From:	Dennis.Shelton@CH2M.com
To:	DHONT, JEFF; Natalia.Raykhman@CH2M.com; Richard.Sturn@CH2M.com
Subject:	RE: QC Results for IVBA
Date:	Monday, June 30, 2014 10:39:11 AM
Attachments:	FW Metals analysis results for Iron King Mine April-May 2013 Sampling SDG 13155D.msg FW In-vitro and 3050B extraction metals analysis results for Iron King Mine 20132014 sampling SDG 14066C.msg FW In-vitro and 3050B extraction metals analysis results for Iron King Mine 20132014 sampling SDGs 14087B and 14087C.msg FW Metals and Bioaccessible metals analysis results for Iron King Mine April-May 2013 Sampling SDG 13210B.msg Bioaccessibility Data.msg

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Jeff - Here are all the emails I have received with bioaccessibility data. Hope this email is not too big for your system. - Dennis

From: DHONT, JEFF [mailto:Dhont.Jeff@epa.gov]

Sent: Monday, June 30, 2014 9:35 AM

To: Raykhman, Natalia/SCO; Sturn, Richard/SCO; Shelton, Dennis/CVO

Subject: QC Results for IVBA

I have Sophia looking at Dennis' materials on the IVBAs. She wants to see a summary of the QC results for the IVBA soil quality control samples along with these. Do you have a copy of this you could provide? I presume it was in the packages provided from the lab.

Jeffrey A. Dhont
Environmental Scientist / Superfund Project Manager
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San Francisco, CA 94105
(415) 972-3020
dhont.jeff@epa.gov

CLIENT	PROJECT	PROJECTNUM	LabName	Sample ID	Lab ID	Analyte	In-vitro mg/kg	Total mg/kg	%bio-access.
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	642	1306007-01	Arsenic	ND	240	<1%
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	642	1306007-01	Lead	14	360	3.9%
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	647	1306007-02	Arsenic	6.4	190	3.4%
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	647	1306007-02	Lead	3.8	190	2.0%
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	648	1306007-03	Arsenic	16	220	7.3%
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	648	1306007-03	Lead	12	180	6.7%
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	750	1306007-04	Arsenic	1.7	29	5.9%
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	750	1306007-04	Lead	570	1100	51.8%
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	753	1306007-05	Arsenic	110	300	36.7%
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	753	1306007-05	Lead	ND	290	<1%
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	978	1306007-06	Arsenic	ND	240	<1%
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	978	1306007-06	Lead	9.8	440	2.2%
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	979	1306007-07	Arsenic	15	480	3.1%
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	979	1306007-07	Lead	130	730	17.8%
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	980	1306007-08	Arsenic	510	3700	13.8%
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	980	1306007-08	Lead	32	5700	0.6%

LABNAME	LABSAMPID	QCTYPE	MATRIX	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	RPTtoMDL	BASIS	DILUTION	SOURCEID	SOURCERES	SPIKELEVEL	RECOVERY	RPD	UPPERCL	LOWERCL	RPDCL	ANALYST	PSOLIDS	LNOTE	ANOTE	ANALYTEORDER
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Aluminum	7429-90-5	FALSE	FALSE	ND	50	100	mg/kg	TRUE	Dry	2									SC			U	10
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Chromium	7440-47-3	FALSE	FALSE	ND	0.50	1.0	mg/kg	TRUE	Dry	2									SC			U	100
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cobalt	7440-48-4	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Dry	2									SC			U	110
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Copper	7440-50-8	FALSE	FALSE	ND	2.0	4.0	mg/kg	TRUE	Dry	2									SC			U	120
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Iron	7439-89-6	FALSE	FALSE	ND	50	100	mg/kg	TRUE	Dry	2									SC			U	130
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Dry	2									SC			U	140
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Manganese	7439-96-5	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2									SC			U	160
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Molybdenum	7439-98-7	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2									SC			U	170
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Nickel	7440-02-0	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2									SC			U	180
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Potassium	7440-09-7	FALSE	FALSE	ND	250	500	mg/kg	TRUE	Dry	2									SC			U	190
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Antimony	7440-36-0	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Dry	2									SC			U	20
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Selenium	7782-49-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Dry	2									SC			U	200
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Silver	7440-22-4	FALSE	FALSE	ND	0.50	1.0	mg/kg	TRUE	Dry	2									SC			U	220
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Thallium	7440-28-0	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2									SC			U	250
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Vanadium	7440-62-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Dry	2									SC			U	280
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Zinc	7440-66-6	FALSE	FALSE	ND	4.0	8.0	mg/kg	TRUE	Dry	2									SC			U	290
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Dry	2									SC			U	30
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Beryllium	7440-41-7	FALSE	FALSE	ND	0.05	0.10	mg/kg	TRUE	Dry	2									SC			U	50
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cadmium	7440-43-9	FALSE	FALSE	ND	0.25	0.50	mg/kg	TRUE	Dry	2									SC			U	70
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Calcium	7440-70-2	FALSE	FALSE	ND	50	100	mg/kg	TRUE	Dry	2									SC			U	80
EPA Region 9 Laboratory	B13F059-BLK2	Blank	Solid	06/13/2013 11:15:00	07/19/2013 16:15:42	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Magnesium	7439-95-4	FALSE	FALSE	ND	25	50	mg/kg	TRUE	Dry	2									SC			U	150
EPA Region 9 Laboratory	B13F059-BLK2	Blank	Solid	06/13/2013 11:15:00	07/19/2013 16:15:42	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Sodium	7440-23-5	FALSE	FALSE	ND	25	50	mg/kg	TRUE	Dry	2									SC			U	230
EPA Region 9 Laboratory	B13F059-BLK2	Blank	Solid	06/13/2013 11:15:00	07/19/2013 16:15:42	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Barium	7440-39-3	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2									SC			U	40
EPA Region 9 Laboratory	B13F059-MS1	Matrix Spike	Solid	06/13/2013 11:15:00	06/17/2013 18:58:50	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	453	1.5	3.0	mg/kg	TRUE	Dry	2	1306007-01	359	99.0	95		125	75	20	SC				140
EPA Region 9 Laboratory	B13F059-MS1	Matrix Spike	Solid	06/13/2013 11:15:00	06/17/2013 18:58:50	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	663	1.0	2.0	mg/kg	TRUE	Dry	2	1306007-01	238	396	107		125	75	20	SC				30
EPA Region 9 Laboratory	B13F059-MSD1	Matrix Spike Dup	Solid	06/13/2013 11:15:00	06/17/2013 19:06:07	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	472	1.5	3.0	mg/kg	TRUE	Dry	2	1306007-01	359	99.0	115	4	125	75	20	SC				140
EPA Region 9 Laboratory	B13F059-MSD1	Matrix Spike Dup	Solid	06/13/2013 11:15:00	06/17/2013 19:06:07	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	696	1.0	2.0	mg/kg	TRUE	Dry	2	1306007-01	238	396	116	5	125	75	20	SC				30
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Aluminum	7429-90-5	FALSE	FALSE	123	50	100	mg/kg	TRUE	Dry	2			115	107		152	47.6		SC				10
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Chromium	7440-47-3	FALSE	FALSE	28.0	0.50	1.0	mg/kg	TRUE	Dry	2			27.2	103		132	68.3		SC				100
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cobalt	7440-48-4	FALSE	FALSE	37.3	1.0	2.0	mg/kg	TRUE	Dry	2			37.5	100		135	64.7		SC				110
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Copper	7440-50-8	FALSE	FALSE	1560	2.0	4.0	mg/kg	TRUE	Dry	2			1770	88		126	74.6		SC				120
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Iron	7439-89-6	FALSE	FALSE	6740	50	100	mg/kg	TRUE	Dry	2			6480	104		134	66.2		SC				130
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	58.9	1.5	3.0	mg/kg	TRUE	Dry	2			57.0	103		127	72.8		SC				140
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Manganese	7439-96-5	FALSE	FALSE	62.7	2.5	5.0	mg/kg	TRUE	Dry	2			61.1	103		132	68.2		SC				160
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Nickel	7440-02-0	FALSE	FALSE	16.3	2.5	5.0	mg/kg	TRUE	Dry	2			16.3	100		145	55.2		SC				180
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Potassium	7440-09-7	FALSE	FALSE	ND	250	500	mg/kg	TRUE	Dry	2			39.8			215	0		SC			U	190
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Antimony	7440-36-0	FALSE	FALSE	61.8	1.0	2.0	mg/kg	TRUE	Dry	2			66.1	93		158	41.2		SC				20
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Selenium	7782-49-2	FALSE	FALSE	10.3	1.0	2.0	mg/kg	TRUE	Dry	2			10.0	103		159	41		SC				200
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Silver	7440-22-4	FALSE	FALSE	6.10	0.50	1.0	mg/kg	TRUE	Dry	2			5.91	103		154	45.8		SC				220
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Thallium	7440-28-0	FALSE	FALSE	9.61	2.5	5.0	mg/kg	TRUE	Dry	2			9.52	101		169	30.5		SC				250
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Vanadium	7440-62-2	FALSE	FALSE	19.2	1.0	2.0	mg/kg	TRUE	Dry	2			17.6	109		135	65.9		SC				280
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Zinc	7440-66-6	FALSE	FALSE	47.3	4.0	8.0	mg/kg	TRUE	Dry	2			47.6	99		157	43.2		SC				290
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	284	1.0	2.0	mg/kg	TRUE	Dry	2			254	112		139	60.9		SC				30
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Beryllium	7440-41-7	FALSE	FALSE	4.97	0.05	0.10	mg/kg	TRUE	Dry	2			4.91	101		139	61.2		SC				50
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cadmium	7440-43-9	FALSE	FALSE	10.7	0.25	0.50	mg/kg	TRUE	Dry	2			10.9	98		128	70.6		SC				70
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Calcium	7440-70-2	FALSE	FALSE	47300	50	100	mg/kg	TRUE	Dry	2			44300	107		132	68.6		SC				80
EPA Region 9 Laboratory	B13F059-SRM2	Reference	Solid	06/13/2013 11:15:00	07/19/2013 16:20:59	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Magnesium	7439-95-4	FALSE	FALSE	28000	25	50	mg/kg	TRUE	Dry	2			29300	96		130	70.2		SC				150
EPA Region 9 Laboratory	B13F059-SRM2	Reference	Solid	06/13/2013 11:15:00	07/19/2013 16:20:59	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Sodium	7440-23-5	FALSE	FALSE	ND	25	50	mg/kg	TRUE	Dry	2			72.6			298	0		SC			U	230
EPA Region 9 Laboratory	B13F059-SRM2	Reference	Solid	06/13/2013 11:15:00	07/19/2013 16:20:59	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Barium	7440-39-3	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2			1.60			138	62.5		SC			U	40
EPA Region 9 Laboratory	B13F065-BLK1	Blank	Solid	06/13/2013 08:55:00	06/14/2013 08:52:17	B13F065	Solids, Dry Weight	3550C/SOP460	Solids, Dry Weight (Prep)	% Solids	NA	FALSE	FALSE	ND	1	1	%	FALSE	Wet	1									WD			U	1
EPA Region 9 Laboratory	B13F065-DUP1	Duplicate	Solid	06/13/2013 08:55:00	06/14/2013 08:52:17	B13F065	Solids, Dry Weight	3550C/SOP460	Solids, Dry Weight (Prep)	% Solids	NA	FALSE	FALSE	68	1	1	%	FALSE	Wet	1	1306007-10	67			2			20	WD	66.8			1
EPA Region 9 Laboratory	B13F077-BLK1	Blank	Solid	07/09/2013 09:25:00	07/11/2013 14:02:01	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1									SC			U	140
EPA Region 9 Laboratory	B13F077-BLK1	Blank	Solid	07/09/2013 09:25:00	07/11/2013 14:02:01	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	1.2	1.0	2.0	mg/kg	TRUE	Wet	1									SC			C1, J	30
EPA Region 9 Laboratory	B13F077-BLK2	Blank	Solid	07/09/2013 09:25:00	07/11/2013 14:08:00	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1									SC			U	140
EPA Region 9 Laboratory	B13F077-BLK2	Blank	Solid	07/09/2013 09:25:00	07/11/2013 14:08:00	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Wet	1									SC			U	30
EPA Region 9 Laboratory	B13F077-BS1	LCS	Solid	07/09/2013 09:25:00	07/11/2013 14:14:01	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	102	1.5	3.0	mg/kg	TRUE	Wet	1			100	102		120	80	200	SC				140
EPA Region 9 Laboratory	B13F077-BS1	LCS	Solid	07/09/2013 09:25:00	07/11/2013 14:14:01	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	402	1.0	2.0	mg/kg	TRUE	Wet	1			400	100		120	80	200	SC				30
EPA Region 9 Laboratory	B13F077-DUP1	Duplicate	Solid	07/09/2013 09:25:00	07/11/2013 15:19:29	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1	1306007-05	ND						20	SC			U	140
EPA Region 9 Laboratory	B13F077-DUP1	Duplicate	Solid	07/09/2013 09:25:00	07/11/2013 15:19:29	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	110	1.0	2.0	mg/kg	TRUE	Wet	1	1306007-05	110			0.4			20	SC				30
EPA Region 9 Laboratory	B13F077-MS1	Matrix Spike	Solid	07/09/2013 09:25:00	07/11/2013 15:25:18	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	395	1.5	3.0	mg/kg	TRUE	Wet	1	1306007-05	ND	500	79		125	75	20	SC				140
EPA Region 9 Laboratory	B13F077-MS1	Matrix Spike	Solid	07/09/2013 09:25:00	07/11/2013 15:25:18	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	1770	1.0	2.0	mg/kg	TRUE	Wet	1	1306007-05	110	2000	83		125	75	20	SC				30
EPA Region 9 Laboratory	B13F077-SRM1	Reference	Solid	07/09/2013 09:25:00	07/11/2013 14:19:59	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	1070	1.5	3.0	mg/kg	TRUE	Wet	1			1300	82		200	0		SC				140
EPA Region 9 Laboratory	B13F077-SRM1	Reference	Solid	07/09/2013 09:25:00	07/11/2013 14:19:59	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	56.4	1.0	2.0	mg/kg	TRUE	Wet	1			89.3	63		200	0		SC				30
EPA Region 9 Laboratory	B13F077-SRM2	Reference	Solid	07/09/2013 09:25:00	07/11/2013 14:25:57	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	1060	1.5	3.0	mg/kg	TRUE	Wet	1			1300	81		200	0		SC				140
EPA Region 9 Laboratory	B13F077-SRM2	Reference	Solid	07/09/2013 09:25:00	07/11/2013 14:25:57	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	56.3	1.0	2.0	mg/kg	TRUE	Wet	1			89.0	63		200	0		SC				30
EPA Region 9 Laboratory	B13G071-BLK1	Blank	Solid	07/18/2013 09:46:00	07/19/2013 16:40:27	B13G071	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Wet	1									SC			U	30
EPA Region 9 Laboratory	B13G071-BLK2	Blank	Solid	07/18/2013 09:46:00	07/19/2013 16:44:27	B13G071	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Wet	1									SC			U	30
EPA Region 9 Laboratory	B13G071-BS1	LCS	Solid	07/18/2013 09:46:00	07/19/2013 16:48:35	B13G071	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	390	1.0	2.0	mg/kg	TRUE	Wet	1			400	97		120	80	200	SC				30
EPA Region 9 Laboratory	B13G071-SRM1	Reference	Solid	07/18/2013 09:46:00	07/19/2013 16:54:35	B13G071	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	55.8	1.0	2.0	mg/kg	TRUE	Wet	1			89.1	63		200	0		SC				30
EPA Region 9 Laboratory	B13G071-SRM2	Reference	Solid	07/18/2013 09:46:00	07/19/2013 17:03:23	B13G071	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	56.2	1.0	2.0	mg/kg	TRUE	Wet	1			89.3	63		200	0		SC				30

QUALIFIE	DESCRIPTION
C1	The reported concentration for this analyte is below the quantitation limit.
J	The reported result for this analyte should be considered an estimated value.
U	This analyte was not detected.

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street Building 201
Richmond, CA 94804

Date: **7/30/2013**

Subject: **Analytical Testing Results - Project R13S75**
SDG: 13155D

From: **Brenda Bettencourt, Director**
EPA Region 9 Laboratory
MTS-2

To: **Zi Zi Searles**
California Site Cleanup Section 1
SFD-7-1

Attached are the results from the analysis of samples from the **Iron King Mine April-May 2013 Sampling** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Analyses included in this report:

Analysis of In Vitro Gastric Extracts by ICP

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 13155D
Project Number: R13S75	**75 Hawthorne Street**	**Reported:** 07/30/13 16:33
Project: Iron King Mine April-May 2013 Sampling	**San Francisco CA, 94105**	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
642	1306007-01	Soil	05/01/13 00:00	06/04/13 13:30
647	1306007-02	Soil	05/01/13 00:00	06/04/13 13:30
648	1306007-03	Soil	05/01/13 00:00	06/04/13 13:30
750	1306007-04	Soil	05/01/13 00:00	06/04/13 13:30
753	1306007-05	Soil	05/01/13 00:00	06/04/13 13:30
978	1306007-06	Soil	05/01/13 00:00	06/04/13 13:30
979	1306007-07	Soil	04/29/13 14:21	06/04/13 13:30
980	1306007-08	Soil	04/29/13 15:13	06/04/13 13:30

SDG ID 13155D

Samples were analyzed using an in-vitro bioaccesibility leaching method. Calculated bio-accessibilities are as follows:

Sample ID	Lab ID	Analyte	In-vitro mg/kg	Total mg/kg	%bio-access.
642	1306007-01	Arsenic	ND	240	<1%
642	1306007-01	Lead	14	360	3.9%
647	1306007-02	Arsenic	6.4	190	3.4%
647	1306007-02	Lead	3.8	190	2.0%
648	1306007-03	Arsenic	16	220	7.3%
648	1306007-03	Lead	12	180	6.7%
750	1306007-04	Arsenic	1.7	29	5.9%
750	1306007-04	Lead	570	1100	51.8%
753	1306007-05	Arsenic	110	300	36.7%
753	1306007-05	Lead	ND	290	<1%
978	1306007-06	Arsenic	ND	240	<1%
978	1306007-06	Lead	9.8	440	2.2%
979	1306007-07	Arsenic	15	480	3.1%
979	1306007-07	Lead	130	730	17.8%
980	1306007-08	Arsenic	510	3700	13.8%
980	1306007-08	Lead	32	5700	0.6%

Work Order(s)

1306007

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 13155D
Project Number: R13S75	**75 Hawthorne Street**	**Reported:** 07/30/13 16:33
Project: Iron King Mine April-May 2013 Sampling	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1306007-01									**Soil - Sampled: 05/01/13 00:00**
Sample ID: 642									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic		ND	U	2	mg/kg	B13F077	07/09/13	07/11/13	6010C/SOP503
Lead		14		3	"	"	"	"	6010C/SOP503
Lab ID: 1306007-02									**Soil - Sampled: 05/01/13 00:00**
Sample ID: 647									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic		6.4		2	mg/kg	B13F077	07/09/13	07/11/13	6010C/SOP503
Lead		3.8		3	"	"	"	"	6010C/SOP503
Lab ID: 1306007-03									**Soil - Sampled: 05/01/13 00:00**
Sample ID: 648									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic		16		2	mg/kg	B13F077	07/09/13	07/11/13	6010C/SOP503
Lead		12		3	"	"	"	"	6010C/SOP503
Lab ID: 1306007-04									**Soil - Sampled: 05/01/13 00:00**
Sample ID: 750									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	1.7	C1, J	2	mg/kg	B13G071	07/18/13	07/19/13	6010C/SOP503
Lead		570		3	"	B13F077	07/09/13	07/11/13	6010C/SOP503
Lab ID: 1306007-05									**Soil - Sampled: 05/01/13 00:00**
Sample ID: 753									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic		110		2	mg/kg	B13F077	07/09/13	07/11/13	6010C/SOP503
Lead		ND	U	3	"	"	"	"	6010C/SOP503
Lab ID: 1306007-06									**Soil - Sampled: 05/01/13 00:00**
Sample ID: 978									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	ND	U	2	mg/kg	B13G071	07/18/13	07/19/13	6010C/SOP503
Lead		9.8		3	"	B13F077	07/09/13	07/11/13	6010C/SOP503
Lab ID: 1306007-07									**Soil - Sampled: 04/29/13 14:21**
Sample ID: 979									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic		15		2	mg/kg	B13F077	07/09/13	07/11/13	6010C/SOP503
Lead		130		3	"	"	"	"	6010C/SOP503
Lab ID: 1306007-08									**Soil - Sampled: 04/29/13 15:13**
Sample ID: 980									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic		510		2	mg/kg	B13F077	07/09/13	07/11/13	6010C/SOP503
Lead		32		3	"	"	"	"	6010C/SOP503

United States Environmental Protection Agency
Region 9 Laboratory

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Project Manager: Zi Zi Searles
Project Number: R13S75
Project: Iron King Mine April-May 2013 Sampling

California Site Cleanup Section 1
75 Hawthorne Street
San Francisco CA, 94105

SDG: 13155D
Reported: 07/30/13 16:33

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B13F077 - In Vitro Gastric Extraction - In Vitro Extraction, ICP, Sample Basis									**Prepared: 07/09/13 Analyzed: 07/11/13**	
									Analysis of In Vitro Gastric Digestion Extracts - Quality Control	
Blank (B13F077-BLK1)										
Arsenic	1.2	C1, J	2	mg/kg						
Lead	ND	U	3	"						
Blank (B13F077-BLK2)										
Arsenic	ND	U	2	mg/kg						
Lead	ND	U	3	"						
LCS (B13F077-BS1)										
Arsenic	402		2	mg/kg	400		100	80-120		200
Lead	102		3	"	100		102	80-120		200
Duplicate (B13F077-DUP1)		**Source: 1306007-05**								
Arsenic	110		2	mg/kg		110			0.4	20
Lead	ND	U	3	"		ND				20
Matrix Spike (B13F077-MS1)		**Source: 1306007-05**								
Arsenic	1,770		2	mg/kg	2000	110	83	75-125		20
Lead	395		3	"	500	ND	79	75-125		20
Reference (B13F077-SRM1)										
Arsenic	56.4		2	mg/kg	89.3		63	0-200		
Lead	1,070		3	"	1300		82	0-200		
Reference (B13F077-SRM2)										
Arsenic	56.3		2	mg/kg	89.0		63	0-200		
Lead	1,060		3	"	1300		81	0-200		
Batch B13G071 - In Vitro Gastric Extraction - In Vitro Extraction, ICP, Sample Basis									**Prepared: 07/18/13 Analyzed: 07/19/13**	
									Analysis of In Vitro Gastric Digestion Extracts - Quality Control	
Blank (B13G071-BLK1)										
Arsenic	ND	U	2	mg/kg						
Blank (B13G071-BLK2)										
Arsenic	ND	U	2	mg/kg						
LCS (B13G071-BS1)										
Arsenic	390		2	mg/kg	400		97	80-120		200
Reference (B13G071-SRM1)										
Arsenic	55.8		2	mg/kg	89.1		63	0-200		
Reference (B13G071-SRM2)										
Arsenic	56.2		2	mg/kg	89.3		63	0-200		

United States Environmental Protection Agency
Region 9 Laboratory

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Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 13155D
Project Number: R13S75	**75 Hawthorne Street**	**Reported:** 07/30/13 16:33
Project: Iron King Mine April-May 2013 Sampling	**San Francisco CA, 94105**	

Qualifiers and Comments

J The reported result for this analyte should be considered an estimated value.

C1 The reported concentration for this analyte is below the quantitation limit.

U Not Detected

NR Not Reported

RE1, RE2, etc: Result is from a sample re-analysis.

CLIENT	PROJECT	PROJECTNUM	LabName	SAMPLENAME	LABSAMPID	MATRIX	RPTMATRIX	SAMPDATE	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	Result	DL	RL	UNITS	RPTqMDL	BASIS	DILUTION	SPIKELEVEL	RECOVERY	UPPERCL	LOWERCL	ANALYST	PSOLIDS	LNOTE	ANOTE	LATITUDE	LONGITUDE	sComment	SNOTE1	SNOTE2	SNOTE3	SNOTE4	SNOTE5	SNOTE6	SNOTE7	SNOTE8	SNOTE9	SNOTE10	ANALYTEORDER
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	642	1306007-01	Solid	Soil	05/01/2013 00:00:00	07/09/2013 09:25:00	07/11/2013 14:49:57	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	14	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	642	1306007-01	Solid	Soil	05/01/2013 00:00:00	07/09/2013 09:25:00	07/11/2013 14:49:57	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Wet	1					SC			U														30
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	647	1306007-02	Solid	Soil	05/01/2013 00:00:00	07/09/2013 09:25:00	07/11/2013 14:55:56	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	3.8	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	647	1306007-02	Solid	Soil	05/01/2013 00:00:00	07/09/2013 09:25:00	07/11/2013 14:55:56	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	6.4	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	648	1306007-03	Solid	Soil	05/01/2013 00:00:00	07/09/2013 09:25:00	07/11/2013 15:01:53	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	12	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	648	1306007-03	Solid	Soil	05/01/2013 00:00:00	07/09/2013 09:25:00	07/11/2013 15:01:53	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	16	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	750	1306007-04	Solid	Soil	05/01/2013 00:00:00	07/09/2013 09:25:00	07/11/2013 15:07:54	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	570	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	750	1306007-04RE1	Solid	Soil	05/01/2013 00:00:00	07/18/2013 09:45:00	07/19/2013 17:12:10	B13G071	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	1.7	1.0	2.0	mg/kg	TRUE	Wet	1					SC			C1, J														30
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	753	1306007-05	Solid	Soil	05/01/2013 00:00:00	07/09/2013 09:25:00	07/11/2013 15:13:43	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1					SC			U														140
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	753	1306007-05	Solid	Soil	05/01/2013 00:00:00	07/09/2013 09:25:00	07/11/2013 15:13:43	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	110	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	978	1306007-06	Solid	Soil	05/01/2013 00:00:00	07/09/2013 09:25:00	07/11/2013 15:34:20	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	9.8	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	978	1306007-06RE1	Solid	Soil	05/01/2013 00:00:00	07/18/2013 09:45:00	07/19/2013 17:17:54	B13G071	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Wet	1					SC			U														30
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	979	1306007-07	Solid	Soil	04/29/2013 14:21:00	07/09/2013 09:25:00	07/11/2013 15:40:18	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	130	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	979	1306007-07	Solid	Soil	04/29/2013 14:21:00	07/09/2013 09:25:00	07/11/2013 15:40:18	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	15	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	980	1306007-08	Solid	Soil	04/29/2013 15:13:00	07/09/2013 09:25:00	07/11/2013 15:46:19	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	32	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	980	1306007-08	Solid	Soil	04/29/2013 15:13:00	07/09/2013 09:25:00	07/11/2013 15:46:19	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	510	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30

LABNAME	LABSAMPID	QCTYPE	MATRIX	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	RPTtoMDL	BASIS	DILUTION	SOURCEID	SOURCERES	SPIKELEVEL	RECOVERY	RPD	UPPERCL	LOWERCL	RPDCL	ANALYST	PSOLIDS	LNOTE	ANOTE	ANALYTEORDER
EPA Region 9 Laboratory	B13F077-BLK1	Blank	Solid	07/09/2013 09:25:00	07/11/2013 14:02:01	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1								SC			U	140
EPA Region 9 Laboratory	B13F077-BLK1	Blank	Solid	07/09/2013 09:25:00	07/11/2013 14:02:01	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	1.2	1.0	2.0	mg/kg	TRUE	Wet	1								SC			C1, J	30
EPA Region 9 Laboratory	B13F077-BLK2	Blank	Solid	07/09/2013 09:25:00	07/11/2013 14:08:00	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1								SC			U	140
EPA Region 9 Laboratory	B13F077-BLK2	Blank	Solid	07/09/2013 09:25:00	07/11/2013 14:08:00	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Wet	1								SC			U	30
EPA Region 9 Laboratory	B13F077-BS1	LCS	Solid	07/09/2013 09:25:00	07/11/2013 14:14:01	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	102	1.5	3.0	mg/kg	TRUE	Wet	1			100	102		120	80	200	SC				140
EPA Region 9 Laboratory	B13F077-BS1	LCS	Solid	07/09/2013 09:25:00	07/11/2013 14:14:01	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	402	1.0	2.0	mg/kg	TRUE	Wet	1			400	100		120	80	200	SC				30
EPA Region 9 Laboratory	B13F077-DUP1	Duplicate	Solid	07/09/2013 09:25:00	07/11/2013 15:19:29	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1	1306007-05	ND						20	SC			U	140
EPA Region 9 Laboratory	B13F077-DUP1	Duplicate	Solid	07/09/2013 09:25:00	07/11/2013 15:19:29	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	110	1.0	2.0	mg/kg	TRUE	Wet	1	1306007-05	110			0.4			20	SC				30
EPA Region 9 Laboratory	B13F077-MS1	Matrix Spike	Solid	07/09/2013 09:25:00	07/11/2013 15:25:18	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	395	1.5	3.0	mg/kg	TRUE	Wet	1	1306007-05	ND	500	79		125	75	20	SC				140
EPA Region 9 Laboratory	B13F077-MS1	Matrix Spike	Solid	07/09/2013 09:25:00	07/11/2013 15:25:18	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	1770	1.0	2.0	mg/kg	TRUE	Wet	1	1306007-05	110	2000	83		125	75	20	SC				30
EPA Region 9 Laboratory	B13F077-SRM1	Reference	Solid	07/09/2013 09:25:00	07/11/2013 14:19:59	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	1070	1.5	3.0	mg/kg	TRUE	Wet	1			1300	82		200	0		SC				140
EPA Region 9 Laboratory	B13F077-SRM1	Reference	Solid	07/09/2013 09:25:00	07/11/2013 14:19:59	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	56.4	1.0	2.0	mg/kg	TRUE	Wet	1			89.3	63		200	0		SC				30
EPA Region 9 Laboratory	B13F077-SRM2	Reference	Solid	07/09/2013 09:25:00	07/11/2013 14:25:57	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	1060	1.5	3.0	mg/kg	TRUE	Wet	1			1300	81		200	0		SC				140
EPA Region 9 Laboratory	B13F077-SRM2	Reference	Solid	07/09/2013 09:25:00	07/11/2013 14:25:57	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	56.3	1.0	2.0	mg/kg	TRUE	Wet	1			89.0	63		200	0		SC				30
EPA Region 9 Laboratory	B13G071-BLK1	Blank	Solid	07/18/2013 09:46:00	07/19/2013 16:40:27	B13G071	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Wet	1								SC			U	30
EPA Region 9 Laboratory	B13G071-BLK2	Blank	Solid	07/18/2013 09:46:00	07/19/2013 16:44:27	B13G071	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Wet	1								SC			U	30
EPA Region 9 Laboratory	B13G071-BS1	LCS	Solid	07/18/2013 09:46:00	07/19/2013 16:48:35	B13G071	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	390	1.0	2.0	mg/kg	TRUE	Wet	1			400	97		120	80	200	SC				30
EPA Region 9 Laboratory	B13G071-SRM1	Reference	Solid	07/18/2013 09:46:00	07/19/2013 16:54:35	B13G071	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	55.8	1.0	2.0	mg/kg	TRUE	Wet	1			89.1	63		200	0		SC				30
EPA Region 9 Laboratory	B13G071-SRM2	Reference	Solid	07/18/2013 09:46:00	07/19/2013 17:03:23	B13G071	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	56.2	1.0	2.0	mg/kg	TRUE	Wet	1			89.3	63		200	0		SC				30

QUALIFIER	DESCRIPTION
C1	The reported concentration for this analyte is below the quantitation limit.
J	The reported result for this analyte should be considered an estimated value.
U	This analyte was not detected.

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street Building 201
Richmond, CA 94804

Date: **7/30/2013**

Subject: **Analytical Testing Results - Project R13S75**
SDG: 13155D

From: **Brenda Bettencourt, Director**
EPA Region 9 Laboratory
MTS-2

To: **Zi Zi Searles**
California Site Cleanup Section 1
SFD-7-1

Attached are the results from the analysis of samples from the **Iron King Mine April-May 2013 Sampling** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Analyses included in this report:

Metals by ICP	Percent Solids

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 13155D
Project Number: R13S75	**75 Hawthorne Street**	**Reported:** 07/30/13 16:23
Project: Iron King Mine April-May 2013 Sampling	**San Francisco CA, 94105**	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
642	1306007-01	Soil	05/01/13 00:00	06/04/13 13:30
647	1306007-02	Soil	05/01/13 00:00	06/04/13 13:30
648	1306007-03	Soil	05/01/13 00:00	06/04/13 13:30
750	1306007-04	Soil	05/01/13 00:00	06/04/13 13:30
753	1306007-05	Soil	05/01/13 00:00	06/04/13 13:30
978	1306007-06	Soil	05/01/13 00:00	06/04/13 13:30
979	1306007-07	Soil	04/29/13 14:21	06/04/13 13:30
980	1306007-08	Soil	04/29/13 15:13	06/04/13 13:30
Chap-01-surface	1306007-09	Sediment	04/29/13 13:43	06/04/13 13:30
Chap-02-surface	1306007-10	Sediment	04/29/13 13:47	06/04/13 13:30
Chap-03-surface	1306007-11	Sediment	04/29/13 13:50	06/04/13 13:30

SDG ID 13155D

Samples were digested using EPA method SW3050 for "Total" metals.

Work Order(s)

1306007

United States Environmental Protection Agency
Region 9 Laboratory

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Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 13155D
Project Number: R13S75	**75 Hawthorne Street**	**Reported:** 07/30/13 16:23
Project: Iron King Mine April-May 2013 Sampling	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1306007-01									**Soil - Sampled: 05/01/13 00:00**
Sample ID: 642									**Metals by EPA 6000/7000 Series Methods**
Arsenic		240		2	mg/kg wet	B13F059	06/13/13	06/17/13	6010C/SOP503
Lead		360		3	"	"	"	"	6010C/SOP503
Lab ID: 1306007-02									**Soil - Sampled: 05/01/13 00:00**
Sample ID: 647									**Metals by EPA 6000/7000 Series Methods**
Arsenic		190		2	mg/kg wet	B13F059	06/13/13	06/17/13	6010C/SOP503
Lead		190		3	"	"	"	"	6010C/SOP503
Lab ID: 1306007-03									**Soil - Sampled: 05/01/13 00:00**
Sample ID: 648									**Metals by EPA 6000/7000 Series Methods**
Arsenic		220		2	mg/kg wet	B13F059	06/13/13	06/17/13	6010C/SOP503
Lead		180		3	"	"	"	"	6010C/SOP503
Lab ID: 1306007-04									**Soil - Sampled: 05/01/13 00:00**
Sample ID: 750									**Metals by EPA 6000/7000 Series Methods**
Arsenic		29		2	mg/kg wet	B13F059	06/13/13	06/17/13	6010C/SOP503
Lead		1,100		3	"	"	"	"	6010C/SOP503
Lab ID: 1306007-05									**Soil - Sampled: 05/01/13 00:00**
Sample ID: 753									**Metals by EPA 6000/7000 Series Methods**
Arsenic	RE1	300		2	mg/kg wet	B13F059	06/13/13	07/03/13	6010C/SOP503
Lead		290		3	"	"	"	06/17/13	6010C/SOP503
Lab ID: 1306007-06									**Soil - Sampled: 05/01/13 00:00**
Sample ID: 978									**Metals by EPA 6000/7000 Series Methods**
Arsenic	RE1	240		2	mg/kg wet	B13F059	06/13/13	07/03/13	6010C/SOP503
Lead		440		3	"	"	"	06/17/13	6010C/SOP503
Lab ID: 1306007-07									**Soil - Sampled: 04/29/13 14:21**
Sample ID: 979									**Metals by EPA 6000/7000 Series Methods**
Arsenic	RE1	480		2	mg/kg wet	B13F059	06/13/13	07/03/13	6010C/SOP503
Lead		730		3	"	"	"	06/17/13	6010C/SOP503
Lab ID: 1306007-08									**Soil - Sampled: 04/29/13 15:13**
Sample ID: 980									**Metals by EPA 6000/7000 Series Methods**
Arsenic	RE1	3,700		2	mg/kg wet	B13F059	06/13/13	07/03/13	6010C/SOP503
Lead		5,700		3	"	"	"	06/17/13	6010C/SOP503
Lab ID: 1306007-09									**Sediment - Sampled: 04/29/13 13:43**
Sample ID: Chap-01-surface									**Metals by EPA 6000/7000 Series Methods**
Aluminum		9,800		130	mg/kg dry	B13F059	06/13/13	06/17/13	6010C/SOP503
Antimony		1.4	C1, J	2.5	"	"	"	"	6010C/SOP503
Arsenic	RE1	150		2.5	"	"	"	07/03/13	6010C/SOP503
Barium	RE1	58		6.3	"	"	"	"	6010C/SOP503
Beryllium		0.37		0.13	"	"	"	06/17/13	6010C/SOP503
Cadmium		3.1		0.63	"	"	"	"	6010C/SOP503
Calcium		3,500		130	"	"	"	"	6010C/SOP503

United States Environmental Protection Agency
Region 9 Laboratory

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Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 13155D
Project Number: R13S75	**75 Hawthorne Street**	**Reported:** 07/30/13 16:23
Project: Iron King Mine April-May 2013 Sampling	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1306007-09									**Sediment - Sampled: 04/29/13 13:43**
Sample ID: Chap-01-surface									**Metals by EPA 6000/7000 Series Methods**
Chromium		13		1.3	mg/kg dry	B13F059	06/13/13	06/17/13	6010C/SOP503
Cobalt		9.3		2.5	"	"	"	"	6010C/SOP503
Copper		440		5.1	"	"	"	"	6010C/SOP503
Iron		28,000		130	"	"	"	"	6010C/SOP503
Lead		69		3.8	"	"	"	"	6010C/SOP503
Magnesium	RE1	4,900		63	"	"	"	07/03/13	6010C/SOP503
Manganese		490		6.3	"	"	"	06/17/13	6010C/SOP503
Molybdenum		ND	U	6.3	"	"	"	"	6010C/SOP503
Nickel		12		6.3	"	"	"	"	6010C/SOP503
Potassium		1,500		630	"	"	"	"	6010C/SOP503
Selenium		3.6		2.5	"	"	"	"	6010C/SOP503
Silver		1.1	C1, J	1.3	"	"	"	"	6010C/SOP503
Sodium	RE1	190		63	"	"	"	07/03/13	6010C/SOP503
Thallium		ND	U	6.3	"	"	"	06/17/13	6010C/SOP503
Vanadium		40		2.5	"	"	"	"	6010C/SOP503
Zinc		630		10	"	"	"	"	6010C/SOP503
Sample ID: Chap-01-surface									**Conventional Chemistry Parameters by APHA/EPA Methods**
% Solids		79		1	%	B13F065	06/13/13	06/14/13	3550C/SOP460
Lab ID: 1306007-10									**Sediment - Sampled: 04/29/13 13:47**
Sample ID: Chap-02-surface									**Metals by EPA 6000/7000 Series Methods**
Aluminum		17,000		150	mg/kg dry	B13F059	06/13/13	06/17/13	6010C/SOP503
Antimony		2.4	C1, J	3	"	"	"	"	6010C/SOP503
Arsenic	RE1	210		3	"	"	"	07/03/13	6010C/SOP503
Barium	RE1	140		7.5	"	"	"	"	6010C/SOP503
Beryllium		0.44		0.15	"	"	"	06/17/13	6010C/SOP503
Cadmium		3.4		0.75	"	"	"	"	6010C/SOP503
Calcium		7,200		150	"	"	"	"	6010C/SOP503
Chromium		19		1.5	"	"	"	"	6010C/SOP503
Cobalt		17		3	"	"	"	"	6010C/SOP503
Copper		940		6	"	"	"	"	6010C/SOP503
Iron		41,000		150	"	"	"	"	6010C/SOP503
Lead		210		4.5	"	"	"	"	6010C/SOP503
Magnesium	RE1	7,300		75	"	"	"	07/03/13	6010C/SOP503
Manganese		820		7.5	"	"	"	06/17/13	6010C/SOP503
Molybdenum		ND	U	7.5	"	"	"	"	6010C/SOP503
Nickel		21		7.5	"	"	"	"	6010C/SOP503
Potassium		2,000		750	"	"	"	"	6010C/SOP503
Selenium		6.3		3	"	"	"	"	6010C/SOP503
Silver		3.9		1.5	"	"	"	"	6010C/SOP503
Sodium	RE1	170		75	"	"	"	07/03/13	6010C/SOP503

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Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 13155D
Project Number: R13S75	**75 Hawthorne Street**	**Reported:** 07/30/13 16:23
Project: Iron King Mine April-May 2013 Sampling	**San Francisco CA, 94105**	

Sample Results

Analyte		Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID:	**1306007-10**									**Sediment - Sampled: 04/29/13 13:47**
Sample ID:	**Chap-02-surface**									**Metals by EPA 6000/7000 Series Methods**
Thallium			ND	U	7.5	mg/kg dry	B13F059	06/13/13	06/17/13	6010C/SOP503
Vanadium			58		3	"	"	"	"	6010C/SOP503
Zinc			1,200		12	"	"	"	"	6010C/SOP503
Sample ID:	**Chap-02-surface**									**Conventional Chemistry Parameters by APHA/EPA Methods**
% Solids			67		1	%	B13F065	06/13/13	06/14/13	3550C/SOP460
Lab ID:	**1306007-11**									**Sediment - Sampled: 04/29/13 13:50**
Sample ID:	**Chap-03-surface**									**Metals by EPA 6000/7000 Series Methods**
Aluminum			12,000		120	mg/kg dry	B13F059	06/13/13	06/17/13	6010C/SOP503
Antimony			2.7		2.3	"	"	"	"	6010C/SOP503
Arsenic		RE1	290		2.3	"	"	"	07/03/13	6010C/SOP503
Barium		RE1	92		5.8	"	"	"	"	6010C/SOP503
Beryllium			0.36		0.12	"	"	"	06/17/13	6010C/SOP503
Cadmium			1.9		0.58	"	"	"	"	6010C/SOP503
Calcium			7,800		120	"	"	"	"	6010C/SOP503
Chromium			13		1.2	"	"	"	"	6010C/SOP503
Cobalt			13		2.3	"	"	"	"	6010C/SOP503
Copper			470		4.6	"	"	"	"	6010C/SOP503
Iron			36,000		120	"	"	"	"	6010C/SOP503
Lead			150		3.5	"	"	"	"	6010C/SOP503
Magnesium		RE1	5,600		58	"	"	"	07/03/13	6010C/SOP503
Manganese			450		5.8	"	"	"	06/17/13	6010C/SOP503
Molybdenum			ND	U	5.8	"	"	"	"	6010C/SOP503
Nickel			14		5.8	"	"	"	"	6010C/SOP503
Potassium			1,900		580	"	"	"	"	6010C/SOP503
Selenium			6.1		2.3	"	"	"	"	6010C/SOP503
Silver			1.8		1.2	"	"	"	"	6010C/SOP503
Sodium		RE1	270		58	"	"	"	07/03/13	6010C/SOP503
Thallium			ND	U	5.8	"	"	"	06/17/13	6010C/SOP503
Vanadium			58		2.3	"	"	"	"	6010C/SOP503
Zinc			570		9.3	"	"	"	"	6010C/SOP503
Sample ID:	**Chap-03-surface**									**Conventional Chemistry Parameters by APHA/EPA Methods**
% Solids			86		1	%	B13F065	06/13/13	06/14/13	3550C/SOP460

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Project Manager: Zi Zi Searles | **California Site Cleanup Section 1** | **SDG:** 13155D
Project Number: R13S75 | **75 Hawthorne Street** | **Reported:** 07/30/13 16:23
Project: Iron King Mine April-May 2013 Sampling | **San Francisco CA, 94105**

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B13F059 - 3050B Sld Acid Dig - Metals by 6010										**Prepared: 06/13/13 Analyzed: 06/17/13**
										Metals by EPA 6000/7000 Series Methods - Quality Control
Blank (B13F059-BLK1)										
Aluminum	ND	U	100	mg/kg wet						
Antimony	ND	U	2	"						
Arsenic	ND	U	2	"						
Beryllium	ND	U	0.1	"						
Cadmium	ND	U	0.5	"						
Calcium	ND	U	100	"						
Chromium	ND	U	1	"						
Cobalt	ND	U	2	"						
Copper	ND	U	4	"						
Iron	ND	U	100	"						
Lead	ND	U	3	"						
Manganese	ND	U	5	"						
Molybdenum	ND	U	5	"						
Nickel	ND	U	5	"						
Potassium	ND	U	500	"						
Selenium	ND	U	2	"						
Silver	ND	U	1	"						
Thallium	ND	U	5	"						
Vanadium	ND	U	2	"						
Zinc	ND	U	8	"						
Blank (B13F059-BLK2)										
Barium	ND	U	5	mg/kg wet						
Magnesium	ND	U	50	"						
Sodium	ND	U	50	"						
Matrix Spike (B13F059-MS1)		**Source: 1306007-01**								
Arsenic	663		2	mg/kg wet	396	238	107	75-125		20
Lead	453		3	"	99.0	359	95	75-125		20
Matrix Spike Dup (B13F059-MSD1)		**Source: 1306007-01**								
Arsenic	696		2	mg/kg wet	396	238	116	75-125	5	20
Lead	472		3	"	99.0	359	115	75-125	4	20
Reference (B13F059-SRM1)										
Aluminum	123		100	mg/kg wet	115		107	47.6-152		
Antimony	61.8		2	"	66.1		93	41.2-158		
Arsenic	284		2	"	254		112	60.9-139		
Beryllium	4.97		0.1	"	4.91		101	61.2-139		
Cadmium	10.7		0.5	"	10.9		98	70.6-128		
Calcium	47,300		100	"	44300		107	68.6-132		
Chromium	28		1	"	27.2		103	68.3-132		

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 13155D
Project Number: R13S75	**75 Hawthorne Street**	**Reported:** 07/30/13 16:23
Project: Iron King Mine April-May 2013 Sampling	**San Francisco CA, 94105**	

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B13F059 - 3050B Sld Acid Dig - Metals by 6010									**Prepared: 06/13/13 Analyzed: 06/17/13**	
									Metals by EPA 6000/7000 Series Methods - Quality Control	
Reference (B13F059-SRM1)										
Cobalt	37.3		2	"	37.5		100	64.7-135		
Copper	1,560		4	"	1770		88	74.6-126		
Iron	6,740		100	"	6480		104	66.2-134		
Lead	58.9		3	"	57.0		103	72.8-127		
Manganese	62.7		5	"	61.1		103	68.2-132		
Nickel	16.3		5	"	16.3		100	55.2-145		
Potassium	ND	U	500	"	39.8			0-215		
Selenium	10.3		2	"	10.0		103	41-159		
Silver	6.1		1	"	5.91		103	45.8-154		
Thallium	9.61		5	"	9.52		101	30.5-169		
Vanadium	19.2		2	"	17.6		109	65.9-135		
Zinc	47.3		8	"	47.6		99	43.2-157		
Reference (B13F059-SRM2)										
Barium	ND	U	5	mg/kg wet	1.60			62.5-138		
Magnesium	28,000		50	"	29300		96	70.2-130		
Sodium	ND	U	50	"	72.6			0-298		
Batch B13F065 - Solids, Dry Weight (Prep) - Solids, Dry Weight									**Prepared: 06/13/13 Analyzed: 06/14/13**	
									Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control	
Blank (B13F065-BLK1)										
% Solids	ND	U	1	%						
Duplicate (B13F065-DUP1)		**Source: 1306007-10**								
% Solids	68		1	%		67			2	20

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Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 13155D
Project Number: R13S75	**75 Hawthorne Street**	**Reported:** 07/30/13 16:23
Project: Iron King Mine April-May 2013 Sampling	**San Francisco CA, 94105**	

Qualifiers and Comments

J The reported result for this analyte should be considered an estimated value.

C1 The reported concentration for this analyte is below the quantitation limit.

U Not Detected

NR Not Reported

RE1, RE2, etc: Result is from a sample re-analysis.

CLIENT	PROJECT	PROJECTNUM	LabName	SAMPLENAME	LABSAMPID	MATRIX	RPTMATRIX	SAMPDATE	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	Result	DL	RL	UNITS	RPToMDL	BASIS	DILUTION	SPIKELEVEL	RECOVERY	UPPERCL	LOWERCL	ANALYST	PSOLIDS	LNOTE	ANOTE	LATITUDE	LONGITUDE	sComment	SNOTE1	SNOTE2	SNOTE3	SNOTE4	SNOTE5	SNOTE6	SNOTE7	SNOTE8	SNOTE9	SNOTE10	ANALYTEORDER
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	642	1306007-01	Solid	Soil	05/01/2013 00:00:00	06/13/2013 11:15:00	06/17/2013 18:52:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	360	1.5	3.0	mg/kg	TRUE	Dry	2					SC																	140
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	642	1306007-01	Solid	Soil	05/01/2013 00:00:00	06/13/2013 11:15:00	06/17/2013 18:52:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	240	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	30
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	647	1306007-02	Solid	Soil	05/01/2013 00:00:00	06/13/2013 11:15:00	06/17/2013 19:13:20	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	190	1.5	3.0	mg/kg	TRUE	Dry	2					SC																	140
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	647	1306007-02	Solid	Soil	05/01/2013 00:00:00	06/13/2013 11:15:00	06/17/2013 19:13:20	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	190	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	30
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	648	1306007-03	Solid	Soil	05/01/2013 00:00:00	06/13/2013 11:15:00	06/17/2013 19:19:10	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	180	1.5	3.0	mg/kg	TRUE	Dry	2					SC																	140
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	648	1306007-03	Solid	Soil	05/01/2013 00:00:00	06/13/2013 11:15:00	06/17/2013 19:19:10	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	220	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	30
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	750	1306007-04	Solid	Soil	05/01/2013 00:00:00	06/13/2013 11:15:00	06/17/2013 19:24:55	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	1100	1.5	3.0	mg/kg	TRUE	Dry	2					SC																	140
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	750	1306007-04	Solid	Soil	05/01/2013 00:00:00	06/13/2013 11:15:00	06/17/2013 19:24:55	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	29	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	30
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	753	1306007-05	Solid	Soil	05/01/2013 00:00:00	06/13/2013 11:15:00	06/17/2013 19:45:04	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	290	1.5	3.0	mg/kg	TRUE	Dry	2					SC																	140
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	753	1306007-05RE1	Solid	Soil	05/01/2013 00:00:00	06/13/2013 11:15:00	07/03/2013 18:02:23	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	300	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	30
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	978	1306007-06	Solid	Soil	05/01/2013 00:00:00	06/13/2013 11:15:00	06/17/2013 19:50:14	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	440	1.5	3.0	mg/kg	TRUE	Dry	2					SC																	140
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	978	1306007-06RE1	Solid	Soil	05/01/2013 00:00:00	06/13/2013 11:15:00	07/03/2013 18:12:15	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	240	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	30
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	979	1306007-07	Solid	Soil	04/29/2013 14:21:00	06/13/2013 11:15:00	06/17/2013 19:55:59	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	730	1.5	3.0	mg/kg	TRUE	Dry	2					SC																	140
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	979	1306007-07RE1	Solid	Soil	04/29/2013 14:21:00	06/13/2013 11:15:00	07/03/2013 18:22:23	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	480	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	30
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	980	1306007-08	Solid	Soil	04/29/2013 15:13:00	06/13/2013 11:15:00	06/17/2013 20:04:01	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	5700	1.5	3.0	mg/kg	TRUE	Dry	2					SC																	140
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	980	1306007-08RE1	Solid	Soil	04/29/2013 15:13:00	06/13/2013 11:15:00	07/03/2013 18:31:27	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	3700	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	30
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-01-surface	1306007-09	Solid	Sediment	04/29/2013 13:43:00	06/13/2013 08:55:00	06/14/2013 08:52:17	B13F065	Solids, Dry Weight	3550C/SOP460	Solids, Dry Weight (Prep)	% Solids	NA	FALSE	FALSE	79	1	1	%	FALSE	Wet	1					WD	78.8																1
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-01-surface	1306007-09	Solid	Sediment	04/29/2013 13:43:00	06/13/2013 11:15:00	06/17/2013 20:12:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Aluminum	7429-90-5	FALSE	FALSE	9800	63	130	mg/kg	TRUE	Dry	2					SC	78.8																10
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-01-surface	1306007-09	Solid	Sediment	04/29/2013 13:43:00	06/13/2013 11:15:00	06/17/2013 20:12:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Chromium	7440-47-3	FALSE	FALSE	13	0.63	1.3	mg/kg	TRUE	Dry	2					SC	78.8																100
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-01-surface	1306007-09	Solid	Sediment	04/29/2013 13:43:00	06/13/2013 11:15:00	06/17/2013 20:12:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cobalt	7440-48-4	FALSE	FALSE	9.3	1.3	2.5	mg/kg	TRUE	Dry	2					SC	78.8																110
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-01-surface	1306007-09	Solid	Sediment	04/29/2013 13:43:00	06/13/2013 11:15:00	06/17/2013 20:12:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Copper	7440-50-8	FALSE	FALSE	440	2.5	5.1	mg/kg	TRUE	Dry	2					SC	78.8																120
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-01-surface	1306007-09	Solid	Sediment	04/29/2013 13:43:00	06/13/2013 11:15:00	06/17/2013 20:12:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Iron	7439-89-6	FALSE	FALSE	28000	63	130	mg/kg	TRUE	Dry	2					SC	78.8																130
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-01-surface	1306007-09	Solid	Sediment	04/29/2013 13:43:00	06/13/2013 11:15:00	06/17/2013 20:12:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	69	1.9	3.8	mg/kg	TRUE	Dry	2					SC	78.8																140
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-01-surface	1306007-09	Solid	Sediment	04/29/2013 13:43:00	06/13/2013 11:15:00	06/17/2013 20:12:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Manganese	7439-96-5	FALSE	FALSE	490	3.2	6.3	mg/kg	TRUE	Dry	2					SC	78.8																160
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-01-surface	1306007-09	Solid	Sediment	04/29/2013 13:43:00	06/13/2013 11:15:00	06/17/2013 20:12:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Molybdenum	7439-98-7	FALSE	FALSE	ND	3.2	6.3	mg/kg	TRUE	Dry	2					SC	78.8		U														170
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-01-surface	1306007-09	Solid	Sediment	04/29/2013 13:43:00	06/13/2013 11:15:00	06/17/2013 20:12:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Nickel	7440-02-0	FALSE	FALSE	12	3.2	6.3	mg/kg	TRUE	Dry	2					SC	78.8																180
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-01-surface	1306007-09	Solid	Sediment	04/29/2013 13:43:00	06/13/2013 11:15:00	06/17/2013 20:12:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Potassium	7440-09-7	FALSE	FALSE	1500	320	630	mg/kg	TRUE	Dry	2					SC	78.8																190
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-01-surface	1306007-09	Solid	Sediment	04/29/2013 13:43:00	06/13/2013 11:15:00	06/17/2013 20:12:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Antimony	7440-36-0	FALSE	FALSE	1.4	1.3	2.5	mg/kg	TRUE	Dry	2					SC	78.8		C1, J														20
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-01-surface	1306007-09	Solid	Sediment	04/29/2013 13:43:00	06/13/2013 11:15:00	06/17/2013 20:12:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Selenium	7782-49-2	FALSE	FALSE	3.6	1.3	2.5	mg/kg	TRUE	Dry	2					SC	78.8																200
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-01-surface	1306007-09	Solid	Sediment	04/29/2013 13:43:00	06/13/2013 11:15:00	06/17/2013 20:12:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Silver	7440-22-4	FALSE	FALSE	1.1	0.63	1.3	mg/kg	TRUE	Dry	2					SC	78.8		C1, J														220
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-01-surface	1306007-09	Solid	Sediment	04/29/2013 13:43:00	06/13/2013 11:15:00	06/17/2013 20:12:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Thallium	7440-28-0	FALSE	FALSE	ND	3.2	6.3	mg/kg	TRUE	Dry	2					SC	78.8		U														250
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-01-surface	1306007-09	Solid	Sediment	04/29/2013 13:43:00	06/13/2013 11:15:00	06/17/2013 20:12:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Vanadium	7440-62-2	FALSE	FALSE	40	1.3	2.5	mg/kg	TRUE	Dry	2					SC	78.8																280
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-01-surface	1306007-09	Solid	Sediment	04/29/2013 13:43:00	06/13/2013 11:15:00	06/17/2013 20:12:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Zinc	7440-66-6	FALSE	FALSE	630	5.1	10	mg/kg	TRUE	Dry	2					SC	78.8																290
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-01-surface	1306007-09	Solid	Sediment	04/29/2013 13:43:00	06/13/2013 11:15:00	06/17/2013 20:12:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Beryllium	7440-41-7	FALSE	FALSE	0.37	0.06	0.13	mg/kg	TRUE	Dry	2					SC	78.8																50
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-01-surface	1306007-09	Solid	Sediment	04/29/2013 13:43:00	06/13/2013 11:15:00	06/17/2013 20:12:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cadmium	7440-43-9	FALSE	FALSE	3.1	0.32	0.63	mg/kg	TRUE	Dry	2					SC	78.8																70
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-01-surface	1306007-09	Solid	Sediment	04/29/2013 13:43:00	06/13/2013 11:15:00	06/17/2013 20:12:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Calcium	7440-70-2	FALSE	FALSE	3500	63	130	mg/kg	TRUE	Dry	2					SC	78.8																80
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-01-surface	1306007-09RE1	Solid	Sediment	04/29/2013 13:43:00	06/13/2013 11:15:00	07/03/2013 18:41:29	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Magnesium	7439-95-4	FALSE	FALSE	4900	32	63	mg/kg	TRUE	Dry	2					SC	78.8																150
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-01-surface	1306007-09RE1	Solid	Sediment	04/29/2013 13:43:00	06/13/2013 11:15:00	07/03/2013 18:41:29	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Sodium	7440-23-5	FALSE	FALSE	190	32	63	mg/kg	TRUE	Dry	2					SC	78.8																230
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-01-surface	1306007-09RE1	Solid	Sediment	04/29/2013 13:43:00	06/13/2013 11:15:00	07/03/2013 18:41:29	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	150	1.3	2.5	mg/kg	TRUE	Dry	2					SC	78.8																30
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-01-surface	1306007-09RE1	Solid	Sediment	04/29/2013 13:43:00	06/13/2013 11:15:00	07/03/2013 18:41:29	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Barium	7440-39-3	FALSE	FALSE	58	3.2	6.3	mg/kg	TRUE	Dry	2					SC	78.8																40
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-02-surface	1306007-10	Solid	Sediment	04/29/2013 13:47:00	06/13/2013 08:55:00	06/14/2013 08:52:17	B13F065	Solids, Dry Weight	3550C/SOP460	Solids, Dry Weight (Prep)	% Solids	NA	FALSE	FALSE	67	1	1	%	FALSE	Wet	1					WD	66.8																1
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-02-surface	1306007-10	Solid	Sediment	04/29/2013 13:47:00	06/13/2013 11:15:00	06/17/2013 20:18:44	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Aluminum	7429-90-5	FALSE	FALSE	17000	75	150	mg/kg	TRUE	Dry	2					SC	66.8																10
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-02-surface	1306007-10	Solid	Sediment	04/29/2013 13:47:00	06/13/2013 11:15:00	06/17/2013 20:18:44	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Chromium	7440-47-3	FALSE	FALSE	19	0.75	1.5	mg/kg	TRUE	Dry	2					SC	66.8																100
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-02-surface	1306007-10	Solid	Sediment	04/29/2013 13:47:00	06/13/2013 11:15:00	06/17/2013 20:18:44	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cobalt	7440-48-4	FALSE	FALSE	17	1.5	3.0	mg/kg	TRUE	Dry	2					SC	66.8																110
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-02-surface	1306007-10	Solid	Sediment	04/29/2013 13:47:00	06/13/2013 11:15:00	06/17/2013 20:18:44	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Copper	7440-50-8	FALSE	FALSE	940	3.0	6.0	mg/kg	TRUE	Dry	2					SC	66.8																120
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-02-surface	1306007-10	Solid	Sediment	04/29/2013 13:47:00	06/13/2013 11:15:00	06/17/2013 20:18:44	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Iron	7439-89-6	FALSE	FALSE	41000	75	150	mg/kg	TRUE	Dry	2					SC	66.8																130
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-02-surface	1306007-10	Solid	Sediment	04/29/2013 13:47:00	06/13/2013 11:15:00	06/17/2013 20:18:44	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	210	2.2	4.5	mg/kg	TRUE	Dry	2					SC	66.8																140
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-02-surface	1306007-10	Solid	Sediment	04/29/2013 13:47:00	06/13/2013 11:15:00	06/17/2013 20:18:44	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Manganese	7439-96-5	FALSE	FALSE	820	3.7	7.5	mg/kg	TRUE	Dry	2					SC	66.8																160
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-02-surface	1306007-10	Solid	Sediment	04/29/2013 13:47:00	06/13/2013 11:15:00	06/17/2013 20:18:44	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Molybdenum	7439-98-7	FALSE	FALSE	ND	3.7	7.5	mg/kg	TRUE	Dry	2					SC	66.8		U														170
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-02-surface	1306007-10	Solid	Sediment	04/29/2013 13:47:00	06/13/2013 11:15:00	06/17/2013 20:18:44	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Nickel	7440-02-0	FALSE	FALSE	21	3.7	7.5	mg/kg	TRUE	Dry	2					SC	66.8																180
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-02-surface	1306007-10	Solid	Sediment	04/29/2013 13:47:00	06/13/2013 11:15:00	06/17/2013 20:18:44	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Potassium	7440-09-7	FALSE	FALSE	2000	370	750	mg/kg	TRUE	Dry	2					SC	66.8																190
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-02-surface	1306007-10	Solid	Sediment	04/29/2013 13:47:00	06/13/2013 11:15:00	06/17/2013 20:18:44	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Antimony	7440-36-0	FALSE	FALSE	2.4	1.5	3.0	mg/kg	TRUE	Dry	2					SC	66.8		C1, J														20
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-02-surface	1306007-10	Solid	Sediment	04/29/2013 13:47:00	06/13/2013 11:15:00	06/17/2013 20:18:44	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Selenium	7782-49-2	FALSE	FALSE	6.3	1.5	3.0	mg/kg	TRUE	Dry	2					SC	66.8																200
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-02-surface	1306007-10	Solid	Sediment	04/29/2013 13:47:00	06/13/2013 11:15:00	06/17/2013 20:18:44	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Silver	7440-22-4	FALSE	FALSE	3.9	0.75	1.5	mg/kg	TRUE	Dry	2					SC	66.8																220
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-02-surface	1306007-10	Solid	Sediment	04/29/2013 13:47:00	06/13/2013 11:15:00	06/17/2013 20:18:44	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Thallium	7440-28-0	FALSE	FALSE	ND	3.7	7.5	mg/kg	TRUE	Dry	2					SC	66.8		U														250
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-02-surface	1306007-10	Solid	Sediment	04/29/2013 13:47:00	06/13/2013 11:15:00	06/17/2013 20:18:44	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Vanadium	7440-62-2	FALSE	FALSE	58	1.5	3.0	mg/kg	TRUE	Dry	2					SC	66.8																280
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-02-surface	1306007-10	Solid	Sediment	04/29/2013 13:47:00	06/13/2013 11:15:00	06/17/2013 20:18:44	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Zinc	7440-66-6	FALSE	FALSE	1200	6.0	12	mg/kg	TRUE	Dry	2					SC	66.8																290
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-02-surface	1306007-10	Solid	Sediment	04/29/2013 13:47:00	06/13/2013 11:15:00	06/17/2013 20:18:44	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Beryllium	7440-41-7	FALSE	FALSE	0.44	0.07	0.15	mg/kg	TRUE	Dry	2					SC	66.8																50
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-02-surface	1306007-10	Solid	Sediment	04/29/2013 13:47:00	06/13/2013 11:15:00	06/17/2013 20:18:44	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cadmium	7440-43-9	FALSE	FALSE	3.4	0.37	0.75	mg/kg	TRUE	Dry	2					SC	66.8																70
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-02-surface	1306007-10	Solid	Sediment	04/29/2013 13:47:00	06/13/2013 11:15:00	06/17/2013 20:18:44	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Calcium	7440-70-2	FALSE	FALSE	7200	75	150	mg/kg	TRUE	Dry	2					SC	66.8																80
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-02-surface	1306007-10RE1	Solid	Sediment	04/29/2013 13:47:00	06/13/2013 11:15:00	07/03/2013 18:47:13	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Magnesium	7439-95-4	FALSE	FALSE	7300	37	75	mg/kg	TRUE	Dry	2					SC	66.8																150
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-02-surface	1306007-10RE1	Solid	Sediment	04/29/2013 13:47:00	06/13/2013 11:15:00	07/03/2013 18:47:13	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Sodium	7440-23-5	FALSE	FALSE	170	37	75	mg/kg	TRUE	Dry	2					SC	66.8																230
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-02-surface	1306007-10RE1	Solid	Sediment	04/29/2013 13:47:00	06/13/2013 11:15:00	07/03/2013 18:47:13	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	210	1.5	3.0	mg/kg	TRUE	Dry	2					SC	66.8																30
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-02-surface	1306007-10RE1	Solid	Sediment	04/29/2013 13:47:00	06/13/2013 11:15:00	07/03/2013 18:47:13	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Barium	7440-39-3	FALSE	FALSE	140	3.7	7.5	mg/kg	TRUE	Dry	2					SC	66.8																40
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-03-surface	1306007-11	Solid	Sediment	04/29/2013 13:50:00	06/13/2013 08:55:00	06/14/2013 08:52:17	B13F065	Solids, Dry Weight	3550C/SOP460	Solids, Dry Weight (Prep)	% Solids	NA	FALSE	FALSE	86	1	1	%	FALSE	Wet	1					WD	86.3																1
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-03-surface	1306007-11	Solid	Sediment	04/29/2013 13:50:00	06/13/2013 11:15:00	06/17/2013 20:24:27	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Aluminum	7429-90-5	FALSE	FALSE	12000	58	120	mg/kg	TRUE	Dry	2					SC	86.3																10
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-03-surface	1306007-11	Solid	Sediment	04/29/2013 13:50:00	06/13/2013 11:15:00	06/17/2013 20:24:27	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Chromium	7440-47-3	FALSE	FALSE	13	0.58	1.2	mg/kg	TRUE	Dry	2					SC	86.3																100
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-03-surface	1306007-11	Solid	Sediment	04/29/2013 13:50:00	06/13/2013 11:15:00	06/17/2013 20:24:27	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cobalt	7440-48-4	FALSE	FALSE	13	1.2	2.3	mg/kg	TRUE	Dry	2					SC	86.3																110
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-03-surface	1306007-11	Solid	Sediment	04/29/2013 13:50:00	06/13/2013 11:15:00	06/17/2013 20:24:27	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Copper	7440-50-8	FALSE	FALSE	470	2.3	4.6	mg/kg	TRUE	Dry	2					SC	86.3																120
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-03-surface	1306007-11	Solid	Sediment	04/29/2013 13:50:00	06/13/2013 11:15:00	06/17/2013 20:24:27	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Iron	7439-89-6	FALSE	FALSE	36000	58	120	mg/kg	TRUE	Dry	2					SC	86.3																130
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-03-surface	1306007-11	Solid	Sediment	04/29/2013 13:50:00	06/13/2013 11:15:00	06/17/2013 20:24:27	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	150	1.7	3.5	mg/kg	TRUE	Dry	2					SC	86.3																140
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-03-surface	1306007-11	Solid	Sediment	04/29/2013 13:50:00	06/13/2013 11:15:00	06/17/2013 20:24:27	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Manganese	7439-96-5	FALSE	FALSE	450	2.9	5.8	mg/kg	TRUE	Dry	2					SC	86.3																160
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-03-surface	1306007-11	Solid	Sediment	04/29/2013 13:50:00	06/13/2013 11:15:00	06/17/2013 20:24:27	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Molybdenum	7439-98-7	FALSE	FALSE	ND	2.9	5.8	mg/kg	TRUE	Dry	2					SC	86.3		U														170
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-03-surface	1306007-11	Solid	Sediment	04/29/2013 13:50:00	06/13/2013 11:15:00	06/17/2013 20:24:27	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Nickel	7440-02-0	FALSE	FALSE	14	2.9	5.8	mg/kg	TRUE	Dry	2					SC	86.3																180
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-03-surface	1306007-11	Solid	Sediment	04/29/2013 13:50:00	06/13/2013 11:15:00	06/17/2013 20:24:27	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Potassium	7440-09-7	FALSE	FALSE	1900	290	580	mg/kg	TRUE	Dry	2					SC	86.3																190
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-03-surface	1306007-11	Solid	Sediment	04/29/2013 13:50:00	06/13/2013 11:15:00	06/17/2013 20:24:27	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Antimony	7440-36-0	FALSE	FALSE	2.7	1.2	2.3	mg/kg	TRUE	Dry	2					SC	86.3																20
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-03-surface	1306007-11	Solid	Sediment	04/29/2013 13:50:00	06/13/2013 11:15:00	06/17/2013 20:24:27	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Selenium	7782-49-2	FALSE	FALSE	6.1	1.2	2.3	mg/kg	TRUE	Dry	2					SC	86.3																200
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-03-surface	1306007-11	Solid	Sediment	04/29/2013 13:50:00	06/13/2013 11:15:00	06/17/2013 20:24:27	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Silver	7440-22-4	FALSE	FALSE	1.8	0.58	1.2	mg/kg	TRUE	Dry	2					SC	86.3																220
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-03-surface	1306007-11	Solid	Sediment	04/29/2013 13:50:00	06/13/2013 11:15:00	06/17/2013 20:24:27	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Thallium	7440-28-0	FALSE	FALSE	ND	2.9	5.8	mg/kg	TRUE	Dry	2					SC	86.3		U														250
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-03-surface	1306007-11	Solid	Sediment	04/29/2013 13:50:00	06/13/2013 11:15:00	06/17/2013 20:24:27	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Vanadium	7440-62-2	FALSE	FALSE	58	1.2	2.3	mg/kg	TRUE	Dry	2					SC	86.3																280
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-03-surface	1306007-11	Solid	Sediment	04/29/2013 13:50:00	06/13/2013 11:15:00	06/17/2013 20:24:27	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Zinc	7440-66-6	FALSE	FALSE	570	4.6	9.3	mg/kg	TRUE	Dry	2					SC	86.3																290
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-03-surface	1306007-11	Solid	Sediment	04/29/2013 13:50:00	06/13/2013 11:15:00	06/17/2013 20:24:27	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Beryllium	7440-41-7	FALSE	FALSE	0.36	0.06	0.12	mg/kg	TRUE	Dry	2					SC	86.3																50
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-03-surface	1306007-11	Solid	Sediment	04/29/2013 13:50:00	06/13/2013 11:15:00	06/17/2013 20:24:27	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cadmium	7440-43-9	FALSE	FALSE	1.9	0.29	0.58	mg/kg	TRUE	Dry	2					SC	86.3																70
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-03-surface	1306007-11	Solid	Sediment	04/29/2013 13:50:00	06/13/2013 11:15:00	06/17/2013 20:24:27	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Calcium	7440-70-2	FALSE	FALSE	7800	58	120	mg/kg	TRUE	Dry	2					SC	86.3																80
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-03-surface	1306007-11RE1	Solid	Sediment	04/29/2013 13:50:00	06/13/2013 11:15:00	07/03/2013 18:53:03	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Magnesium	7439-95-4	FALSE	FALSE	5600	29	58	mg/kg	TRUE	Dry	2					SC	86.3																150
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-03-surface	1306007-11RE1	Solid	Sediment	04/29/2013 13:50:00	06/13/2013 11:15:00	07/03/2013 18:53:03	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Sodium	7440-23-5	FALSE	FALSE	270	29	58	mg/kg	TRUE	Dry	2					SC	86.3																230
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-03-surface	1306007-11RE1	Solid	Sediment	04/29/2013 13:50:00	06/13/2013 11:15:00	07/03/2013 18:53:03	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	290	1.2	2.3	mg/kg	TRUE	Dry	2					SC	86.3																30
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	Chap-03-surface	1306007-11RE1	Solid	Sediment	04/29/2013 13:50:00	06/13/2013 11:15:00	07/03/2013 18:53:03	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Barium	7440-39-3	FALSE	FALSE	92	2.9	5.8	mg/kg	TRUE	Dry	2					SC	86.3																40

LABNAME	LABSAMPID	QCTYPE	MATRIX	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	RPToMDL	BASIS	DILUTION	SOURCEID	SOURCERES	SPIKELEVEL	RECOVERY	RPD	UPPERCL	LOWERCL	RPDCL	ANALYST	PSOLIDS	LNOTE	ANOTE	ANALYTEORDER
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Aluminum	7429-90-5	FALSE	FALSE	ND	50	100	mg/kg	TRUE	Dry	2									SC			U	10
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Chromium	7440-47-3	FALSE	FALSE	ND	0.50	1.0	mg/kg	TRUE	Dry	2									SC			U	100
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cobalt	7440-48-4	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Dry	2									SC			U	110
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Copper	7440-50-8	FALSE	FALSE	ND	2.0	4.0	mg/kg	TRUE	Dry	2									SC			U	120
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Iron	7439-89-6	FALSE	FALSE	ND	50	100	mg/kg	TRUE	Dry	2									SC			U	130
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Dry	2									SC			U	140
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Manganese	7439-96-5	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2									SC			U	160
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Molybdenum	7439-98-7	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2									SC			U	170
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Nickel	7440-02-0	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2									SC			U	180
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Potassium	7440-09-7	FALSE	FALSE	ND	250	500	mg/kg	TRUE	Dry	2									SC			U	190
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Antimony	7440-36-0	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Dry	2									SC			U	20
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Selenium	7782-49-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Dry	2									SC			U	200
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Silver	7440-22-4	FALSE	FALSE	ND	0.50	1.0	mg/kg	TRUE	Dry	2									SC			U	220
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Thallium	7440-28-0	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2									SC			U	250
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Vanadium	7440-62-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Dry	2									SC			U	280
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Zinc	7440-66-6	FALSE	FALSE	ND	4.0	8.0	mg/kg	TRUE	Dry	2									SC			U	290
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Dry	2									SC			U	30
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Beryllium	7440-41-7	FALSE	FALSE	ND	0.05	0.10	mg/kg	TRUE	Dry	2									SC			U	50
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cadmium	7440-43-9	FALSE	FALSE	ND	0.25	0.50	mg/kg	TRUE	Dry	2									SC			U	70
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Calcium	7440-70-2	FALSE	FALSE	ND	50	100	mg/kg	TRUE	Dry	2									SC			U	80
EPA Region 9 Laboratory	B13F059-BLK2	Blank	Solid	06/13/2013 11:15:00	07/19/2013 16:15:42	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Magnesium	7439-95-4	FALSE	FALSE	ND	25	50	mg/kg	TRUE	Dry	2									SC			U	150
EPA Region 9 Laboratory	B13F059-BLK2	Blank	Solid	06/13/2013 11:15:00	07/19/2013 16:15:42	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Sodium	7440-23-5	FALSE	FALSE	ND	25	50	mg/kg	TRUE	Dry	2									SC			U	230
EPA Region 9 Laboratory	B13F059-BLK2	Blank	Solid	06/13/2013 11:15:00	07/19/2013 16:15:42	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Barium	7440-39-3	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2									SC			U	40
EPA Region 9 Laboratory	B13F059-MS1	Matrix Spike	Solid	06/13/2013 11:15:00	06/17/2013 18:58:50	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	453	1.5	3.0	mg/kg	TRUE	Dry	2	1306007-01	359	99.0	95		125	75	20	SC				140
EPA Region 9 Laboratory	B13F059-MS1	Matrix Spike	Solid	06/13/2013 11:15:00	06/17/2013 18:58:50	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	663	1.0	2.0	mg/kg	TRUE	Dry	2	1306007-01	238	396	107		125	75	20	SC				30
EPA Region 9 Laboratory	B13F059-MSD1	Matrix Spike Dup	Solid	06/13/2013 11:15:00	06/17/2013 19:06:07	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	472	1.5	3.0	mg/kg	TRUE	Dry	2	1306007-01	359	99.0	115	4	125	75	20	SC				140
EPA Region 9 Laboratory	B13F059-MSD1	Matrix Spike Dup	Solid	06/13/2013 11:15:00	06/17/2013 19:06:07	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	696	1.0	2.0	mg/kg	TRUE	Dry	2	1306007-01	238	396	116	5	125	75	20	SC				30
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Aluminum	7429-90-5	FALSE	FALSE	123	50	100	mg/kg	TRUE	Dry	2			115	107		152	47.6		SC				10
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Chromium	7440-47-3	FALSE	FALSE	28.0	0.50	1.0	mg/kg	TRUE	Dry	2			27.2	103		132	68.3		SC				100
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cobalt	7440-48-4	FALSE	FALSE	37.3	1.0	2.0	mg/kg	TRUE	Dry	2			37.5	100		135	64.7		SC				110
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Copper	7440-50-8	FALSE	FALSE	1560	2.0	4.0	mg/kg	TRUE	Dry	2			1770	88		126	74.6		SC				120
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Iron	7439-89-6	FALSE	FALSE	6740	50	100	mg/kg	TRUE	Dry	2			6480	104		134	66.2		SC				130
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	58.9	1.5	3.0	mg/kg	TRUE	Dry	2			57.0	103		127	72.8		SC				140
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Manganese	7439-96-5	FALSE	FALSE	62.7	2.5	5.0	mg/kg	TRUE	Dry	2			61.1	103		132	68.2		SC				160
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Nickel	7440-02-0	FALSE	FALSE	16.3	2.5	5.0	mg/kg	TRUE	Dry	2			16.3	100		145	55.2		SC				180
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Potassium	7440-09-7	FALSE	FALSE	ND	250	500	mg/kg	TRUE	Dry	2			39.8			215	0		SC			U	190
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Antimony	7440-36-0	FALSE	FALSE	61.8	1.0	2.0	mg/kg	TRUE	Dry	2			66.1	93		158	41.2		SC				20
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Selenium	7782-49-2	FALSE	FALSE	10.3	1.0	2.0	mg/kg	TRUE	Dry	2			10.0	103		159	41		SC				200
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Silver	7440-22-4	FALSE	FALSE	6.10	0.50	1.0	mg/kg	TRUE	Dry	2			5.91	103		154	45.8		SC				220
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Thallium	7440-28-0	FALSE	FALSE	9.61	2.5	5.0	mg/kg	TRUE	Dry	2			9.52	101		169	30.5		SC				250
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Vanadium	7440-62-2	FALSE	FALSE	19.2	1.0	2.0	mg/kg	TRUE	Dry	2			17.6	109		135	65.9		SC				280
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Zinc	7440-66-6	FALSE	FALSE	47.3	4.0	8.0	mg/kg	TRUE	Dry	2			47.6	99		157	43.2		SC				290
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	284	1.0	2.0	mg/kg	TRUE	Dry	2			254	112		139	60.9		SC				30
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Beryllium	7440-41-7	FALSE	FALSE	4.97	0.05	0.10	mg/kg	TRUE	Dry	2			4.91	101		139	61.2		SC				50
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cadmium	7440-43-9	FALSE	FALSE	10.7	0.25	0.50	mg/kg	TRUE	Dry	2			10.9	98		128	70.6		SC				70
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Calcium	7440-70-2	FALSE	FALSE	47300	50	100	mg/kg	TRUE	Dry	2			44300	107		132	68.6		SC				80
EPA Region 9 Laboratory	B13F059-SRM2	Reference	Solid	06/13/2013 11:15:00	07/19/2013 16:20:59	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Magnesium	7439-95-4	FALSE	FALSE	28000	25	50	mg/kg	TRUE	Dry	2			29300	96		130	70.2		SC				150
EPA Region 9 Laboratory	B13F059-SRM2	Reference	Solid	06/13/2013 11:15:00	07/19/2013 16:20:59	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Sodium	7440-23-5	FALSE	FALSE	ND	25	50	mg/kg	TRUE	Dry	2			72.6			298	0		SC			U	230
EPA Region 9 Laboratory	B13F059-SRM2	Reference	Solid	06/13/2013 11:15:00	07/19/2013 16:20:59	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Barium	7440-39-3	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2			1.60			138	62.5		SC			U	40
EPA Region 9 Laboratory	B13F065-BLK1	Blank	Solid	06/13/2013 08:55:00	06/14/2013 08:52:17	B13F065	Solids, Dry Weight	3550C/SOP460	Solids, Dry Weight (Prep)	% Solids	NA	FALSE	FALSE	ND	1	1	%	FALSE	Wet	1									WD			U	1
EPA Region 9 Laboratory	B13F065-DUP1	Duplicate	Solid	06/13/2013 08:55:00	06/14/2013 08:52:17	B13F065	Solids, Dry Weight	3550C/SOP460	Solids, Dry Weight (Prep)	% Solids	NA	FALSE	FALSE	68	1	1	%	FALSE	Wet	1	1306007-10	67			2			20	WD	66.8			1

QUALIFIER	DESCRIPTION
C1	The reported concentration for this analyte is below the quantitation limit.
J	The reported result for this analyte should be considered an estimated value.
U	This analyte was not detected.

From: Dennis.Shelton@CH2M.com [Dennis.Shelton@CH2M.com]
To: Dennis.Shelton@CH2M.com [Dennis.Shelton@CH2M.com]
CC:
Subject: FW: Metals analysis results for Iron King Mine April-May 2013 Sampling SDG 13155D
Sent: Monday, June 30, 2014 10:23:36
Attachment 1: 13155d_total_met.pdf
Attachment 2: 13155d_total_met.xls
Attachment 3: 13155d_invitro_met.pdf
Attachment 4: 13155d_invitro_met.xls
Attachment 5: 13155d_bioaccess calc.xls

From: searles, zizi [mailto:searles.zizi@epa.gov]
Sent: Wednesday, July 31, 2013 3:59 PM
To: Raykhman, Natalia/SCO
Cc: DHONT, JEFF
Subject: FW: Metals analysis results for Iron King Mine April-May 2013 Sampling SDG 13155D

From: Berges, Jack
Sent: Tuesday, July 30, 2013 5:02 PM
To: searles, zizi
Subject: Metals analysis results for Iron King Mine April-May 2013 Sampling SDG 13155D

Metals analysis results for Iron King Mine April-May 2013 Sampling SDG 13155D, project R13S75, are attached. One reports total metals and the other reports bio-accessible metals. I have also included a spreadsheet that calculates the percent of metal that is bio-accessible.

Jack Berges
Chemist, US EPA Region 9 Laboratory
1337 South 46th Street Bldg 201
Richmond, CA 94804
P: 510-412-2332 F: 510-412-2302
berges.jack@epa.gov

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street Building 201
Richmond, CA 94804

Date: **4/4/2014**

Subject: **Analytical Testing Results - Project R14S06**
SDG: 14066C

From: **Brenda Bettencourt, Director**
EPA Region 9 Laboratory
MTS-2

To: **Zi Zi Searles**
California Site Cleanup Section 1
SFD-7-1

Attached are the results from the analysis of samples from the **Iron King Mine 2013/2014 Sampling** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Electronic CC: David Aloysius, SERAS
Donna Getty, SERAS
Jeff Dhont, EPA Region 9

Analyses included in this report:

Analysis of In Vitro Gastric Extracts by ICP

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14066C
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/04/14 10:39
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
GAL-01	1403013-01	Soil	02/28/14 12:05	03/07/14 13:08
GAL-02	1403013-02	Soil	02/28/14 12:30	03/07/14 13:08
GAL-03	1403013-03	Soil	02/28/14 13:20	03/07/14 13:08
GAL-04	1403013-04	Soil	02/28/14 13:30	03/07/14 13:08
GAL-05	1403013-05	Soil	02/28/14 13:45	03/07/14 13:08
GAL-06	1403013-06	Soil	02/28/14 13:30	03/07/14 13:08
MTP-01	1403013-07	Soil	02/27/14 15:30	03/07/14 13:08
MTP-02	1403013-08	Soil	02/27/14 15:45	03/07/14 13:08
MTP-03	1403013-09	Soil	02/27/14 15:45	03/07/14 13:08
MTP-04	1403013-10	Soil	02/27/14 16:10	03/07/14 13:08
MTP-05	1403013-11	Soil	02/27/14 16:15	03/07/14 13:08
MTP-06	1403013-12	Soil	02/27/14 16:25	03/07/14 13:08
MTP-07	1403013-13	Soil	02/27/14 16:50	03/07/14 13:08
MTP-08	1403013-14	Soil	02/27/14 17:00	03/07/14 13:08
MTP-09	1403013-15	Soil	02/27/14 17:05	03/07/14 13:08
MTP-10	1403013-16	Soil	02/27/14 17:10	03/07/14 13:08

SDG ID 14066C

All samples were dried and sieved prior to preparation for analysis.

Samples were subjected to an in-vitro extraction prior to digestion and analysis. Results reported are the available metal in the soil after extraction.

Work Order(s)

1403013

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14066C
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/04/14 10:39
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: **1403013-01**									**Soil - Sampled: 02/28/14 12:05**
Sample ID: **GAL-01**									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic		41		2	mg/kg	B14C099	03/21/14	03/25/14	6010C/SOP503
Lead		58		3	"	"	"	"	6010C/SOP503
Lab ID: **1403013-02**									**Soil - Sampled: 02/28/14 12:30**
Sample ID: **GAL-02**									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic		7.1		2	mg/kg	B14C099	03/21/14	03/25/14	6010C/SOP503
Lead		46		3	"	"	"	"	6010C/SOP503
Lab ID: **1403013-03**									**Soil - Sampled: 02/28/14 13:20**
Sample ID: **GAL-03**									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic		24		2	mg/kg	B14C099	03/21/14	03/25/14	6010C/SOP503
Lead		470		3	"	"	"	"	6010C/SOP503
Lab ID: **1403013-04**									**Soil - Sampled: 02/28/14 13:30**
Sample ID: **GAL-04**									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic		930		2	mg/kg	B14C099	03/21/14	03/25/14	6010C/SOP503
Lead		8.8		3	"	"	"	"	6010C/SOP503
Lab ID: **1403013-05**									**Soil - Sampled: 02/28/14 13:45**
Sample ID: **GAL-05**									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic		66		2	mg/kg	B14C099	03/21/14	03/25/14	6010C/SOP503
Lead		32		3	"	"	"	"	6010C/SOP503
Lab ID: **1403013-06**									**Soil - Sampled: 02/28/14 13:30**
Sample ID: **GAL-06**									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic		920		2	mg/kg	B14C099	03/21/14	03/25/14	6010C/SOP503
Lead		11		3	"	"	"	"	6010C/SOP503
Lab ID: **1403013-07**									**Soil - Sampled: 02/27/14 15:30**
Sample ID: **MTP-01**									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic		170		2	mg/kg	B14C099	03/21/14	03/25/14	6010C/SOP503
Lead		22		3	"	"	"	"	6010C/SOP503
Lab ID: **1403013-08**									**Soil - Sampled: 02/27/14 15:45**
Sample ID: **MTP-02**									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic		400		2	mg/kg	B14C099	03/21/14	03/25/14	6010C/SOP503
Lead		2,100		3	"	"	"	"	6010C/SOP503
Lab ID: **1403013-09**									**Soil - Sampled: 02/27/14 15:45**
Sample ID: **MTP-03**									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic		59		2	mg/kg	B14C099	03/21/14	03/25/14	6010C/SOP503
Lead		120		3	"	"	"	"	6010C/SOP503
Lab ID: **1403013-10**									**Soil - Sampled: 02/27/14 16:10**
Sample ID: **MTP-04**									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic		340		2	mg/kg	B14C099	03/21/14	03/25/14	6010C/SOP503
Lead		20		3	"	"	"	"	6010C/SOP503
Lab ID: **1403013-11**									**Soil - Sampled: 02/27/14 16:15**

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14066C
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/04/14 10:39
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: **1403013-11**									**Soil - Sampled: 02/27/14 16:15**
Sample ID: **MTP-05**									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic		390		2	mg/kg	B14C099	03/21/14	03/25/14	6010C/SOP503
Lead		27		3	"	"	"	"	6010C/SOP503
Lab ID: **1403013-12**									**Soil - Sampled: 02/27/14 16:25**
Sample ID: **MTP-06**									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic		260		2	mg/kg	B14C099	03/21/14	03/25/14	6010C/SOP503
Lead		27		3	"	"	"	"	6010C/SOP503
Lab ID: **1403013-13**									**Soil - Sampled: 02/27/14 16:50**
Sample ID: **MTP-07**									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic		230		2	mg/kg	B14C099	03/21/14	03/25/14	6010C/SOP503
Lead		12		3	"	"	"	"	6010C/SOP503
Lab ID: **1403013-14**									**Soil - Sampled: 02/27/14 17:00**
Sample ID: **MTP-08**									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic		360		2	mg/kg	B14C099	03/21/14	03/25/14	6010C/SOP503
Lead		28		3	"	"	"	"	6010C/SOP503
Lab ID: **1403013-15**									**Soil - Sampled: 02/27/14 17:05**
Sample ID: **MTP-09**									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic		650		2	mg/kg	B14C099	03/21/14	03/25/14	6010C/SOP503
Lead		13		3	"	"	"	"	6010C/SOP503
Lab ID: **1403013-16**									**Soil - Sampled: 02/27/14 17:10**
Sample ID: **MTP-10**									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic		110		2	mg/kg	B14C099	03/21/14	03/25/14	6010C/SOP503
Lead		23		3	"	"	"	"	6010C/SOP503

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Project Manager: Zi Zi Searles
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Project: Iron King Mine 2013/2014 Sampling

California Site Cleanup Section 1
75 Hawthorne Street
San Francisco CA, 94105

SDG: 14066C
Reported: 04/04/14 10:39

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B14C099 - In Vitro Gastric Extraction - In Vitro Extraction, ICP, Sample Basis									**Prepared: 03/21/14 Analyzed: 03/25/14** Analysis of In Vitro Gastric Digestion Extracts - Quality Control	
Blank (B14C099-BLK1)										
Arsenic	1.3	C1, J	2	mg/kg						
Lead	ND	U	3	"						
Blank (B14C099-BLK2)										
Arsenic	1.3	C1, J	2	mg/kg						
Lead	ND	U	3	"						
LCS (B14C099-BS1)										
Arsenic	390		2	mg/kg	400		97	80-120		200
Lead	92.5		3	"	100		93	80-120		200
Duplicate (B14C099-DUP1)		**Source: 1403013-10**								
Arsenic	328		2	mg/kg		335			2	20
Lead	18		3	"		20.2			12	20
Matrix Spike (B14C099-MS1)		**Source: 1403013-10**								
Arsenic	4,260		2	mg/kg	4000	335	98	75-125		20
Lead	919		3	"	1000	20.2	90	75-125		20
Reference (B14C099-SRM1)										
Arsenic	56.7		2	mg/kg	89.0		64	0-200		
Lead	1,020		3	"	1300		78	0-200		

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Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14066C
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/04/14 10:39
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

Qualifiers and Comments

J The reported result for this analyte should be considered an estimated value.

C1 The reported concentration for this analyte is below the quantitation limit.

U Not Detected

NR Not Reported

RE1, RE2, etc: Result is from a sample re-analysis.

CLIENT	PROJECT	PROJECTNUM	LabName	SAMPLENAME	LABSAMPID	MATRIX	RPTMATRIX	SAMPDATE	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	Result	DL	RL	UNITS	RPTQMDL	BASIS	DILUTION	SPIKELEVEL	RECOVERY	UPPERCL	LOWERCL	ANALYST	PSOLIDS	LNOTE	ANOTE	LATITUDE	LONGITUDE	sComment	SNOTE1	SNOTE2	SNOTE3	SNOTE4	SNOTE5	SNOTE6	SNOTE7	SNOTE8	SNOTE9	SNOTE10	ANALYTEORDER
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	GAL-01	1403013-01	Solid	Soil	02/28/2014 12:05:00	03/21/2014 12:00:00	03/25/2014 18:53:20	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	58	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	GAL-01	1403013-01	Solid	Soil	02/28/2014 12:05:00	03/21/2014 12:00:00	03/25/2014 18:53:20	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	41	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	GAL-02	1403013-02	Solid	Soil	02/28/2014 12:30:00	03/21/2014 12:00:00	03/25/2014 18:59:32	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	46	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	GAL-02	1403013-02	Solid	Soil	02/28/2014 12:30:00	03/21/2014 12:00:00	03/25/2014 18:59:32	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	7.1	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	GAL-03	1403013-03	Solid	Soil	02/28/2014 13:20:00	03/21/2014 12:00:00	03/25/2014 19:05:48	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	470	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	GAL-03	1403013-03	Solid	Soil	02/28/2014 13:20:00	03/21/2014 12:00:00	03/25/2014 19:05:48	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	24	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	GAL-04	1403013-04	Solid	Soil	02/28/2014 13:30:00	03/21/2014 12:00:00	03/25/2014 19:12:01	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	8.8	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	GAL-04	1403013-04	Solid	Soil	02/28/2014 13:30:00	03/21/2014 12:00:00	03/25/2014 19:12:01	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	930	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	GAL-05	1403013-05	Solid	Soil	02/28/2014 13:45:00	03/21/2014 12:00:00	03/25/2014 19:20:00	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	32	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	GAL-05	1403013-05	Solid	Soil	02/28/2014 13:45:00	03/21/2014 12:00:00	03/25/2014 19:20:00	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	66	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	GAL-06	1403013-06	Solid	Soil	02/28/2014 13:30:00	03/21/2014 12:00:00	03/25/2014 19:40:29	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	11	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	GAL-06	1403013-06	Solid	Soil	02/28/2014 13:30:00	03/21/2014 12:00:00	03/25/2014 19:40:29	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	920	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-01	1403013-07	Solid	Soil	02/27/2014 15:30:00	03/21/2014 12:00:00	03/25/2014 19:48:27	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	22	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-01	1403013-07	Solid	Soil	02/27/2014 15:30:00	03/21/2014 12:00:00	03/25/2014 19:48:27	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	170	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-02	1403013-08	Solid	Soil	02/27/2014 15:45:00	03/21/2014 12:00:00	03/25/2014 19:54:44	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	2100	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-02	1403013-08	Solid	Soil	02/27/2014 15:45:00	03/21/2014 12:00:00	03/25/2014 19:54:44	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	400	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-03	1403013-09	Solid	Soil	02/27/2014 15:45:00	03/21/2014 12:00:00	03/25/2014 20:00:45	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	120	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-03	1403013-09	Solid	Soil	02/27/2014 15:45:00	03/21/2014 12:00:00	03/25/2014 20:00:45	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	59	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-04	1403013-10	Solid	Soil	02/27/2014 16:10:00	03/21/2014 12:00:00	03/25/2014 20:07:02	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	20	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-04	1403013-10	Solid	Soil	02/27/2014 16:10:00	03/21/2014 12:00:00	03/25/2014 20:07:02	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	340	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-05	1403013-11	Solid	Soil	02/27/2014 16:15:00	03/21/2014 12:00:00	03/25/2014 20:27:49	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	27	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-05	1403013-11	Solid	Soil	02/27/2014 16:15:00	03/21/2014 12:00:00	03/25/2014 20:27:49	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	390	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-06	1403013-12	Solid	Soil	02/27/2014 16:25:00	03/21/2014 12:00:00	03/25/2014 20:34:03	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	27	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-06	1403013-12	Solid	Soil	02/27/2014 16:25:00	03/21/2014 12:00:00	03/25/2014 20:34:03	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	260	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-07	1403013-13	Solid	Soil	02/27/2014 16:50:00	03/21/2014 12:00:00	03/25/2014 20:40:06	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	12	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-07	1403013-13	Solid	Soil	02/27/2014 16:50:00	03/21/2014 12:00:00	03/25/2014 20:40:06	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	230	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-08	1403013-14	Solid	Soil	02/27/2014 17:00:00	03/21/2014 12:00:00	03/25/2014 21:00:38	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	28	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-08	1403013-14	Solid	Soil	02/27/2014 17:00:00	03/21/2014 12:00:00	03/25/2014 21:00:38	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	360	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-09	1403013-15	Solid	Soil	02/27/2014 17:05:00	03/21/2014 12:00:00	03/25/2014 21:06:39	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	13	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-09	1403013-15	Solid	Soil	02/27/2014 17:05:00	03/21/2014 12:00:00	03/25/2014 21:06:39	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	650	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-10	1403013-16	Solid	Soil	02/27/2014 17:10:00	03/21/2014 12:00:00	03/25/2014 21:14:39	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	23	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-10	1403013-16	Solid	Soil	02/27/2014 17:10:00	03/21/2014 12:00:00	03/25/2014 21:14:39	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	110	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30

LABNAME	LABSAMPID	QCTYPE	MATRIX	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	RPTоMDL	BASIS	DILUTION	SOURCEID	SOURCERES	SPIKELEVEL	RECOVERY	RPD	UPPERCL	LOWERCL	RPDCL	ANALYST	PSOLIDS	LNOTE	ANOTE	ANALYTEORDER
EPA Region 9 Laboratory	B14C099-BLK1	Blank	Solid	03/21/2014 12:00:00	03/25/2014 18:28:14	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1								SC			U	140
EPA Region 9 Laboratory	B14C099-BLK1	Blank	Solid	03/21/2014 12:00:00	03/25/2014 18:28:14	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	1.3	1.0	2.0	mg/kg	TRUE	Wet	1								SC			C1, J	30
EPA Region 9 Laboratory	B14C099-BLK2	Blank	Solid	03/21/2014 12:00:00	03/25/2014 18:34:28	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1								SC			U	140
EPA Region 9 Laboratory	B14C099-BLK2	Blank	Solid	03/21/2014 12:00:00	03/25/2014 18:34:28	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	1.3	1.0	2.0	mg/kg	TRUE	Wet	1								SC			C1, J	30
EPA Region 9 Laboratory	B14C099-BS1	LCS	Solid	03/21/2014 12:00:00	03/25/2014 18:40:40	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	92.5	1.5	3.0	mg/kg	TRUE	Wet	1			100	93		120	80	200	SC				140
EPA Region 9 Laboratory	B14C099-BS1	LCS	Solid	03/21/2014 12:00:00	03/25/2014 18:40:40	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	390	1.0	2.0	mg/kg	TRUE	Wet	1			400	97		120	80	200	SC				30
EPA Region 9 Laboratory	B14C099-DUP1	Duplicate	Solid	03/21/2014 12:00:00	03/25/2014 20:13:17	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	18.0	1.5	3.0	mg/kg	TRUE	Wet	1	1403013-10	20.2			12			20	SC				140
EPA Region 9 Laboratory	B14C099-DUP1	Duplicate	Solid	03/21/2014 12:00:00	03/25/2014 20:13:17	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	328	1.0	2.0	mg/kg	TRUE	Wet	1	1403013-10	335			2			20	SC				30
EPA Region 9 Laboratory	B14C099-MS1	Matrix Spike	Solid	03/21/2014 12:00:00	03/25/2014 20:19:32	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	919	1.5	3.0	mg/kg	TRUE	Wet	1	1403013-10	20.2	1000	90		125	75	20	SC				140
EPA Region 9 Laboratory	B14C099-MS1	Matrix Spike	Solid	03/21/2014 12:00:00	03/25/2014 20:19:32	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	4260	1.0	2.0	mg/kg	TRUE	Wet	1	1403013-10	335	4000	98		125	75	20	SC				30
EPA Region 9 Laboratory	B14C099-SRM1	Reference	Solid	03/21/2014 12:00:00	03/25/2014 18:46:52	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	1020	1.5	3.0	mg/kg	TRUE	Wet	1			1300	78		200	0		SC				140
EPA Region 9 Laboratory	B14C099-SRM1	Reference	Solid	03/21/2014 12:00:00	03/25/2014 18:46:52	B14C099	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	56.7	1.0	2.0	mg/kg	TRUE	Wet	1			89.0	64		200	0		SC				30

QUALIFIER	DESCRIPTION
C1	The reported concentration for this analyte is below the quantitation limit.
J	The reported result for this analyte should be considered an estimated value.
U	This analyte was not detected.

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street Building 201
Richmond, CA 94804

Date: **4/4/2014**

Subject: **Analytical Testing Results - Project R14S06**
SDG: 14066C

From: **Brenda Bettencourt, Director**
EPA Region 9 Laboratory
MTS-2

To: **Zi Zi Searles**
California Site Cleanup Section 1
SFD-7-1

Attached are the results from the analysis of samples from the **Iron King Mine 2013/2014 Sampling** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Electronic CC: David Aloysius, SERAS
Donna Getty, SERAS
Jeff Dhont, EPA Region 9

Analyses included in this report:

Metals by ICP

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14066C
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/04/14 10:32
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
GAL-01	1403013-01	Soil	02/28/14 12:05	03/07/14 13:08
GAL-02	1403013-02	Soil	02/28/14 12:30	03/07/14 13:08
GAL-03	1403013-03	Soil	02/28/14 13:20	03/07/14 13:08
GAL-04	1403013-04	Soil	02/28/14 13:30	03/07/14 13:08
GAL-05	1403013-05	Soil	02/28/14 13:45	03/07/14 13:08
GAL-06	1403013-06	Soil	02/28/14 13:30	03/07/14 13:08
MTP-01	1403013-07	Soil	02/27/14 15:30	03/07/14 13:08
MTP-02	1403013-08	Soil	02/27/14 15:45	03/07/14 13:08
MTP-03	1403013-09	Soil	02/27/14 15:45	03/07/14 13:08
MTP-04	1403013-10	Soil	02/27/14 16:10	03/07/14 13:08
MTP-05	1403013-11	Soil	02/27/14 16:15	03/07/14 13:08
MTP-06	1403013-12	Soil	02/27/14 16:25	03/07/14 13:08
MTP-07	1403013-13	Soil	02/27/14 16:50	03/07/14 13:08
MTP-08	1403013-14	Soil	02/27/14 17:00	03/07/14 13:08
MTP-09	1403013-15	Soil	02/27/14 17:05	03/07/14 13:08
MTP-10	1403013-16	Soil	02/27/14 17:10	03/07/14 13:08

SDG ID 14066C

All samples were dried and sieved prior to preparation for analysis.

Samples were digested per EPA method SW 3050.

Work Order(s)

1403013

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14066C
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/04/14 10:32
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: **1403013-01**									**Soil - Sampled: 02/28/14 12:05**
Sample ID: **GAL-01**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		1,300		2	mg/kg	B14C037	03/19/14	03/25/14	6010C/SOP503
Lead		1,700		3	"	"	"	"	6010C/SOP503
Lab ID: **1403013-02**									**Soil - Sampled: 02/28/14 12:30**
Sample ID: **GAL-02**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		170		2	mg/kg	B14C037	03/19/14	03/25/14	6010C/SOP503
Lead		180		3	"	"	"	"	6010C/SOP503
Lab ID: **1403013-03**									**Soil - Sampled: 02/28/14 13:20**
Sample ID: **GAL-03**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		710		2	mg/kg	B14C037	03/19/14	03/25/14	6010C/SOP503
Lead		1,900		3	"	"	"	"	6010C/SOP503
Lab ID: **1403013-04**									**Soil - Sampled: 02/28/14 13:30**
Sample ID: **GAL-04**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		2,700		2	mg/kg	B14C037	03/19/14	03/25/14	6010C/SOP503
Lead		510		3	"	"	"	"	6010C/SOP503
Lab ID: **1403013-05**									**Soil - Sampled: 02/28/14 13:45**
Sample ID: **GAL-05**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		650		2	mg/kg	B14C037	03/19/14	03/25/14	6010C/SOP503
Lead		810		3	"	"	"	"	6010C/SOP503
Lab ID: **1403013-06**									**Soil - Sampled: 02/28/14 13:30**
Sample ID: **GAL-06**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		2,500		2	mg/kg	B14C037	03/19/14	03/25/14	6010C/SOP503
Lead		480		3	"	"	"	"	6010C/SOP503
Lab ID: **1403013-07**									**Soil - Sampled: 02/27/14 15:30**
Sample ID: **MTP-01**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		5,100		2	mg/kg	B14C037	03/19/14	03/25/14	6010C/SOP503
Lead		2,500		3	"	"	"	"	6010C/SOP503
Lab ID: **1403013-08**									**Soil - Sampled: 02/27/14 15:45**
Sample ID: **MTP-02**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		4,300		2	mg/kg	B14C037	03/19/14	03/25/14	6010C/SOP503
Lead		3,000		3	"	"	"	"	6010C/SOP503
Lab ID: **1403013-09**									**Soil - Sampled: 02/27/14 15:45**
Sample ID: **MTP-03**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		310		2	mg/kg	B14C037	03/19/14	03/25/14	6010C/SOP503
Lead		770		3	"	"	"	"	6010C/SOP503
Lab ID: **1403013-10**									**Soil - Sampled: 02/27/14 16:10**
Sample ID: **MTP-04**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		1,800		2	mg/kg	B14C037	03/19/14	03/25/14	6010C/SOP503
Lead		1,900	J, Q4	3	"	"	"	"	6010C/SOP503
Lab ID: **1403013-11**									**Soil - Sampled: 02/27/14 16:15**

United States Environmental Protection Agency
Region 9 Laboratory

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Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14066C
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/04/14 10:32
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: **1403013-11**									**Soil - Sampled: 02/27/14 16:15**
Sample ID: **MTP-05**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		1,300		2	mg/kg	B14C037	03/19/14	03/25/14	6010C/SOP503
Lead		1,200		3	"	"	"	"	6010C/SOP503
Lab ID: **1403013-12**									**Soil - Sampled: 02/27/14 16:25**
Sample ID: **MTP-06**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		2,100		2	mg/kg	B14C037	03/19/14	03/25/14	6010C/SOP503
Lead		1,300		3	"	"	"	"	6010C/SOP503
Lab ID: **1403013-13**									**Soil - Sampled: 02/27/14 16:50**
Sample ID: **MTP-07**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		1,000		2	mg/kg	B14C037	03/19/14	03/25/14	6010C/SOP503
Lead		970		3	"	"	"	"	6010C/SOP503
Lab ID: **1403013-14**									**Soil - Sampled: 02/27/14 17:00**
Sample ID: **MTP-08**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		1,500		2	mg/kg	B14C037	03/19/14	03/25/14	6010C/SOP503
Lead		1,500		3	"	"	"	"	6010C/SOP503
Lab ID: **1403013-15**									**Soil - Sampled: 02/27/14 17:05**
Sample ID: **MTP-09**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		2,700		2	mg/kg	B14C037	03/19/14	03/26/14	6010C/SOP503
Lead		1,300		3	"	"	"	"	6010C/SOP503
Lab ID: **1403013-16**									**Soil - Sampled: 02/27/14 17:10**
Sample ID: **MTP-10**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		890		2	mg/kg	B14C037	03/19/14	03/26/14	6010C/SOP503
Lead		580		3	"	"	"	"	6010C/SOP503

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Project Manager: Zi Zi Searles
Project Number: R14S06
Project: Iron King Mine 2013/2014 Sampling

California Site Cleanup Section 1
75 Hawthorne Street
San Francisco CA, 94105

SDG: 14066C
Reported: 04/04/14 10:32

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B14C037 - 3050B Sld Acid Dig - Metals by 6010										**Prepared: 03/19/14 Analyzed: 03/25/14**
										Metals by EPA 6000/7000 Series Methods - Quality Control
Blank (B14C037-BLK1)										
Arsenic	ND	U	2	mg/kg						
Lead	ND	U	3	"						
Matrix Spike (B14C037-MS1)		**Source: 1403013-10**								
Arsenic	2,200		2	mg/kg	392	1,830	94	75-125		20
Lead	2,000	Q10	3	"	98.0	1,940	**55**	75-125		20
Matrix Spike Dup (B14C037-MSD1)		**Source: 1403013-10**								
Arsenic	2,220		2	mg/kg	388	1,830	101	75-125	1	20
Lead	2,000	Q10	3	"	97.1	1,940	**55**	75-125	0.01	20
Reference (B14C037-SRM1)										
Arsenic	286		2	mg/kg	252		113	60.9-139		
Lead	54.9		3	"	56.7		97	72.8-127		

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Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14066C
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/04/14 10:32
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

Qualifiers and Comments

Q4 The matrix spike and/or matrix spike duplicate associated with this sample did not meet recovery criteria for this analyte (see MS/MSD results for this batch in QC summary)

Q10 The analyte concentration in the unfortified sample is significantly greater than the concentration spiked into the matrix spike and matrix spike duplicate. The reported spike recovery is not a meaningful measure of the dataset's analytical accuracy.

J The reported result for this analyte should be considered an estimated value.

U Not Detected

NR Not Reported

RE1, RE2, etc: Result is from a sample re-analysis.

CLIENT	PROJECT	PROJECTNUM	LabName	SAMPLENAME	LABSAMPID	MATRIX	RPTMATRIX	SAMPDATE	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	Result	DL	RL	UNITS	RPTtoMDL	BASIS	DILUTION	SPIKELEVEL	RECOVERY	UPPERCL	LOWERCL	ANALYST	PSOLIDS	LNOTE	ANOTE	LATITUDE	LONGITUDE	sComment	SNOTE1	SNOTE2	SNOTE3	SNOTE4	SNOTE5	SNOTE6	SNOTE7	SNOTE8	SNOTE9	SNOTE10	ANALYTEORDER
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	GAL-01	1403013-01	Solid	Soil	02/28/2014 12:05:00	03/19/2014 06:18:00	03/25/2014 21:33:25	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	1700	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	GAL-01	1403013-01	Solid	Soil	02/28/2014 12:05:00	03/19/2014 06:18:00	03/25/2014 21:33:25	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	1300	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	GAL-02	1403013-02	Solid	Soil	02/28/2014 12:30:00	03/19/2014 06:18:00	03/25/2014 21:40:44	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	180	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	GAL-02	1403013-02	Solid	Soil	02/28/2014 12:30:00	03/19/2014 06:18:00	03/25/2014 21:40:44	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	170	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	GAL-03	1403013-03	Solid	Soil	02/28/2014 13:20:00	03/19/2014 06:18:00	03/25/2014 21:46:00	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	1900	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	GAL-03	1403013-03	Solid	Soil	02/28/2014 13:20:00	03/19/2014 06:18:00	03/25/2014 21:46:00	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	710	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	GAL-04	1403013-04	Solid	Soil	02/28/2014 13:30:00	03/19/2014 06:18:00	03/25/2014 21:53:17	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	510	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	GAL-04	1403013-04	Solid	Soil	02/28/2014 13:30:00	03/19/2014 06:18:00	03/25/2014 21:53:17	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	2700	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	GAL-05	1403013-05	Solid	Soil	02/28/2014 13:45:00	03/19/2014 06:18:00	03/25/2014 22:00:38	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	810	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	GAL-05	1403013-05	Solid	Soil	02/28/2014 13:45:00	03/19/2014 06:18:00	03/25/2014 22:00:38	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	650	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	GAL-06	1403013-06	Solid	Soil	02/28/2014 13:30:00	03/19/2014 06:18:00	03/25/2014 22:28:21	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	480	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	GAL-06	1403013-06	Solid	Soil	02/28/2014 13:30:00	03/19/2014 06:18:00	03/25/2014 22:28:21	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	2500	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-01	1403013-07	Solid	Soil	02/27/2014 15:30:00	03/19/2014 06:18:00	03/25/2014 22:35:42	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	2500	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-01	1403013-07	Solid	Soil	02/27/2014 15:30:00	03/19/2014 06:18:00	03/25/2014 22:35:42	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	5100	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-02	1403013-08	Solid	Soil	02/27/2014 15:45:00	03/19/2014 06:18:00	03/25/2014 22:43:22	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	3000	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-02	1403013-08	Solid	Soil	02/27/2014 15:45:00	03/19/2014 06:18:00	03/25/2014 22:43:22	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	4300	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-03	1403013-09	Solid	Soil	02/27/2014 15:45:00	03/19/2014 06:18:00	03/25/2014 22:51:44	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	770	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-03	1403013-09	Solid	Soil	02/27/2014 15:45:00	03/19/2014 06:18:00	03/25/2014 22:51:44	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	310	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-04	1403013-10	Solid	Soil	02/27/2014 16:10:00	03/19/2014 06:18:00	03/25/2014 22:57:16	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	1900	1.5	3.0	mg/kg	TRUE	Wet	2					SC		J, Q4														140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-04	1403013-10	Solid	Soil	02/27/2014 16:10:00	03/19/2014 06:18:00	03/25/2014 22:57:16	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	1800	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-05	1403013-11	Solid	Soil	02/27/2014 16:15:00	03/19/2014 06:18:00	03/25/2014 23:18:27	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	1200	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-05	1403013-11	Solid	Soil	02/27/2014 16:15:00	03/19/2014 06:18:00	03/25/2014 23:18:27	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	1300	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-06	1403013-12	Solid	Soil	02/27/2014 16:25:00	03/19/2014 06:18:00	03/25/2014 23:26:29	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	1300	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-06	1403013-12	Solid	Soil	02/27/2014 16:25:00	03/19/2014 06:18:00	03/25/2014 23:26:29	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	2100	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-07	1403013-13	Solid	Soil	02/27/2014 16:50:00	03/19/2014 06:18:00	03/25/2014 23:49:08	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	970	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-07	1403013-13	Solid	Soil	02/27/2014 16:50:00	03/19/2014 06:18:00	03/25/2014 23:49:08	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	1000	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-08	1403013-14	Solid	Soil	02/27/2014 17:00:00	03/19/2014 06:18:00	03/25/2014 23:56:25	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	1500	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-08	1403013-14	Solid	Soil	02/27/2014 17:00:00	03/19/2014 06:18:00	03/25/2014 23:56:25	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	1500	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-09	1403013-15	Solid	Soil	02/27/2014 17:05:00	03/19/2014 06:18:00	03/26/2014 00:03:42	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	1300	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-09	1403013-15	Solid	Soil	02/27/2014 17:05:00	03/19/2014 06:18:00	03/26/2014 00:03:42	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	2700	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-10	1403013-16	Solid	Soil	02/27/2014 17:10:00	03/19/2014 06:18:00	03/26/2014 00:11:16	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	580	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	MTP-10	1403013-16	Solid	Soil	02/27/2014 17:10:00	03/19/2014 06:18:00	03/26/2014 00:11:16	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	890	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30

LABNAME	LABSAMPID	QCTYPE	MATRIX	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	RPTOMDL	BASIS	DILUTION	SOURCEID	SOURCERES	SPIKELEVEL	RECOVERY	RPD	UPPERCL	LOWERCL	RPDCL	ANALYST	PSOLIDS	LNOTE	ANOTE	ANALYTEORDER
EPA Region 9 Laboratory	B14C037-BLK1	Blank	Solid	03/19/2014 06:18:00	03/25/2014 21:20:57	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	2									SC			U	140
EPA Region 9 Laboratory	B14C037-BLK1	Blank	Solid	03/19/2014 06:18:00	03/25/2014 21:20:57	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Wet	2									SC			U	30
EPA Region 9 Laboratory	B14C037-MS1	Matrix Spike	Solid	03/19/2014 06:18:00	03/25/2014 23:04:36	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	2000	1.5	3.0	mg/kg	TRUE	Wet	2	1403013-10	1940	98.0	55		125	75	20	SC			Q10	140
EPA Region 9 Laboratory	B14C037-MS1	Matrix Spike	Solid	03/19/2014 06:18:00	03/25/2014 23:04:36	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	2200	1.0	2.0	mg/kg	TRUE	Wet	2	1403013-10	1830	392	94		125	75	20	SC				30
EPA Region 9 Laboratory	B14C037-MSD1	Matrix Spike Dup	Solid	03/19/2014 06:18:00	03/25/2014 23:11:55	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	2000	1.5	3.0	mg/kg	TRUE	Wet	2	1403013-10	1940	97.1	55	0.01	125	75	20	SC			Q10	140
EPA Region 9 Laboratory	B14C037-MSD1	Matrix Spike Dup	Solid	03/19/2014 06:18:00	03/25/2014 23:11:55	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	2220	1.0	2.0	mg/kg	TRUE	Wet	2	1403013-10	1830	388	101	1	125	75	20	SC				30
EPA Region 9 Laboratory	B14C037-SRM1	Reference	Solid	03/19/2014 06:18:00	03/25/2014 21:27:10	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	54.9	1.5	3.0	mg/kg	TRUE	Wet	2			56.7	97		127	72.8		SC				140
EPA Region 9 Laboratory	B14C037-SRM1	Reference	Solid	03/19/2014 06:18:00	03/25/2014 21:27:10	B14C037	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	286	1.0	2.0	mg/kg	TRUE	Wet	2			252	113		139	60.9		SC				30

QUALIFIE	DESCRIPTION
J	The reported result for this analyte should be considered an estimated value.
Q10	The analyte concentration in the unfortified sample is significantly greater than the concentration spiked into the matrix spike and matrix spike duplicate. The reported spike recovery is not a meaningful measure of the dataset's analytical accuracy.
Q4	The matrix spike and/or matrix spike duplicate associated with this sample did not meet recovery criteria for this analyte (see MS/MSD results for this batch in QC summary)
U	This analyte was not detected.

From: Dhont.Jeff@epa.gov [Dhont.Jeff@epa.gov]
To: Natalia.Raykhman@CH2M.com [Natalia.Raykhman@CH2M.com]; Dennis.Shelton@CH2M.com [Dennis.Shelton@CH2M.com]
CC:
Subject: FW: In-vitro and 3050B extraction metals analysis results for Iron King Mine 2013/2014 sampling SDG 14066C
Sent: Friday, April 04, 2014 15:47:07
Attachment 1: 14066c_metals.pdf
Attachment 2: 14066c_metals.xls
Attachment 3: 14066c_in_vitro_metals.pdf
Attachment 4: 14066c_in_vitro_metals.xls

From: Berges, Jack
Sent: Friday, April 04, 2014 11:11 AM
To: david.l.aloysius@lmco.com; DHONT, JEFF; donna.j.getty@lmco.com
Subject: In-vitro and 3050B extraction metals analysis results for Iron King Mine 2013/2014 sampling SDG 14066C

In-vitro and 3050B extraction metals analysis results for Iron King Mine 2013/2014 sampling SDG 14066C, project R14S06, are attached. To obtain the bio-accessible factor for a given analyte/sample, divide the in-vitro result by the 3050B result.

Jack Berges
Chemist, US EPA Region 9 Laboratory
1337 South 46th Street Bldg 201
Richmond, CA 94804
P: 510-412-2332 F: 510-412-2302
berges.jack@epa.gov

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street Building 201
Richmond, CA 94804

Date: **4/30/2014**

Subject: **Analytical Testing Results - Project R14S06**
SDG: 14087B

From: **Duane James, Acting Director**
EPA Region 9 Laboratory
MTS-2

To: **Zi Zi Searles**
California Site Cleanup Section 1
SFD-7-1

Attached are the results from the analysis of samples from the **Iron King Mine 2013/2014 Sampling** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Electronic CC: David Aloysius, SERAS
Donna Getty, SERAS
Jeff Dhont, EPA Region 9

Analyses included in this report:

Metals by ICP

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles
Project Number: R14S06
Project: Iron King Mine 2013/2014 Sampling

California Site Cleanup Section 1
75 Hawthorne Street
San Francisco CA, 94105

SDG: 14087B
Reported: 04/30/14 16:59

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
2216-02	1403073-01	Soil	03/05/14 16:24	03/28/14 11:15
106-04	1403073-02	Soil	02/26/14 15:00	03/28/14 11:15
108-03	1403073-03	Soil	02/24/14 09:40	03/28/14 11:15
109-11	1403073-04	Soil	02/19/14 10:56	03/28/14 11:15
126-14	1403073-05	Soil	02/27/14 16:42	03/28/14 11:15
2014-08	1403073-06	Soil	01/31/14 10:59	03/28/14 11:15
2324-03	1403073-07	Soil	02/05/14 14:41	03/28/14 11:15
2328-02	1403073-08	Soil	02/05/14 10:18	03/28/14 11:15
2408-01	1403073-09	Soil	03/10/14 10:45	03/28/14 11:15
2410-03	1403073-10	Soil	03/10/14 16:13	03/28/14 11:15
2426-09	1403073-11	Soil	02/05/14 15:46	03/28/14 11:15
2519-10	1403073-12	Soil	03/10/14 12:00	03/28/14 11:15
2523-05	1403073-13	Soil	02/19/14 15:35	03/28/14 11:15
2602-09	1403073-14	Soil	02/13/14 14:16	03/28/14 11:15
2615-03	1403073-15	Soil	02/20/14 10:53	03/28/14 11:15
2743D-11	1403073-16	Soil	02/24/14 15:27	03/28/14 11:15
2755-07	1403073-17	Soil	02/22/14 13:40	03/28/14 11:15
2808-15	1403073-18	Soil	02/21/14 14:35	03/28/14 11:15
2901-06	1403073-19	Soil	02/26/14 10:02	03/28/14 11:15
3004-08	1403073-20	Soil	03/03/14 14:50	03/28/14 11:15

SDG ID 14087B

All samples were dried and sieved prior to preparation for analysis.

Samples were digested per EPA method SW 3050B.

Work Order(s)

1403073

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14087B
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/30/14 16:59
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: **1403073-01**									**Soil - Sampled: 03/05/14 16:24**
Sample ID: **2216-02**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		280		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		350		3	"	"	"	"	6010C/SOP503
Lab ID: **1403073-02**									**Soil - Sampled: 02/26/14 15:00**
Sample ID: **106-04**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		250		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		21		3	"	"	"	"	6010C/SOP503
Lab ID: **1403073-03**									**Soil - Sampled: 02/24/14 09:40**
Sample ID: **108-03**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		420		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		770		3	"	"	"	"	6010C/SOP503
Lab ID: **1403073-04**									**Soil - Sampled: 02/19/14 10:56**
Sample ID: **109-11**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		170		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		230		3	"	"	"	"	6010C/SOP503
Lab ID: **1403073-05**									**Soil - Sampled: 02/27/14 16:42**
Sample ID: **126-14**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		180		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		22		3	"	"	"	"	6010C/SOP503
Lab ID: **1403073-06**									**Soil - Sampled: 01/31/14 10:59**
Sample ID: **2014-08**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		310		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		300		3	"	"	"	"	6010C/SOP503
Lab ID: **1403073-07**									**Soil - Sampled: 02/05/14 14:41**
Sample ID: **2324-03**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		230		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		170		3	"	"	"	"	6010C/SOP503
Lab ID: **1403073-08**									**Soil - Sampled: 02/05/14 10:18**
Sample ID: **2328-02**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		780		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		520		3	"	"	"	"	6010C/SOP503
Lab ID: **1403073-09**									**Soil - Sampled: 03/10/14 10:45**
Sample ID: **2408-01**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		220		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		840		3	"	"	"	"	6010C/SOP503
Lab ID: **1403073-10**									**Soil - Sampled: 03/10/14 16:13**
Sample ID: **2410-03**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		290		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		2,000		3	"	"	"	"	6010C/SOP503
Lab ID: **1403073-11**									**Soil - Sampled: 02/05/14 15:46**

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14087B
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/30/14 16:59
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1403073-11									**Soil - Sampled: 02/05/14 15:46**
Sample ID: 2426-09									**Metals by EPA 6000/7000 Series Methods**
Arsenic		340		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		65		3	"	"	"	"	6010C/SOP503
Lab ID: 1403073-12									**Soil - Sampled: 03/10/14 12:00**
Sample ID: 2519-10									**Metals by EPA 6000/7000 Series Methods**
Arsenic		160		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		47		3	"	"	"	"	6010C/SOP503
Lab ID: 1403073-13									**Soil - Sampled: 02/19/14 15:35**
Sample ID: 2523-05									**Metals by EPA 6000/7000 Series Methods**
Arsenic		170		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		220		3	"	"	"	"	6010C/SOP503
Lab ID: 1403073-14									**Soil - Sampled: 02/13/14 14:16**
Sample ID: 2602-09									**Metals by EPA 6000/7000 Series Methods**
Arsenic		140		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead	RE1	15,000		15	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-15									**Soil - Sampled: 02/20/14 10:53**
Sample ID: 2615-03									**Metals by EPA 6000/7000 Series Methods**
Arsenic		1,200		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		16		3	"	"	"	"	6010C/SOP503
Lab ID: 1403073-16									**Soil - Sampled: 02/24/14 15:27**
Sample ID: 2743D-11									**Metals by EPA 6000/7000 Series Methods**
Arsenic		650		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		9.5		3	"	"	"	"	6010C/SOP503
Lab ID: 1403073-17									**Soil - Sampled: 02/22/14 13:40**
Sample ID: 2755-07									**Metals by EPA 6000/7000 Series Methods**
Arsenic		150		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		34		3	"	"	"	"	6010C/SOP503
Lab ID: 1403073-18									**Soil - Sampled: 02/21/14 14:35**
Sample ID: 2808-15									**Metals by EPA 6000/7000 Series Methods**
Arsenic		410		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		18		3	"	"	"	"	6010C/SOP503
Lab ID: 1403073-19									**Soil - Sampled: 02/26/14 10:02**
Sample ID: 2901-06									**Metals by EPA 6000/7000 Series Methods**
Arsenic		160		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		14		3	"	"	"	"	6010C/SOP503
Lab ID: 1403073-20									**Soil - Sampled: 03/03/14 14:50**
Sample ID: 3004-08									**Metals by EPA 6000/7000 Series Methods**
Arsenic		260		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		650		3	"	"	"	"	6010C/SOP503

United States Environmental Protection Agency
Region 9 Laboratory

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Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles
Project Number: R14S06
Project: Iron King Mine 2013/2014 Sampling

California Site Cleanup Section 1
75 Hawthorne Street
San Francisco CA, 94105

SDG: 14087B
Reported: 04/30/14 16:59

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B14D031 - 3050B Sld Acid Dig - Metals by 6010										**Prepared: 04/07/14 Analyzed: 04/22/14**
										Metals by EPA 6000/7000 Series Methods - Quality Control
Blank (B14D031-BLK1)										
Arsenic	ND	U	2	mg/kg						
Lead	ND	U	3	"						
Matrix Spike (B14D031-MS1)		**Source: 1403073-01**								
Arsenic	695		2	mg/kg	400	280	104	75-125		20
Lead	449		3	"	100	347	101	75-125		20
Matrix Spike (B14D031-MS2)		**Source: 1403073-02**								
Arsenic	661		2	mg/kg	396	253	103	75-125		20
Lead	110		3	"	99.0	20.9	90	75-125		20
Matrix Spike Dup (B14D031-MSD1)		**Source: 1403073-01**								
Arsenic	712		2	mg/kg	400	280	108	75-125	2	20
Lead	447		3	"	100	347	99	75-125	0.4	20
Matrix Spike Dup (B14D031-MSD2)		**Source: 1403073-02**								
Arsenic	667		2	mg/kg	396	253	105	75-125	1	20
Lead	110		3	"	99.0	20.9	90	75-125	0.04	20
Reference (B14D031-SRM1)										
Arsenic	268		2	mg/kg	254		105	60.9-139		
Lead	52.6		3	"	57.2		92	72.8-127		

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14087B
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/30/14 16:59
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

Qualifiers and Comments

U	Not Detected
NR	Not Reported
RE1, RE2, etc:	Result is from a sample re-analysis.

CLIENT	PROJECT	PROJECTNUM	LabName	SAMPLENAME	LABSAMPID	MATRIX	RPTMATRIX	SAMPDATE	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	Result	DL	RL	UNITS	RPTtoMDL	BASIS	DILUTION	SPIKELEVEL	RECOVERY	UPPERCL	LOWERCL	ANALYST	PSOLIDS	LNOTE	ANOTE	LATITUDE	LONGITUDE	sComment	SNOTE1	SNOTE2	SNOTE3	SNOTE4	SNOTE5	SNOTE6	SNOTE7	SNOTE8	SNOTE9	SNOTE10	ANALYTEORDER
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2216-02	1403073-01	Solid	Soil	03/05/2014 16:24:00	04/07/2014 12:55:00	04/22/2014 19:05:33	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	350	1.5	3.0	mg/kg	TRUE	Wet	2					SC					Lab QC											140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2216-02	1403073-01	Solid	Soil	03/05/2014 16:24:00	04/07/2014 12:55:00	04/22/2014 19:05:33	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	280	1.0	2.0	mg/kg	TRUE	Wet	2					SC					Lab QC											30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	106-04	1403073-02	Solid	Soil	02/26/2014 15:00:00	04/07/2014 12:55:00	04/22/2014 19:23:24	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	21	1.5	3.0	mg/kg	TRUE	Wet	2					SC					Lab QC											140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	106-04	1403073-02	Solid	Soil	02/26/2014 15:00:00	04/07/2014 12:55:00	04/22/2014 19:23:24	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	250	1.0	2.0	mg/kg	TRUE	Wet	2					SC					Lab QC											30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	108-03	1403073-03	Solid	Soil	02/24/2014 09:40:00	04/07/2014 12:55:00	04/22/2014 19:42:16	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	770	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	108-03	1403073-03	Solid	Soil	02/24/2014 09:40:00	04/07/2014 12:55:00	04/22/2014 19:42:16	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	420	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	109-11	1403073-04	Solid	Soil	02/19/2014 10:56:00	04/07/2014 12:55:00	04/22/2014 20:02:10	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	230	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	109-11	1403073-04	Solid	Soil	02/19/2014 10:56:00	04/07/2014 12:55:00	04/22/2014 20:02:10	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	170	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	126-14	1403073-05	Solid	Soil	02/27/2014 16:42:00	04/07/2014 12:55:00	04/22/2014 20:08:42	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	22	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	126-14	1403073-05	Solid	Soil	02/27/2014 16:42:00	04/07/2014 12:55:00	04/22/2014 20:08:42	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	180	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2014-08	1403073-06	Solid	Soil	01/31/2014 10:59:00	04/07/2014 12:55:00	04/22/2014 20:16:02	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	300	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2014-08	1403073-06	Solid	Soil	01/31/2014 10:59:00	04/07/2014 12:55:00	04/22/2014 20:16:02	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	310	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2324-03	1403073-07	Solid	Soil	02/05/2014 14:41:00	04/07/2014 12:55:00	04/22/2014 20:22:31	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	170	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2324-03	1403073-07	Solid	Soil	02/05/2014 14:41:00	04/07/2014 12:55:00	04/22/2014 20:22:31	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	230	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2328-02	1403073-08	Solid	Soil	02/05/2014 10:18:00	04/07/2014 12:55:00	04/22/2014 20:29:47	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	520	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2328-02	1403073-08	Solid	Soil	02/05/2014 10:18:00	04/07/2014 12:55:00	04/22/2014 20:29:47	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	780	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2408-01	1403073-09	Solid	Soil	03/10/2014 10:45:00	04/07/2014 12:55:00	04/22/2014 20:36:59	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	840	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2408-01	1403073-09	Solid	Soil	03/10/2014 10:45:00	04/07/2014 12:55:00	04/22/2014 20:36:59	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	220	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2410-03	1403073-10	Solid	Soil	03/10/2014 16:13:00	04/07/2014 12:55:00	04/22/2014 20:44:14	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	2000	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2410-03	1403073-10	Solid	Soil	03/10/2014 16:13:00	04/07/2014 12:55:00	04/22/2014 20:44:14	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	290	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2426-09	1403073-11	Solid	Soil	02/05/2014 15:46:00	04/07/2014 12:55:00	04/22/2014 20:51:27	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	65	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2426-09	1403073-11	Solid	Soil	02/05/2014 15:46:00	04/07/2014 12:55:00	04/22/2014 20:51:27	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	340	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2519-10	1403073-12	Solid	Soil	03/10/2014 12:00:00	04/07/2014 12:55:00	04/22/2014 20:58:48	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	47	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2519-10	1403073-12	Solid	Soil	03/10/2014 12:00:00	04/07/2014 12:55:00	04/22/2014 20:58:48	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	160	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2523-05	1403073-13	Solid	Soil	02/19/2014 15:35:00	04/07/2014 12:55:00	04/22/2014 21:06:04	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	220	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2523-05	1403073-13	Solid	Soil	02/19/2014 15:35:00	04/07/2014 12:55:00	04/22/2014 21:06:04	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	170	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2602-09	1403073-14	Solid	Soil	02/13/2014 14:16:00	04/07/2014 12:55:00	04/22/2014 21:25:58	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	140	1.0	2.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2602-09	1403073-14	Solid	Soil	02/13/2014 14:16:00	04/07/2014 12:55:00	04/22/2014 21:25:58	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	140	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2602-09	1403073-14RE1	Solid	Soil	02/13/2014 14:16:00	04/07/2014 12:55:00	04/23/2014 14:13:40	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	15000	7.5	15	mg/kg	TRUE	Wet	10					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2615-03	1403073-15	Solid	Soil	02/20/2014 10:53:00	04/07/2014 12:55:00	04/22/2014 21:32:27	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	16	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2615-03	1403073-15	Solid	Soil	02/20/2014 10:53:00	04/07/2014 12:55:00	04/22/2014 21:32:27	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	1200	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2743D-11	1403073-16	Solid	Soil	02/24/2014 15:27:00	04/07/2014 12:55:00	04/22/2014 21:39:47	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	9.5	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2743D-11	1403073-16	Solid	Soil	02/24/2014 15:27:00	04/07/2014 12:55:00	04/22/2014 21:39:47	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	650	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2755-07	1403073-17	Solid	Soil	02/22/2014 13:40:00	04/07/2014 12:55:00	04/22/2014 21:46:33	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	34	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2755-07	1403073-17	Solid	Soil	02/22/2014 13:40:00	04/07/2014 12:55:00	04/22/2014 21:46:33	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	150	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2808-15	1403073-18	Solid	Soil	02/21/2014 14:35:00	04/07/2014 12:55:00	04/22/2014 21:53:59	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	18	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2808-15	1403073-18	Solid	Soil	02/21/2014 14:35:00	04/07/2014 12:55:00	04/22/2014 21:53:59	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	410	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2901-06	1403073-19	Solid	Soil	02/26/2014 10:02:00	04/07/2014 12:55:00	04/22/2014 22:01:20	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	14	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2901-06	1403073-19	Solid	Soil	02/26/2014 10:02:00	04/07/2014 12:55:00	04/22/2014 22:01:20	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	160	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	3004-08	1403073-20	Solid	Soil	03/03/2014 14:50:00	04/07/2014 12:55:00	04/22/2014 22:08:39	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	650	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	3004-08	1403073-20	Solid	Soil	03/03/2014 14:50:00	04/07/2014 12:55:00	04/22/2014 22:08:39	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	260	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30

LABNAME	LABSAMPID	QCTYPE	MATRIX	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	RPToMDL	BASIS	DILUTION	SOURCEID	SOURCERES	SPIKELEVEL	RECOVERY	RPD	UPPERCL	LOWERCL	RPDCL	ANALYST	PSOLIDS	LNOTE	ANOTE	ANALYTEORDER
EPA Region 9 Laboratory	B14D031-BLK1	Blank	Solid	04/07/2014 12:55:00	04/22/2014 18:52:58	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	2									SC			U	140
EPA Region 9 Laboratory	B14D031-BLK1	Blank	Solid	04/07/2014 12:55:00	04/22/2014 18:52:58	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Wet	2									SC			U	30
EPA Region 9 Laboratory	B14D031-MS1	Matrix Spike	Solid	04/07/2014 12:55:00	04/22/2014 19:12:01	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	449	1.5	3.0	mg/kg	TRUE	Wet	2	1403073-01	347	100	101		125	75	20	SC				140
EPA Region 9 Laboratory	B14D031-MS1	Matrix Spike	Solid	04/07/2014 12:55:00	04/22/2014 19:12:01	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	695	1.0	2.0	mg/kg	TRUE	Wet	2	1403073-01	280	400	104		125	75	20	SC				30
EPA Region 9 Laboratory	B14D031-MS2	Matrix Spike	Solid	04/07/2014 12:55:00	04/22/2014 19:30:41	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	110	1.5	3.0	mg/kg	TRUE	Wet	2	1403073-02	20.9	99.0	90		125	75	20	SC				140
EPA Region 9 Laboratory	B14D031-MS2	Matrix Spike	Solid	04/07/2014 12:55:00	04/22/2014 19:30:41	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	661	1.0	2.0	mg/kg	TRUE	Wet	2	1403073-02	253	396	103		125	75	20	SC				30
EPA Region 9 Laboratory	B14D031-MSD1	Matrix Spike Dup	Solid	04/07/2014 12:55:00	04/22/2014 19:17:42	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	447	1.5	3.0	mg/kg	TRUE	Wet	2	1403073-01	347	100	99	0.4	125	75	20	SC				140
EPA Region 9 Laboratory	B14D031-MSD1	Matrix Spike Dup	Solid	04/07/2014 12:55:00	04/22/2014 19:17:42	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	712	1.0	2.0	mg/kg	TRUE	Wet	2	1403073-01	280	400	108	2	125	75	20	SC				30
EPA Region 9 Laboratory	B14D031-MSD2	Matrix Spike Dup	Solid	04/07/2014 12:55:00	04/22/2014 19:36:29	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	110	1.5	3.0	mg/kg	TRUE	Wet	2	1403073-02	20.9	99.0	90	0.04	125	75	20	SC				140
EPA Region 9 Laboratory	B14D031-MSD2	Matrix Spike Dup	Solid	04/07/2014 12:55:00	04/22/2014 19:36:29	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	667	1.0	2.0	mg/kg	TRUE	Wet	2	1403073-02	253	396	105	1	125	75	20	SC				30
EPA Region 9 Laboratory	B14D031-SRM1	Reference	Solid	04/07/2014 12:55:00	04/22/2014 18:59:15	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	52.6	1.5	3.0	mg/kg	TRUE	Wet	2			57.2	92		127	72.8		SC				140
EPA Region 9 Laboratory	B14D031-SRM1	Reference	Solid	04/07/2014 12:55:00	04/22/2014 18:59:15	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	268	1.0	2.0	mg/kg	TRUE	Wet	2			254	105		139	60.9		SC				30

QUALIFIER	DESCRIPTION
U	This analyte was not detected.

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street Building 201
Richmond, CA 94804

Date: **4/30/2014**

Subject: **Analytical Testing Results - Project R14S06**
SDG: 14087B

From: **Duane James, Acting Director**
EPA Region 9 Laboratory
MTS-2

To: **Zi Zi Searles**
California Site Cleanup Section 1
SFD-7-1

Attached are the results from the analysis of samples from the **Iron King Mine 2013/2014 Sampling** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Electronic CC: David Aloysius, SERAS
Donna Getty, SERAS
Jeff Dhont, EPA Region 9

Analyses included in this report:

Analysis of In Vitro Gastric Extracts by ICP

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14087B
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/30/14 17:04
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
2216-02	1403073-01	Soil	03/05/14 16:24	03/28/14 11:15
106-04	1403073-02	Soil	02/26/14 15:00	03/28/14 11:15
108-03	1403073-03	Soil	02/24/14 09:40	03/28/14 11:15
109-11	1403073-04	Soil	02/19/14 10:56	03/28/14 11:15
126-14	1403073-05	Soil	02/27/14 16:42	03/28/14 11:15
2014-08	1403073-06	Soil	01/31/14 10:59	03/28/14 11:15
2324-03	1403073-07	Soil	02/05/14 14:41	03/28/14 11:15
2328-02	1403073-08	Soil	02/05/14 10:18	03/28/14 11:15
2408-01	1403073-09	Soil	03/10/14 10:45	03/28/14 11:15
2410-03	1403073-10	Soil	03/10/14 16:13	03/28/14 11:15
2426-09	1403073-11	Soil	02/05/14 15:46	03/28/14 11:15
2519-10	1403073-12	Soil	03/10/14 12:00	03/28/14 11:15
2523-05	1403073-13	Soil	02/19/14 15:35	03/28/14 11:15
2602-09	1403073-14	Soil	02/13/14 14:16	03/28/14 11:15
2615-03	1403073-15	Soil	02/20/14 10:53	03/28/14 11:15
2743D-11	1403073-16	Soil	02/24/14 15:27	03/28/14 11:15
2755-07	1403073-17	Soil	02/22/14 13:40	03/28/14 11:15
2808-15	1403073-18	Soil	02/21/14 14:35	03/28/14 11:15
2901-06	1403073-19	Soil	02/26/14 10:02	03/28/14 11:15
3004-08	1403073-20	Soil	03/03/14 14:50	03/28/14 11:15

SDG ID 14087B

All samples were dried and sieved prior to preparation for analysis.

Samples were subjected to an in-vitro extraction prior to digestion and analysis. Results reported are the available metal in the soil after extraction.

Work Order(s)

1403073

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14087B
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/30/14 17:04
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1403073-01									**Soil - Sampled: 03/05/14 16:24**
Sample ID: 2216-02									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	17		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		190		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-02									**Soil - Sampled: 02/26/14 15:00**
Sample ID: 106-04									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	23		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		6.0		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-03									**Soil - Sampled: 02/24/14 09:40**
Sample ID: 108-03									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	110		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		280		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-04									**Soil - Sampled: 02/19/14 10:56**
Sample ID: 109-11									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	47		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		140		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-05									**Soil - Sampled: 02/27/14 16:42**
Sample ID: 126-14									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	13		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		7.8		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-06									**Soil - Sampled: 01/31/14 10:59**
Sample ID: 2014-08									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	45		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		19		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-07									**Soil - Sampled: 02/05/14 14:41**
Sample ID: 2324-03									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	42		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		59		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-08									**Soil - Sampled: 02/05/14 10:18**
Sample ID: 2328-02									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	130		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		200		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-09									**Soil - Sampled: 03/10/14 10:45**
Sample ID: 2408-01									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	24		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		69		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-10									**Soil - Sampled: 03/10/14 16:13**
Sample ID: 2410-03									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	28		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		160		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-11									**Soil - Sampled: 02/05/14 15:46**

United States Environmental Protection Agency
Region 9 Laboratory

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Project Manager: Zi Zi Searles
Project Number: R14S06
Project: Iron King Mine 2013/2014 Sampling

California Site Cleanup Section 1
75 Hawthorne Street
San Francisco CA, 94105

SDG: 14087B
Reported: 04/30/14 17:04

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1403073-11									**Soil - Sampled: 02/05/14 15:46**
Sample ID: 2426-09									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	18		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		26		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-12									**Soil - Sampled: 03/10/14 12:00**
Sample ID: 2519-10									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	20		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		24		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-13									**Soil - Sampled: 02/19/14 15:35**
Sample ID: 2523-05									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	31		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		77		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-14									**Soil - Sampled: 02/13/14 14:16**
Sample ID: 2602-09									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	24		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead	RE2	12,000		30	"	"	"	04/26/14	6010C/SOP503
Lab ID: 1403073-15									**Soil - Sampled: 02/20/14 10:53**
Sample ID: 2615-03									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	49		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		2.9	C1, J	3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-16									**Soil - Sampled: 02/24/14 15:27**
Sample ID: 2743D-11									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	39		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		ND	U	3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-17									**Soil - Sampled: 02/22/14 13:40**
Sample ID: 2755-07									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	11		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		16		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-18									**Soil - Sampled: 02/21/14 14:35**
Sample ID: 2808-15									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	15		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		5.7		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-19									**Soil - Sampled: 02/26/14 10:02**
Sample ID: 2901-06									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	15		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		5.5		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-20									**Soil - Sampled: 03/03/14 14:50**
Sample ID: 3004-08									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	51		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		480		3	"	"	"	04/24/14	6010C/SOP503

United States Environmental Protection Agency
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Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14087B
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/30/14 17:04
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B14D040 - In Vitro Gastric Extraction - In Vitro Extraction, ICP, Sample Basis									**Prepared: 04/10/14 Analyzed: 04/23/14**	
									Analysis of In Vitro Gastric Digestion Extracts - Quality Control	
Blank (B14D040-BLK1)										
Lead	ND	U	3	mg/kg						
Blank (B14D040-BLK2)										
Lead	ND	U	3	mg/kg						
Blank (B14D040-BLK3)										
Arsenic	1.2	C1, J	2	mg/kg						
Blank (B14D040-BLK4)										
Arsenic	1.4	C1, J	2	mg/kg						
LCS (B14D040-BS2)										
Arsenic	2,060		2	mg/kg	2000		103	80-120		200
Lead	529		3	"	500		106	80-120		200
Duplicate (B14D040-DUP1)		**Source: 1403073-01**								
Lead	191		3	mg/kg		186			2	20
Duplicate (B14D040-DUP2)		**Source: 1403073-02**								
Lead	5.48		3	mg/kg		6.04			10	20
Duplicate (B14D040-DUP3)		**Source: 1403073-01RE1**								
Arsenic	17.6		2	mg/kg		17.1			3	20
Duplicate (B14D040-DUP4)		**Source: 1403073-02RE1**								
Arsenic	21.2		2	mg/kg		22.9			8	20
Matrix Spike (B14D040-MS1)		**Source: 1403073-01**								
Lead	1,120		3	mg/kg	990	186	94	75-125		20
Matrix Spike (B14D040-MS2)		**Source: 1403073-02**								
Lead	918		3	mg/kg	1000	6.04	91	75-125		20
Matrix Spike (B14D040-MS3)		**Source: 1403073-01RE1**								
Arsenic	4,280		2	mg/kg	3960	17.1	108	75-125		20
Matrix Spike (B14D040-MS4)		**Source: 1403073-02RE1**								
Arsenic	4,370		2	mg/kg	4000	22.9	109	75-125		20
Reference (B14D040-SRM2)										
Lead	1,050		3	mg/kg	1290		82	0-200		
Reference (B14D040-SRM3)										
Arsenic	63.1		2	mg/kg	89.0		71	0-200		
Lead	1,190		3	"	1300		91	0-200		
Reference (B14D040-SRM4)										
Arsenic	61.6		2	mg/kg	88.1		70	0-200		

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Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14087B
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/30/14 17:04
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

Qualifiers and Comments

J	The reported result for this analyte should be considered an estimated value.
C1	The reported concentration for this analyte is below the quantitation limit.
U	Not Detected
NR	Not Reported
RE1, RE2, etc:	Result is from a sample re-analysis.

CLIENT	PROJECT	PROJECTNUM	LabName	SAMPLENAME	LABSAMPID	MATRIX	RPTMATRIX	SAMPDATE	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	Result	DL	RL	UNITS	RPToMDL	BASIS	DILUTION	SPIKELEVEL	RECOVERY	UPPERCL	LOWERCL	ANALYST	PSOLIDS	LNOTE	ANOTE	LATITUDE	LONGITUDE	sComment	SNOTE1	SNOTE2	SNOTE3	SNOTE4	SNOTE5	SNOTE6	SNOTE7	SNOTE8	SNOTE9	SNOTE10	ANALYTEORDER
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2216-02	1403073-01	Solid	Soil	03/05/2014 16:24:00	04/10/2014 13:00:00	04/23/2014 20:39:28	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	190	1.5	3.0	mg/kg	TRUE	Wet	1					SC					Lab QC											140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2216-02	1403073-01RE1	Solid	Soil	03/05/2014 16:24:00	04/10/2014 13:00:00	04/25/2014 16:18:37	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	17	1.0	2.0	mg/kg	TRUE	Wet	1					SC					Lab QC											30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	106-04	1403073-02	Solid	Soil	02/26/2014 15:00:00	04/10/2014 13:00:00	04/23/2014 21:24:26	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	6.0	1.5	3.0	mg/kg	TRUE	Wet	1					SC					Lab QC											140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	106-04	1403073-02RE1	Solid	Soil	02/26/2014 15:00:00	04/10/2014 13:00:00	04/25/2014 17:16:28	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	23	1.0	2.0	mg/kg	TRUE	Wet	1					SC					Lab QC											30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	108-03	1403073-03	Solid	Soil	02/24/2014 09:40:00	04/10/2014 13:00:00	04/23/2014 21:51:14	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	280	1.5	3.0	mg/kg	TRUE	Wet	1					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	108-03	1403073-03RE1	Solid	Soil	02/24/2014 09:40:00	04/10/2014 13:00:00	04/25/2014 17:48:47	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	110	1.0	2.0	mg/kg	TRUE	Wet	1					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	109-11	1403073-04	Solid	Soil	02/19/2014 10:56:00	04/10/2014 13:00:00	04/23/2014 21:57:30	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	140	1.5	3.0	mg/kg	TRUE	Wet	1					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	109-11	1403073-04RE1	Solid	Soil	02/19/2014 10:56:00	04/10/2014 13:00:00	04/25/2014 17:55:07	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	47	1.0	2.0	mg/kg	TRUE	Wet	1					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	126-14	1403073-05	Solid	Soil	02/27/2014 16:42:00	04/10/2014 13:00:00	04/23/2014 22:03:46	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	7.8	1.5	3.0	mg/kg	TRUE	Wet	1					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	126-14	1403073-05RE1	Solid	Soil	02/27/2014 16:42:00	04/10/2014 13:00:00	04/25/2014 18:01:24	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	13	1.0	2.0	mg/kg	TRUE	Wet	1					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2014-08	1403073-06	Solid	Soil	01/31/2014 10:59:00	04/10/2014 13:00:00	04/23/2014 22:09:59	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	19	1.5	3.0	mg/kg	TRUE	Wet	1					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2014-08	1403073-06RE1	Solid	Soil	01/31/2014 10:59:00	04/10/2014 13:00:00	04/25/2014 18:07:38	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	45	1.0	2.0	mg/kg	TRUE	Wet	1					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2324-03	1403073-07	Solid	Soil	02/05/2014 14:41:00	04/10/2014 13:00:00	04/23/2014 22:16:14	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	59	1.5	3.0	mg/kg	TRUE	Wet	1					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2324-03	1403073-07RE1	Solid	Soil	02/05/2014 14:41:00	04/10/2014 13:00:00	04/25/2014 18:33:42	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	42	1.0	2.0	mg/kg	TRUE	Wet	1					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2328-02	1403073-08	Solid	Soil	02/05/2014 10:18:00	04/10/2014 13:00:00	04/23/2014 22:35:10	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	200	1.5	3.0	mg/kg	TRUE	Wet	1					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2328-02	1403073-08RE1	Solid	Soil	02/05/2014 10:18:00	04/10/2014 13:00:00	04/25/2014 18:39:43	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	130	1.0	2.0	mg/kg	TRUE	Wet	1					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2408-01	1403073-09	Solid	Soil	03/10/2014 10:45:00	04/10/2014 13:00:00	04/23/2014 22:41:25	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	69	1.5	3.0	mg/kg	TRUE	Wet	1					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2408-01	1403073-09RE1	Solid	Soil	03/10/2014 10:45:00	04/10/2014 13:00:00	04/25/2014 18:45:47	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	24	1.0	2.0	mg/kg	TRUE	Wet	1					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2410-03	1403073-10	Solid	Soil	03/10/2014 16:13:00	04/10/2014 13:00:00	04/23/2014 22:47:43	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	160	1.5	3.0	mg/kg	TRUE	Wet	1					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2410-03	1403073-10RE1	Solid	Soil	03/10/2014 16:13:00	04/10/2014 13:00:00	04/25/2014 18:51:47	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	28	1.0	2.0	mg/kg	TRUE	Wet	1					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2426-09	1403073-11	Solid	Soil	02/05/2014 15:46:00	04/10/2014 13:00:00	04/23/2014 22:54:03	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	26	1.5	3.0	mg/kg	TRUE	Wet	1					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2426-09	1403073-11RE1	Solid	Soil	02/05/2014 15:46:00	04/10/2014 13:00:00	04/25/2014 18:57:52	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	18	1.0	2.0	mg/kg	TRUE	Wet	1					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2519-10	1403073-12	Solid	Soil	03/10/2014 12:00:00	04/10/2014 13:00:00	04/23/2014 23:00:18	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	24	1.5	3.0	mg/kg	TRUE	Wet	1					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2519-10	1403073-12RE1	Solid	Soil	03/10/2014 12:00:00	04/10/2014 13:00:00	04/25/2014 19:04:06	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	20	1.0	2.0	mg/kg	TRUE	Wet	1					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2523-05	1403073-13	Solid	Soil	02/19/2014 15:35:00	04/10/2014 13:00:00	04/23/2014 23:06:35	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	77	1.5	3.0	mg/kg	TRUE	Wet	1					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2523-05	1403073-13RE1	Solid	Soil	02/19/2014 15:35:00	04/10/2014 13:00:00	04/25/2014 19:10:27	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	31	1.0	2.0	mg/kg	TRUE	Wet	1					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2602-09	1403073-14RE1	Solid	Soil	02/13/2014 14:16:00	04/10/2014 13:00:00	04/25/2014 19:16:46	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	24	1.0	2.0	mg/kg	TRUE	Wet	1					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2602-09	1403073-14RE2	Solid	Soil	02/13/2014 14:16:00	04/10/2014 13:00:00	04/26/2014 13:08:16	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	12000	15	30	mg/kg	TRUE	Wet	10					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2615-03	1403073-15	Solid	Soil	02/20/2014 10:53:00	04/10/2014 13:00:00	04/23/2014 23:19:09	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	2.9	1.5	3.0	mg/kg	TRUE	Wet	1					SC			C1, J													140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2615-03	1403073-15RE1	Solid	Soil	02/20/2014 10:53:00	04/10/2014 13:00:00	04/25/2014 19:23:03	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	49	1.0	2.0	mg/kg	TRUE	Wet	1					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2743D-11	1403073-16	Solid	Soil	02/24/2014 15:27:00	04/10/2014 13:00:00	04/23/2014 23:25:42	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1					SC			U													140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2743D-11	1403073-16RE1	Solid	Soil	02/24/2014 15:27:00	04/10/2014 13:00:00	04/25/2014 19:49:26	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	39	1.0	2.0	mg/kg	TRUE	Wet	1					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2755-07	1403073-17	Solid	Soil	02/22/2014 13:40:00	04/10/2014 13:00:00	04/23/2014 23:44:41	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	16	1.5	3.0	mg/kg	TRUE	Wet	1					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2755-07	1403073-17RE1	Solid	Soil	02/22/2014 13:40:00	04/10/2014 13:00:00	04/25/2014 20:09:21	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	11	1.0	2.0	mg/kg	TRUE	Wet	1					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2808-15	1403073-18	Solid	Soil	02/21/2014 14:35:00	04/10/2014 13:00:00	04/23/2014 23:50:57	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	5.7	1.5	3.0	mg/kg	TRUE	Wet	1					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2808-15	1403073-18RE1	Solid	Soil	02/21/2014 14:35:00	04/10/2014 13:00:00	04/25/2014 20:15:39	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	15	1.0	2.0	mg/kg	TRUE	Wet	1					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2901-06	1403073-19	Solid	Soil	02/26/2014 10:02:00	04/10/2014 13:00:00	04/23/2014 23:57:11	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	5.5	1.5	3.0	mg/kg	TRUE	Wet	1					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2901-06	1403073-19RE1	Solid	Soil	02/26/2014 10:02:00	04/10/2014 13:00:00	04/25/2014 20:21:53	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	15	1.0	2.0	mg/kg	TRUE	Wet	1					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	3004-08	1403073-20	Solid	Soil	03/03/2014 14:50:00	04/10/2014 13:00:00	04/24/2014 00:03:31	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	480	1.5	3.0	mg/kg	TRUE	Wet	1					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	3004-08	1403073-20RE1	Solid	Soil	03/03/2014 14:50:00	04/10/2014 13:00:00	04/25/2014 20:28:08	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	51	1.0	2.0	mg/kg	TRUE	Wet	1					SC																30

LABNAME	LABSAMPID	QCTYPE	MATRIX	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	RPTtoMDL	BASIS	DILUTION	SOURCEID	SOURCERES	SPIKELEVEL	RECOVERY	RPD	UPPERCL	LOWERCL	RPDCL	ANALYST	PSOLIDS	LNOTE	ANOTE	ANALYTEORDER
EPA Region 9 Laboratory	B14D040-BLK1	Blank	Solid	04/10/2014 13:00:00	04/23/2014 20:08:08	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1								SC			U	140
EPA Region 9 Laboratory	B14D040-BLK2	Blank	Solid	04/10/2014 13:00:00	04/23/2014 20:14:22	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1								SC			U	140
EPA Region 9 Laboratory	B14D040-BLK3	Blank	Solid	04/10/2014 13:00:00	04/25/2014 15:27:30	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	1.2	1.0	2.0	mg/kg	TRUE	Wet	1								SC			C1, J	30
EPA Region 9 Laboratory	B14D040-BLK4	Blank	Solid	04/10/2014 13:00:00	04/25/2014 15:33:44	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	1.4	1.0	2.0	mg/kg	TRUE	Wet	1								SC			C1, J	30
EPA Region 9 Laboratory	B14D040-BS2	LCS	Solid	04/10/2014 13:00:00	04/25/2014 15:51:53	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	529	1.5	3.0	mg/kg	TRUE	Wet	1			500	106		120	80	200	SC				140
EPA Region 9 Laboratory	B14D040-BS2	LCS	Solid	04/10/2014 13:00:00	04/25/2014 15:51:53	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	2060	1.0	2.0	mg/kg	TRUE	Wet	1			2000	103		120	80	200	SC				30
EPA Region 9 Laboratory	B14D040-DUP1	Duplicate	Solid	04/10/2014 13:00:00	04/23/2014 20:45:42	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	191	1.5	3.0	mg/kg	TRUE	Wet	1	1403073-01	186			2			20	SC				140
EPA Region 9 Laboratory	B14D040-DUP2	Duplicate	Solid	04/10/2014 13:00:00	04/23/2014 21:30:58	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	5.48	1.5	3.0	mg/kg	TRUE	Wet	1	1403073-02	6.04			10			20	SC				140
EPA Region 9 Laboratory	B14D040-DUP3	Duplicate	Solid	04/10/2014 13:00:00	04/25/2014 16:25:04	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	17.6	1.0	2.0	mg/kg	TRUE	Wet	1	1403073-01RE1	17.1			3			20	SC				30
EPA Region 9 Laboratory	B14D040-DUP4	Duplicate	Solid	04/10/2014 13:00:00	04/25/2014 17:22:43	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	21.2	1.0	2.0	mg/kg	TRUE	Wet	1	1403073-02RE1	22.9			8			20	SC				30
EPA Region 9 Laboratory	B14D040-MS1	Matrix Spike	Solid	04/10/2014 13:00:00	04/23/2014 20:51:59	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	1120	1.5	3.0	mg/kg	TRUE	Wet	1	1403073-01	186	990	94		125	75	20	SC				140
EPA Region 9 Laboratory	B14D040-MS2	Matrix Spike	Solid	04/10/2014 13:00:00	04/23/2014 21:37:30	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	918	1.5	3.0	mg/kg	TRUE	Wet	1	1403073-02	6.04	1000	91		125	75	20	SC				140
EPA Region 9 Laboratory	B14D040-MS3	Matrix Spike	Solid	04/10/2014 13:00:00	04/25/2014 16:30:20	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	4280	1.0	2.0	mg/kg	TRUE	Wet	1	1403073-01RE1	17.1	3960	108		125	75	20	SC				30
EPA Region 9 Laboratory	B14D040-MS4	Matrix Spike	Solid	04/10/2014 13:00:00	04/25/2014 17:27:56	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	4370	1.0	2.0	mg/kg	TRUE	Wet	1	1403073-02RE1	22.9	4000	109		125	75	20	SC				30
EPA Region 9 Laboratory	B14D040-SRM2	Reference	Solid	04/10/2014 13:00:00	04/23/2014 20:33:11	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	1050	1.5	3.0	mg/kg	TRUE	Wet	1			1290	82		200	0		SC				140
EPA Region 9 Laboratory	B14D040-SRM3	Reference	Solid	04/10/2014 13:00:00	04/25/2014 16:05:44	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	1190	1.5	3.0	mg/kg	TRUE	Wet	1			1300	91		200	0		SC				140
EPA Region 9 Laboratory	B14D040-SRM3	Reference	Solid	04/10/2014 13:00:00	04/25/2014 16:05:44	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	63.1	1.0	2.0	mg/kg	TRUE	Wet	1			89.0	71		200	0		SC				30
EPA Region 9 Laboratory	B14D040-SRM4	Reference	Solid	04/10/2014 13:00:00	04/25/2014 16:12:13	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	61.6	1.0	2.0	mg/kg	TRUE	Wet	1			88.1	70		200	0		SC				30

QUALIFIER	DESCRIPTION
C1	The reported concentration for this analyte is below the quantitation limit.
J	The reported result for this analyte should be considered an estimated value.
U	This analyte was not detected.

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street Building 201
Richmond, CA 94804

Date: **4/30/2014**

Subject: **Analytical Testing Results - Project R14S06**
SDG: 14087C

From: **Duane James, Acting Director**
EPA Region 9 Laboratory
MTS-2

To: **Zi Zi Searles**
California Site Cleanup Section 1
SFD-7-1

Attached are the results from the analysis of samples from the **Iron King Mine 2013/2014 Sampling** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Electronic CC: David Aloysius, SERAS
Donna Getty, SERAS
Jeff Dhont, EPA Region 9

Analyses included in this report:

Metals by ICP

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14087C
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/30/14 17:14
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
3005-18	1403074-01	Soil	03/04/14 16:41	03/28/14 11:15

SDG ID 14087C

All samples were dried and sieved prior to preparation for analysis.

Samples were digested per EPA method SW 3050B.

Work Order(s)

1403074

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles
Project Number: R14S06
Project: Iron King Mine 2013/2014 Sampling

California Site Cleanup Section 1
75 Hawthorne Street
San Francisco CA, 94105

SDG: 14087C
Reported: 04/30/14 17:14

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1403074-01									**Soil - Sampled: 03/04/14 16:41**
Sample ID: 3005-18									**Metals by EPA 6000/7000 Series Methods**
Arsenic	RE2	230		2	mg/kg	B14D140	04/25/14	04/26/14	6010C/SOP503
Lead	RE2	450		3	"	"	"	"	6010C/SOP503

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B14D140 - 3050B Sld Acid Dig - Metals by 6010										**Prepared: 04/25/14 Analyzed: 04/26/14**
										Metals by EPA 6000/7000 Series Methods - Quality Control
Blank (B14D140-BLK1)										
Arsenic	ND	U	2	mg/kg						
Lead	ND	U	3	"						
Matrix Spike (B14D140-MS1)		**Source: 1403074-01RE2**								
Arsenic	666		2	mg/kg	388	226	113	75-125		20
Lead	543		3	"	97.1	449	97	75-125		20
Matrix Spike Dup (B14D140-MSD1)		**Source: 1403074-01RE2**								
Arsenic	662		2	mg/kg	396	226	110	75-125	0.6	20
Lead	532		3	"	99.0	449	84	75-125	2	20
Reference (B14D140-SRM1)										
Arsenic	255		2	mg/kg	252		101	60.9-139		
Lead	53.1		3	"	56.6		94	72.8-127		

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14087C
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/30/14 17:14
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

Qualifiers and Comments

U	Not Detected
NR	Not Reported
RE1, RE2, etc:	Result is from a sample re-analysis.

CLIENT	PROJECT	PROJECTNUM	LabName	SAMPLENAME	LABSAMPID	MATRIX	RPTMATRIX	SAMPDATE	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	Result	DL	RL	UNITS	RPToMDL	BASIS	DILUTION	SPIKELEVEL	RECOVERY	UPPERCL	LOWERCL	ANALYST	PSOLIDS	LNOTE	ANOTE	LATITUDE	LONGITUDE	sComment	SNOTE1	SNOTE2	SNOTE3	SNOTE4	SNOTE5	SNOTE6	SNOTE7	SNOTE8	SNOTE9	SNOTE10	ANALYTEORDER
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	3005-18	1403074-01RE2	Solid	Soil	03/04/2014 16:41:00	04/25/2014 06:57:00	04/26/2014 13:30:07	B14D140	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	450	1.5	3.0	mg/kg	TRUE	Wet	2					SC					Lab QC											140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	3005-18	1403074-01RE2	Solid	Soil	03/04/2014 16:41:00	04/25/2014 06:57:00	04/26/2014 13:30:07	B14D140	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	230	1.0	2.0	mg/kg	TRUE	Wet	2					SC					Lab QC											30

LABNAME	LABSAMPID	QCTYPE	MATRIX	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	RPTоMDL	BASIS	DILUTION	SOURCEID	SOURCERES	SPIKELEVEL	RECOVERY	RPD	UPPERCL	LOWERCL	RPDCL	ANALYST	PSOLIDS	LNOTE	ANOTE	ANALYTEORDER
EPA Region 9 Laboratory	B14D140-BLK1	Blank	Solid	04/25/2014 06:57:00	04/26/2014 13:19:46	B14D140	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	2									SC			U	140
EPA Region 9 Laboratory	B14D140-BLK1	Blank	Solid	04/25/2014 06:57:00	04/26/2014 13:19:46	B14D140	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Wet	2									SC			U	30
EPA Region 9 Laboratory	B14D140-MS1	Matrix Spike	Solid	04/25/2014 06:57:00	04/26/2014 13:38:53	B14D140	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	543	1.5	3.0	mg/kg	TRUE	Wet	2	1403074-01RE2	449	97.1	97		125	75	20	SC				140
EPA Region 9 Laboratory	B14D140-MS1	Matrix Spike	Solid	04/25/2014 06:57:00	04/26/2014 13:38:53	B14D140	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	666	1.0	2.0	mg/kg	TRUE	Wet	2	1403074-01RE2	226	388	113		125	75	20	SC				30
EPA Region 9 Laboratory	B14D140-MSD1	Matrix Spike Dup	Solid	04/25/2014 06:57:00	04/26/2014 13:49:03	B14D140	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	532	1.5	3.0	mg/kg	TRUE	Wet	2	1403074-01RE2	449	99.0	84	2	125	75	20	SC				140
EPA Region 9 Laboratory	B14D140-MSD1	Matrix Spike Dup	Solid	04/25/2014 06:57:00	04/26/2014 13:49:03	B14D140	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	662	1.0	2.0	mg/kg	TRUE	Wet	2	1403074-01RE2	226	396	110	0.6	125	75	20	SC				30
EPA Region 9 Laboratory	B14D140-SRM1	Reference	Solid	04/25/2014 06:57:00	04/26/2014 13:24:59	B14D140	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	53.1	1.5	3.0	mg/kg	TRUE	Wet	2			56.6	94		127	72.8		SC				140
EPA Region 9 Laboratory	B14D140-SRM1	Reference	Solid	04/25/2014 06:57:00	04/26/2014 13:24:59	B14D140	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	255	1.0	2.0	mg/kg	TRUE	Wet	2			252	101		139	60.9		SC				30

QUALIFIER	DESCRIPTION
U	This analyte was not detected.

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street Building 201
Richmond, CA 94804

Date: **4/30/2014**

Subject: **Analytical Testing Results - Project R14S06**
SDG: 14087C

From: **Duane James, Acting Director**
EPA Region 9 Laboratory
MTS-2

To: **Zi Zi Searles**
California Site Cleanup Section 1
SFD-7-1

Attached are the results from the analysis of samples from the **Iron King Mine 2013/2014 Sampling** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Electronic CC: David Aloysius, SERAS
Donna Getty, SERAS
Jeff Dhont, EPA Region 9

Analyses included in this report:

Analysis of In Vitro Gastric Extracts by ICP

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14087C
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/30/14 17:08
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
3005-18	1403074-01	Soil	03/04/14 16:41	03/28/14 11:15

SDG ID 14087C

All samples were dried and sieved prior to preparation for analysis.

Samples were subjected to an in-vitro extraction prior to digestion and analysis. Results reported are the available metal in the soil after extraction.

Work Order(s)

1403074

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14087C
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/30/14 17:08
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: **1403074-01**									**Soil - Sampled: 03/04/14 16:41**
Sample ID: **3005-18**									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	52		2	mg/kg	B14D046	04/10/14	04/23/14	6010C/SOP503
Lead		310		3	"	"	"	04/22/14	6010C/SOP503

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B14D046 - In Vitro Gastric Extraction - In Vitro Extraction, ICP, Sample Basis									**Prepared: 04/10/14 Analyzed: 04/22/14**	
									Analysis of In Vitro Gastric Digestion Extracts - Quality Control	
Blank (B14D046-BLK1)										
Lead	ND	U	3	mg/kg						
Blank (B14D046-BLK2)										
Lead	ND	U	3	mg/kg						
Blank (B14D046-BLK3)										
Arsenic	3.1		2	mg/kg						
Blank (B14D046-BLK4)										
Arsenic	3.3		2	mg/kg						
LCS (B14D046-BS1)										
Lead	537		3	mg/kg	500		107	80-120		200
LCS (B14D046-BS2)										
Arsenic	1,950		2	mg/kg	2000		97	80-120		200
Duplicate (B14D046-DUP1)		**Source: 1403074-01**								
Lead	313		3	mg/kg		312			0.3	20
Duplicate (B14D046-DUP2)		**Source: 1403074-01RE1**								
Arsenic	50.4		2	mg/kg		51.7			2	20
Matrix Spike (B14D046-MS1)		**Source: 1403074-01**								
Lead	1,350		3	mg/kg	990	312	105	75-125		20
Matrix Spike (B14D046-MS2)		**Source: 1403074-01RE1**								
Arsenic	3,910		2	mg/kg	3960	51.7	97	75-125		20
Reference (B14D046-SRM1)										
Lead	1,180		3	mg/kg	1260		93	0-200		
Reference (B14D046-SRM2)										
Arsenic	64.5		2	mg/kg	86.4		75	0-200		

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14087C
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/30/14 17:08
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

Qualifiers and Comments

U	Not Detected
NR	Not Reported
RE1, RE2, etc:	Result is from a sample re-analysis.

CLIENT	PROJECT	PROJECTNUM	LabName	SAMPLENAME	LABSAMPID	MATRIX	RPTMATRIX	SAMPDATE	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	Result	DL	RL	UNITS	RPTtoMDL	BASIS	DILUTION	SPIKELEVEL	RECOVERY	UPPERCL	LOWERCL	ANALYST	PSOLIDS	LNOTE	ANOTE	LATITUDE	LONGITUDE	pComment	SNOTE1	SNOTE2	SNOTE3	SNOTE4	SNOTE5	SNOTE6	SNOTE7	SNOTE8	SNOTE9	SNOTE10	ANALYTEORDER
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	3005-18	1403074-01	Solid	Soil	03/04/2014 16:41:00	04/10/2014 13:00:00	04/22/2014 14:48:00	B14D046	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	310	1.5	3.0	mg/kg	TRUE	Wet	1					SC					Lab QC											140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	3005-18	1403074-01RE1	Solid	Soil	03/04/2014 16:41:00	04/10/2014 13:00:00	04/23/2014 19:09:00	B14D046	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	52	1.0	2.0	mg/kg	TRUE	Wet	1					SC					Lab QC											30

LABNAME	LABSAMPID	QCTYPE	MATRIX	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	RPToMDL	BASIS	DILUTION	SOURCEID	SOURCERES	SPIKELEVEL	RECOVERY	RPD	UPPERCL	LOWERCL	RPDCL	ANALYST	PSOLIDS	LNOTE	ANOTE	ANALYTEORDER
EPA Region 9 Laboratory	B14D046-BLK1	Blank	Solid	04/10/2014 13:00:00	04/22/2014 14:21:05	B14D046	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1								SC			U	140
EPA Region 9 Laboratory	B14D046-BLK2	Blank	Solid	04/10/2014 13:00:00	04/22/2014 14:28:22	B14D046	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1								SC			U	140
EPA Region 9 Laboratory	B14D046-BLK3	Blank	Solid	04/10/2014 13:00:00	04/23/2014 18:24:38	B14D046	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	3.1	1.0	2.0	mg/kg	TRUE	Wet	1								SC				30
EPA Region 9 Laboratory	B14D046-BLK4	Blank	Solid	04/10/2014 13:00:00	04/23/2014 18:30:52	B14D046	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	3.3	1.0	2.0	mg/kg	TRUE	Wet	1								SC				30
EPA Region 9 Laboratory	B14D046-BS1	LCS	Solid	04/10/2014 13:00:00	04/22/2014 14:34:32	B14D046	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	537	1.5	3.0	mg/kg	TRUE	Wet	1			500	107		120	80	200	SC				140
EPA Region 9 Laboratory	B14D046-BS2	LCS	Solid	04/10/2014 13:00:00	04/23/2014 18:56:02	B14D046	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	1950	1.0	2.0	mg/kg	TRUE	Wet	1			2000	97		120	80	200	SC				30
EPA Region 9 Laboratory	B14D046-DUP1	Duplicate	Solid	04/10/2014 13:00:00	04/22/2014 14:54:55	B14D046	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	313	1.5	3.0	mg/kg	TRUE	Wet	1	1403074-01	312			0.3			20	SC				140
EPA Region 9 Laboratory	B14D046-DUP2	Duplicate	Solid	04/10/2014 13:00:00	04/23/2014 19:16:14	B14D046	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	50.4	1.0	2.0	mg/kg	TRUE	Wet	1	1403074-01RE1	51.7			2			20	SC				30
EPA Region 9 Laboratory	B14D046-MS1	Matrix Spike	Solid	04/10/2014 13:00:00	04/22/2014 15:01:25	B14D046	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	1350	1.5	3.0	mg/kg	TRUE	Wet	1	1403074-01	312	990	105		125	75	20	SC				140
EPA Region 9 Laboratory	B14D046-MS2	Matrix Spike	Solid	04/10/2014 13:00:00	04/23/2014 19:22:27	B14D046	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	3910	1.0	2.0	mg/kg	TRUE	Wet	1	1403074-01RE1	51.7	3960	97		125	75	20	SC				30
EPA Region 9 Laboratory	B14D046-SRM1	Reference	Solid	04/10/2014 13:00:00	04/22/2014 14:42:05	B14D046	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	1180	1.5	3.0	mg/kg	TRUE	Wet	1			1260	93		200	0		SC				140
EPA Region 9 Laboratory	B14D046-SRM2	Reference	Solid	04/10/2014 13:00:00	04/23/2014 19:03:27	B14D046	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	64.5	1.0	2.0	mg/kg	TRUE	Wet	1			86.4	75		200	0		SC				30

QUALIFIER	DESCRIPTION
U	This analyte was not detected.

From: Dhont.Jeff@epa.gov [Dhont.Jeff@epa.gov]
To: Natalia.Raykhman@CH2M.com [Natalia.Raykhman@CH2M.com]; Dennis.Shelton@CH2M.com [Dennis.Shelton@CH2M.com]
CC:
Subject: FW: In-vitro and 3050B extraction metals analysis results for Iron King Mine 2013/2014 sampling SDGs 14087B and 14087C
Sent: Thursday, May 01, 2014 13:12:06
Attachment 1: 14087b_metals_invitro.pdf
Attachment 2: 14087b_metals_invitro.xls
Attachment 3: 14087b_metals_3050b.pdf
Attachment 4: 14087b_metals_3050b.xls
Attachment 5: 14087c_metals_invitro.pdf
Attachment 6: 14087c_metals_invitro.xls
Attachment 7: 14087c_metals_3050b.xls
Attachment 8: 14087c_metals_3050b.pdf

In-vitro results fresh-in !

From: Berges, Jack
Sent: Thursday, May 01, 2014 9:41 AM
To: david.l.aloysius@lmco.com; DHONT, JEFF; donna.j.getty@lmco.com
Subject: In-vitro and 3050B extraction metals analysis results for Iron King Mine 2013/2014 sampling SDGs 14087B and 14087C

In-vitro and 3050B extraction metals analysis results for Iron King Mine 2013/2014 sampling SDGs 14087B and 14087C, project R14S06, are attached. To obtain the bio-accessible factor for a given analyte/sample, divide the in-vitro result by the 3050B result.

Jack Berges
Chemist, US EPA Region 9 Laboratory
1337 South 46th Street Bldg 201
Richmond, CA 94804
P: 510-412-2332 F: 510-412-2302
berges.jack@epa.gov

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street Building 201
Richmond, CA 94804

Date: **4/30/2014**

Subject: **Analytical Testing Results - Project R14S06**
SDG: 14087B

From: **Duane James, Acting Director**
EPA Region 9 Laboratory
MTS-2

To: **Zi Zi Searles**
California Site Cleanup Section 1
SFD-7-1

Attached are the results from the analysis of samples from the **Iron King Mine 2013/2014 Sampling** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Electronic CC: David Aloysius, SERAS
Donna Getty, SERAS
Jeff Dhont, EPA Region 9

Analyses included in this report:

Metals by ICP

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles
Project Number: R14S06
Project: Iron King Mine 2013/2014 Sampling

California Site Cleanup Section 1
75 Hawthorne Street
San Francisco CA, 94105

SDG: 14087B
Reported: 04/30/14 16:59

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
2216-02	1403073-01	Soil	03/05/14 16:24	03/28/14 11:15
106-04	1403073-02	Soil	02/26/14 15:00	03/28/14 11:15
108-03	1403073-03	Soil	02/24/14 09:40	03/28/14 11:15
109-11	1403073-04	Soil	02/19/14 10:56	03/28/14 11:15
126-14	1403073-05	Soil	02/27/14 16:42	03/28/14 11:15
2014-08	1403073-06	Soil	01/31/14 10:59	03/28/14 11:15
2324-03	1403073-07	Soil	02/05/14 14:41	03/28/14 11:15
2328-02	1403073-08	Soil	02/05/14 10:18	03/28/14 11:15
2408-01	1403073-09	Soil	03/10/14 10:45	03/28/14 11:15
2410-03	1403073-10	Soil	03/10/14 16:13	03/28/14 11:15
2426-09	1403073-11	Soil	02/05/14 15:46	03/28/14 11:15
2519-10	1403073-12	Soil	03/10/14 12:00	03/28/14 11:15
2523-05	1403073-13	Soil	02/19/14 15:35	03/28/14 11:15
2602-09	1403073-14	Soil	02/13/14 14:16	03/28/14 11:15
2615-03	1403073-15	Soil	02/20/14 10:53	03/28/14 11:15
2743D-11	1403073-16	Soil	02/24/14 15:27	03/28/14 11:15
2755-07	1403073-17	Soil	02/22/14 13:40	03/28/14 11:15
2808-15	1403073-18	Soil	02/21/14 14:35	03/28/14 11:15
2901-06	1403073-19	Soil	02/26/14 10:02	03/28/14 11:15
3004-08	1403073-20	Soil	03/03/14 14:50	03/28/14 11:15

SDG ID 14087B

All samples were dried and sieved prior to preparation for analysis.

Samples were digested per EPA method SW 3050B.

Work Order(s)

1403073

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14087B
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/30/14 16:59
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: **1403073-01**									**Soil - Sampled: 03/05/14 16:24**
Sample ID: **2216-02**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		280		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		350		3	"	"	"	"	6010C/SOP503
Lab ID: **1403073-02**									**Soil - Sampled: 02/26/14 15:00**
Sample ID: **106-04**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		250		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		21		3	"	"	"	"	6010C/SOP503
Lab ID: **1403073-03**									**Soil - Sampled: 02/24/14 09:40**
Sample ID: **108-03**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		420		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		770		3	"	"	"	"	6010C/SOP503
Lab ID: **1403073-04**									**Soil - Sampled: 02/19/14 10:56**
Sample ID: **109-11**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		170		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		230		3	"	"	"	"	6010C/SOP503
Lab ID: **1403073-05**									**Soil - Sampled: 02/27/14 16:42**
Sample ID: **126-14**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		180		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		22		3	"	"	"	"	6010C/SOP503
Lab ID: **1403073-06**									**Soil - Sampled: 01/31/14 10:59**
Sample ID: **2014-08**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		310		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		300		3	"	"	"	"	6010C/SOP503
Lab ID: **1403073-07**									**Soil - Sampled: 02/05/14 14:41**
Sample ID: **2324-03**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		230		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		170		3	"	"	"	"	6010C/SOP503
Lab ID: **1403073-08**									**Soil - Sampled: 02/05/14 10:18**
Sample ID: **2328-02**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		780		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		520		3	"	"	"	"	6010C/SOP503
Lab ID: **1403073-09**									**Soil - Sampled: 03/10/14 10:45**
Sample ID: **2408-01**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		220		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		840		3	"	"	"	"	6010C/SOP503
Lab ID: **1403073-10**									**Soil - Sampled: 03/10/14 16:13**
Sample ID: **2410-03**									**Metals by EPA 6000/7000 Series Methods**
Arsenic		290		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		2,000		3	"	"	"	"	6010C/SOP503
Lab ID: **1403073-11**									**Soil - Sampled: 02/05/14 15:46**

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14087B
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/30/14 16:59
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1403073-11									**Soil - Sampled: 02/05/14 15:46**
Sample ID: 2426-09									**Metals by EPA 6000/7000 Series Methods**
Arsenic		340		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		65		3	"	"	"	"	6010C/SOP503
Lab ID: 1403073-12									**Soil - Sampled: 03/10/14 12:00**
Sample ID: 2519-10									**Metals by EPA 6000/7000 Series Methods**
Arsenic		160		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		47		3	"	"	"	"	6010C/SOP503
Lab ID: 1403073-13									**Soil - Sampled: 02/19/14 15:35**
Sample ID: 2523-05									**Metals by EPA 6000/7000 Series Methods**
Arsenic		170		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		220		3	"	"	"	"	6010C/SOP503
Lab ID: 1403073-14									**Soil - Sampled: 02/13/14 14:16**
Sample ID: 2602-09									**Metals by EPA 6000/7000 Series Methods**
Arsenic		140		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead	RE1	15,000		15	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-15									**Soil - Sampled: 02/20/14 10:53**
Sample ID: 2615-03									**Metals by EPA 6000/7000 Series Methods**
Arsenic		1,200		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		16		3	"	"	"	"	6010C/SOP503
Lab ID: 1403073-16									**Soil - Sampled: 02/24/14 15:27**
Sample ID: 2743D-11									**Metals by EPA 6000/7000 Series Methods**
Arsenic		650		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		9.5		3	"	"	"	"	6010C/SOP503
Lab ID: 1403073-17									**Soil - Sampled: 02/22/14 13:40**
Sample ID: 2755-07									**Metals by EPA 6000/7000 Series Methods**
Arsenic		150		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		34		3	"	"	"	"	6010C/SOP503
Lab ID: 1403073-18									**Soil - Sampled: 02/21/14 14:35**
Sample ID: 2808-15									**Metals by EPA 6000/7000 Series Methods**
Arsenic		410		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		18		3	"	"	"	"	6010C/SOP503
Lab ID: 1403073-19									**Soil - Sampled: 02/26/14 10:02**
Sample ID: 2901-06									**Metals by EPA 6000/7000 Series Methods**
Arsenic		160		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		14		3	"	"	"	"	6010C/SOP503
Lab ID: 1403073-20									**Soil - Sampled: 03/03/14 14:50**
Sample ID: 3004-08									**Metals by EPA 6000/7000 Series Methods**
Arsenic		260		2	mg/kg	B14D031	04/07/14	04/22/14	6010C/SOP503
Lead		650		3	"	"	"	"	6010C/SOP503

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Project Manager: Zi Zi Searles
Project Number: R14S06
Project: Iron King Mine 2013/2014 Sampling

California Site Cleanup Section 1
75 Hawthorne Street
San Francisco CA, 94105

SDG: 14087B
Reported: 04/30/14 16:59

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B14D031 - 3050B Sld Acid Dig - Metals by 6010										**Prepared: 04/07/14 Analyzed: 04/22/14**
										Metals by EPA 6000/7000 Series Methods - Quality Control
Blank (B14D031-BLK1)										
Arsenic	ND	U	2	mg/kg						
Lead	ND	U	3	"						
Matrix Spike (B14D031-MS1)		**Source: 1403073-01**								
Arsenic	695		2	mg/kg	400	280	104	75-125		20
Lead	449		3	"	100	347	101	75-125		20
Matrix Spike (B14D031-MS2)		**Source: 1403073-02**								
Arsenic	661		2	mg/kg	396	253	103	75-125		20
Lead	110		3	"	99.0	20.9	90	75-125		20
Matrix Spike Dup (B14D031-MSD1)		**Source: 1403073-01**								
Arsenic	712		2	mg/kg	400	280	108	75-125	2	20
Lead	447		3	"	100	347	99	75-125	0.4	20
Matrix Spike Dup (B14D031-MSD2)		**Source: 1403073-02**								
Arsenic	667		2	mg/kg	396	253	105	75-125	1	20
Lead	110		3	"	99.0	20.9	90	75-125	0.04	20
Reference (B14D031-SRM1)										
Arsenic	268		2	mg/kg	254		105	60.9-139		
Lead	52.6		3	"	57.2		92	72.8-127		

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Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14087B
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/30/14 16:59
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

Qualifiers and Comments

U	Not Detected
NR	Not Reported
RE1, RE2, etc:	Result is from a sample re-analysis.

CLIENT	PROJECT	PROJECTNUM	LabName	SAMPLENAME	LABSAMPID	MATRIX	RPTMATRIX	SAMPDATE	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	Result	DL	RL	UNITS	RPToMDL	BASIS	DILUTION	SPIKELEVEL	RECOVERY	UPPERCL	LOWERCL	ANALYST	PSOLIDS	LNOTE	ANOTE	LATITUDE	LONGITUDE	sComment	SNOTE1	SNOTE2	SNOTE3	SNOTE4	SNOTE5	SNOTE6	SNOTE7	SNOTE8	SNOTE9	SNOTE10	ANALYTEORDER
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2216-02	1403073-01	Solid	Soil	03/05/2014 16:24:00	04/07/2014 12:55:00	04/22/2014 19:05:33	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	350	1.5	3.0	mg/kg	TRUE	Wet	2					SC					Lab QC											140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2216-02	1403073-01	Solid	Soil	03/05/2014 16:24:00	04/07/2014 12:55:00	04/22/2014 19:05:33	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	280	1.0	2.0	mg/kg	TRUE	Wet	2					SC					Lab QC											30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	106-04	1403073-02	Solid	Soil	02/26/2014 15:00:00	04/07/2014 12:55:00	04/22/2014 19:23:24	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	21	1.5	3.0	mg/kg	TRUE	Wet	2					SC					Lab QC											140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	106-04	1403073-02	Solid	Soil	02/26/2014 15:00:00	04/07/2014 12:55:00	04/22/2014 19:23:24	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	250	1.0	2.0	mg/kg	TRUE	Wet	2					SC					Lab QC											30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	108-03	1403073-03	Solid	Soil	02/24/2014 09:40:00	04/07/2014 12:55:00	04/22/2014 19:42:16	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	770	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	108-03	1403073-03	Solid	Soil	02/24/2014 09:40:00	04/07/2014 12:55:00	04/22/2014 19:42:16	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	420	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	109-11	1403073-04	Solid	Soil	02/19/2014 10:56:00	04/07/2014 12:55:00	04/22/2014 20:02:10	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	230	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	109-11	1403073-04	Solid	Soil	02/19/2014 10:56:00	04/07/2014 12:55:00	04/22/2014 20:02:10	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	170	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	126-14	1403073-05	Solid	Soil	02/27/2014 16:42:00	04/07/2014 12:55:00	04/22/2014 20:08:42	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	22	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	126-14	1403073-05	Solid	Soil	02/27/2014 16:42:00	04/07/2014 12:55:00	04/22/2014 20:08:42	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	180	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2014-08	1403073-06	Solid	Soil	01/31/2014 10:59:00	04/07/2014 12:55:00	04/22/2014 20:16:02	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	300	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2014-08	1403073-06	Solid	Soil	01/31/2014 10:59:00	04/07/2014 12:55:00	04/22/2014 20:16:02	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	310	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2324-03	1403073-07	Solid	Soil	02/05/2014 14:41:00	04/07/2014 12:55:00	04/22/2014 20:22:31	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	170	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2324-03	1403073-07	Solid	Soil	02/05/2014 14:41:00	04/07/2014 12:55:00	04/22/2014 20:22:31	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	230	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2328-02	1403073-08	Solid	Soil	02/05/2014 10:18:00	04/07/2014 12:55:00	04/22/2014 20:29:47	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	520	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2328-02	1403073-08	Solid	Soil	02/05/2014 10:18:00	04/07/2014 12:55:00	04/22/2014 20:29:47	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	780	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2408-01	1403073-09	Solid	Soil	03/10/2014 10:45:00	04/07/2014 12:55:00	04/22/2014 20:36:59	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	840	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2408-01	1403073-09	Solid	Soil	03/10/2014 10:45:00	04/07/2014 12:55:00	04/22/2014 20:36:59	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	220	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2410-03	1403073-10	Solid	Soil	03/10/2014 16:13:00	04/07/2014 12:55:00	04/22/2014 20:44:14	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	2000	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2410-03	1403073-10	Solid	Soil	03/10/2014 16:13:00	04/07/2014 12:55:00	04/22/2014 20:44:14	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	290	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2426-09	1403073-11	Solid	Soil	02/05/2014 15:46:00	04/07/2014 12:55:00	04/22/2014 20:51:27	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	65	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2426-09	1403073-11	Solid	Soil	02/05/2014 15:46:00	04/07/2014 12:55:00	04/22/2014 20:51:27	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	340	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2519-10	1403073-12	Solid	Soil	03/10/2014 12:00:00	04/07/2014 12:55:00	04/22/2014 20:58:48	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	47	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2519-10	1403073-12	Solid	Soil	03/10/2014 12:00:00	04/07/2014 12:55:00	04/22/2014 20:58:48	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	160	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2523-05	1403073-13	Solid	Soil	02/19/2014 15:35:00	04/07/2014 12:55:00	04/22/2014 21:06:04	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	220	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2523-05	1403073-13	Solid	Soil	02/19/2014 15:35:00	04/07/2014 12:55:00	04/22/2014 21:06:04	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	170	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2602-09	1403073-14	Solid	Soil	02/13/2014 14:16:00	04/07/2014 12:55:00	04/22/2014 21:25:58	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	140	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2602-09	1403073-14RE1	Solid	Soil	02/13/2014 14:16:00	04/07/2014 12:55:00	04/23/2014 14:13:40	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	15000	7.5	15	mg/kg	TRUE	Wet	10					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2615-03	1403073-15	Solid	Soil	02/20/2014 10:53:00	04/07/2014 12:55:00	04/22/2014 21:32:27	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	16	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2615-03	1403073-15	Solid	Soil	02/20/2014 10:53:00	04/07/2014 12:55:00	04/22/2014 21:32:27	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	1200	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2743D-11	1403073-16	Solid	Soil	02/24/2014 15:27:00	04/07/2014 12:55:00	04/22/2014 21:39:47	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	9.5	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2743D-11	1403073-16	Solid	Soil	02/24/2014 15:27:00	04/07/2014 12:55:00	04/22/2014 21:39:47	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	650	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2755-07	1403073-17	Solid	Soil	02/22/2014 13:40:00	04/07/2014 12:55:00	04/22/2014 21:46:33	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	34	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2755-07	1403073-17	Solid	Soil	02/22/2014 13:40:00	04/07/2014 12:55:00	04/22/2014 21:46:33	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	150	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2808-15	1403073-18	Solid	Soil	02/21/2014 14:35:00	04/07/2014 12:55:00	04/22/2014 21:53:59	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	18	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2808-15	1403073-18	Solid	Soil	02/21/2014 14:35:00	04/07/2014 12:55:00	04/22/2014 21:53:59	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	410	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2901-06	1403073-19	Solid	Soil	02/26/2014 10:02:00	04/07/2014 12:55:00	04/22/2014 22:01:20	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	14	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	2901-06	1403073-19	Solid	Soil	02/26/2014 10:02:00	04/07/2014 12:55:00	04/22/2014 22:01:20	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	160	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	3004-08	1403073-20	Solid	Soil	03/03/2014 14:50:00	04/07/2014 12:55:00	04/22/2014 22:08:39	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	650	1.5	3.0	mg/kg	TRUE	Wet	2					SC																140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	3004-08	1403073-20	Solid	Soil	03/03/2014 14:50:00	04/07/2014 12:55:00	04/22/2014 22:08:39	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	260	1.0	2.0	mg/kg	TRUE	Wet	2					SC																30

LABNAME	LABSAMPID	QCTYPE	MATRIX	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	RPToMDL	BASIS	DILUTION	SOURCEID	SOURCERES	SPIKELEVEL	RECOVERY	RPD	UPPERCL	LOWERCL	RPDCL	ANALYST	PSOLIDS	LNOTE	ANOTE	ANALYTEORDER
EPA Region 9 Laboratory	B14D031-BLK1	Blank	Solid	04/07/2014 12:55:00	04/22/2014 18:52:58	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	2									SC			U	140
EPA Region 9 Laboratory	B14D031-BLK1	Blank	Solid	04/07/2014 12:55:00	04/22/2014 18:52:58	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Wet	2									SC			U	30
EPA Region 9 Laboratory	B14D031-MS1	Matrix Spike	Solid	04/07/2014 12:55:00	04/22/2014 19:12:01	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	449	1.5	3.0	mg/kg	TRUE	Wet	2	1403073-01	347	100	101		125	75	20	SC				140
EPA Region 9 Laboratory	B14D031-MS1	Matrix Spike	Solid	04/07/2014 12:55:00	04/22/2014 19:12:01	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	695	1.0	2.0	mg/kg	TRUE	Wet	2	1403073-01	280	400	104		125	75	20	SC				30
EPA Region 9 Laboratory	B14D031-MS2	Matrix Spike	Solid	04/07/2014 12:55:00	04/22/2014 19:30:41	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	110	1.5	3.0	mg/kg	TRUE	Wet	2	1403073-02	20.9	99.0	90		125	75	20	SC				140
EPA Region 9 Laboratory	B14D031-MS2	Matrix Spike	Solid	04/07/2014 12:55:00	04/22/2014 19:30:41	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	661	1.0	2.0	mg/kg	TRUE	Wet	2	1403073-02	253	396	103		125	75	20	SC				30
EPA Region 9 Laboratory	B14D031-MSD1	Matrix Spike Dup	Solid	04/07/2014 12:55:00	04/22/2014 19:17:42	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	447	1.5	3.0	mg/kg	TRUE	Wet	2	1403073-01	347	100	99	0.4	125	75	20	SC				140
EPA Region 9 Laboratory	B14D031-MSD1	Matrix Spike Dup	Solid	04/07/2014 12:55:00	04/22/2014 19:17:42	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	712	1.0	2.0	mg/kg	TRUE	Wet	2	1403073-01	280	400	108	2	125	75	20	SC				30
EPA Region 9 Laboratory	B14D031-MSD2	Matrix Spike Dup	Solid	04/07/2014 12:55:00	04/22/2014 19:36:29	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	110	1.5	3.0	mg/kg	TRUE	Wet	2	1403073-02	20.9	99.0	90	0.04	125	75	20	SC				140
EPA Region 9 Laboratory	B14D031-MSD2	Matrix Spike Dup	Solid	04/07/2014 12:55:00	04/22/2014 19:36:29	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	667	1.0	2.0	mg/kg	TRUE	Wet	2	1403073-02	253	396	105	1	125	75	20	SC				30
EPA Region 9 Laboratory	B14D031-SRM1	Reference	Solid	04/07/2014 12:55:00	04/22/2014 18:59:15	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	52.6	1.5	3.0	mg/kg	TRUE	Wet	2			57.2	92		127	72.8		SC				140
EPA Region 9 Laboratory	B14D031-SRM1	Reference	Solid	04/07/2014 12:55:00	04/22/2014 18:59:15	B14D031	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	268	1.0	2.0	mg/kg	TRUE	Wet	2			254	105		139	60.9		SC				30

QUALIFIER	DESCRIPTION
U	This analyte was not detected.

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street Building 201
Richmond, CA 94804

Date: **4/30/2014**

Subject: **Analytical Testing Results - Project R14S06**
SDG: 14087B

From: **Duane James, Acting Director**
EPA Region 9 Laboratory
MTS-2

To: **Zi Zi Searles**
California Site Cleanup Section 1
SFD-7-1

Attached are the results from the analysis of samples from the **Iron King Mine 2013/2014 Sampling** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Electronic CC: David Aloysius, SERAS
Donna Getty, SERAS
Jeff Dhont, EPA Region 9

Analyses included in this report:

Analysis of In Vitro Gastric Extracts by ICP

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14087B
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/30/14 17:04
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
2216-02	1403073-01	Soil	03/05/14 16:24	03/28/14 11:15
106-04	1403073-02	Soil	02/26/14 15:00	03/28/14 11:15
108-03	1403073-03	Soil	02/24/14 09:40	03/28/14 11:15
109-11	1403073-04	Soil	02/19/14 10:56	03/28/14 11:15
126-14	1403073-05	Soil	02/27/14 16:42	03/28/14 11:15
2014-08	1403073-06	Soil	01/31/14 10:59	03/28/14 11:15
2324-03	1403073-07	Soil	02/05/14 14:41	03/28/14 11:15
2328-02	1403073-08	Soil	02/05/14 10:18	03/28/14 11:15
2408-01	1403073-09	Soil	03/10/14 10:45	03/28/14 11:15
2410-03	1403073-10	Soil	03/10/14 16:13	03/28/14 11:15
2426-09	1403073-11	Soil	02/05/14 15:46	03/28/14 11:15
2519-10	1403073-12	Soil	03/10/14 12:00	03/28/14 11:15
2523-05	1403073-13	Soil	02/19/14 15:35	03/28/14 11:15
2602-09	1403073-14	Soil	02/13/14 14:16	03/28/14 11:15
2615-03	1403073-15	Soil	02/20/14 10:53	03/28/14 11:15
2743D-11	1403073-16	Soil	02/24/14 15:27	03/28/14 11:15
2755-07	1403073-17	Soil	02/22/14 13:40	03/28/14 11:15
2808-15	1403073-18	Soil	02/21/14 14:35	03/28/14 11:15
2901-06	1403073-19	Soil	02/26/14 10:02	03/28/14 11:15
3004-08	1403073-20	Soil	03/03/14 14:50	03/28/14 11:15

SDG ID 14087B

All samples were dried and sieved prior to preparation for analysis.

Samples were subjected to an in-vitro extraction prior to digestion and analysis. Results reported are the available metal in the soil after extraction.

Work Order(s)

1403073

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14087B
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/30/14 17:04
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1403073-01									**Soil - Sampled: 03/05/14 16:24**
Sample ID: 2216-02									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	17		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		190		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-02									**Soil - Sampled: 02/26/14 15:00**
Sample ID: 106-04									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	23		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		6.0		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-03									**Soil - Sampled: 02/24/14 09:40**
Sample ID: 108-03									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	110		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		280		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-04									**Soil - Sampled: 02/19/14 10:56**
Sample ID: 109-11									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	47		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		140		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-05									**Soil - Sampled: 02/27/14 16:42**
Sample ID: 126-14									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	13		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		7.8		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-06									**Soil - Sampled: 01/31/14 10:59**
Sample ID: 2014-08									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	45		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		19		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-07									**Soil - Sampled: 02/05/14 14:41**
Sample ID: 2324-03									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	42		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		59		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-08									**Soil - Sampled: 02/05/14 10:18**
Sample ID: 2328-02									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	130		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		200		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-09									**Soil - Sampled: 03/10/14 10:45**
Sample ID: 2408-01									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	24		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		69		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-10									**Soil - Sampled: 03/10/14 16:13**
Sample ID: 2410-03									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	28		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		160		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-11									**Soil - Sampled: 02/05/14 15:46**

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles
Project Number: R14S06
Project: Iron King Mine 2013/2014 Sampling

California Site Cleanup Section 1
75 Hawthorne Street
San Francisco CA, 94105

SDG: 14087B
Reported: 04/30/14 17:04

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1403073-11									**Soil - Sampled: 02/05/14 15:46**
Sample ID: 2426-09									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	18		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		26		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-12									**Soil - Sampled: 03/10/14 12:00**
Sample ID: 2519-10									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	20		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		24		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-13									**Soil - Sampled: 02/19/14 15:35**
Sample ID: 2523-05									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	31		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		77		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-14									**Soil - Sampled: 02/13/14 14:16**
Sample ID: 2602-09									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	24		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead	RE2	12,000		30	"	"	"	04/26/14	6010C/SOP503
Lab ID: 1403073-15									**Soil - Sampled: 02/20/14 10:53**
Sample ID: 2615-03									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	49		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		2.9	C1, J	3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-16									**Soil - Sampled: 02/24/14 15:27**
Sample ID: 2743D-11									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	39		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		ND	U	3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-17									**Soil - Sampled: 02/22/14 13:40**
Sample ID: 2755-07									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	11		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		16		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-18									**Soil - Sampled: 02/21/14 14:35**
Sample ID: 2808-15									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	15		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		5.7		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-19									**Soil - Sampled: 02/26/14 10:02**
Sample ID: 2901-06									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	15		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		5.5		3	"	"	"	04/23/14	6010C/SOP503
Lab ID: 1403073-20									**Soil - Sampled: 03/03/14 14:50**
Sample ID: 3004-08									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	51		2	mg/kg	B14D040	04/10/14	04/25/14	6010C/SOP503
Lead		480		3	"	"	"	04/24/14	6010C/SOP503

United States Environmental Protection Agency
Region 9 Laboratory

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Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14087B
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/30/14 17:04
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B14D040 - In Vitro Gastric Extraction - In Vitro Extraction, ICP, Sample Basis									**Prepared: 04/10/14 Analyzed: 04/23/14**	
									Analysis of In Vitro Gastric Digestion Extracts - Quality Control	
Blank (B14D040-BLK1)										
Lead	ND	U	3	mg/kg						
Blank (B14D040-BLK2)										
Lead	ND	U	3	mg/kg						
Blank (B14D040-BLK3)										
Arsenic	1.2	C1, J	2	mg/kg						
Blank (B14D040-BLK4)										
Arsenic	1.4	C1, J	2	mg/kg						
LCS (B14D040-BS2)										
Arsenic	2,060		2	mg/kg	2000		103	80-120		200
Lead	529		3	"	500		106	80-120		200
Duplicate (B14D040-DUP1)		**Source: 1403073-01**								
Lead	191		3	mg/kg		186			2	20
Duplicate (B14D040-DUP2)		**Source: 1403073-02**								
Lead	5.48		3	mg/kg		6.04			10	20
Duplicate (B14D040-DUP3)		**Source: 1403073-01RE1**								
Arsenic	17.6		2	mg/kg		17.1			3	20
Duplicate (B14D040-DUP4)		**Source: 1403073-02RE1**								
Arsenic	21.2		2	mg/kg		22.9			8	20
Matrix Spike (B14D040-MS1)		**Source: 1403073-01**								
Lead	1,120		3	mg/kg	990	186	94	75-125		20
Matrix Spike (B14D040-MS2)		**Source: 1403073-02**								
Lead	918		3	mg/kg	1000	6.04	91	75-125		20
Matrix Spike (B14D040-MS3)		**Source: 1403073-01RE1**								
Arsenic	4,280		2	mg/kg	3960	17.1	108	75-125		20
Matrix Spike (B14D040-MS4)		**Source: 1403073-02RE1**								
Arsenic	4,370		2	mg/kg	4000	22.9	109	75-125		20
Reference (B14D040-SRM2)										
Lead	1,050		3	mg/kg	1290		82	0-200		
Reference (B14D040-SRM3)										
Arsenic	63.1		2	mg/kg	89.0		71	0-200		
Lead	1,190		3	"	1300		91	0-200		
Reference (B14D040-SRM4)										
Arsenic	61.6		2	mg/kg	88.1		70	0-200		

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Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14087B
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/30/14 17:04
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

Qualifiers and Comments

J	The reported result for this analyte should be considered an estimated value.
C1	The reported concentration for this analyte is below the quantitation limit.
U	Not Detected
NR	Not Reported
RE1, RE2, etc:	Result is from a sample re-analysis.

CLIENT	PROJECT	PROJECTNUM	LabName	SAMPLENAME	LABSAMPID	MATRIX	RPTMATRIX	SAMPDATE	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	Result	DL	RL	UNITS	RPToMDL	BASIS	DILUTION	SPIKELEVEL	RECOVERY	UPPERCL	LOWERCL	ANALYST	PSOLIDS	LNOTE	ANOTE	LATITUDE	LONGITUDE	sComment	SNOTE1	SNOTE2	SNOTE3	SNOTE4	SNOTE5	SNOTE6	SNOTE7	SNOTE8	SNOTE9	SNOTE10	ANALYTEORDER
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2216-02	1403073-01	Solid	Soil	03/05/2014 16:24:00	04/10/2014 13:00:00	04/23/2014 20:39:28	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	190	1.5	3.0	mg/kg	TRUE	Wet	1					SC					Lab QC												140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2216-02	1403073-01RE1	Solid	Soil	03/05/2014 16:24:00	04/10/2014 13:00:00	04/25/2014 16:18:37	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	17	1.0	2.0	mg/kg	TRUE	Wet	1					SC					Lab QC												30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	106-04	1403073-02	Solid	Soil	02/26/2014 15:00:00	04/10/2014 13:00:00	04/23/2014 21:24:26	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	6.0	1.5	3.0	mg/kg	TRUE	Wet	1					SC					Lab QC												140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	106-04	1403073-02RE1	Solid	Soil	02/26/2014 15:00:00	04/10/2014 13:00:00	04/25/2014 17:16:28	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	23	1.0	2.0	mg/kg	TRUE	Wet	1					SC					Lab QC												30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	108-03	1403073-03	Solid	Soil	02/24/2014 09:40:00	04/10/2014 13:00:00	04/23/2014 21:51:14	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	280	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	108-03	1403073-03RE1	Solid	Soil	02/24/2014 09:40:00	04/10/2014 13:00:00	04/25/2014 17:48:47	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	110	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	109-11	1403073-04	Solid	Soil	02/19/2014 10:56:00	04/10/2014 13:00:00	04/23/2014 21:57:30	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	140	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	109-11	1403073-04RE1	Solid	Soil	02/19/2014 10:56:00	04/10/2014 13:00:00	04/25/2014 17:55:07	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	47	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	126-14	1403073-05	Solid	Soil	02/27/2014 16:42:00	04/10/2014 13:00:00	04/23/2014 22:03:46	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	7.8	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	126-14	1403073-05RE1	Solid	Soil	02/27/2014 16:42:00	04/10/2014 13:00:00	04/25/2014 18:01:24	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	13	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2014-08	1403073-06	Solid	Soil	01/31/2014 10:59:00	04/10/2014 13:00:00	04/23/2014 22:09:59	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	19	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2014-08	1403073-06RE1	Solid	Soil	01/31/2014 10:59:00	04/10/2014 13:00:00	04/25/2014 18:07:38	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	45	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2324-03	1403073-07	Solid	Soil	02/05/2014 14:41:00	04/10/2014 13:00:00	04/23/2014 22:16:14	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	59	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2324-03	1403073-07RE1	Solid	Soil	02/05/2014 14:41:00	04/10/2014 13:00:00	04/25/2014 18:33:42	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	42	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2328-02	1403073-08	Solid	Soil	02/05/2014 10:18:00	04/10/2014 13:00:00	04/23/2014 22:35:10	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	200	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2328-02	1403073-08RE1	Solid	Soil	02/05/2014 10:18:00	04/10/2014 13:00:00	04/25/2014 18:39:43	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	130	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2408-01	1403073-09	Solid	Soil	03/10/2014 10:45:00	04/10/2014 13:00:00	04/23/2014 22:41:25	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	69	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2408-01	1403073-09RE1	Solid	Soil	03/10/2014 10:45:00	04/10/2014 13:00:00	04/25/2014 18:45:47	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	24	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2410-03	1403073-10	Solid	Soil	03/10/2014 16:13:00	04/10/2014 13:00:00	04/23/2014 22:47:43	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	160	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2410-03	1403073-10RE1	Solid	Soil	03/10/2014 16:13:00	04/10/2014 13:00:00	04/25/2014 18:51:47	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	28	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2426-09	1403073-11	Solid	Soil	02/05/2014 15:46:00	04/10/2014 13:00:00	04/23/2014 22:54:03	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	26	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2426-09	1403073-11RE1	Solid	Soil	02/05/2014 15:46:00	04/10/2014 13:00:00	04/25/2014 18:57:52	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	18	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2519-10	1403073-12	Solid	Soil	03/10/2014 12:00:00	04/10/2014 13:00:00	04/23/2014 23:00:18	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	24	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2519-10	1403073-12RE1	Solid	Soil	03/10/2014 12:00:00	04/10/2014 13:00:00	04/25/2014 19:04:06	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	20	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2523-05	1403073-13	Solid	Soil	02/19/2014 15:35:00	04/10/2014 13:00:00	04/23/2014 23:06:35	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	77	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2523-05	1403073-13RE1	Solid	Soil	02/19/2014 15:35:00	04/10/2014 13:00:00	04/25/2014 19:10:27	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	31	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2602-09	1403073-14RE1	Solid	Soil	02/13/2014 14:16:00	04/10/2014 13:00:00	04/25/2014 19:16:46	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	24	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2602-09	1403073-14RE2	Solid	Soil	02/13/2014 14:16:00	04/10/2014 13:00:00	04/26/2014 13:08:16	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	12000	15	30	mg/kg	TRUE	Wet	10					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2615-03	1403073-15	Solid	Soil	02/20/2014 10:53:00	04/10/2014 13:00:00	04/23/2014 23:19:09	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	2.9	1.5	3.0	mg/kg	TRUE	Wet	1					SC		C1, J															140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2615-03	1403073-15RE1	Solid	Soil	02/20/2014 10:53:00	04/10/2014 13:00:00	04/25/2014 19:23:03	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	49	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2743D-11	1403073-16	Solid	Soil	02/24/2014 15:27:00	04/10/2014 13:00:00	04/23/2014 23:25:42	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1					SC		U															140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2743D-11	1403073-16RE1	Solid	Soil	02/24/2014 15:27:00	04/10/2014 13:00:00	04/25/2014 19:49:26	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	39	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2755-07	1403073-17	Solid	Soil	02/22/2014 13:40:00	04/10/2014 13:00:00	04/23/2014 23:44:41	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	16	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2755-07	1403073-17RE1	Solid	Soil	02/22/2014 13:40:00	04/10/2014 13:00:00	04/25/2014 20:09:21	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	11	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2808-15	1403073-18	Solid	Soil	02/21/2014 14:35:00	04/10/2014 13:00:00	04/23/2014 23:50:57	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	5.7	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2808-15	1403073-18RE1	Solid	Soil	02/21/2014 14:35:00	04/10/2014 13:00:00	04/25/2014 20:15:39	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	15	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2901-06	1403073-19	Solid	Soil	02/26/2014 10:02:00	04/10/2014 13:00:00	04/23/2014 23:57:11	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	5.5	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2901-06	1403073-19RE1	Solid	Soil	02/26/2014 10:02:00	04/10/2014 13:00:00	04/25/2014 20:21:53	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	15	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	3004-08	1403073-20	Solid	Soil	03/03/2014 14:50:00	04/10/2014 13:00:00	04/24/2014 00:03:31	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	480	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	3004-08	1403073-20RE1	Solid	Soil	03/03/2014 14:50:00	04/10/2014 13:00:00	04/25/2014 20:28:08	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	51	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30

LABNAME	LABSAMPID	QCTYPE	MATRIX	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	RPToMDL	BASIS	DILUTION	SOURCEID	SOURCERES	SPIKELEVEL	RECOVERY	RPD	UPPERCL	LOWERCL	RPDCL	ANALYST	PSOLIDS	LNOTE	ANOTE	ANALYTEORDER
EPA Region 9 Laboratory	B14D040-BLK1	Blank	Solid	04/10/2014 13:00:00	04/23/2014 20:08:08	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1								SC			U	140
EPA Region 9 Laboratory	B14D040-BLK2	Blank	Solid	04/10/2014 13:00:00	04/23/2014 20:14:22	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1								SC			U	140
EPA Region 9 Laboratory	B14D040-BLK3	Blank	Solid	04/10/2014 13:00:00	04/25/2014 15:27:30	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	1.2	1.0	2.0	mg/kg	TRUE	Wet	1								SC			C1, J	30
EPA Region 9 Laboratory	B14D040-BLK4	Blank	Solid	04/10/2014 13:00:00	04/25/2014 15:33:44	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	1.4	1.0	2.0	mg/kg	TRUE	Wet	1								SC			C1, J	30
EPA Region 9 Laboratory	B14D040-BS2	LCS	Solid	04/10/2014 13:00:00	04/25/2014 15:51:53	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	529	1.5	3.0	mg/kg	TRUE	Wet	1			500	106		120	80	200	SC				140
EPA Region 9 Laboratory	B14D040-BS2	LCS	Solid	04/10/2014 13:00:00	04/25/2014 15:51:53	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	2060	1.0	2.0	mg/kg	TRUE	Wet	1			2000	103		120	80	200	SC				30
EPA Region 9 Laboratory	B14D040-DUP1	Duplicate	Solid	04/10/2014 13:00:00	04/23/2014 20:45:42	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	191	1.5	3.0	mg/kg	TRUE	Wet	1	1403073-01	186			2			20	SC				140
EPA Region 9 Laboratory	B14D040-DUP2	Duplicate	Solid	04/10/2014 13:00:00	04/23/2014 21:30:58	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	5.48	1.5	3.0	mg/kg	TRUE	Wet	1	1403073-02	6.04			10			20	SC				140
EPA Region 9 Laboratory	B14D040-DUP3	Duplicate	Solid	04/10/2014 13:00:00	04/25/2014 16:25:04	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	17.6	1.0	2.0	mg/kg	TRUE	Wet	1	1403073-01RE1	17.1			3			20	SC				30
EPA Region 9 Laboratory	B14D040-DUP4	Duplicate	Solid	04/10/2014 13:00:00	04/25/2014 17:22:43	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	21.2	1.0	2.0	mg/kg	TRUE	Wet	1	1403073-02RE1	22.9			8			20	SC				30
EPA Region 9 Laboratory	B14D040-MS1	Matrix Spike	Solid	04/10/2014 13:00:00	04/23/2014 20:51:59	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	1120	1.5	3.0	mg/kg	TRUE	Wet	1	1403073-01	186	990	94		125	75	20	SC				140
EPA Region 9 Laboratory	B14D040-MS2	Matrix Spike	Solid	04/10/2014 13:00:00	04/23/2014 21:37:30	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	918	1.5	3.0	mg/kg	TRUE	Wet	1	1403073-02	6.04	1000	91		125	75	20	SC				140
EPA Region 9 Laboratory	B14D040-MS3	Matrix Spike	Solid	04/10/2014 13:00:00	04/25/2014 16:30:20	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	4280	1.0	2.0	mg/kg	TRUE	Wet	1	1403073-01RE1	17.1	3960	108		125	75	20	SC				30
EPA Region 9 Laboratory	B14D040-MS4	Matrix Spike	Solid	04/10/2014 13:00:00	04/25/2014 17:27:56	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	4370	1.0	2.0	mg/kg	TRUE	Wet	1	1403073-02RE1	22.9	4000	109		125	75	20	SC				30
EPA Region 9 Laboratory	B14D040-SRM2	Reference	Solid	04/10/2014 13:00:00	04/23/2014 20:33:11	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	1050	1.5	3.0	mg/kg	TRUE	Wet	1			1290	82		200	0		SC				140
EPA Region 9 Laboratory	B14D040-SRM3	Reference	Solid	04/10/2014 13:00:00	04/25/2014 16:05:44	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	1190	1.5	3.0	mg/kg	TRUE	Wet	1			1300	91		200	0		SC				140
EPA Region 9 Laboratory	B14D040-SRM3	Reference	Solid	04/10/2014 13:00:00	04/25/2014 16:05:44	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	63.1	1.0	2.0	mg/kg	TRUE	Wet	1			89.0	71		200	0		SC				30
EPA Region 9 Laboratory	B14D040-SRM4	Reference	Solid	04/10/2014 13:00:00	04/25/2014 16:12:13	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	61.6	1.0	2.0	mg/kg	TRUE	Wet	1			88.1	70		200	0		SC				30

QUALIFIER	DESCRIPTION
C1	The reported concentration for this analyte is below the quantitation limit.
J	The reported result for this analyte should be considered an estimated value.
U	This analyte was not detected.

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street Building 201
Richmond, CA 94804

Date: **4/30/2014**

Subject: **Analytical Testing Results - Project R14S06**
SDG: 14087C

From: **Duane James, Acting Director**
EPA Region 9 Laboratory
MTS-2

To: **Zi Zi Searles**
California Site Cleanup Section 1
SFD-7-1

Attached are the results from the analysis of samples from the **Iron King Mine 2013/2014 Sampling** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Electronic CC: David Aloysius, SERAS
Donna Getty, SERAS
Jeff Dhont, EPA Region 9

Analyses included in this report:

Metals by ICP

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14087C
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/30/14 17:14
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
3005-18	1403074-01	Soil	03/04/14 16:41	03/28/14 11:15

SDG ID 14087C

All samples were dried and sieved prior to preparation for analysis.

Samples were digested per EPA method SW 3050B.

Work Order(s)

1403074

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles
Project Number: R14S06
Project: Iron King Mine 2013/2014 Sampling

California Site Cleanup Section 1
75 Hawthorne Street
San Francisco CA, 94105

SDG: 14087C
Reported: 04/30/14 17:14

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1403074-01									**Soil - Sampled: 03/04/14 16:41**
Sample ID: 3005-18									**Metals by EPA 6000/7000 Series Methods**
Arsenic	RE2	230		2	mg/kg	B14D140	04/25/14	04/26/14	6010C/SOP503
Lead	RE2	450		3	"	"	"	"	6010C/SOP503

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B14D140 - 3050B Sld Acid Dig - Metals by 6010										**Prepared: 04/25/14 Analyzed: 04/26/14**
										Metals by EPA 6000/7000 Series Methods - Quality Control
Blank (B14D140-BLK1)										
Arsenic	ND	U	2	mg/kg						
Lead	ND	U	3	"						
Matrix Spike (B14D140-MS1)		**Source: 1403074-01RE2**								
Arsenic	666		2	mg/kg	388	226	113	75-125		20
Lead	543		3	"	97.1	449	97	75-125		20
Matrix Spike Dup (B14D140-MSD1)		**Source: 1403074-01RE2**								
Arsenic	662		2	mg/kg	396	226	110	75-125	0.6	20
Lead	532		3	"	99.0	449	84	75-125	2	20
Reference (B14D140-SRM1)										
Arsenic	255		2	mg/kg	252		101	60.9-139		
Lead	53.1		3	"	56.6		94	72.8-127		

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14087C
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/30/14 17:14
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

Qualifiers and Comments

U	Not Detected
NR	Not Reported
RE1, RE2, etc:	Result is from a sample re-analysis.

CLIENT	PROJECT	PROJECTNUM	LabName	SAMPLENAME	LABSAMPID	MATRIX	RPTMATRIX	SAMPDATE	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	Result	DL	RL	UNITS	RPTtoMDL	BASIS	DILUTION	SPIKELEVEL	RECOVERY	UPPERCL	LOWERCL	ANALYST	PSOLIDS	LNOTE	ANOTE	LATITUDE	LONGITUDE	sComment	SNOTE1	SNOTE2	SNOTE3	SNOTE4	SNOTE5	SNOTE6	SNOTE7	SNOTE8	SNOTE9	SNOTE10	ANALYTEORDER
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	3005-18	1403074-01RE2	Solid	Soil	03/04/2014 16:41:00	04/25/2014 06:57:00	04/26/2014 13:30:07	B14D140	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	450	1.5	3.0	mg/kg	TRUE	Wet	2					SC						Lab QC											140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	3005-18	1403074-01RE2	Solid	Soil	03/04/2014 16:41:00	04/25/2014 06:57:00	04/26/2014 13:30:07	B14D140	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	230	1.0	2.0	mg/kg	TRUE	Wet	2					SC						Lab QC											30

LABNAME	LABSAMPID	QCTYPE	MATRIX	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	RPToMDL	BASIS	DILUTION	SOURCEID	SOURCERES	SPIKELEVEL	RECOVERY	RPD	UPPERCL	LOWERCL	RPDCL	ANALYST	PSOLIDS	LNOTE	ANOTE	ANALYTEORDER
EPA Region 9 Laboratory	B14D140-BLK1	Blank	Solid	04/25/2014 06:57:00	04/26/2014 13:19:46	B14D140	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	2									SC			U	140
EPA Region 9 Laboratory	B14D140-BLK1	Blank	Solid	04/25/2014 06:57:00	04/26/2014 13:19:46	B14D140	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Wet	2									SC			U	30
EPA Region 9 Laboratory	B14D140-MS1	Matrix Spike	Solid	04/25/2014 06:57:00	04/26/2014 13:38:53	B14D140	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	543	1.5	3.0	mg/kg	TRUE	Wet	2	1403074-01RE2	449	97.1	97		125	75	20	SC				140
EPA Region 9 Laboratory	B14D140-MS1	Matrix Spike	Solid	04/25/2014 06:57:00	04/26/2014 13:38:53	B14D140	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	666	1.0	2.0	mg/kg	TRUE	Wet	2	1403074-01RE2	226	388	113		125	75	20	SC				30
EPA Region 9 Laboratory	B14D140-MSD1	Matrix Spike Dup	Solid	04/25/2014 06:57:00	04/26/2014 13:49:03	B14D140	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	532	1.5	3.0	mg/kg	TRUE	Wet	2	1403074-01RE2	449	99.0	84	2	125	75	20	SC				140
EPA Region 9 Laboratory	B14D140-MSD1	Matrix Spike Dup	Solid	04/25/2014 06:57:00	04/26/2014 13:49:03	B14D140	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	662	1.0	2.0	mg/kg	TRUE	Wet	2	1403074-01RE2	226	396	110	0.6	125	75	20	SC				30
EPA Region 9 Laboratory	B14D140-SRM1	Reference	Solid	04/25/2014 06:57:00	04/26/2014 13:24:59	B14D140	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	53.1	1.5	3.0	mg/kg	TRUE	Wet	2			56.6	94		127	72.8		SC				140
EPA Region 9 Laboratory	B14D140-SRM1	Reference	Solid	04/25/2014 06:57:00	04/26/2014 13:24:59	B14D140	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	255	1.0	2.0	mg/kg	TRUE	Wet	2			252	101		139	60.9		SC				30

QUALIFIER	DESCRIPTION
U	This analyte was not detected.

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street Building 201
Richmond, CA 94804

Date: **4/30/2014**

Subject: **Analytical Testing Results - Project R14S06**
SDG: 14087C

From: **Duane James, Acting Director**
EPA Region 9 Laboratory
MTS-2

To: **Zi Zi Searles**
California Site Cleanup Section 1
SFD-7-1

Attached are the results from the analysis of samples from the **Iron King Mine 2013/2014 Sampling** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Electronic CC: David Aloysius, SERAS
Donna Getty, SERAS
Jeff Dhont, EPA Region 9

Analyses included in this report:

Analysis of In Vitro Gastric Extracts by ICP

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14087C
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/30/14 17:08
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
3005-18	1403074-01	Soil	03/04/14 16:41	03/28/14 11:15

SDG ID 14087C

All samples were dried and sieved prior to preparation for analysis.

Samples were subjected to an in-vitro extraction prior to digestion and analysis. Results reported are the available metal in the soil after extraction.

Work Order(s)

1403074

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14087C
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/30/14 17:08
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: **1403074-01**									**Soil - Sampled: 03/04/14 16:41**
Sample ID: **3005-18**									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic	RE1	52		2	mg/kg	B14D046	04/10/14	04/23/14	6010C/SOP503
Lead		310		3	"	"	"	04/22/14	6010C/SOP503

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B14D046 - In Vitro Gastric Extraction - In Vitro Extraction, ICP, Sample Basis									**Prepared: 04/10/14 Analyzed: 04/22/14**	
									Analysis of In Vitro Gastric Digestion Extracts - Quality Control	
Blank (B14D046-BLK1)										
Lead	ND	U	3	mg/kg						
Blank (B14D046-BLK2)										
Lead	ND	U	3	mg/kg						
Blank (B14D046-BLK3)										
Arsenic	3.1		2	mg/kg						
Blank (B14D046-BLK4)										
Arsenic	3.3		2	mg/kg						
LCS (B14D046-BS1)										
Lead	537		3	mg/kg	500		107	80-120		200
LCS (B14D046-BS2)										
Arsenic	1,950		2	mg/kg	2000		97	80-120		200
Duplicate (B14D046-DUP1)		**Source: 1403074-01**								
Lead	313		3	mg/kg		312			0.3	20
Duplicate (B14D046-DUP2)		**Source: 1403074-01RE1**								
Arsenic	50.4		2	mg/kg		51.7			2	20
Matrix Spike (B14D046-MS1)		**Source: 1403074-01**								
Lead	1,350		3	mg/kg	990	312	105	75-125		20
Matrix Spike (B14D046-MS2)		**Source: 1403074-01RE1**								
Arsenic	3,910		2	mg/kg	3960	51.7	97	75-125		20
Reference (B14D046-SRM1)										
Lead	1,180		3	mg/kg	1260		93	0-200		
Reference (B14D046-SRM2)										
Arsenic	64.5		2	mg/kg	86.4		75	0-200		

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
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Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 14087C
Project Number: R14S06	**75 Hawthorne Street**	**Reported:** 04/30/14 17:08
Project: Iron King Mine 2013/2014 Sampling	**San Francisco CA, 94105**	

Qualifiers and Comments

U	Not Detected
NR	Not Reported
RE1, RE2, etc:	Result is from a sample re-analysis.

CLIENT	PROJECT	PROJECTNUM	LabName	SAMPLENAME	LABSAMPID	MATRIX	RPTMATRIX	SAMPDATE	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	Result	DL	RL	UNITS	RPToMDL	BASIS	DILUTION	SPIKELEVEL	RECOVERY	UPPERCL	LOWERCL	ANALYST	PSOLIDS	LNOTE	ANOTE	LATITUDE	LONGITUDE	sComment	SNOTE1	SNOTE2	SNOTE3	SNOTE4	SNOTE5	SNOTE6	SNOTE7	SNOTE8	SNOTE9	SNOTE10	ANALYTEORDER
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2216-02	1403073-01	Solid	Soil	03/05/2014 16:24:00	04/10/2014 13:00:00	04/23/2014 20:39:28	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	190	1.5	3.0	mg/kg	TRUE	Wet	1					SC					Lab QC												140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2216-02	1403073-01RE1	Solid	Soil	03/05/2014 16:24:00	04/10/2014 13:00:00	04/25/2014 16:18:37	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	17	1.0	2.0	mg/kg	TRUE	Wet	1					SC					Lab QC												30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	106-04	1403073-02	Solid	Soil	02/26/2014 15:00:00	04/10/2014 13:00:00	04/23/2014 21:24:26	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	6.0	1.5	3.0	mg/kg	TRUE	Wet	1					SC					Lab QC												140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	106-04	1403073-02RE1	Solid	Soil	02/26/2014 15:00:00	04/10/2014 13:00:00	04/25/2014 17:16:28	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	23	1.0	2.0	mg/kg	TRUE	Wet	1					SC					Lab QC												30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	108-03	1403073-03	Solid	Soil	02/24/2014 09:40:00	04/10/2014 13:00:00	04/23/2014 21:51:14	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	280	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	108-03	1403073-03RE1	Solid	Soil	02/24/2014 09:40:00	04/10/2014 13:00:00	04/25/2014 17:48:47	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	110	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	109-11	1403073-04	Solid	Soil	02/19/2014 10:56:00	04/10/2014 13:00:00	04/23/2014 21:57:30	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	140	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	109-11	1403073-04RE1	Solid	Soil	02/19/2014 10:56:00	04/10/2014 13:00:00	04/25/2014 17:55:07	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	47	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	126-14	1403073-05	Solid	Soil	02/27/2014 16:42:00	04/10/2014 13:00:00	04/23/2014 22:03:46	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	7.8	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	126-14	1403073-05RE1	Solid	Soil	02/27/2014 16:42:00	04/10/2014 13:00:00	04/25/2014 18:01:24	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	13	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2014-08	1403073-06	Solid	Soil	01/31/2014 10:59:00	04/10/2014 13:00:00	04/23/2014 22:09:59	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	19	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2014-08	1403073-06RE1	Solid	Soil	01/31/2014 10:59:00	04/10/2014 13:00:00	04/25/2014 18:07:38	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	45	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2324-03	1403073-07	Solid	Soil	02/05/2014 14:41:00	04/10/2014 13:00:00	04/23/2014 22:16:14	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	59	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2324-03	1403073-07RE1	Solid	Soil	02/05/2014 14:41:00	04/10/2014 13:00:00	04/25/2014 18:33:42	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	42	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2328-02	1403073-08	Solid	Soil	02/05/2014 10:18:00	04/10/2014 13:00:00	04/23/2014 22:35:10	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	200	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2328-02	1403073-08RE1	Solid	Soil	02/05/2014 10:18:00	04/10/2014 13:00:00	04/25/2014 18:39:43	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	130	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2408-01	1403073-09	Solid	Soil	03/10/2014 10:45:00	04/10/2014 13:00:00	04/23/2014 22:41:25	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	69	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2408-01	1403073-09RE1	Solid	Soil	03/10/2014 10:45:00	04/10/2014 13:00:00	04/25/2014 18:45:47	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	24	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2410-03	1403073-10	Solid	Soil	03/10/2014 16:13:00	04/10/2014 13:00:00	04/23/2014 22:47:43	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	160	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2410-03	1403073-10RE1	Solid	Soil	03/10/2014 16:13:00	04/10/2014 13:00:00	04/25/2014 18:51:47	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	28	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2426-09	1403073-11	Solid	Soil	02/05/2014 15:46:00	04/10/2014 13:00:00	04/23/2014 22:54:03	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	26	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2426-09	1403073-11RE1	Solid	Soil	02/05/2014 15:46:00	04/10/2014 13:00:00	04/25/2014 18:57:52	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	18	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2519-10	1403073-12	Solid	Soil	03/10/2014 12:00:00	04/10/2014 13:00:00	04/23/2014 23:00:18	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	24	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2519-10	1403073-12RE1	Solid	Soil	03/10/2014 12:00:00	04/10/2014 13:00:00	04/25/2014 19:04:06	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	20	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2523-05	1403073-13	Solid	Soil	02/19/2014 15:35:00	04/10/2014 13:00:00	04/23/2014 23:06:35	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	77	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2523-05	1403073-13RE1	Solid	Soil	02/19/2014 15:35:00	04/10/2014 13:00:00	04/25/2014 19:10:27	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	31	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2602-09	1403073-14RE1	Solid	Soil	02/13/2014 14:16:00	04/10/2014 13:00:00	04/25/2014 19:16:46	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	24	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2602-09	1403073-14RE2	Solid	Soil	02/13/2014 14:16:00	04/10/2014 13:00:00	04/26/2014 13:08:16	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	12000	15	30	mg/kg	TRUE	Wet	10					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2615-03	1403073-15	Solid	Soil	02/20/2014 10:53:00	04/10/2014 13:00:00	04/23/2014 23:19:09	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	2.9	1.5	3.0	mg/kg	TRUE	Wet	1					SC		C1, J															140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2615-03	1403073-15RE1	Solid	Soil	02/20/2014 10:53:00	04/10/2014 13:00:00	04/25/2014 19:23:03	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	49	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2743D-11	1403073-16	Solid	Soil	02/24/2014 15:27:00	04/10/2014 13:00:00	04/23/2014 23:25:42	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1					SC		U															140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2743D-11	1403073-16RE1	Solid	Soil	02/24/2014 15:27:00	04/10/2014 13:00:00	04/25/2014 19:49:26	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	39	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2755-07	1403073-17	Solid	Soil	02/22/2014 13:40:00	04/10/2014 13:00:00	04/23/2014 23:44:41	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	16	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2755-07	1403073-17RE1	Solid	Soil	02/22/2014 13:40:00	04/10/2014 13:00:00	04/25/2014 20:09:21	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	11	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2808-15	1403073-18	Solid	Soil	02/21/2014 14:35:00	04/10/2014 13:00:00	04/23/2014 23:50:57	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	5.7	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2808-15	1403073-18RE1	Solid	Soil	02/21/2014 14:35:00	04/10/2014 13:00:00	04/25/2014 20:15:39	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	15	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2901-06	1403073-19	Solid	Soil	02/26/2014 10:02:00	04/10/2014 13:00:00	04/23/2014 23:57:11	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	5.5	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	2901-06	1403073-19RE1	Solid	Soil	02/26/2014 10:02:00	04/10/2014 13:00:00	04/25/2014 20:21:53	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	15	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	3004-08	1403073-20	Solid	Soil	03/03/2014 14:50:00	04/10/2014 13:00:00	04/24/2014 00:03:31	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	480	1.5	3.0	mg/kg	TRUE	Wet	1					SC																	140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14SO6	EPA Region 9 Laboratory	3004-08	1403073-20RE1	Solid	Soil	03/03/2014 14:50:00	04/10/2014 13:00:00	04/25/2014 20:28:08	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	51	1.0	2.0	mg/kg	TRUE	Wet	1					SC																	30

LABNAME	LABSAMPID	QCTYPE	MATRIX	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	RPToMDL	BASIS	DILUTION	SOURCEID	SOURCERES	SPIKELEVEL	RECOVERY	RPD	UPPERCL	LOWERCL	RPDCL	ANALYST	PSOLIDS	LNOTE	ANOTE	ANALYTEORDER
EPA Region 9 Laboratory	B14D040-BLK1	Blank	Solid	04/10/2014 13:00:00	04/23/2014 20:08:08	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1								SC			U	140
EPA Region 9 Laboratory	B14D040-BLK2	Blank	Solid	04/10/2014 13:00:00	04/23/2014 20:14:22	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1								SC			U	140
EPA Region 9 Laboratory	B14D040-BLK3	Blank	Solid	04/10/2014 13:00:00	04/25/2014 15:27:30	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	1.2	1.0	2.0	mg/kg	TRUE	Wet	1								SC			C1, J	30
EPA Region 9 Laboratory	B14D040-BLK4	Blank	Solid	04/10/2014 13:00:00	04/25/2014 15:33:44	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	1.4	1.0	2.0	mg/kg	TRUE	Wet	1								SC			C1, J	30
EPA Region 9 Laboratory	B14D040-BS2	LCS	Solid	04/10/2014 13:00:00	04/25/2014 15:51:53	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	529	1.5	3.0	mg/kg	TRUE	Wet	1			500	106		120	80	200	SC				140
EPA Region 9 Laboratory	B14D040-BS2	LCS	Solid	04/10/2014 13:00:00	04/25/2014 15:51:53	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	2060	1.0	2.0	mg/kg	TRUE	Wet	1			2000	103		120	80	200	SC				30
EPA Region 9 Laboratory	B14D040-DUP1	Duplicate	Solid	04/10/2014 13:00:00	04/23/2014 20:45:42	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	191	1.5	3.0	mg/kg	TRUE	Wet	1	1403073-01	186			2			20	SC				140
EPA Region 9 Laboratory	B14D040-DUP2	Duplicate	Solid	04/10/2014 13:00:00	04/23/2014 21:30:58	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	5.48	1.5	3.0	mg/kg	TRUE	Wet	1	1403073-02	6.04			10			20	SC				140
EPA Region 9 Laboratory	B14D040-DUP3	Duplicate	Solid	04/10/2014 13:00:00	04/25/2014 16:25:04	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	17.6	1.0	2.0	mg/kg	TRUE	Wet	1	1403073-01RE1	17.1			3			20	SC				30
EPA Region 9 Laboratory	B14D040-DUP4	Duplicate	Solid	04/10/2014 13:00:00	04/25/2014 17:22:43	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	21.2	1.0	2.0	mg/kg	TRUE	Wet	1	1403073-02RE1	22.9			8			20	SC				30
EPA Region 9 Laboratory	B14D040-MS1	Matrix Spike	Solid	04/10/2014 13:00:00	04/23/2014 20:51:59	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	1120	1.5	3.0	mg/kg	TRUE	Wet	1	1403073-01	186	990	94		125	75	20	SC				140
EPA Region 9 Laboratory	B14D040-MS2	Matrix Spike	Solid	04/10/2014 13:00:00	04/23/2014 21:37:30	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	918	1.5	3.0	mg/kg	TRUE	Wet	1	1403073-02	6.04	1000	91		125	75	20	SC				140
EPA Region 9 Laboratory	B14D040-MS3	Matrix Spike	Solid	04/10/2014 13:00:00	04/25/2014 16:30:20	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	4280	1.0	2.0	mg/kg	TRUE	Wet	1	1403073-01RE1	17.1	3960	108		125	75	20	SC				30
EPA Region 9 Laboratory	B14D040-MS4	Matrix Spike	Solid	04/10/2014 13:00:00	04/25/2014 17:27:56	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	4370	1.0	2.0	mg/kg	TRUE	Wet	1	1403073-02RE1	22.9	4000	109		125	75	20	SC				30
EPA Region 9 Laboratory	B14D040-SRM2	Reference	Solid	04/10/2014 13:00:00	04/23/2014 20:33:11	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	1050	1.5	3.0	mg/kg	TRUE	Wet	1			1290	82		200	0		SC				140
EPA Region 9 Laboratory	B14D040-SRM3	Reference	Solid	04/10/2014 13:00:00	04/25/2014 16:05:44	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	1190	1.5	3.0	mg/kg	TRUE	Wet	1			1300	91		200	0		SC				140
EPA Region 9 Laboratory	B14D040-SRM3	Reference	Solid	04/10/2014 13:00:00	04/25/2014 16:05:44	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	63.1	1.0	2.0	mg/kg	TRUE	Wet	1			89.0	71		200	0		SC				30
EPA Region 9 Laboratory	B14D040-SRM4	Reference	Solid	04/10/2014 13:00:00	04/25/2014 16:12:13	B14D040	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	61.6	1.0	2.0	mg/kg	TRUE	Wet	1			88.1	70		200	0		SC				30

QUALIFIER	DESCRIPTION
C1	The reported concentration for this analyte is below the quantitation limit.
J	The reported result for this analyte should be considered an estimated value.
U	This analyte was not detected.

CLIENT	PROJECT	PROJECTNUM	LabName	SAMPLENAME	LABSAMPID	MATRIX	RPTMATRIX	SAMPDATE	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	Result	DL	RL	UNITS	RPToMDL	BASIS	DILUTION	SPIKELEVEL	RECOVERY	UPPERCL	LOWERCL	ANALYST	PSOLIDS	LNOTE	ANOTE	LATITUDE	LONGITUDE	sComment	SNOTE1	SNOTE2	SNOTE3	SNOTE4	SNOTE5	SNOTE6	SNOTE7	SNOTE8	SNOTE9	SNOTE10	ANALYTEORDER
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	3005-18	1403074-01	Solid	Soil	03/04/2014 16:41:00	04/10/2014 13:00:00	04/22/2014 14:48:00	B14D046	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	310	1.5	3.0	mg/kg	TRUE	Wet	1					SC						Lab QC												140
California Site Cleanup Section 1	Iron King Mine 2013/2014 Sampling	R14S06	EPA Region 9 Laboratory	3005-18	1403074-01RE1	Solid	Soil	03/04/2014 16:41:00	04/10/2014 13:00:00	04/23/2014 19:09:00	B14D046	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	52	1.0	2.0	mg/kg	TRUE	Wet	1					SC						Lab QC												30

LABNAME	LABSAMPID	QCTYPE	MATRIX	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	RPToMDL	BASIS	DILUTION	SOURCEID	SOURCERES	SPIKELEVEL	RECOVERY	RPD	UPPERCL	LOWERCL	RPDCL	ANALYST	PSOLIDS	LNOTE	ANOTE	ANALYTEORDER
EPA Region 9 Laboratory	B14D046-BLK1	Blank	Solid	04/10/2014 13:00:00	04/22/2014 14:21:05	B14D046	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1								SC			U	140
EPA Region 9 Laboratory	B14D046-BLK2	Blank	Solid	04/10/2014 13:00:00	04/22/2014 14:28:22	B14D046	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1								SC			U	140
EPA Region 9 Laboratory	B14D046-BLK3	Blank	Solid	04/10/2014 13:00:00	04/23/2014 18:24:38	B14D046	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	3.1	1.0	2.0	mg/kg	TRUE	Wet	1								SC				30
EPA Region 9 Laboratory	B14D046-BLK4	Blank	Solid	04/10/2014 13:00:00	04/23/2014 18:30:52	B14D046	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	3.3	1.0	2.0	mg/kg	TRUE	Wet	1								SC				30
EPA Region 9 Laboratory	B14D046-BS1	LCS	Solid	04/10/2014 13:00:00	04/22/2014 14:34:32	B14D046	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	537	1.5	3.0	mg/kg	TRUE	Wet	1			500	107		120	80	200	SC				140
EPA Region 9 Laboratory	B14D046-BS2	LCS	Solid	04/10/2014 13:00:00	04/23/2014 18:56:02	B14D046	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	1950	1.0	2.0	mg/kg	TRUE	Wet	1			2000	97		120	80	200	SC				30
EPA Region 9 Laboratory	B14D046-DUP1	Duplicate	Solid	04/10/2014 13:00:00	04/22/2014 14:54:55	B14D046	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	313	1.5	3.0	mg/kg	TRUE	Wet	1	1403074-01	312			0.3			20	SC				140
EPA Region 9 Laboratory	B14D046-DUP2	Duplicate	Solid	04/10/2014 13:00:00	04/23/2014 19:16:14	B14D046	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	50.4	1.0	2.0	mg/kg	TRUE	Wet	1	1403074-01RE1	51.7			2			20	SC				30
EPA Region 9 Laboratory	B14D046-MS1	Matrix Spike	Solid	04/10/2014 13:00:00	04/22/2014 15:01:25	B14D046	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	1350	1.5	3.0	mg/kg	TRUE	Wet	1	1403074-01	312	990	105		125	75	20	SC				140
EPA Region 9 Laboratory	B14D046-MS2	Matrix Spike	Solid	04/10/2014 13:00:00	04/23/2014 19:22:27	B14D046	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	3910	1.0	2.0	mg/kg	TRUE	Wet	1	1403074-01RE1	51.7	3960	97		125	75	20	SC				30
EPA Region 9 Laboratory	B14D046-SRM1	Reference	Solid	04/10/2014 13:00:00	04/22/2014 14:42:05	B14D046	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	1180	1.5	3.0	mg/kg	TRUE	Wet	1			1260	93		200	0		SC				140
EPA Region 9 Laboratory	B14D046-SRM2	Reference	Solid	04/10/2014 13:00:00	04/23/2014 19:03:27	B14D046	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	64.5	1.0	2.0	mg/kg	TRUE	Wet	1			86.4	75		200	0		SC				30

QUALIFIER	DESCRIPTION
U	This analyte was not detected.

From: Dhont.Jeff@epa.gov [Dhont.Jeff@epa.gov]
To: Natalia.Raykhman@CH2M.com [Natalia.Raykhman@CH2M.com]; Dennis.Shelton@CH2M.com [Dennis.Shelton@CH2M.com]
CC:
Subject: FW: In-vitro and 3050B extraction metals analysis results for Iron King Mine 2013/2014 sampling SDGs 14087B and 14087C
Sent: Thursday, May 01, 2014 13:12:06
Attachment 1: 14087b_metals_invitro.pdf
Attachment 2: 14087b_metals_invitro.xls
Attachment 3: 14087b_metals_3050b.pdf
Attachment 4: 14087b_metals_3050b.xls
Attachment 5: 14087c_metals_invitro.pdf
Attachment 6: 14087c_metals_invitro.xls
Attachment 7: 14087c_metals_3050b.xls
Attachment 8: 14087c_metals_3050b.pdf

In-vitro results fresh-in !

From: Berges, Jack
Sent: Thursday, May 01, 2014 9:41 AM
To: david.l.aloysius@lmco.com; DHONT, JEFF; donna.j.getty@lmco.com
Subject: In-vitro and 3050B extraction metals analysis results for Iron King Mine 2013/2014 sampling SDGs 14087B and 14087C

In-vitro and 3050B extraction metals analysis results for Iron King Mine 2013/2014 sampling SDGs 14087B and 14087C, project R14S06, are attached. To obtain the bio-accessible factor for a given analyte/sample, divide the in-vitro result by the 3050B result.

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CLIENT	PROJECT	PROJECTNUM	LabName	Sample ID	Lab ID	Analyte	In-vitro mg/kg	Total mg/kg	%bio-access.
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Arsenic	95.9	441	21.7%
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Lead	122	1440	8.5%
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Arsenic	84.2	387	21.8%
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Lead	134	1380	9.7%
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Arsenic	43.0	330	13.0%
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Lead	10.7	396	2.7%

LABNAME	LABSAMPID	QCTYPE	MATRIX	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	RPTtoMDL	BASIS	DILUTION	SOURCEID	SOURCERES	SPIKELEVEL	RECOVERY	RPD	UPPERCL	LOWERCL	RPDCL	ANALYST	PSOLIDS	LNOTE	ANOTE	ANALYTEORDER
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Aluminum	7429-90-5	FALSE	FALSE	ND	50	100	mg/kg	TRUE	Dry	2								SC			U	10
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Chromium	7440-47-3	FALSE	FALSE	ND	0.50	1.0	mg/kg	TRUE	Dry	2								SC			U	100
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cobalt	7440-48-4	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Dry	2								SC			U	110
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Copper	7440-50-8	FALSE	FALSE	ND	2.0	4.0	mg/kg	TRUE	Dry	2								SC			U	120
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Iron	7439-89-6	FALSE	FALSE	ND	50	100	mg/kg	TRUE	Dry	2								SC			U	130
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Dry	2								SC			U	140
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Manganese	7439-96-5	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2								SC			U	160
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Molybdenum	7439-98-7	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2								SC			U	170
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Nickel	7440-02-0	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2								SC			U	180
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Potassium	7440-09-7	FALSE	FALSE	ND	250	500	mg/kg	TRUE	Dry	2								SC			U	190
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Antimony	7440-36-0	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Dry	2								SC			U	20
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Selenium	7782-49-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Dry	2								SC			U	200
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Silver	7440-22-4	FALSE	FALSE	ND	0.50	1.0	mg/kg	TRUE	Dry	2								SC			U	220
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Thallium	7440-28-0	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2								SC			U	250
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Vanadium	7440-62-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Dry	2								SC			U	280
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Zinc	7440-66-6	FALSE	FALSE	ND	4.0	8.0	mg/kg	TRUE	Dry	2								SC			U	290
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Dry	2								SC			U	30
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Beryllium	7440-41-7	FALSE	FALSE	ND	0.05	0.10	mg/kg	TRUE	Dry	2								SC			U	50
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cadmium	7440-43-9	FALSE	FALSE	ND	0.25	0.50	mg/kg	TRUE	Dry	2								SC			U	70
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Calcium	7440-70-2	FALSE	FALSE	ND	50	100	mg/kg	TRUE	Dry	2								SC			U	80
EPA Region 9 Laboratory	B13F059-BLK2	Blank	Solid	06/13/2013 11:15:00	07/19/2013 16:15:42	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Magnesium	7439-95-4	FALSE	FALSE	ND	25	50	mg/kg	TRUE	Dry	2								SC			U	150
EPA Region 9 Laboratory	B13F059-BLK2	Blank	Solid	06/13/2013 11:15:00	07/19/2013 16:15:42	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Sodium	7440-23-5	FALSE	FALSE	ND	25	50	mg/kg	TRUE	Dry	2								SC			U	230
EPA Region 9 Laboratory	B13F059-BLK2	Blank	Solid	06/13/2013 11:15:00	07/19/2013 16:15:42	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Barium	7440-39-3	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2								SC			U	40
EPA Region 9 Laboratory	B13F059-MS1	Matrix Spike	Solid	06/13/2013 11:15:00	06/17/2013 18:58:50	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	453	1.5	3.0	mg/kg	TRUE	Dry	2	1306007-01	359	99.0	95		125	75	20	SC				140
EPA Region 9 Laboratory	B13F059-MS1	Matrix Spike	Solid	06/13/2013 11:15:00	06/17/2013 18:58:50	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	663	1.0	2.0	mg/kg	TRUE	Dry	2	1306007-01	238	396	107		125	75	20	SC				30
EPA Region 9 Laboratory	B13F059-MSD1	Matrix Spike Dup	Solid	06/13/2013 11:15:00	06/17/2013 19:06:07	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	472	1.5	3.0	mg/kg	TRUE	Dry	2	1306007-01	359	99.0	115	4	125	75	20	SC				140
EPA Region 9 Laboratory	B13F059-MSD1	Matrix Spike Dup	Solid	06/13/2013 11:15:00	06/17/2013 19:06:07	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	696	1.0	2.0	mg/kg	TRUE	Dry	2	1306007-01	238	396	116	5	125	75	20	SC				30
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Aluminum	7429-90-5	FALSE	FALSE	123	50	100	mg/kg	TRUE	Dry	2			115	107		152	47.6		SC				10
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Chromium	7440-47-3	FALSE	FALSE	28.0	0.50	1.0	mg/kg	TRUE	Dry	2			27.2	103		132	68.3		SC				100
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cobalt	7440-48-4	FALSE	FALSE	37.3	1.0	2.0	mg/kg	TRUE	Dry	2			37.5	100		135	64.7		SC				110
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Copper	7440-50-8	FALSE	FALSE	1560	2.0	4.0	mg/kg	TRUE	Dry	2			1770	88		126	74.6		SC				120
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Iron	7439-89-6	FALSE	FALSE	6740	50	100	mg/kg	TRUE	Dry	2			6480	104		134	66.2		SC				130
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	58.9	1.5	3.0	mg/kg	TRUE	Dry	2			57.0	103		127	72.8		SC				140
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Manganese	7439-96-5	FALSE	FALSE	62.7	2.5	5.0	mg/kg	TRUE	Dry	2			61.1	103		132	68.2		SC				160
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Nickel	7440-02-0	FALSE	FALSE	16.3	2.5	5.0	mg/kg	TRUE	Dry	2			16.3	100		145	55.2		SC				180
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Potassium	7440-09-7	FALSE	FALSE	ND	250	500	mg/kg	TRUE	Dry	2			39.8			215	0		SC			U	190
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Antimony	7440-36-0	FALSE	FALSE	61.8	1.0	2.0	mg/kg	TRUE	Dry	2			66.1	93		158	41.2		SC				20
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Selenium	7782-49-2	FALSE	FALSE	10.3	1.0	2.0	mg/kg	TRUE	Dry	2			10.0	103		159	41		SC				200
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Silver	7440-22-4	FALSE	FALSE	6.10	0.50	1.0	mg/kg	TRUE	Dry	2			5.91	103		154	45.8		SC				220
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Thallium	7440-28-0	FALSE	FALSE	9.61	2.5	5.0	mg/kg	TRUE	Dry	2			9.52	101		169	30.5		SC				250
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Vanadium	7440-62-2	FALSE	FALSE	19.2	1.0	2.0	mg/kg	TRUE	Dry	2			17.6	109		135	65.9		SC				280
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Zinc	7440-66-6	FALSE	FALSE	47.3	4.0	8.0	mg/kg	TRUE	Dry	2			47.6	99		157	43.2		SC				290
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	284	1.0	2.0	mg/kg	TRUE	Dry	2			254	112		139	60.9		SC				30
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Beryllium	7440-41-7	FALSE	FALSE	4.97	0.05	0.10	mg/kg	TRUE	Dry	2			4.91	101		139	61.2		SC				50
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cadmium	7440-43-9	FALSE	FALSE	10.7	0.25	0.50	mg/kg	TRUE	Dry	2			10.9	98		128	70.6		SC				70
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Calcium	7440-70-2	FALSE	FALSE	47300	50	100	mg/kg	TRUE	Dry	2			44300	107		132	68.6		SC				80
EPA Region 9 Laboratory	B13F059-SRM2	Reference	Solid	06/13/2013 11:15:00	07/19/2013 16:20:59	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Magnesium	7439-95-4	FALSE	FALSE	28000	25	50	mg/kg	TRUE	Dry	2			29300	96		130	70.2		SC				150
EPA Region 9 Laboratory	B13F059-SRM2	Reference	Solid	06/13/2013 11:15:00	07/19/2013 16:20:59	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Sodium	7440-23-5	FALSE	FALSE	ND	25	50	mg/kg	TRUE	Dry	2			72.6			298	0		SC			U	230
EPA Region 9 Laboratory	B13F059-SRM2	Reference	Solid	06/13/2013 11:15:00	07/19/2013 16:20:59	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Barium	7440-39-3	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2			1.60			138	62.5		SC			U	40
EPA Region 9 Laboratory	B13F065-BLK1	Blank	Solid	06/13/2013 08:55:00	06/14/2013 08:52:17	B13F065	Solids, Dry Weight	3550C/SOP460	Solids, Dry Weight (Prep)	% Solids	NA	FALSE	FALSE	ND	1	1	%	FALSE	Wet	1								WD			U	1
EPA Region 9 Laboratory	B13F065-DUP1	Duplicate	Solid	06/13/2013 08:55:00	06/14/2013 08:52:17	B13F065	Solids, Dry Weight	3550C/SOP460	Solids, Dry Weight (Prep)	% Solids	NA	FALSE	FALSE	68	1	1	%	FALSE	Wet	1	1306007-10	67			2			20	WD	66.8			1
EPA Region 9 Laboratory	B13F077-BLK1	Blank	Solid	07/09/2013 09:25:00	07/11/2013 14:02:01	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1								SC			U	140
EPA Region 9 Laboratory	B13F077-BLK1	Blank	Solid	07/09/2013 09:25:00	07/11/2013 14:02:01	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	1.2	1.0	2.0	mg/kg	TRUE	Wet	1								SC			C1, J	30
EPA Region 9 Laboratory	B13F077-BLK2	Blank	Solid	07/09/2013 09:25:00	07/11/2013 14:08:00	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1								SC			U	140
EPA Region 9 Laboratory	B13F077-BLK2	Blank	Solid	07/09/2013 09:25:00	07/11/2013 14:08:00	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Wet	1								SC			U	30
EPA Region 9 Laboratory	B13F077-BS1	LCS	Solid	07/09/2013 09:25:00	07/11/2013 14:14:01	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	102	1.5	3.0	mg/kg	TRUE	Wet	1			100	102		120	80	200	SC				140
EPA Region 9 Laboratory	B13F077-BS1	LCS	Solid	07/09/2013 09:25:00	07/11/2013 14:14:01	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	402	1.0	2.0	mg/kg	TRUE	Wet	1			400	100		120	80	200	SC				30
EPA Region 9 Laboratory	B13F077-DUP1	Duplicate	Solid	07/09/2013 09:25:00	07/11/2013 15:19:29	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1	1306007-05	ND						20	SC			U	140
EPA Region 9 Laboratory	B13F077-DUP1	Duplicate	Solid	07/09/2013 09:25:00	07/11/2013 15:19:29	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	110	1.0	2.0	mg/kg	TRUE	Wet	1	1306007-05	110			0.4			20	SC				30
EPA Region 9 Laboratory	B13F077-MS1	Matrix Spike	Solid	07/09/2013 09:25:00	07/11/2013 15:25:18	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	395	1.5	3.0	mg/kg	TRUE	Wet	1	1306007-05	ND	500	79		125	75	20	SC				140
EPA Region 9 Laboratory	B13F077-MS1	Matrix Spike	Solid	07/09/2013 09:25:00	07/11/2013 15:25:18	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	1770	1.0	2.0	mg/kg	TRUE	Wet	1	1306007-05	110	2000	83		125	75	20	SC				30
EPA Region 9 Laboratory	B13F077-SRM1	Reference	Solid	07/09/2013 09:25:00	07/11/2013 14:19:59	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	1070	1.5	3.0	mg/kg	TRUE	Wet	1			1300	82		200	0		SC				140
EPA Region 9 Laboratory	B13F077-SRM1	Reference	Solid	07/09/2013 09:25:00	07/11/2013 14:19:59	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	56.4	1.0	2.0	mg/kg	TRUE	Wet	1			89.3	63		200	0		SC				30
EPA Region 9 Laboratory	B13F077-SRM2	Reference	Solid	07/09/2013 09:25:00	07/11/2013 14:25:57	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	1060	1.5	3.0	mg/kg	TRUE	Wet	1			1300	81		200	0		SC				140
EPA Region 9 Laboratory	B13F077-SRM2	Reference	Solid	07/09/2013 09:25:00	07/11/2013 14:25:57	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	56.3	1.0	2.0	mg/kg	TRUE	Wet	1			89.0	63		200	0		SC				30
EPA Region 9 Laboratory	B13G071-BLK1	Blank	Solid	07/18/2013 09:46:00	07/19/2013 16:40:27	B13G071	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Wet	1								SC			U	30
EPA Region 9 Laboratory	B13G071-BLK2	Blank	Solid	07/18/2013 09:46:00	07/19/2013 16:44:27	B13G071	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Wet	1								SC			U	30
EPA Region 9 Laboratory	B13G071-BS1	LCS	Solid	07/18/2013 09:46:00	07/19/2013 16:48:35	B13G071	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	390	1.0	2.0	mg/kg	TRUE	Wet	1			400	97		120	80	200	SC				30
EPA Region 9 Laboratory	B13G071-SRM1	Reference	Solid	07/18/2013 09:46:00	07/19/2013 16:54:35	B13G071	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	55.8	1.0	2.0	mg/kg	TRUE	Wet	1			89.1	63		200	0		SC				30
EPA Region 9 Laboratory	B13G071-SRM2	Reference	Solid	07/18/2013 09:46:00	07/19/2013 17:03:23	B13G071	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	56.2	1.0	2.0	mg/kg	TRUE	Wet	1			89.3	63		200	0		SC				30

QUALIFIER	DESCRIPTION
C1	The reported concentration for this analyte is below the quantitation limit.
J	The reported result for this analyte should be considered an estimated value.
U	This analyte was not detected.

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street Building 201
Richmond, CA 94804

Date: **8/16/2013**

Subject: **Analytical Testing Results - Project R13S75**
SDG: 13210B

From: **Brenda Bettencourt, Director**
EPA Region 9 Laboratory
MTS-2

To: **Zi Zi Searles**
California Site Cleanup Section 1
SFD-7-1

Attached are the results from the analysis of samples from the **Iron King Mine April-May 2013 Sampling** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Analyses included in this report:

Analysis of In Vitro Gastric Extracts by ICP

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 13210B
Project Number: R13S75	**75 Hawthorne Street**	**Reported:** 08/16/13 16:43
Project: Iron King Mine April-May 2013 Sampling	**San Francisco CA, 94105**	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
13330WellsSt	1307058-01	Soil	07/11/13 15:03	07/26/13 15:50
13336WellsSt	1307058-02	Soil	07/11/13 15:56	07/26/13 15:50
GulchYard	1307058-03	Soil	07/11/13 11:00	07/26/13 15:50

SDG ID 13210B

Samples were analyzed using an in-vitro bioaccesibility leaching method. Calculated bio-accessibilities are as follows:

Sample ID	Lab ID	Analyte	In-vitro mg/kg	Total mg/kg	%bio-access.
13330WellsSt	1307058-01	Arsenic	95.9	441	21.7%
13330WellsSt	1307058-01	Lead	122	1440	8.5%
13336WellsSt	1307058-02	Arsenic	84.2	387	21.8%
13336WellsSt	1307058-02	Lead	134	1380	9.7%
GulchYard	1307058-03	Arsenic	43.0	330	13.0%
GulchYard	1307058-03	Lead	10.7	396	2.7%

Work Order(s)

1307058

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 13210B
Project Number: R13S75	**75 Hawthorne Street**	**Reported:** 08/16/13 16:43
Project: Iron King Mine April-May 2013 Sampling	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: **1307058-01**									**Soil - Sampled: 07/11/13 15:03**
Sample ID: **13330WellsSt**									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic		96		2	mg/kg	B13H019	08/13/13	08/13/13	6010C/SOP503
Lead		120		3	"	"	"	"	6010C/SOP503
Lab ID: **1307058-02**									**Soil - Sampled: 07/11/13 15:56**
Sample ID: **13336WellsSt**									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic		84		2	mg/kg	B13H019	08/13/13	08/13/13	6010C/SOP503
Lead		130		3	"	"	"	"	6010C/SOP503
Lab ID: **1307058-03**									**Soil - Sampled: 07/11/13 11:00**
Sample ID: **GulchYard**									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic		43		2	mg/kg	B13H019	08/13/13	08/13/13	6010C/SOP503
Lead		11		3	"	"	"	"	6010C/SOP503

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B13H019 - In Vitro Gastric Extraction - In Vitro Extraction, ICP, Sample Basis										**Prepared & Analyzed: 08/13/13**
										Analysis of In Vitro Gastric Digestion Extracts - Quality Control
Blank (B13H019-BLK1)										
Arsenic	ND	U	2	mg/kg						
Lead	ND	U	3	"						
Blank (B13H019-BLK2)										
Arsenic	ND	U	2	mg/kg						
Lead	ND	U	3	"						
LCS (B13H019-BS1)										
Arsenic	402		2	mg/kg	400		101	80-120		200
Lead	98.3		3	"	100		98	80-120		200
Duplicate (B13H019-DUP1)		**Source: 1307058-01**								
Arsenic	94.1		2	mg/kg		95.9			2	20
Lead	127		3	"		122			4	20
Matrix Spike (B13H019-MS1)		**Source: 1307058-01**								
Arsenic	2,010		2	mg/kg	2000	95.9	96	75-125		20
Lead	558		3	"	500	122	87	75-125		20
Reference (B13H019-SRM1)										
Arsenic	57		2	mg/kg	88.7		64	0-200		
Lead	1,060		3	"	1290		82	0-200		
Reference (B13H019-SRM2)										
Arsenic	56.2		2	mg/kg	88.7		63	0-200		
Lead	1,060		3	"	1290		82	0-200		

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 13210B
Project Number: R13S75	**75 Hawthorne Street**	**Reported:** 08/16/13 16:43
Project: Iron King Mine April-May 2013 Sampling	**San Francisco CA, 94105**	

Qualifiers and Comments

U	Not Detected
NR	Not Reported
RE1, RE2, etc:	Result is from a sample re-analysis.

CLIENT	PROJECT	PROJECTNUM	LabName	SAMPLENAME	LABSAMPID	MATRIX	RPTMATRIX	SAMPDATE	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	Result	DL	RL	UNITS	RPTxMDL	BASIS	DILUTION	SPIKELEVEL	RECOVERY	UPPERCL	LOWERCL	ANALYST	PSOLIDS	LNOTE	ANOTE	LATITUDE	LONGITUDE	sComment	SNOTE1	SNOTE2	SNOTE3	SNOTE4	SNOTE5	SNOTE6	SNOTE7	SNOTE8	SNOTE9	SNOTE10	ANALYTEORDER
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/13/2013 08:30:00	08/13/2013 16:46:05	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	120	1.5	3.0	mg/kg	TRUE	Wet	1					SC																		140
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/13/2013 08:30:00	08/13/2013 16:46:05	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	96	1.0	2.0	mg/kg	TRUE	Wet	1					SC																		30
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/13/2013 08:30:00	08/13/2013 17:08:29	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	130	1.5	3.0	mg/kg	TRUE	Wet	1					SC																		140
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/13/2013 08:30:00	08/13/2013 17:08:29	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	84	1.0	2.0	mg/kg	TRUE	Wet	1					SC																		30
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/13/2013 08:30:00	08/13/2013 17:14:53	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	11	1.5	3.0	mg/kg	TRUE	Wet	1					SC																		140
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/13/2013 08:30:00	08/13/2013 17:14:53	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	43	1.0	2.0	mg/kg	TRUE	Wet	1					SC																		30

LABNAME	LABSAMPID	QCTYPE	MATRIX	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	RPTtoMDL	BASIS	DILUTION	SOURCEID	SOURCERES	SPIKELEVEL	RECOVERY	RPD	UPPERCL	LOWERCL	RPDCL	ANALYST	PSOLIDS	LNOTE	ANOTE	ANALYTEORDER
EPA Region 9 Laboratory	B13H019-BLK1	Blank	Solid	08/13/2013 08:30:00	08/13/2013 16:09:05	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1								SC			U	140
EPA Region 9 Laboratory	B13H019-BLK1	Blank	Solid	08/13/2013 08:30:00	08/13/2013 16:09:05	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Wet	1								SC			U	30
EPA Region 9 Laboratory	B13H019-BLK2	Blank	Solid	08/13/2013 08:30:00	08/13/2013 16:13:33	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1								SC			U	140
EPA Region 9 Laboratory	B13H019-BLK2	Blank	Solid	08/13/2013 08:30:00	08/13/2013 16:13:33	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Wet	1								SC			U	30
EPA Region 9 Laboratory	B13H019-BS1	LCS	Solid	08/13/2013 08:30:00	08/13/2013 16:17:58	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	98.3	1.5	3.0	mg/kg	TRUE	Wet	1			100	98		120	80	200	SC				140
EPA Region 9 Laboratory	B13H019-BS1	LCS	Solid	08/13/2013 08:30:00	08/13/2013 16:17:58	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	402	1.0	2.0	mg/kg	TRUE	Wet	1			400	101		120	80	200	SC				30
EPA Region 9 Laboratory	B13H019-DUP1	Duplicate	Solid	08/13/2013 08:30:00	08/13/2013 16:53:12	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	127	1.5	3.0	mg/kg	TRUE	Wet	1	1307058-01	122			4			20	SC				140
EPA Region 9 Laboratory	B13H019-DUP1	Duplicate	Solid	08/13/2013 08:30:00	08/13/2013 16:53:12	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	94.1	1.0	2.0	mg/kg	TRUE	Wet	1	1307058-01	95.9			2			20	SC				30
EPA Region 9 Laboratory	B13H019-MS1	Matrix Spike	Solid	08/13/2013 08:30:00	08/13/2013 16:59:30	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	558	1.5	3.0	mg/kg	TRUE	Wet	1	1307058-01	122	500	87		125	75	20	SC				140
EPA Region 9 Laboratory	B13H019-MS1	Matrix Spike	Solid	08/13/2013 08:30:00	08/13/2013 16:59:30	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	2010	1.0	2.0	mg/kg	TRUE	Wet	1	1307058-01	95.9	2000	96		125	75	20	SC				30
EPA Region 9 Laboratory	B13H019-SRM1	Reference	Solid	08/13/2013 08:30:00	08/13/2013 16:23:31	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	1060	1.5	3.0	mg/kg	TRUE	Wet	1			1290	82		200	0		SC				140
EPA Region 9 Laboratory	B13H019-SRM1	Reference	Solid	08/13/2013 08:30:00	08/13/2013 16:23:31	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	57.0	1.0	2.0	mg/kg	TRUE	Wet	1			88.7	64		200	0		SC				30
EPA Region 9 Laboratory	B13H019-SRM2	Reference	Solid	08/13/2013 08:30:00	08/13/2013 16:32:56	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	1060	1.5	3.0	mg/kg	TRUE	Wet	1			1290	82		200	0		SC				140
EPA Region 9 Laboratory	B13H019-SRM2	Reference	Solid	08/13/2013 08:30:00	08/13/2013 16:32:56	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	56.2	1.0	2.0	mg/kg	TRUE	Wet	1			88.7	63		200	0		SC				30

QUALIFIER	DESCRIPTION
U	This analyte was not detected.

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street Building 201
Richmond, CA 94804

Date: **8/16/2013**

Subject: **Analytical Testing Results - Project R13S75**
SDG: 13210B

From: **Brenda Bettencourt, Director**
EPA Region 9 Laboratory
MTS-2

To: **Zi Zi Searles**
California Site Cleanup Section 1
SFD-7-1

Attached are the results from the analysis of samples from the **Iron King Mine April-May 2013 Sampling** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Analyses included in this report:

Metals by ICP

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 13210B
Project Number: R13S75	**75 Hawthorne Street**	**Reported:** 08/16/13 15:12
Project: Iron King Mine April-May 2013 Sampling	**San Francisco CA, 94105**	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
13330WellsSt	1307058-01	Soil	07/11/13 15:03	07/26/13 15:50
13336WellsSt	1307058-02	Soil	07/11/13 15:56	07/26/13 15:50
GulchYard	1307058-03	Soil	07/11/13 11:00	07/26/13 15:50

SDG ID 13210B

Work Order(s)

1307058

Total metals: Soil samples were dried at 37 degree C then sieved through a No. 70 (212um) screen prior to preparation and analysis.

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 13210B
Project Number: R13S75	**75 Hawthorne Street**	**Reported:** 08/16/13 15:12
Project: Iron King Mine April-May 2013 Sampling	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: **1307058-01**									**Soil - Sampled: 07/11/13 15:03**
Sample ID: **13330WellsSt**									**Metals by EPA 6000/7000 Series Methods**
Aluminum		20,000		100	mg/kg wet	B13H062	08/12/13	08/13/13	6010C/SOP503
Antimony		11		2	"	"	"	"	6010C/SOP503
Arsenic		440		2	"	"	"	"	6010C/SOP503
Barium		210		5	"	"	"	"	6010C/SOP503
Beryllium		0.54		0.10	"	"	"	"	6010C/SOP503
Cadmium		6.3		0.50	"	"	"	"	6010C/SOP503
Calcium		12,000		100	"	"	"	"	6010C/SOP503
Chromium		31		1	"	"	"	"	6010C/SOP503
Cobalt		11		2	"	"	"	"	6010C/SOP503
Copper		230		4	"	"	"	"	6010C/SOP503
Iron		41,000		100	"	"	"	"	6010C/SOP503
Lead		1,400		3	"	"	"	"	6010C/SOP503
Magnesium		6,100		50	"	"	"	"	6010C/SOP503
Manganese		670		5	"	"	"	"	6010C/SOP503
Molybdenum		ND	U	5	"	"	"	"	6010C/SOP503
Nickel		23		5	"	"	"	"	6010C/SOP503
Potassium		5,300		500	"	"	"	"	6010C/SOP503
Selenium		3.8		2	"	"	"	"	6010C/SOP503
Silver		11		1	"	"	"	"	6010C/SOP503
Sodium		390		50	"	"	"	"	6010C/SOP503
Thallium		ND	U	5	"	"	"	"	6010C/SOP503
Vanadium		54		2	"	"	"	"	6010C/SOP503
Zinc		1,400		8	"	"	"	"	6010C/SOP503
Lab ID: **1307058-02**									**Soil - Sampled: 07/11/13 15:56**
Sample ID: **13336WellsSt**									**Metals by EPA 6000/7000 Series Methods**
Aluminum		17,000		100	mg/kg wet	B13H062	08/12/13	08/13/13	6010C/SOP503
Antimony		7.8	J, Q4	2	"	"	"	"	6010C/SOP503
Arsenic		390		2	"	"	"	"	6010C/SOP503
Barium		190		5	"	"	"	"	6010C/SOP503
Beryllium		0.56		0.10	"	"	"	"	6010C/SOP503
Cadmium		7.1		0.50	"	"	"	"	6010C/SOP503
Calcium		9,400		100	"	"	"	"	6010C/SOP503
Chromium		30		1	"	"	"	"	6010C/SOP503
Cobalt		10		2	"	"	"	"	6010C/SOP503
Copper		240		4	"	"	"	"	6010C/SOP503
Iron		37,000		100	"	"	"	"	6010C/SOP503
Lead		1,400		3	"	"	"	"	6010C/SOP503
Magnesium		5,400	J, Q4	50	"	"	"	"	6010C/SOP503
Manganese		550		5	"	"	"	"	6010C/SOP503
Molybdenum		ND	U	5	"	"	"	"	6010C/SOP503

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Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 13210B
Project Number: R13S75	**75 Hawthorne Street**	**Reported:** 08/16/13 15:12
Project: Iron King Mine April-May 2013 Sampling	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID:	**1307058-02**								**Soil - Sampled: 07/11/13 15:56**
Sample ID:	**13336WellsSt**								**Metals by EPA 6000/7000 Series Methods**
Nickel		24		5	mg/kg wet	B13H062	08/12/13	08/13/13	6010C/SOP503
Potassium		5,400		500	"	"	"	"	6010C/SOP503
Selenium		3.5		2	"	"	"	"	6010C/SOP503
Silver		9.7		1	"	"	"	"	6010C/SOP503
Sodium		310		50	"	"	"	"	6010C/SOP503
Thallium		ND	U	5	"	"	"	"	6010C/SOP503
Vanadium		46		2	"	"	"	"	6010C/SOP503
Zinc		1,700		8	"	"	"	"	6010C/SOP503
Lab ID:	**1307058-03**								**Soil - Sampled: 07/11/13 11:00**
Sample ID:	**GulchYard**								**Metals by EPA 6000/7000 Series Methods**
Aluminum		19,000		100	mg/kg wet	B13H062	08/12/13	08/13/13	6010C/SOP503
Antimony		2.9		2	"	"	"	"	6010C/SOP503
Arsenic		330		2	"	"	"	"	6010C/SOP503
Barium		130		5	"	"	"	"	6010C/SOP503
Beryllium		0.41		0.10	"	"	"	"	6010C/SOP503
Cadmium		2.2		0.50	"	"	"	"	6010C/SOP503
Calcium		9,400		100	"	"	"	"	6010C/SOP503
Chromium		25		1	"	"	"	"	6010C/SOP503
Cobalt		13		2	"	"	"	"	6010C/SOP503
Copper		71		4	"	"	"	"	6010C/SOP503
Iron		45,000		100	"	"	"	"	6010C/SOP503
Lead		400		3	"	"	"	"	6010C/SOP503
Magnesium		6,600		50	"	"	"	"	6010C/SOP503
Manganese		560		5	"	"	"	"	6010C/SOP503
Molybdenum		ND	U	5	"	"	"	"	6010C/SOP503
Nickel		18		5	"	"	"	"	6010C/SOP503
Potassium		3,400		500	"	"	"	"	6010C/SOP503
Selenium		3.4		2	"	"	"	"	6010C/SOP503
Silver		2.3		1	"	"	"	"	6010C/SOP503
Sodium		140		50	"	"	"	"	6010C/SOP503
Thallium		ND	U	5	"	"	"	"	6010C/SOP503
Vanadium		79		2	"	"	"	"	6010C/SOP503
Zinc		540		8	"	"	"	"	6010C/SOP503

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Project Number: R13S75	**75 Hawthorne Street**	**Reported:** 08/16/13 15:12
Project: Iron King Mine April-May 2013 Sampling	**San Francisco CA, 94105**	

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B13H062 - 3050B Sld Acid Dig - Metals by 6010										**Prepared: 08/12/13 Analyzed: 08/13/13**
										Metals by EPA 6000/7000 Series Methods - Quality Control
Blank (B13H062-BLK1)										
Aluminum	ND	U	100	mg/kg wet						
Antimony	ND	U	2	"						
Arsenic	ND	U	2	"						
Barium	ND	U	5	"						
Beryllium	ND	U	0.1	"						
Cadmium	ND	U	0.5	"						
Calcium	ND	U	100	"						
Chromium	ND	U	1	"						
Cobalt	ND	U	2	"						
Copper	ND	U	4	"						
Iron	ND	U	100	"						
Lead	ND	U	3	"						
Magnesium	ND	U	50	"						
Manganese	ND	U	5	"						
Molybdenum	ND	U	5	"						
Nickel	ND	U	5	"						
Potassium	ND	U	500	"						
Selenium	ND	U	2	"						
Silver	ND	U	1	"						
Sodium	ND	U	50	"						
Thallium	ND	U	5	"						
Vanadium	ND	U	2	"						
Zinc	ND	U	8	"						
Matrix Spike (B13H062-MS1)		**Source: 1307058-02**								
Aluminum	17,700	Q10	100	mg/kg wet	385	16,900	**204**	75-125		20
Antimony	30.4		2	"	96.2	7.8	**24**	75-125		20
Arsenic	769		2	"	385	387	99	75-125		20
Barium	550		5	"	385	191	93	75-125		20
Beryllium	9.61		0.1	"	9.62	0.556	94	75-125		20
Cadmium	15.8		0.5	"	9.62	7.09	91	75-125		20
Calcium	11,300	Q10	100	"	1920	9,400	98	75-125		20
Chromium	65.2		1	"	38.5	29.6	93	75-125		20
Cobalt	96.7		2	"	96.2	10.2	90	75-125		20
Copper	285	Q10	4	"	48.1	238	97	75-125		20
Iron	37,200	Q10	100	"	192	36,700	**243**	75-125		20
Lead	1,480	Q10	3	"	96.2	1,380	112	75-125		20
Magnesium	7,340		50	"	1920	5,440	99	75-125		20
Manganese	628	Q10	5	"	96.2	551	80	75-125		20
Molybdenum	74.8		5	"	96.2	ND	78	75-125		20
Nickel	111		5	"	96.2	24.1	91	75-125		20

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Project Number: R13S75	**75 Hawthorne Street**	**Reported:** 08/16/13 15:12
Project: Iron King Mine April-May 2013 Sampling	**San Francisco CA, 94105**	

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B13H062 - 3050B Sld Acid Dig - Metals by 6010									**Prepared: 08/12/13 Analyzed: 08/13/13**	
									Metals by EPA 6000/7000 Series Methods - Quality Control	
Matrix Spike (B13H062-MS1)		**Source: 1307058-02**								
Potassium	7,440		500	"	1920	5,380	107	75-125		20
Selenium	372		2	"	385	3.46	96	75-125		20
Silver	19.3		1	"	9.62	9.71	100	75-125		20
Sodium	2,100		50	"	1920	311	93	75-125		20
Thallium	346		5	"	385	ND	90	75-125		20
Vanadium	137		2	"	96.2	45.9	95	75-125		20
Zinc	1,790	Q10	8	"	96.2	1,680	113	75-125		20
Matrix Spike Dup (B13H062-MSD1)		**Source: 1307058-02**								
Aluminum	19,600	Q10	100	mg/kg wet	396	16,900	**666**	75-125	10	20
Antimony	30.8		2	"	99.0	7.8	**23**	75-125	1	20
Arsenic	806		2	"	396	387	106	75-125	5	20
Barium	609		5	"	396	191	106	75-125	10	20
Beryllium	10.1		0.1	"	9.90	0.556	97	75-125	5	20
Cadmium	16.3		0.5	"	9.90	7.09	93	75-125	3	20
Calcium	12,300	Q10	100	"	1980	9,400	**144**	75-125	8	20
Chromium	68.8		1	"	39.6	29.6	99	75-125	5	20
Cobalt	107		2	"	99.0	10.2	98	75-125	11	20
Copper	317	Q10	4	"	49.5	238	**160**	75-125	11	20
Iron	39,900	Q10	100	"	198	36,700	**NR**	75-125	7	20
Lead	1,510	Q10	3	"	99.0	1,380	**134**	75-125	2	20
Magnesium	7,940		50	"	1980	5,440	**126**	75-125	8	20
Manganese	682	Q10	5	"	99.0	551	**132**	75-125	8	20
Molybdenum	78.8		5	"	99.0	ND	80	75-125	5	20
Nickel	118		5	"	99.0	24.1	95	75-125	6	20
Potassium	7,590		500	"	1980	5,380	111	75-125	2	20
Selenium	392		2	"	396	3.46	98	75-125	5	20
Silver	20.1		1	"	9.90	9.71	105	75-125	4	20
Sodium	2,400		50	"	1980	311	106	75-125	13	20
Thallium	363		5	"	396	ND	92	75-125	5	20
Vanadium	141		2	"	99.0	45.9	96	75-125	3	20
Zinc	1,880	Q10	8	"	99.0	1,680	**201**	75-125	5	20
Reference (B13H062-SRM1)										
Aluminum	141		100	mg/kg wet	115		122	47.6-152		
Antimony	65.8		2	"	66.1		100	41.2-158		
Arsenic	307		2	"	253		121	60.9-139		
Barium	ND	U	5	"	1.60			62.5-138		
Beryllium	5.32		0.1	"	4.91		108	61.2-139		
Cadmium	11.3		0.5	"	10.9		103	70.6-128		
Calcium	55,000		100	"	44300		124	68.6-132		
Chromium	29.9		1	"	27.1		110	68.3-132		

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Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 13210B
Project Number: R13S75	**75 Hawthorne Street**	**Reported:** 08/16/13 15:12
Project: Iron King Mine April-May 2013 Sampling	**San Francisco CA, 94105**	

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B13H062 - 3050B Sld Acid Dig - Metals by 6010									**Prepared: 08/12/13 Analyzed: 08/13/13**	
									Metals by EPA 6000/7000 Series Methods - Quality Control	
Reference (B13H062-SRM1)										
Cobalt	41.1		2	"	37.5		110	64.7-135		
Copper	1,770		4	"	1770		100	74.6-126		
Iron	7,530		100	"	6480		116	66.2-134		
Lead	60.5		3	"	57.0		106	72.8-127		
Magnesium	31,800		50	"	29200		109	70.2-130		
Manganese	70.5		5	"	61.1		115	68.2-132		
Nickel	17.3		5	"	16.3		106	55.2-145		
Potassium	ND	U	500	"	39.8			0-215		
Selenium	12.2		2	"	10.0		122	41-159		
Silver	6.24		1	"	5.91		106	45.8-154		
Sodium	ND	U	50	"	72.6			0-298		
Thallium	6.5		5	"	9.51		68	30.5-169		
Vanadium	19.2		2	"	17.6		109	65.9-135		
Zinc	51.7		8	"	47.6		109	43.2-157		

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Project Number: R13S75	**75 Hawthorne Street**	**Reported:** 08/16/13 15:12
Project: Iron King Mine April-May 2013 Sampling	**San Francisco CA, 94105**	

Qualifiers and Comments

Q4 The matrix spike and/or matrix spike duplicate associated with this sample did not meet recovery criteria for this analyte (see MS/MSD results for this batch in QC summary)

Q10 The analyte concentration in the unfortified sample is significantly greater than the concentration spiked into the matrix spike and matrix spike duplicate. The reported spike recovery is not a meaningful measure of the dataset's analytical accuracy.

J The reported result for this analyte should be considered an estimated value.

U Not Detected

NR Not Reported

RE1, RE2, etc: Result is from a sample re-analysis.

CLIENT	PROJECT	PROJECTNUM	LabName	SAMPLENAME	LABSAMPID	MATRIX	RPTMATRIX	SAMPDATE	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	Result	DL	RL	UNITS	RPToMDL	BASIS	DILUTION	SPIKELEVEL	RECOVERY	UPPERCL	LOWERCL	ANALYST	PSOLIDS	LNOTE	ANOTE	LATITUDE	LONGITUDE	sComment	SNOTE1	SNOTE2	SNOTE3	SNOTE4	SNOTE5	SNOTE6	SNOTE7	SNOTE8	SNOTE9	SNOTE10	ANALYTEORDER
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Aluminum	7429-90-5	FALSE	FALSE	20000	50	100	mg/kg	TRUE	Dry	2					SC																	10
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Chromium	7440-47-3	FALSE	FALSE	31	0.50	1.0	mg/kg	TRUE	Dry	2					SC																	100
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cobalt	7440-48-4	FALSE	FALSE	11	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	110
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Copper	7440-50-8	FALSE	FALSE	230	2.0	4.0	mg/kg	TRUE	Dry	2					SC																	120
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Iron	7439-89-6	FALSE	FALSE	41000	50	100	mg/kg	TRUE	Dry	2					SC																	130
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	1400	1.5	3.0	mg/kg	TRUE	Dry	2					SC																	140
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Magnesium	7439-95-4	FALSE	FALSE	6100	25	50	mg/kg	TRUE	Dry	2					SC																	150
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Manganese	7439-96-5	FALSE	FALSE	670	2.5	5.0	mg/kg	TRUE	Dry	2					SC																	160
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Molybdenum	7439-98-7	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2					SC			U														170
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Nickel	7440-02-0	FALSE	FALSE	23	2.5	5.0	mg/kg	TRUE	Dry	2					SC																	180
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Potassium	7440-09-7	FALSE	FALSE	5300	250	500	mg/kg	TRUE	Dry	2					SC																	190
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Antimony	7440-36-0	FALSE	FALSE	11	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	20
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Selenium	7782-49-2	FALSE	FALSE	3.8	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	200
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Silver	7440-22-4	FALSE	FALSE	11	0.50	1.0	mg/kg	TRUE	Dry	2					SC																	220
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Sodium	7440-23-5	FALSE	FALSE	390	25	50	mg/kg	TRUE	Dry	2					SC																	230
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Thallium	7440-28-0	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2					SC			U														250
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Vanadium	7440-62-2	FALSE	FALSE	54	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	280
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Zinc	7440-66-6	FALSE	FALSE	1400	4.0	8.0	mg/kg	TRUE	Dry	2					SC																	290
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	440	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	30
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Barium	7440-39-3	FALSE	FALSE	210	2.5	5.0	mg/kg	TRUE	Dry	2					SC																	40
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Beryllium	7440-41-7	FALSE	FALSE	0.54	0.05	0.10	mg/kg	TRUE	Dry	2					SC																	50
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cadmium	7440-43-9	FALSE	FALSE	6.3	0.25	0.50	mg/kg	TRUE	Dry	2					SC																	70
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Calcium	7440-70-2	FALSE	FALSE	12000	50	100	mg/kg	TRUE	Dry	2					SC																	80
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Aluminum	7429-90-5	FALSE	FALSE	17000	50	100	mg/kg	TRUE	Dry	2					SC																	10
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Chromium	7440-47-3	FALSE	FALSE	30	0.50	1.0	mg/kg	TRUE	Dry	2					SC																	100
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cobalt	7440-48-4	FALSE	FALSE	10	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	110
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Copper	7440-50-8	FALSE	FALSE	240	2.0	4.0	mg/kg	TRUE	Dry	2					SC																	120
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Iron	7439-89-6	FALSE	FALSE	37000	50	100	mg/kg	TRUE	Dry	2					SC																	130
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	1400	1.5	3.0	mg/kg	TRUE	Dry	2					SC																	140
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Magnesium	7439-95-4	FALSE	FALSE	5400	25	50	mg/kg	TRUE	Dry	2					SC			J, Q4														150
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Manganese	7439-96-5	FALSE	FALSE	550	2.5	5.0	mg/kg	TRUE	Dry	2					SC																	160
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Molybdenum	7439-98-7	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2					SC			U														170
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Nickel	7440-02-0	FALSE	FALSE	24	2.5	5.0	mg/kg	TRUE	Dry	2					SC																	180
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Potassium	7440-09-7	FALSE	FALSE	5400	250	500	mg/kg	TRUE	Dry	2					SC																	190
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Antimony	7440-36-0	FALSE	FALSE	7.8	1.0	2.0	mg/kg	TRUE	Dry	2					SC			J, Q4														20
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Selenium	7782-49-2	FALSE	FALSE	3.5	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	200
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Silver	7440-22-4	FALSE	FALSE	9.7	0.50	1.0	mg/kg	TRUE	Dry	2					SC																	220
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Sodium	7440-23-5	FALSE	FALSE	310	25	50	mg/kg	TRUE	Dry	2					SC																	230
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Thallium	7440-28-0	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2					SC			U														250
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Vanadium	7440-62-2	FALSE	FALSE	46	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	280
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Zinc	7440-66-6	FALSE	FALSE	1700	4.0	8.0	mg/kg	TRUE	Dry	2					SC																	290
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	390	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	30
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Barium	7440-39-3	FALSE	FALSE	190	2.5	5.0	mg/kg	TRUE	Dry	2					SC																	40
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Beryllium	7440-41-7	FALSE	FALSE	0.56	0.05	0.10	mg/kg	TRUE	Dry	2					SC																	50
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cadmium	7440-43-9	FALSE	FALSE	7.1	0.25	0.50	mg/kg	TRUE	Dry	2					SC																	70
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Calcium	7440-70-2	FALSE	FALSE	9400	50	100	mg/kg	TRUE	Dry	2					SC																	80
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Aluminum	7429-90-5	FALSE	FALSE	19000	50	100	mg/kg	TRUE	Dry	2					SC																	10
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Chromium	7440-47-3	FALSE	FALSE	25	0.50	1.0	mg/kg	TRUE	Dry	2					SC																	100
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cobalt	7440-48-4	FALSE	FALSE	13	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	110
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Copper	7440-50-8	FALSE	FALSE	71	2.0	4.0	mg/kg	TRUE	Dry	2					SC																	120
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Iron	7439-89-6	FALSE	FALSE	45000	50	100	mg/kg	TRUE	Dry	2					SC																	130
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	400	1.5	3.0	mg/kg	TRUE	Dry	2					SC																	140
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Magnesium	7439-95-4	FALSE	FALSE	6600	25	50	mg/kg	TRUE	Dry	2					SC																	150
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Manganese	7439-96-5	FALSE	FALSE	560	2.5	5.0	mg/kg	TRUE	Dry	2					SC																	160
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Molybdenum	7439-98-7	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2					SC			U														170
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Nickel	7440-02-0	FALSE	FALSE	18	2.5	5.0	mg/kg	TRUE	Dry	2					SC																	180
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Potassium	7440-09-7	FALSE	FALSE	3400	250	500	mg/kg	TRUE	Dry	2					SC																	190
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Antimony	7440-36-0	FALSE	FALSE	2.9	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	20
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Selenium	7782-49-2	FALSE	FALSE	3.4	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	200
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Silver	7440-22-4	FALSE	FALSE	2.3	0.50	1.0	mg/kg	TRUE	Dry	2					SC																	220
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Sodium	7440-23-5	FALSE	FALSE	140	25	50	mg/kg	TRUE	Dry	2					SC																	230
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Thallium	7440-28-0	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2					SC			U														250
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Vanadium	7440-62-2	FALSE	FALSE	79	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	280
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Zinc	7440-66-6	FALSE	FALSE	540	4.0	8.0	mg/kg	TRUE	Dry	2					SC																	290
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	330	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	30
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Barium	7440-39-3	FALSE	FALSE	130	2.5	5.0	mg/kg	TRUE	Dry	2					SC																	40
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Beryllium	7440-41-7	FALSE	FALSE	0.41	0.05	0.10	mg/kg	TRUE	Dry	2					SC																	50
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cadmium	7440-43-9	FALSE	FALSE	2.2	0.25	0.50	mg/kg	TRUE	Dry	2					SC																	70
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Calcium	7440-70-2	FALSE	FALSE	9400	50	100	mg/kg	TRUE	Dry	2					SC																	80

LABNAME	LABSAMPID	QCTYPE	MATRIX	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	RPToMDL	BASIS	DILUTION	SOURCEID	SOURCERES	SPIKELEVEL	RECOVERY	RPD	UPPERCL	LOWERCL	RPDCL	ANALYST	PSOLIDS	LNOTE	ANOTE	ANALYTEORDER
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Aluminum	7429-90-5	FALSE	FALSE	ND	50	100	mg/kg	TRUE	Dry	2									SC			U	10
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Chromium	7440-47-3	FALSE	FALSE	ND	0.50	1.0	mg/kg	TRUE	Dry	2									SC			U	100
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cobalt	7440-48-4	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Dry	2									SC			U	110
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Copper	7440-50-8	FALSE	FALSE	ND	2.0	4.0	mg/kg	TRUE	Dry	2									SC			U	120
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Iron	7439-89-6	FALSE	FALSE	ND	50	100	mg/kg	TRUE	Dry	2									SC			U	130
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Dry	2									SC			U	140
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Magnesium	7439-95-4	FALSE	FALSE	ND	25	50	mg/kg	TRUE	Dry	2									SC			U	150
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Manganese	7439-96-5	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2									SC			U	160
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Molybdenum	7439-98-7	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2									SC			U	170
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Nickel	7440-02-0	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2									SC			U	180
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Potassium	7440-09-7	FALSE	FALSE	ND	250	500	mg/kg	TRUE	Dry	2									SC			U	190
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Antimony	7440-36-0	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Dry	2									SC			U	20
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Selenium	7782-49-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Dry	2									SC			U	200
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Silver	7440-22-4	FALSE	FALSE	ND	0.50	1.0	mg/kg	TRUE	Dry	2									SC			U	220
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Sodium	7440-23-5	FALSE	FALSE	ND	25	50	mg/kg	TRUE	Dry	2									SC			U	230
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Thallium	7440-28-0	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2									SC			U	250
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Vanadium	7440-62-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Dry	2									SC			U	280
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Zinc	7440-66-6	FALSE	FALSE	ND	4.0	8.0	mg/kg	TRUE	Dry	2									SC			U	290
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Dry	2									SC			U	30
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Barium	7440-39-3	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2									SC			U	40
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Beryllium	7440-41-7	FALSE	FALSE	ND	0.05	0.10	mg/kg	TRUE	Dry	2									SC			U	50
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cadmium	7440-43-9	FALSE	FALSE	ND	0.25	0.50	mg/kg	TRUE	Dry	2									SC			U	70
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Calcium	7440-70-2	FALSE	FALSE	ND	50	100	mg/kg	TRUE	Dry	2									SC			U	80
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Aluminum	7429-90-5	FALSE	FALSE	17700	50	100	mg/kg	TRUE	Dry	2	1307058-02	16900	385	204		125	75	20	SC			Q10	10
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Chromium	7440-47-3	FALSE	FALSE	65.2	0.50	1.0	mg/kg	TRUE	Dry	2	1307058-02	29.6	38.5	93		125	75	20	SC				100
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cobalt	7440-48-4	FALSE	FALSE	96.7	1.0	2.0	mg/kg	TRUE	Dry	2	1307058-02	10.2	96.2	90		125	75	20	SC				110
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Copper	7440-50-8	FALSE	FALSE	285	2.0	4.0	mg/kg	TRUE	Dry	2	1307058-02	238	48.1	97		125	75	20	SC			Q10	120
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Iron	7439-89-6	FALSE	FALSE	37200	50	100	mg/kg	TRUE	Dry	2	1307058-02	36700	192	243		125	75	20	SC			Q10	130
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	1480	1.5	3.0	mg/kg	TRUE	Dry	2	1307058-02	1380	96.2	112		125	75	20	SC			Q10	140
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Magnesium	7439-95-4	FALSE	FALSE	7340	25	50	mg/kg	TRUE	Dry	2	1307058-02	5440	1920	99		125	75	20	SC				150
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Manganese	7439-96-5	FALSE	FALSE	628	2.5	5.0	mg/kg	TRUE	Dry	2	1307058-02	551	96.2	80		125	75	20	SC			Q10	160
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Molybdenum	7439-98-7	FALSE	FALSE	74.8	2.5	5.0	mg/kg	TRUE	Dry	2	1307058-02	ND	96.2	78		125	75	20	SC				170
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Nickel	7440-02-0	FALSE	FALSE	111	2.5	5.0	mg/kg	TRUE	Dry	2	1307058-02	24.1	96.2	91		125	75	20	SC				180
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Potassium	7440-09-7	FALSE	FALSE	7440	250	500	mg/kg	TRUE	Dry	2	1307058-02	5380	1920	107		125	75	20	SC				190
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Antimony	7440-36-0	FALSE	FALSE	30.4	1.0	2.0	mg/kg	TRUE	Dry	2	1307058-02	7.80	96.2	24		125	75	20	SC				20
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Selenium	7782-49-2	FALSE	FALSE	372	1.0	2.0	mg/kg	TRUE	Dry	2	1307058-02	3.46	385	96		125	75	20	SC				200
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Silver	7440-22-4	FALSE	FALSE	19.3	0.50	1.0	mg/kg	TRUE	Dry	2	1307058-02	9.71	9.62	100		125	75	20	SC				220
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Sodium	7440-23-5	FALSE	FALSE	2100	25	50	mg/kg	TRUE	Dry	2	1307058-02	311	1920	93		125	75	20	SC				230
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Thallium	7440-28-0	FALSE	FALSE	346	2.5	5.0	mg/kg	TRUE	Dry	2	1307058-02	ND	385	90		125	75	20	SC				250
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Vanadium	7440-62-2	FALSE	FALSE	137	1.0	2.0	mg/kg	TRUE	Dry	2	1307058-02	45.9	96.2	95		125	75	20	SC				280
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Zinc	7440-66-6	FALSE	FALSE	1790	4.0	8.0	mg/kg	TRUE	Dry	2	1307058-02	1680	96.2	113		125	75	20	SC			Q10	290
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	769	1.0	2.0	mg/kg	TRUE	Dry	2	1307058-02	387	385	99		125	75	20	SC				30
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Barium	7440-39-3	FALSE	FALSE	550	2.5	5.0	mg/kg	TRUE	Dry	2	1307058-02	191	385	93		125	75	20	SC				40
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Beryllium	7440-41-7	FALSE	FALSE	9.61	0.05	0.10	mg/kg	TRUE	Dry	2	1307058-02	0.556	9.62	94		125	75	20	SC				50
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cadmium	7440-43-9	FALSE	FALSE	15.8	0.25	0.50	mg/kg	TRUE	Dry	2	1307058-02	7.09	9.62	91		125	75	20	SC				70
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Calcium	7440-70-2	FALSE	FALSE	11300	50	100	mg/kg	TRUE	Dry	2	1307058-02	9400	1920	98		125	75	20	SC			Q10	80
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Aluminum	7429-90-5	FALSE	FALSE	19600	50	100	mg/kg	TRUE	Dry	2	1307058-02	16900	396	666	10	125	75	20	SC			Q10	10
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Chromium	7440-47-3	FALSE	FALSE	68.8	0.50	1.0	mg/kg	TRUE	Dry	2	1307058-02	29.6	39.6	99	5	125	75	20	SC				100
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cobalt	7440-48-4	FALSE	FALSE	107	1.0	2.0	mg/kg	TRUE	Dry	2	1307058-02	10.2	99.0	98	11	125	75	20	SC				110
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Copper	7440-50-8	FALSE	FALSE	317	2.0	4.0	mg/kg	TRUE	Dry	2	1307058-02	238	49.5	160	11	125	75	20	SC			Q10	120
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Iron	7439-89-6	FALSE	FALSE	39900	50	100	mg/kg	TRUE	Dry	2	1307058-02	36700	198	1600	7	125	75	20	SC			Q10	130
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	1510	1.5	3.0	mg/kg	TRUE	Dry	2	1307058-02	1380	99.0	134	2	125	75	20	SC			Q10	140
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Magnesium	7439-95-4	FALSE	FALSE	7940	25	50	mg/kg	TRUE	Dry	2	1307058-02	5440	1980	126	8	125	75	20	SC				150
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Manganese	7439-96-5	FALSE	FALSE	682	2.5	5.0	mg/kg	TRUE	Dry	2	1307058-02	551	99.0	132	8	125	75	20	SC			Q10	160
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Molybdenum	7439-98-7	FALSE	FALSE	78.8	2.5	5.0	mg/kg	TRUE	Dry	2	1307058-02	ND	99.0	80	5	125	75	20	SC				170
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Nickel	7440-02-0	FALSE	FALSE	118	2.5	5.0	mg/kg	TRUE	Dry	2	1307058-02	24.1	99.0	95	6	125	75	20	SC				180
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Potassium	7440-09-7	FALSE	FALSE	7590	250	500	mg/kg	TRUE	Dry	2	1307058-02	5380	1980	111	2	125	75	20	SC				190
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Antimony	7440-36-0	FALSE	FALSE	30.8	1.0	2.0	mg/kg	TRUE	Dry	2	1307058-02	7.80	99.0	23	1	125	75	20	SC				20
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Selenium	7782-49-2	FALSE	FALSE	392	1.0	2.0	mg/kg	TRUE	Dry	2	1307058-02	3.46	396	98	5	125	75	20	SC				200
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Silver	7440-22-4	FALSE	FALSE	20.1	0.50	1.0	mg/kg	TRUE	Dry	2	1307058-02	9.71	9.90	105	4	125	75	20	SC				220
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Sodium	7440-23-5	FALSE	FALSE	2400	25	50	mg/kg	TRUE	Dry	2	1307058-02	311	1980	106	13	125	75	20	SC				230
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Thallium	7440-28-0	FALSE	FALSE	363	2.5	5.0	mg/kg	TRUE	Dry	2	1307058-02	ND	396	92	5	125	75	20	SC				250
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Vanadium	7440-62-2	FALSE	FALSE	141	1.0	2.0	mg/kg	TRUE	Dry	2	1307058-02	45.9	99.0	96	3	125	75	20	SC				280
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Zinc	7440-66-6	FALSE	FALSE	1880	4.0	8.0	mg/kg	TRUE	Dry	2	1307058-02	1680	99.0	201	5	125	75	20	SC			Q10	290
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	806	1.0	2.0	mg/kg	TRUE	Dry	2	1307058-02	387	396	106	5	125	75	20	SC				30
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Barium	7440-39-3	FALSE	FALSE	609	2.5	5.0	mg/kg	TRUE	Dry	2	1307058-02	191	396	106	10	125	75	20	SC				40
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Beryllium	7440-41-7	FALSE	FALSE	10.1	0.05	0.10	mg/kg	TRUE	Dry	2	1307058-02	0.556	9.90	97	5	125	75	20	SC				50
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cadmium	7440-43-9	FALSE	FALSE	16.3	0.25	0.50	mg/kg	TRUE	Dry	2	1307058-02	7.09	9.90	93	3	125	75	20	SC				70
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Calcium	7440-70-2	FALSE	FALSE	12300	50	100	mg/kg	TRUE	Dry	2	1307058-02	9400	1980	144	8	125	75	20	SC			Q10	80
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Aluminum	7429-90-5	FALSE	FALSE	141	50	100	mg/kg	TRUE	Dry	2			115	122		152	47.6		SC				10
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Chromium	7440-47-3	FALSE	FALSE	29.9	0.50	1.0	mg/kg	TRUE	Dry	2			27.1	110		132	68.3		SC				100
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cobalt	7440-48-4	FALSE	FALSE	41.1	1.0	2.0	mg/kg	TRUE	Dry	2			37.5	110		135	64.7		SC				110
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Copper	7440-50-8	FALSE	FALSE	1770	2.0	4.0	mg/kg	TRUE	Dry	2			1770	100		126	74.6		SC				120
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Iron	7439-89-6	FALSE	FALSE	7530	50	100	mg/kg	TRUE	Dry	2			6480	116		134	66.2		SC				130
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	60.5	1.5	3.0	mg/kg	TRUE	Dry	2			57.0	106		127	72.8		SC				140
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Magnesium	7439-95-4	FALSE	FALSE	31800	25	50	mg/kg	TRUE	Dry	2			29200	109		130	70.2		SC				150
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Manganese	7439-96-5	FALSE	FALSE	70.5	2.5	5.0	mg/kg	TRUE	Dry	2			61.1	115		132	68.2		SC				160
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Nickel	7440-02-0	FALSE	FALSE	17.3	2.5	5.0	mg/kg	TRUE	Dry	2			16.3	106		145	55.2		SC				180
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Potassium	7440-09-7	FALSE	FALSE	ND	250	500	mg/kg	TRUE	Dry	2			39.8			215	0		SC			U	190
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Antimony	7440-36-0	FALSE	FALSE	65.8	1.0	2.0	mg/kg	TRUE	Dry	2			66.1	100		158	41.2		SC				20
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Selenium	7782-49-2	FALSE	FALSE	12.2	1.0	2.0	mg/kg	TRUE	Dry	2			10.0	122		159	41		SC				200
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Silver	7440-22-4	FALSE	FALSE	6.24	0.50	1.0	mg/kg	TRUE	Dry	2			5.91	106		154	45.8		SC				220

LABNAME	LABSAMPID	QCTYPE	MATRIX	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	RPTtoMDL	BASIS	DILUTION	SOURCEID	SOURCERES	SPIKELEVEL	RECOVERY	RPD	UPPERCL	LOWERCL	RPDCL	ANALYST	PSOLIDS	LNOTE	ANOTE	ANALYTEORDER
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Sodium	7440-23-5	FALSE	FALSE	ND	25	50	mg/kg	TRUE	Dry	2			72.6			298	0		SC			U	230
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Thallium	7440-28-0	FALSE	FALSE	6.50	2.5	5.0	mg/kg	TRUE	Dry	2			9.51	68		169	30.5		SC				250
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Vanadium	7440-62-2	FALSE	FALSE	19.2	1.0	2.0	mg/kg	TRUE	Dry	2			17.6	109		135	65.9		SC				280
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Zinc	7440-66-6	FALSE	FALSE	51.7	4.0	8.0	mg/kg	TRUE	Dry	2			47.6	109		157	43.2		SC				290
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	307	1.0	2.0	mg/kg	TRUE	Dry	2			253	121		139	60.9		SC				30
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Barium	7440-39-3	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2			1.60			138	62.5		SC			U	40
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Beryllium	7440-41-7	FALSE	FALSE	5.32	0.05	0.10	mg/kg	TRUE	Dry	2			4.91	108		139	61.2		SC				50
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cadmium	7440-43-9	FALSE	FALSE	11.3	0.25	0.50	mg/kg	TRUE	Dry	2			10.9	103		128	70.6		SC				70
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Calcium	7440-70-2	FALSE	FALSE	55000	50	100	mg/kg	TRUE	Dry	2			44300	124		132	68.6		SC				80

QUALIFIER	DESCRIPTION
J	The reported result for this analyte should be considered an estimated value.
Q10	The analyte concentration in the unfortified sample is significantly greater than the concentration spiked into the matrix spike and matrix spike duplicate. The reported spike recovery is not a meaningful measure of the dataset's analytical accuracy.
Q4	The matrix spike and/or matrix spike duplicate associated with this sample did not meet recovery criteria for this analyte (see MS/MSD results for this batch in QC summary)
U	This analyte was not detected.

From: Natalia.Raykhman@CH2M.com [Natalia.Raykhman@CH2M.com]
To: Dennis.Shelton@CH2M.com [Dennis.Shelton@CH2M.com]
CC:
Subject: FW: Metals and Bioaccessible metals analysis results for Iron King Mine April-May 2013 Sampling SDG 13210B
Sent: Wednesday, August 21, 2013 11:51:08
Attachment 1: 13210b_total_metals.pdf
Attachment 2: 13210b_total_metals.xls
Attachment 3: 13210b_in vitro_metals.pdf
Attachment 4: 13210b_in vitro_metals.xls
Attachment 5: 13210b_bioaccess calc.xls
Attachment 6: IKHS_July 2013 BioPV_QC.xlsx

From: searles, zizi [mailto:searles.zizi@epa.gov]
Sent: Friday, August 16, 2013 4:55 PM
To: Raykhman, Natalia/SCO
Subject: FW: Metals and Bioaccessible metals analysis results for Iron King Mine April-May 2013 Sampling SDG 13210B

From: Berges, Jack
Sent: Friday, August 16, 2013 4:53 PM
To: searles, zizi
Subject: Metals and Bioaccessible metals analysis results for Iron King Mine April-May 2013 Sampling SDG 13210B

Metals and bioaccessible metals analysis results for Iron King Mine April-May 2013 Sampling SDG 13210B, project R13S75, are attached.

Jack Berges
Chemist, US EPA Region 9 Laboratory
1337 South 46th Street Bldg 201
Richmond, CA 94804
P: 510-412-2332 F: 510-412-2302
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Time	Type	Duration	Units	Sequence	Res	EScale	SAMPLE	LOCATION	INSPECTOR	LAT	LONG	NOTE	Flags	As	As Error	Pb	Pb Error	Cu	Cu Error	Zn	Zn Error	Se	Se Error	Ni	Ni Error	Hg	Hg Error	Mo	Mo Error	Zr	Zr Error	Sr	Sr Error	U	U Error	Rb	Rb Error	Th	Th Error	W	W Error	Co	Co Error	Fe	Fe Error	Mn	Mn Error
7/11/2013 8:47	Soil	60	ppm	Final			pv trench		ZIZI Searles					30.52	6.06	15.26	5.64	34.7	15.57	284.56	20	< LOD	4.08	< LOD	56.82	< LOD	8.62	< LOD	5.18	176.98	7.73	185.03	6.57	< LOD	8.92	37.82	3.61	< LOD	5.72	< LOD	62.21	< LOD	187.61	41211.32	414.12	899.65	89.69
7/11/2013 8:55	Soil	60	ppm	Final			yavapai rd 005		ZIZI Searles					28.42	6.12	18.08	5.84	43.99	16.07	196.38	17.13	< LOD	3.79	< LOD	54.28	< LOD	8.99	< LOD	5.21	215.39	8.34	192.72	6.72	< LOD	8.51	34.43	3.45	< LOD	6.3	< LOD	62.47	< LOD	179.54	38188	400.15	837.04	87.32
7/11/2013 9:02	Soil	60	ppm	Final			yavapai rd 004		ZIZI Searles					81.05	9.24	43.86	7.75	53.2	17.21	419.03	24.55	< LOD	4.45	< LOD	57.93	< LOD	8.97	< LOD	5.32	168.29	7.86	189.65	6.84	< LOD	9.09	34.28	3.59	7.61	4.68	< LOD	66	< LOD	200.75	44753.35	443.51	712.87	86.17
7/11/2013 9:09	Soil	60	ppm	Final			yavapai rd 003		ZIZI Searles					30.1	5.83	10.21	5.26	28.56	15.29	171.66	16.15	< LOD	3.69	< LOD	55.41	< LOD	8.63	< LOD	5.25	174.79	7.82	208.82	6.99	< LOD	9	34.19	3.51	8.2	4.37	< LOD	60.92	< LOD	183.7	39053.17	405	775.1	85.22
7/11/2013 9:17	Soil	60	ppm	Final			yavapai rd 002		ZIZI Searles					32.62	6.6	24.65	6.36	31.64	15.43	208.39	17.43	< LOD	3.83	< LOD	54.48	< LOD	8.24	< LOD	5.16	177.58	7.83	200.55	6.86	< LOD	9.23	42.74	3.8	< LOD	6.53	< LOD	57.34	< LOD	179.99	38264.79	400.63	687.32	81.64
7/11/2013 9:22	Soil	60	ppm	Final			yavapai rd a stockpile 006		ZIZI Searles					66.58	10.13	89.08	9.94	44.21	16.69	306.05	21.21	< LOD	4.31	< LOD	58.44	< LOD	9.19	< LOD	5.35	184.06	8.19	235.65	7.54	< LOD	9.68	42.88	3.92	< LOD	6.95	< LOD	65.2	< LOD	204.08	46739.65	451.19	803.34	89.59
7/11/2013 9:29	Soil	60	ppm	Final			yavapai rd a stockpile007		ZIZI Searles					38.13	6.91	30.58	6.55	42.65	15.48	160.41	15.37	< LOD	3.72	< LOD	53.01	< LOD	8.26	< LOD	4.98	118.87	6.71	181.8	6.41	< LOD	8.9	34.8	3.47	< LOD	6.3	< LOD	58.32	251.41	124.64	41514.48	408.95	826.77	85.75
7/11/2013 9:36	Soil	60	ppm	Final			yavapai rd native 8		ZIZI Searles					10.54	4.88	15.66	5.51	26.94	13.91	58.31	10.03	< LOD	3.68	< LOD	50.52	< LOD	7.71	< LOD	5.01	259.4	8.42	178.62	6.14	< LOD	9.88	70.23	4.43	10.21	4.45	< LOD	51.01	< LOD	148.79	28394.04	326.6	513.62	67.95
7/11/2013 11:11	Soil	60	ppm	Final			test 1 Gulch (Bio-1 George)		ZIZI Searles	34.49979806	-112.240325			169.76	15.03	184.5	13.79	55.56	17.67	715.91	32.01	< LOD	4.73	< LOD	58.4	< LOD	10.36	< LOD	5.45	188.03	8.44	243.84	7.81	< LOD	9.63	37.19	3.78	< LOD	7.98	< LOD	70.24	< LOD	211.41	48994.26	470.15	843.54	92.98
7/11/2013 11:21	Soil	60	ppm	Final			test 2 Gulch (Bio-2 George)		ZIZI Searles	34.49959347	-112.240003			221.09	16.85	227.63	15.18	44.34	17.22	454.75	25.96	< LOD	4.81	< LOD	60.35	< LOD	9.5	< LOD	5.36	170.65	8.23	249.45	7.91	< LOD	9.94	38.32	3.88	< LOD	8.62	< LOD	70.3	< LOD	217.4	52179.07	486.41	787.78	92.23
7/11/2013 11:29	Soil	60	ppm	Final			test 3 Gulch (Bio-3 George)		ZIZI Searles	34.49932286	-112.2404901			153.36	12.87	117.12	11.06	33.04	15.71	257.52	19.29	< LOD	4.45	< LOD	55.38	< LOD	8.79	< LOD	5.23	152	7.56	210.21	7.07	< LOD	9.76	50.72	4.12	8.82	5.26	< LOD	58.24	< LOD	175.43	35988.38	391.58	419.43	70.54
7/11/2013 15:03	Soil	60	ppm	Final			Test Bio-1 13330 Wells (Sandy)		ZIZI Searles	34.504406°	-112.232280°			313.58	23.92	641.63	24.36	262.64	25.68	890.42	35.1	< LOD	5.38	< LOD	60.4	< LOD	9.7	< LOD	5.45	212.72	8.8	265.62	8.04	< LOD	10.49	60.42	4.56	< LOD	12.01	< LOD	68.14	253.55	136.53	45887.66	448.86	889.8	93.16
7/11/2013 15:07	Soil	60	ppm	Final			Test Bio-2 13330 Wells (Sandy)		ZIZI Searles	34.504261°	-112.232329°			164.16	18.26	373.56	18.96	180.71	23.12	1440.71	44.67	< LOD	4.96	< LOD	61.04	< LOD	10.18	< LOD	5.51	181.68	8.19	197.26	7.03	< LOD	9.96	49.05	4.2	< LOD	9.93	< LOD	78.06	267.26	136.83	45128.87	449.21	1017.55	98.29
7/11/2013 15:14	Soil	60	ppm	Final			test 3 sandy (background test near driveway)		ZIZI Searles	34.504267°	-112.232223°			75.62	11.95	168.3	12.52	206.81	22.53	942.99	34.63	< LOD	4.2	59.59	37.77	< LOD	9.27	< LOD	5.19	197.64	8.09	232.78	7.22	< LOD	9.41	51.11	4.03	< LOD	8.06	< LOD	70.88	213.68	118.22	37250.97	388.29	1047.61	93.14
7/11/2013 15:31	Soil	60	ppm	Final			Test 1-13336 Wells		ZIZI Searles	34.504422°	-112.232250°			611.08	43.12	2394.16	47.5	230.67	25.51	2098.05	54.51	10.59	5.22	< LOD	61.53	< LOD	12.06	< LOD	5.54	186.18	8.66	214.09	7.48	< LOD	10.95	42.46	4.31	< LOD	21.09	< LOD	85.53	< LOD	224.94	54192.15	498.81	498.21	81.58
7/11/2013 15:37	Soil	60	ppm	Final			Test 2-13336 wells		ZIZI Searles	34.504495°	-112.232203°			155.5	24.05	808.81	27.21	182.93	23.03	2102.96	53.27	< LOD	5.28	< LOD	59.17	< LOD	10.9	< LOD	5.49	163.08	7.94	215.02	7.28	< LOD	9.97	47.4	4.15	< LOD	12.83	< LOD	82.22	215.93	130.86	42208.86	430.88	1165.35	102.18
7/11/2013 15:41	Soil	60	ppm	Final			Retest-1 13336 Wells		ZIZI Searles	34.504422°	-112.232250°			207.33	20.97	567.13	22.26	167.56	21.65	1567.23	44.84	< LOD	5.09	77.32	38.32	< LOD	10.13	< LOD	5.08	70.49	5.71	108.08	5.14	< LOD	7.66	20.35	2.88	< LOD	10.54	< LOD	78.08	< LOD	161.33	30804.43	357.87	752.52	82.73
7/11/2013 15:44	Soil	60	ppm	Final			Retest2 -13336 wells 2		ZIZI Searles	34.504495°	-112.232203°			576.51	43.19	2425.19	47.9	342.46	29.3	2274.2	56.84	9.63	5.14	< LOD	61.36	< LOD	11.63	< LOD	5.65	172.65	8.44	206.76	7.38	< LOD	10.38	44.13	4.3	< LOD	20.96	< LOD	85.02	< LOD	212.21	48186.32	471.87	942.11	98.22
7/11/2013 15:49	Soil	60	ppm	Final			Test 3 13336 wells 3(backyard)		ZIZI Searles	34.504643°	-112.232162°			29.24	9.35	97.67	10.39	129.48	20.8	837.06	34.12	< LOD	3.94	< LOD	58.43	< LOD	9.09	< LOD	5.6	199.36	8.26	152.74	6.21	< LOD	9.49	36.89	3.74	10.1	5.27	< LOD	67.01	< LOD	209.86	49648.42	468.7	678.72	86.46
7/11/2013 15:56	Soil	60	ppm	Final			13336 wells Bio- 1		ZIZI Searles	34.504422°	-112.232250°			290.66	25.2	784.4	26.68	282.02	26.23	1635.99	46.85	< LOD	5.63	< LOD	56.7	< LOD	10.52	8.46	3.77	204.61	8.64	259.42	7.9	< LOD	9.92	39.4	3.88	< LOD	13.1	< LOD	77.24	< LOD	177.38	35016.71	390.01	809.86	87.13
7/11/2013 15:58	Soil	60	ppm	Final			13336 wells Bio-2		ZIZI Searles	34.504495°	-112.232203°			432.13	33.52	1433.84	36.32	281.41	26.68	1896.69	51.09	< LOD	6.59	< LOD	58.07	< LOD	10.83	< LOD	5.5	174.44	8.27	217.57	7.39	< LOD	10.64	45.94	4.26	< LOD	16.68	< LOD	82.97	< LOD	199.44	43853.1	442.12	622.17	82.9
7/11/2013 16:40	Soil	60	ppm	Final			helca and prescott (trench-midway)		ZIZI Searles	34.502588°	-112.237735°			32.82	8.24	68.77	8.83	50.82	16.28	171.72	15.99	< LOD	4.24	< LOD	54.56	< LOD	8.6	< LOD	5.32	204.81	8.2	209.54	6.96	< LOD	9.73	46.86	3.96	< LOD	6.99	< LOD	57.05	176.44	109.72	31284.49	360.22	777.84	83.18
7/11/2013 16:44	Soil	60	ppm	Final			helca and prescott 2 (next to porch)		ZIZI Searles	34.502607°	-112.237744°			37.94	11.98	198.23	13.7	84.58	18.11	815.85	32.7	< LOD	4.34	< LOD	56.19	< LOD	9.21	< LOD	5.25	203.99	8.45	281.96	8.04	< LOD	9.04	41.37	3.74	10.53	5.79	< LOD	66.75	< LOD	174.13	35295.61	383.71	809.51	85.94
7/11/2013 16:51	Soil	60	ppm	Final			prescott st tailings		ZIZI Searles	34.502605°	-112.237577°			145.04	11.78	68.62	9.13	260.39	25.82	2105.17	53.53	< LOD	4.56	< LOD	59.81	< LOD	10.94	< LOD	5.58	263.16	9.38	232.61	7.57	< LOD	9.96	44.08	4	7.47	4.95	< LOD	82.25	< LOD	200.52	44422.62	443.77	1117.9	101.54
7/11/2013 17:14	Soil	60	ppm	Final			hill landscape 1		ZIZI Searles	34.505122°	-112.240730°			21.45	5.96	24.6	6.22	54.91	16.06	126.34	13.89	< LOD	3.77	67.71	36.93	< LOD	8.32	< LOD	5.18	239.93	8.56	229.56	7.12	< LOD	9.31	51.27	3.98	8.51	4.46	< LOD	58.35	< LOD	165.17	33266.9	363.97	651	77.56
7/11/2013 17:15	Soil	60	ppm	Final			hill landscape 2		ZIZI Searles	34.505134°	-112.240726°			29.39	5.88	11.31	5.41	54.77	16.75	90.51	12.75	< LOD	4.08	< LOD	58.13	< LOD	9.06	< LOD	5.36	199.81	8.21	212.14	7.06	< LOD	8.92	35.46	3.55	7.65	4.35	< LOD	63.48	< LOD	198.29	45274.61	437.02	1083.9	97.43
7/11/2013 17:19	Soil	60	ppm	Final			hill landscape 3		ZIZI Searles	34.505141°	-112.240747°			18.09	5.77	20.04	6.05	53.02	16.8	82.23	12.33	< LOD	3.88	64.24	38.6	< LOD	8.93	< LOD	5.27	174.77	7.8	188.57	6.7	< LOD	9.08	39.07	3.69	7.52	4.43	< LOD	62.86	< LOD	182.83	38954.09	406.77	878.42	89.78
7/11/2013 17:31	Soil	60	ppm	Final			hill blue house 1		ZIZI Searles	34.505141°	-112.240689°			20.82	5.53	15.6	5.59	27.77	15.02	76.58	11.71	< LOD	3.82	72.64	35.99	< LOD	8.54	< LOD	4.97	78.75	6.24	243.63	7.39	< LOD	8.31	21.85	2.93	< LOD	5.96	< LOD	61.6	< LOD	89.65	9082.16	194.54	1272.47	95.99
7/11/2013 17:38	Soil	60	ppm	Final			hill blue house 2		ZIZI Searles	34.505124°	-112.240646°			19.66	5.65	16.7	5.83	37.63	15.78	105.94	13.21	< LOD	4.02	< LOD	55.3	< LOD	8.24	< LOD	5.01	125.35	7.12	235.39	7.38	< LOD	8.79	34.39	3.48	< LOD	6.38	< LOD	57.13	< LOD	163.1	31388.32	362.53	827.5	86.01
7/11/2013 17:41	Soil	60	ppm	Final			hill blue house 3		ZIZI Searles	34.505191°	-112.240774°			< LOD	12.81	110.46	10.24	80.76	16.8	241.78	17.93	< LOD	3.99	< LOD	50.12	< LOD	8.43	< LOD	4.98	166.67	8.2	505.81	10.24	< LOD	9.94	46.55	3.85	< LOD	7.27	< LOD	57.35	< LOD	141.31	25164	311.19	484.38	67.15

CLIENT	PROJECT	PROJECTNUM	LabName	Sample ID	Lab ID	Analyte	In-vitro mg/kg	Total mg/kg	%bio-access.
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Arsenic	95.9	441	21.7%
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Lead	122	1440	8.5%
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Arsenic	84.2	387	21.8%
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Lead	134	1380	9.7%
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Arsenic	43.0	330	13.0%
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Lead	10.7	396	2.7%

LABNAME	LABSAMPID	QCTYPE	MATRIX	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	RPToMDL	BASIS	DILUTION	SOURCEID	SOURCERES	SPIKELEVEL	RECOVERY	RPD	UPPERCL	LOWERCL	RPDCL	ANALYST	PSOLIDS	LNOTE	ANOTE	ANALYTEORDER
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Aluminum	7429-90-5	FALSE	FALSE	ND	50	100	mg/kg	TRUE	Dry	2								SC			U	10
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Chromium	7440-47-3	FALSE	FALSE	ND	0.50	1.0	mg/kg	TRUE	Dry	2								SC			U	100
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cobalt	7440-48-4	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Dry	2								SC			U	110
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Copper	7440-50-8	FALSE	FALSE	ND	2.0	4.0	mg/kg	TRUE	Dry	2								SC			U	120
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Iron	7439-89-6	FALSE	FALSE	ND	50	100	mg/kg	TRUE	Dry	2								SC			U	130
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Dry	2								SC			U	140
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Manganese	7439-96-5	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2								SC			U	160
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Molybdenum	7439-98-7	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2								SC			U	170
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Nickel	7440-02-0	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2								SC			U	180
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Potassium	7440-09-7	FALSE	FALSE	ND	250	500	mg/kg	TRUE	Dry	2								SC			U	190
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Antimony	7440-36-0	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Dry	2								SC			U	20
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Selenium	7782-49-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Dry	2								SC			U	200
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Silver	7440-22-4	FALSE	FALSE	ND	0.50	1.0	mg/kg	TRUE	Dry	2								SC			U	220
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Thallium	7440-28-0	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2								SC			U	250
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Vanadium	7440-62-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Dry	2								SC			U	280
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Zinc	7440-66-6	FALSE	FALSE	ND	4.0	8.0	mg/kg	TRUE	Dry	2								SC			U	290
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Dry	2								SC			U	30
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Beryllium	7440-41-7	FALSE	FALSE	ND	0.05	0.10	mg/kg	TRUE	Dry	2								SC			U	50
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cadmium	7440-43-9	FALSE	FALSE	ND	0.25	0.50	mg/kg	TRUE	Dry	2								SC			U	70
EPA Region 9 Laboratory	B13F059-BLK1	Blank	Solid	06/13/2013 11:15:00	06/17/2013 18:40:53	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Calcium	7440-70-2	FALSE	FALSE	ND	50	100	mg/kg	TRUE	Dry	2								SC			U	80
EPA Region 9 Laboratory	B13F059-BLK2	Blank	Solid	06/13/2013 11:15:00	07/19/2013 16:15:42	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Magnesium	7439-95-4	FALSE	FALSE	ND	25	50	mg/kg	TRUE	Dry	2								SC			U	150
EPA Region 9 Laboratory	B13F059-BLK2	Blank	Solid	06/13/2013 11:15:00	07/19/2013 16:15:42	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Sodium	7440-23-5	FALSE	FALSE	ND	25	50	mg/kg	TRUE	Dry	2								SC			U	230
EPA Region 9 Laboratory	B13F059-BLK2	Blank	Solid	06/13/2013 11:15:00	07/19/2013 16:15:42	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Barium	7440-39-3	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2								SC			U	40
EPA Region 9 Laboratory	B13F059-MS1	Matrix Spike	Solid	06/13/2013 11:15:00	06/17/2013 18:58:50	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	453	1.5	3.0	mg/kg	TRUE	Dry	2	1306007-01	359	99.0	95		125	75	20	SC				140
EPA Region 9 Laboratory	B13F059-MS1	Matrix Spike	Solid	06/13/2013 11:15:00	06/17/2013 18:58:50	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	663	1.0	2.0	mg/kg	TRUE	Dry	2	1306007-01	238	396	107		125	75	20	SC				30
EPA Region 9 Laboratory	B13F059-MSD1	Matrix Spike Dup	Solid	06/13/2013 11:15:00	06/17/2013 19:06:07	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	472	1.5	3.0	mg/kg	TRUE	Dry	2	1306007-01	359	99.0	115	4	125	75	20	SC				140
EPA Region 9 Laboratory	B13F059-MSD1	Matrix Spike Dup	Solid	06/13/2013 11:15:00	06/17/2013 19:06:07	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	696	1.0	2.0	mg/kg	TRUE	Dry	2	1306007-01	238	396	116	5	125	75	20	SC				30
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Aluminum	7429-90-5	FALSE	FALSE	123	50	100	mg/kg	TRUE	Dry	2			115	107		152	47.6		SC				10
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Chromium	7440-47-3	FALSE	FALSE	28.0	0.50	1.0	mg/kg	TRUE	Dry	2			27.2	103		132	68.3		SC				100
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cobalt	7440-48-4	FALSE	FALSE	37.3	1.0	2.0	mg/kg	TRUE	Dry	2			37.5	100		135	64.7		SC				110
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Copper	7440-50-8	FALSE	FALSE	1560	2.0	4.0	mg/kg	TRUE	Dry	2			1770	88		126	74.6		SC				120
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Iron	7439-89-6	FALSE	FALSE	6740	50	100	mg/kg	TRUE	Dry	2			6480	104		134	66.2		SC				130
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	58.9	1.5	3.0	mg/kg	TRUE	Dry	2			57.0	103		127	72.8		SC				140
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Manganese	7439-96-5	FALSE	FALSE	62.7	2.5	5.0	mg/kg	TRUE	Dry	2			61.1	103		132	68.2		SC				160
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Nickel	7440-02-0	FALSE	FALSE	16.3	2.5	5.0	mg/kg	TRUE	Dry	2			16.3	100		145	55.2		SC				180
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Potassium	7440-09-7	FALSE	FALSE	ND	250	500	mg/kg	TRUE	Dry	2			39.8			215	0		SC			U	190
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Antimony	7440-36-0	FALSE	FALSE	61.8	1.0	2.0	mg/kg	TRUE	Dry	2			66.1	93		158	41.2		SC				20
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Selenium	7782-49-2	FALSE	FALSE	10.3	1.0	2.0	mg/kg	TRUE	Dry	2			10.0	103		159	41		SC				200
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Silver	7440-22-4	FALSE	FALSE	6.10	0.50	1.0	mg/kg	TRUE	Dry	2			5.91	103		154	45.8		SC				220
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Thallium	7440-28-0	FALSE	FALSE	9.61	2.5	5.0	mg/kg	TRUE	Dry	2			9.52	101		169	30.5		SC				250
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Vanadium	7440-62-2	FALSE	FALSE	19.2	1.0	2.0	mg/kg	TRUE	Dry	2			17.6	109		135	65.9		SC				280
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Zinc	7440-66-6	FALSE	FALSE	47.3	4.0	8.0	mg/kg	TRUE	Dry	2			47.6	99		157	43.2		SC				290
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	284	1.0	2.0	mg/kg	TRUE	Dry	2			254	112		139	60.9		SC				30
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Beryllium	7440-41-7	FALSE	FALSE	4.97	0.05	0.10	mg/kg	TRUE	Dry	2			4.91	101		139	61.2		SC				50
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cadmium	7440-43-9	FALSE	FALSE	10.7	0.25	0.50	mg/kg	TRUE	Dry	2			10.9	98		128	70.6		SC				70
EPA Region 9 Laboratory	B13F059-SRM1	Reference	Solid	06/13/2013 11:15:00	06/17/2013 18:46:54	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Calcium	7440-70-2	FALSE	FALSE	47300	50	100	mg/kg	TRUE	Dry	2			44300	107		132	68.6		SC				80
EPA Region 9 Laboratory	B13F059-SRM2	Reference	Solid	06/13/2013 11:15:00	07/19/2013 16:20:59	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Magnesium	7439-95-4	FALSE	FALSE	28000	25	50	mg/kg	TRUE	Dry	2			29300	96		130	70.2		SC				150
EPA Region 9 Laboratory	B13F059-SRM2	Reference	Solid	06/13/2013 11:15:00	07/19/2013 16:20:59	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Sodium	7440-23-5	FALSE	FALSE	ND	25	50	mg/kg	TRUE	Dry	2			72.6			298	0		SC			U	230
EPA Region 9 Laboratory	B13F059-SRM2	Reference	Solid	06/13/2013 11:15:00	07/19/2013 16:20:59	B13F059	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Barium	7440-39-3	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2			1.60			138	62.5		SC			U	40
EPA Region 9 Laboratory	B13F065-BLK1	Blank	Solid	06/13/2013 08:55:00	06/14/2013 08:52:17	B13F065	Solids, Dry Weight	3550C/SOP460	Solids, Dry Weight (Prep)	% Solids	NA	FALSE	FALSE	ND	1	1	%	FALSE	Wet	1								WD			U	1
EPA Region 9 Laboratory	B13F065-DUP1	Duplicate	Solid	06/13/2013 08:55:00	06/14/2013 08:52:17	B13F065	Solids, Dry Weight	3550C/SOP460	Solids, Dry Weight (Prep)	% Solids	NA	FALSE	FALSE	68	1	1	%	FALSE	Wet	1	1306007-10	67			2			20	WD	66.8			1
EPA Region 9 Laboratory	B13F077-BLK1	Blank	Solid	07/09/2013 09:25:00	07/11/2013 14:02:01	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1								SC			U	140
EPA Region 9 Laboratory	B13F077-BLK1	Blank	Solid	07/09/2013 09:25:00	07/11/2013 14:02:01	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	1.2	1.0	2.0	mg/kg	TRUE	Wet	1								SC			C1, J	30
EPA Region 9 Laboratory	B13F077-BLK2	Blank	Solid	07/09/2013 09:25:00	07/11/2013 14:08:00	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1								SC			U	140
EPA Region 9 Laboratory	B13F077-BLK2	Blank	Solid	07/09/2013 09:25:00	07/11/2013 14:08:00	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Wet	1								SC			U	30
EPA Region 9 Laboratory	B13F077-BS1	LCS	Solid	07/09/2013 09:25:00	07/11/2013 14:14:01	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	102	1.5	3.0	mg/kg	TRUE	Wet	1			100	102		120	80	200	SC				140
EPA Region 9 Laboratory	B13F077-BS1	LCS	Solid	07/09/2013 09:25:00	07/11/2013 14:14:01	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	402	1.0	2.0	mg/kg	TRUE	Wet	1			400	100		120	80	200	SC				30
EPA Region 9 Laboratory	B13F077-DUP1	Duplicate	Solid	07/09/2013 09:25:00	07/11/2013 15:19:29	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1	1306007-05	ND						20	SC			U	140
EPA Region 9 Laboratory	B13F077-DUP1	Duplicate	Solid	07/09/2013 09:25:00	07/11/2013 15:19:29	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	110	1.0	2.0	mg/kg	TRUE	Wet	1	1306007-05	110			0.4			20	SC				30
EPA Region 9 Laboratory	B13F077-MS1	Matrix Spike	Solid	07/09/2013 09:25:00	07/11/2013 15:25:18	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	395	1.5	3.0	mg/kg	TRUE	Wet	1	1306007-05	ND	500	79		125	75	20	SC				140
EPA Region 9 Laboratory	B13F077-MS1	Matrix Spike	Solid	07/09/2013 09:25:00	07/11/2013 15:25:18	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	1770	1.0	2.0	mg/kg	TRUE	Wet	1	1306007-05	110	2000	83		125	75	20	SC				30
EPA Region 9 Laboratory	B13F077-SRM1	Reference	Solid	07/09/2013 09:25:00	07/11/2013 14:19:59	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	1070	1.5	3.0	mg/kg	TRUE	Wet	1			1300	82		200	0		SC				140
EPA Region 9 Laboratory	B13F077-SRM1	Reference	Solid	07/09/2013 09:25:00	07/11/2013 14:19:59	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	56.4	1.0	2.0	mg/kg	TRUE	Wet	1			89.3	63		200	0		SC				30
EPA Region 9 Laboratory	B13F077-SRM2	Reference	Solid	07/09/2013 09:25:00	07/11/2013 14:25:57	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	1060	1.5	3.0	mg/kg	TRUE	Wet	1			1300	81		200	0		SC				140
EPA Region 9 Laboratory	B13F077-SRM2	Reference	Solid	07/09/2013 09:25:00	07/11/2013 14:25:57	B13F077	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	56.3	1.0	2.0	mg/kg	TRUE	Wet	1			89.0	63		200	0		SC				30
EPA Region 9 Laboratory	B13G071-BLK1	Blank	Solid	07/18/2013 09:46:00	07/19/2013 16:40:27	B13G071	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Wet	1								SC			U	30
EPA Region 9 Laboratory	B13G071-BLK2	Blank	Solid	07/18/2013 09:46:00	07/19/2013 16:44:27	B13G071	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Wet	1								SC			U	30
EPA Region 9 Laboratory	B13G071-BS1	LCS	Solid	07/18/2013 09:46:00	07/19/2013 16:48:35	B13G071	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	390	1.0	2.0	mg/kg	TRUE	Wet	1			400	97		120	80	200	SC				30
EPA Region 9 Laboratory	B13G071-SRM1	Reference	Solid	07/18/2013 09:46:00	07/19/2013 16:54:35	B13G071	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	55.8	1.0	2.0	mg/kg	TRUE	Wet	1			89.1	63		200	0		SC				30
EPA Region 9 Laboratory	B13G071-SRM2	Reference	Solid	07/18/2013 09:46:00	07/19/2013 17:03:23	B13G071	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	56.2	1.0	2.0	mg/kg	TRUE	Wet	1			89.3	63		200	0		SC				30

QUALIFIER	DESCRIPTION
C1	The reported concentration for this analyte is below the quantitation limit.
J	The reported result for this analyte should be considered an estimated value.
U	This analyte was not detected.

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street Building 201
Richmond, CA 94804

Date: **8/16/2013**

Subject: **Analytical Testing Results - Project R13S75**
SDG: 13210B

From: **Brenda Bettencourt, Director**
EPA Region 9 Laboratory
MTS-2

To: **Zi Zi Searles**
California Site Cleanup Section 1
SFD-7-1

Attached are the results from the analysis of samples from the **Iron King Mine April-May 2013 Sampling** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Analyses included in this report:

Analysis of In Vitro Gastric Extracts by ICP

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 13210B
Project Number: R13S75	**75 Hawthorne Street**	**Reported:** 08/16/13 16:43
Project: Iron King Mine April-May 2013 Sampling	**San Francisco CA, 94105**	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
13330WellsSt	1307058-01	Soil	07/11/13 15:03	07/26/13 15:50
13336WellsSt	1307058-02	Soil	07/11/13 15:56	07/26/13 15:50
GulchYard	1307058-03	Soil	07/11/13 11:00	07/26/13 15:50

SDG ID 13210B

Samples were analyzed using an in-vitro bioaccesibility leaching method. Calculated bio-accessibilities are as follows:

Sample ID	Lab ID	Analyte	In-vitro mg/kg	Total mg/kg	%bio-access.
13330WellsSt	1307058-01	Arsenic	95.9	441	21.7%
13330WellsSt	1307058-01	Lead	122	1440	8.5%
13336WellsSt	1307058-02	Arsenic	84.2	387	21.8%
13336WellsSt	1307058-02	Lead	134	1380	9.7%
GulchYard	1307058-03	Arsenic	43.0	330	13.0%
GulchYard	1307058-03	Lead	10.7	396	2.7%

Work Order(s)

1307058

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 13210B
Project Number: R13S75	**75 Hawthorne Street**	**Reported:** 08/16/13 16:43
Project: Iron King Mine April-May 2013 Sampling	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: **1307058-01**									**Soil - Sampled: 07/11/13 15:03**
Sample ID: **13330WellsSt**									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic		96		2	mg/kg	B13H019	08/13/13	08/13/13	6010C/SOP503
Lead		120		3	"	"	"	"	6010C/SOP503
Lab ID: **1307058-02**									**Soil - Sampled: 07/11/13 15:56**
Sample ID: **13336WellsSt**									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic		84		2	mg/kg	B13H019	08/13/13	08/13/13	6010C/SOP503
Lead		130		3	"	"	"	"	6010C/SOP503
Lab ID: **1307058-03**									**Soil - Sampled: 07/11/13 11:00**
Sample ID: **GulchYard**									**Analysis of In Vitro Gastric Digestion Extracts**
Arsenic		43		2	mg/kg	B13H019	08/13/13	08/13/13	6010C/SOP503
Lead		11		3	"	"	"	"	6010C/SOP503

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B13H019 - In Vitro Gastric Extraction - In Vitro Extraction, ICP, Sample Basis										**Prepared & Analyzed: 08/13/13**
										Analysis of In Vitro Gastric Digestion Extracts - Quality Control
Blank (B13H019-BLK1)										
Arsenic	ND	U	2	mg/kg						
Lead	ND	U	3	"						
Blank (B13H019-BLK2)										
Arsenic	ND	U	2	mg/kg						
Lead	ND	U	3	"						
LCS (B13H019-BS1)										
Arsenic	402		2	mg/kg	400		101	80-120		200
Lead	98.3		3	"	100		98	80-120		200
Duplicate (B13H019-DUP1)		**Source: 1307058-01**								
Arsenic	94.1		2	mg/kg		95.9			2	20
Lead	127		3	"		122			4	20
Matrix Spike (B13H019-MS1)		**Source: 1307058-01**								
Arsenic	2,010		2	mg/kg	2000	95.9	96	75-125		20
Lead	558		3	"	500	122	87	75-125		20
Reference (B13H019-SRM1)										
Arsenic	57		2	mg/kg	88.7		64	0-200		
Lead	1,060		3	"	1290		82	0-200		
Reference (B13H019-SRM2)										
Arsenic	56.2		2	mg/kg	88.7		63	0-200		
Lead	1,060		3	"	1290		82	0-200		

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 13210B
Project Number: R13S75	**75 Hawthorne Street**	**Reported:** 08/16/13 16:43
Project: Iron King Mine April-May 2013 Sampling	**San Francisco CA, 94105**	

Qualifiers and Comments

U	Not Detected
NR	Not Reported
RE1, RE2, etc:	Result is from a sample re-analysis.

CLIENT	PROJECT	PROJECTNUM	LabName	SAMPLENAME	LABSAMPID	MATRIX	RPTMATRIX	SAMPDATE	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	Result	DL	RL	UNITS	RPTtoMDL	BASIS	DILUTION	SPIKELEVEL	RECOVERY	UPPERCL	LOWERCL	ANALYST	PSOLIDS	LNOTE	ANOTE	LATITUDE	LONGITUDE	sComment	SNOTE1	SNOTE2	SNOTE3	SNOTE4	SNOTE5	SNOTE6	SNOTE7	SNOTE8	SNOTE9	SNOTE10	ANALYTEORDER
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/13/2013 08:30:00	08/13/2013 16:46:05	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	120	1.5	3.0	mg/kg	TRUE	Wet	1					SC																		140
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/13/2013 08:30:00	08/13/2013 16:46:05	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	96	1.0	2.0	mg/kg	TRUE	Wet	1					SC																		30
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/13/2013 08:30:00	08/13/2013 17:08:29	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	130	1.5	3.0	mg/kg	TRUE	Wet	1					SC																		140
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/13/2013 08:30:00	08/13/2013 17:08:29	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	84	1.0	2.0	mg/kg	TRUE	Wet	1					SC																		30
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/13/2013 08:30:00	08/13/2013 17:14:53	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	11	1.5	3.0	mg/kg	TRUE	Wet	1					SC																		140
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/13/2013 08:30:00	08/13/2013 17:14:53	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	43	1.0	2.0	mg/kg	TRUE	Wet	1					SC																		30

LABNAME	LABSAMPID	QCTYPE	MATRIX	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	RPTtoMDL	BASIS	DILUTION	SOURCEID	SOURCERES	SPIKELEVEL	RECOVERY	RPD	UPPERCL	LOWERCL	RPDCL	ANALYST	PSOLIDS	LNOTE	ANOTE	ANALYTEORDER
EPA Region 9 Laboratory	B13H019-BLK1	Blank	Solid	08/13/2013 08:30:00	08/13/2013 16:09:05	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1								SC			U	140
EPA Region 9 Laboratory	B13H019-BLK1	Blank	Solid	08/13/2013 08:30:00	08/13/2013 16:09:05	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Wet	1								SC			U	30
EPA Region 9 Laboratory	B13H019-BLK2	Blank	Solid	08/13/2013 08:30:00	08/13/2013 16:13:33	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Wet	1								SC			U	140
EPA Region 9 Laboratory	B13H019-BLK2	Blank	Solid	08/13/2013 08:30:00	08/13/2013 16:13:33	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Wet	1								SC			U	30
EPA Region 9 Laboratory	B13H019-BS1	LCS	Solid	08/13/2013 08:30:00	08/13/2013 16:17:58	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	98.3	1.5	3.0	mg/kg	TRUE	Wet	1			100	98		120	80	200	SC				140
EPA Region 9 Laboratory	B13H019-BS1	LCS	Solid	08/13/2013 08:30:00	08/13/2013 16:17:58	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	402	1.0	2.0	mg/kg	TRUE	Wet	1			400	101		120	80	200	SC				30
EPA Region 9 Laboratory	B13H019-DUP1	Duplicate	Solid	08/13/2013 08:30:00	08/13/2013 16:53:12	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	127	1.5	3.0	mg/kg	TRUE	Wet	1	1307058-01	122			4			20	SC				140
EPA Region 9 Laboratory	B13H019-DUP1	Duplicate	Solid	08/13/2013 08:30:00	08/13/2013 16:53:12	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	94.1	1.0	2.0	mg/kg	TRUE	Wet	1	1307058-01	95.9			2			20	SC				30
EPA Region 9 Laboratory	B13H019-MS1	Matrix Spike	Solid	08/13/2013 08:30:00	08/13/2013 16:59:30	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	558	1.5	3.0	mg/kg	TRUE	Wet	1	1307058-01	122	500	87		125	75	20	SC				140
EPA Region 9 Laboratory	B13H019-MS1	Matrix Spike	Solid	08/13/2013 08:30:00	08/13/2013 16:59:30	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	2010	1.0	2.0	mg/kg	TRUE	Wet	1	1307058-01	95.9	2000	96		125	75	20	SC				30
EPA Region 9 Laboratory	B13H019-SRM1	Reference	Solid	08/13/2013 08:30:00	08/13/2013 16:23:31	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	1060	1.5	3.0	mg/kg	TRUE	Wet	1			1290	82		200	0		SC				140
EPA Region 9 Laboratory	B13H019-SRM1	Reference	Solid	08/13/2013 08:30:00	08/13/2013 16:23:31	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	57.0	1.0	2.0	mg/kg	TRUE	Wet	1			88.7	64		200	0		SC				30
EPA Region 9 Laboratory	B13H019-SRM2	Reference	Solid	08/13/2013 08:30:00	08/13/2013 16:32:56	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Lead	7439-92-1	FALSE	FALSE	1060	1.5	3.0	mg/kg	TRUE	Wet	1			1290	82		200	0		SC				140
EPA Region 9 Laboratory	B13H019-SRM2	Reference	Solid	08/13/2013 08:30:00	08/13/2013 16:32:56	B13H019	In Vitro Extraction, ICP, Sample Basis	6010C/SOP503	In Vitro Gastric Extraction	Arsenic	7440-38-2	FALSE	FALSE	56.2	1.0	2.0	mg/kg	TRUE	Wet	1			88.7	63		200	0		SC				30

QUALIFIER	DESCRIPTION
U	This analyte was not detected.

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street Building 201
Richmond, CA 94804

Date: **8/16/2013**

Subject: **Analytical Testing Results - Project R13S75**
SDG: 13210B

From: **Brenda Bettencourt, Director**
EPA Region 9 Laboratory
MTS-2

To: **Zi Zi Searles**
California Site Cleanup Section 1
SFD-7-1

Attached are the results from the analysis of samples from the **Iron King Mine April-May 2013 Sampling** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Analyses included in this report:

Metals by ICP

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 13210B
Project Number: R13S75	**75 Hawthorne Street**	**Reported:** 08/16/13 15:12
Project: Iron King Mine April-May 2013 Sampling	**San Francisco CA, 94105**	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
13330WellsSt	1307058-01	Soil	07/11/13 15:03	07/26/13 15:50
13336WellsSt	1307058-02	Soil	07/11/13 15:56	07/26/13 15:50
GulchYard	1307058-03	Soil	07/11/13 11:00	07/26/13 15:50

SDG ID 13210B

Work Order(s)

1307058

Total metals: Soil samples were dried at 37 degree C then sieved through a No. 70 (212um) screen prior to preparation and analysis.

United States Environmental Protection Agency
Region 9 Laboratory

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Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 13210B
Project Number: R13S75	**75 Hawthorne Street**	**Reported:** 08/16/13 15:12
Project: Iron King Mine April-May 2013 Sampling	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: **1307058-01**									**Soil - Sampled: 07/11/13 15:03**
Sample ID: **13330WellsSt**									**Metals by EPA 6000/7000 Series Methods**
Aluminum		20,000		100	mg/kg wet	B13H062	08/12/13	08/13/13	6010C/SOP503
Antimony		11		2	"	"	"	"	6010C/SOP503
Arsenic		440		2	"	"	"	"	6010C/SOP503
Barium		210		5	"	"	"	"	6010C/SOP503
Beryllium		0.54		0.10	"	"	"	"	6010C/SOP503
Cadmium		6.3		0.50	"	"	"	"	6010C/SOP503
Calcium		12,000		100	"	"	"	"	6010C/SOP503
Chromium		31		1	"	"	"	"	6010C/SOP503
Cobalt		11		2	"	"	"	"	6010C/SOP503
Copper		230		4	"	"	"	"	6010C/SOP503
Iron		41,000		100	"	"	"	"	6010C/SOP503
Lead		1,400		3	"	"	"	"	6010C/SOP503
Magnesium		6,100		50	"	"	"	"	6010C/SOP503
Manganese		670		5	"	"	"	"	6010C/SOP503
Molybdenum		ND	U	5	"	"	"	"	6010C/SOP503
Nickel		23		5	"	"	"	"	6010C/SOP503
Potassium		5,300		500	"	"	"	"	6010C/SOP503
Selenium		3.8		2	"	"	"	"	6010C/SOP503
Silver		11		1	"	"	"	"	6010C/SOP503
Sodium		390		50	"	"	"	"	6010C/SOP503
Thallium		ND	U	5	"	"	"	"	6010C/SOP503
Vanadium		54		2	"	"	"	"	6010C/SOP503
Zinc		1,400		8	"	"	"	"	6010C/SOP503
Lab ID: **1307058-02**									**Soil - Sampled: 07/11/13 15:56**
Sample ID: **13336WellsSt**									**Metals by EPA 6000/7000 Series Methods**
Aluminum		17,000		100	mg/kg wet	B13H062	08/12/13	08/13/13	6010C/SOP503
Antimony		7.8	J, Q4	2	"	"	"	"	6010C/SOP503
Arsenic		390		2	"	"	"	"	6010C/SOP503
Barium		190		5	"	"	"	"	6010C/SOP503
Beryllium		0.56		0.10	"	"	"	"	6010C/SOP503
Cadmium		7.1		0.50	"	"	"	"	6010C/SOP503
Calcium		9,400		100	"	"	"	"	6010C/SOP503
Chromium		30		1	"	"	"	"	6010C/SOP503
Cobalt		10		2	"	"	"	"	6010C/SOP503
Copper		240		4	"	"	"	"	6010C/SOP503
Iron		37,000		100	"	"	"	"	6010C/SOP503
Lead		1,400		3	"	"	"	"	6010C/SOP503
Magnesium		5,400	J, Q4	50	"	"	"	"	6010C/SOP503
Manganese		550		5	"	"	"	"	6010C/SOP503
Molybdenum		ND	U	5	"	"	"	"	6010C/SOP503

United States Environmental Protection Agency
Region 9 Laboratory

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Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 13210B
Project Number: R13S75	**75 Hawthorne Street**	**Reported:** 08/16/13 15:12
Project: Iron King Mine April-May 2013 Sampling	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID:	**1307058-02**								**Soil - Sampled: 07/11/13 15:56**
Sample ID:	**13336WellsSt**								**Metals by EPA 6000/7000 Series Methods**
Nickel		24		5	mg/kg wet	B13H062	08/12/13	08/13/13	6010C/SOP503
Potassium		5,400		500	"	"	"	"	6010C/SOP503
Selenium		3.5		2	"	"	"	"	6010C/SOP503
Silver		9.7		1	"	"	"	"	6010C/SOP503
Sodium		310		50	"	"	"	"	6010C/SOP503
Thallium		ND	U	5	"	"	"	"	6010C/SOP503
Vanadium		46		2	"	"	"	"	6010C/SOP503
Zinc		1,700		8	"	"	"	"	6010C/SOP503
Lab ID:	**1307058-03**								**Soil - Sampled: 07/11/13 11:00**
Sample ID:	**GulchYard**								**Metals by EPA 6000/7000 Series Methods**
Aluminum		19,000		100	mg/kg wet	B13H062	08/12/13	08/13/13	6010C/SOP503
Antimony		2.9		2	"	"	"	"	6010C/SOP503
Arsenic		330		2	"	"	"	"	6010C/SOP503
Barium		130		5	"	"	"	"	6010C/SOP503
Beryllium		0.41		0.10	"	"	"	"	6010C/SOP503
Cadmium		2.2		0.50	"	"	"	"	6010C/SOP503
Calcium		9,400		100	"	"	"	"	6010C/SOP503
Chromium		25		1	"	"	"	"	6010C/SOP503
Cobalt		13		2	"	"	"	"	6010C/SOP503
Copper		71		4	"	"	"	"	6010C/SOP503
Iron		45,000		100	"	"	"	"	6010C/SOP503
Lead		400		3	"	"	"	"	6010C/SOP503
Magnesium		6,600		50	"	"	"	"	6010C/SOP503
Manganese		560		5	"	"	"	"	6010C/SOP503
Molybdenum		ND	U	5	"	"	"	"	6010C/SOP503
Nickel		18		5	"	"	"	"	6010C/SOP503
Potassium		3,400		500	"	"	"	"	6010C/SOP503
Selenium		3.4		2	"	"	"	"	6010C/SOP503
Silver		2.3		1	"	"	"	"	6010C/SOP503
Sodium		140		50	"	"	"	"	6010C/SOP503
Thallium		ND	U	5	"	"	"	"	6010C/SOP503
Vanadium		79		2	"	"	"	"	6010C/SOP503
Zinc		540		8	"	"	"	"	6010C/SOP503

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Project Number: R13S75	**75 Hawthorne Street**	**Reported:** 08/16/13 15:12
Project: Iron King Mine April-May 2013 Sampling	**San Francisco CA, 94105**	

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B13H062 - 3050B Sld Acid Dig - Metals by 6010										**Prepared: 08/12/13 Analyzed: 08/13/13**
										Metals by EPA 6000/7000 Series Methods - Quality Control
Blank (B13H062-BLK1)										
Aluminum	ND	U	100	mg/kg wet						
Antimony	ND	U	2	"						
Arsenic	ND	U	2	"						
Barium	ND	U	5	"						
Beryllium	ND	U	0.1	"						
Cadmium	ND	U	0.5	"						
Calcium	ND	U	100	"						
Chromium	ND	U	1	"						
Cobalt	ND	U	2	"						
Copper	ND	U	4	"						
Iron	ND	U	100	"						
Lead	ND	U	3	"						
Magnesium	ND	U	50	"						
Manganese	ND	U	5	"						
Molybdenum	ND	U	5	"						
Nickel	ND	U	5	"						
Potassium	ND	U	500	"						
Selenium	ND	U	2	"						
Silver	ND	U	1	"						
Sodium	ND	U	50	"						
Thallium	ND	U	5	"						
Vanadium	ND	U	2	"						
Zinc	ND	U	8	"						
Matrix Spike (B13H062-MS1)		**Source: 1307058-02**								
Aluminum	17,700	Q10	100	mg/kg wet	385	16,900	**204**	75-125		20
Antimony	30.4		2	"	96.2	7.8	**24**	75-125		20
Arsenic	769		2	"	385	387	99	75-125		20
Barium	550		5	"	385	191	93	75-125		20
Beryllium	9.61		0.1	"	9.62	0.556	94	75-125		20
Cadmium	15.8		0.5	"	9.62	7.09	91	75-125		20
Calcium	11,300	Q10	100	"	1920	9,400	98	75-125		20
Chromium	65.2		1	"	38.5	29.6	93	75-125		20
Cobalt	96.7		2	"	96.2	10.2	90	75-125		20
Copper	285	Q10	4	"	48.1	238	97	75-125		20
Iron	37,200	Q10	100	"	192	36,700	**243**	75-125		20
Lead	1,480	Q10	3	"	96.2	1,380	112	75-125		20
Magnesium	7,340		50	"	1920	5,440	99	75-125		20
Manganese	628	Q10	5	"	96.2	551	80	75-125		20
Molybdenum	74.8		5	"	96.2	ND	78	75-125		20
Nickel	111		5	"	96.2	24.1	91	75-125		20

United States Environmental Protection Agency
Region 9 Laboratory

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Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 13210B
Project Number: R13S75	**75 Hawthorne Street**	**Reported:** 08/16/13 15:12
Project: Iron King Mine April-May 2013 Sampling	**San Francisco CA, 94105**	

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B13H062 - 3050B Sld Acid Dig - Metals by 6010									**Prepared: 08/12/13 Analyzed: 08/13/13**	
									Metals by EPA 6000/7000 Series Methods - Quality Control	
Matrix Spike (B13H062-MS1)		**Source: 1307058-02**								
Potassium	7,440		500	"	1920	5,380	107	75-125		20
Selenium	372		2	"	385	3.46	96	75-125		20
Silver	19.3		1	"	9.62	9.71	100	75-125		20
Sodium	2,100		50	"	1920	311	93	75-125		20
Thallium	346		5	"	385	ND	90	75-125		20
Vanadium	137		2	"	96.2	45.9	95	75-125		20
Zinc	1,790	Q10	8	"	96.2	1,680	113	75-125		20
Matrix Spike Dup (B13H062-MSD1)		**Source: 1307058-02**								
Aluminum	19,600	Q10	100	mg/kg wet	396	16,900	**666**	75-125	10	20
Antimony	30.8		2	"	99.0	7.8	**23**	75-125	1	20
Arsenic	806		2	"	396	387	106	75-125	5	20
Barium	609		5	"	396	191	106	75-125	10	20
Beryllium	10.1		0.1	"	9.90	0.556	97	75-125	5	20
Cadmium	16.3		0.5	"	9.90	7.09	93	75-125	3	20
Calcium	12,300	Q10	100	"	1980	9,400	**144**	75-125	8	20
Chromium	68.8		1	"	39.6	29.6	99	75-125	5	20
Cobalt	107		2	"	99.0	10.2	98	75-125	11	20
Copper	317	Q10	4	"	49.5	238	**160**	75-125	11	20
Iron	39,900	Q10	100	"	198	36,700	**NR**	75-125	7	20
Lead	1,510	Q10	3	"	99.0	1,380	**134**	75-125	2	20
Magnesium	7,940		50	"	1980	5,440	**126**	75-125	8	20
Manganese	682	Q10	5	"	99.0	551	**132**	75-125	8	20
Molybdenum	78.8		5	"	99.0	ND	80	75-125	5	20
Nickel	118		5	"	99.0	24.1	95	75-125	6	20
Potassium	7,590		500	"	1980	5,380	111	75-125	2	20
Selenium	392		2	"	396	3.46	98	75-125	5	20
Silver	20.1		1	"	9.90	9.71	105	75-125	4	20
Sodium	2,400		50	"	1980	311	106	75-125	13	20
Thallium	363		5	"	396	ND	92	75-125	5	20
Vanadium	141		2	"	99.0	45.9	96	75-125	3	20
Zinc	1,880	Q10	8	"	99.0	1,680	**201**	75-125	5	20
Reference (B13H062-SRM1)										
Aluminum	141		100	mg/kg wet	115		122	47.6-152		
Antimony	65.8		2	"	66.1		100	41.2-158		
Arsenic	307		2	"	253		121	60.9-139		
Barium	ND	U	5	"	1.60			62.5-138		
Beryllium	5.32		0.1	"	4.91		108	61.2-139		
Cadmium	11.3		0.5	"	10.9		103	70.6-128		
Calcium	55,000		100	"	44300		124	68.6-132		
Chromium	29.9		1	"	27.1		110	68.3-132		

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Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 13210B
Project Number: R13S75	**75 Hawthorne Street**	**Reported:** 08/16/13 15:12
Project: Iron King Mine April-May 2013 Sampling	**San Francisco CA, 94105**	

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B13H062 - 3050B Sld Acid Dig - Metals by 6010									**Prepared: 08/12/13 Analyzed: 08/13/13**	
									Metals by EPA 6000/7000 Series Methods - Quality Control	
Reference (B13H062-SRM1)										
Cobalt	41.1		2	"	37.5		110	64.7-135		
Copper	1,770		4	"	1770		100	74.6-126		
Iron	7,530		100	"	6480		116	66.2-134		
Lead	60.5		3	"	57.0		106	72.8-127		
Magnesium	31,800		50	"	29200		109	70.2-130		
Manganese	70.5		5	"	61.1		115	68.2-132		
Nickel	17.3		5	"	16.3		106	55.2-145		
Potassium	ND	U	500	"	39.8			0-215		
Selenium	12.2		2	"	10.0		122	41-159		
Silver	6.24		1	"	5.91		106	45.8-154		
Sodium	ND	U	50	"	72.6			0-298		
Thallium	6.5		5	"	9.51		68	30.5-169		
Vanadium	19.2		2	"	17.6		109	65.9-135		
Zinc	51.7		8	"	47.6		109	43.2-157		

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Project Manager: Zi Zi Searles	**California Site Cleanup Section 1**	**SDG:** 13210B
Project Number: R13S75	**75 Hawthorne Street**	**Reported:** 08/16/13 15:12
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Qualifiers and Comments

Q4 The matrix spike and/or matrix spike duplicate associated with this sample did not meet recovery criteria for this analyte (see MS/MSD results for this batch in QC summary)

Q10 The analyte concentration in the unfortified sample is significantly greater than the concentration spiked into the matrix spike and matrix spike duplicate. The reported spike recovery is not a meaningful measure of the dataset's analytical accuracy.

J The reported result for this analyte should be considered an estimated value.

U Not Detected

NR Not Reported

RE1, RE2, etc: Result is from a sample re-analysis.

CLIENT	PROJECT	PROJECTNUM	LabName	SAMPLENAME	LABSAMPID	MATRIX	RPTMATRIX	SAMPDATE	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	Result	DL	RL	UNITS	RPToMDL	BASIS	DILUTION	SPIKELEVEL	RECOVERY	UPPERCL	LOWERCL	ANALYST	PSOLIDS	LNOTE	ANOTE	LATITUDE	LONGITUDE	sComment	SNOTE1	SNOTE2	SNOTE3	SNOTE4	SNOTE5	SNOTE6	SNOTE7	SNOTE8	SNOTE9	SNOTE10	ANALYTEORDER
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Aluminum	7429-90-5	FALSE	FALSE	20000	50	100	mg/kg	TRUE	Dry	2					SC																	10
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Chromium	7440-47-3	FALSE	FALSE	31	0.50	1.0	mg/kg	TRUE	Dry	2					SC																	100
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cobalt	7440-48-4	FALSE	FALSE	11	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	110
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Copper	7440-50-8	FALSE	FALSE	230	2.0	4.0	mg/kg	TRUE	Dry	2					SC																	120
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Iron	7439-89-6	FALSE	FALSE	41000	50	100	mg/kg	TRUE	Dry	2					SC																	130
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	1400	1.5	3.0	mg/kg	TRUE	Dry	2					SC																	140
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Magnesium	7439-95-4	FALSE	FALSE	6100	25	50	mg/kg	TRUE	Dry	2					SC																	150
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Manganese	7439-96-5	FALSE	FALSE	670	2.5	5.0	mg/kg	TRUE	Dry	2					SC																	160
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Molybdenum	7439-98-7	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2					SC			U														170
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Nickel	7440-02-0	FALSE	FALSE	23	2.5	5.0	mg/kg	TRUE	Dry	2					SC																	180
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Potassium	7440-09-7	FALSE	FALSE	5300	250	500	mg/kg	TRUE	Dry	2					SC																	190
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Antimony	7440-36-0	FALSE	FALSE	11	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	20
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Selenium	7782-49-2	FALSE	FALSE	3.8	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	200
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Silver	7440-22-4	FALSE	FALSE	11	0.50	1.0	mg/kg	TRUE	Dry	2					SC																	220
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Sodium	7440-23-5	FALSE	FALSE	390	25	50	mg/kg	TRUE	Dry	2					SC																	230
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Thallium	7440-28-0	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2					SC			U														250
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Vanadium	7440-62-2	FALSE	FALSE	54	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	280
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Zinc	7440-66-6	FALSE	FALSE	1400	4.0	8.0	mg/kg	TRUE	Dry	2					SC																	290
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	440	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	30
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Barium	7440-39-3	FALSE	FALSE	210	2.5	5.0	mg/kg	TRUE	Dry	2					SC																	40
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Beryllium	7440-41-7	FALSE	FALSE	0.54	0.05	0.10	mg/kg	TRUE	Dry	2					SC																	50
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cadmium	7440-43-9	FALSE	FALSE	6.3	0.25	0.50	mg/kg	TRUE	Dry	2					SC																	70
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13330WellsSt	1307058-01	Solid	Soil	07/11/2013 15:03:00	08/12/2013 08:14:00	08/13/2013 13:51:41	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Calcium	7440-70-2	FALSE	FALSE	12000	50	100	mg/kg	TRUE	Dry	2					SC																	80
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Aluminum	7429-90-5	FALSE	FALSE	17000	50	100	mg/kg	TRUE	Dry	2					SC																	10
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Chromium	7440-47-3	FALSE	FALSE	30	0.50	1.0	mg/kg	TRUE	Dry	2					SC																	100
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cobalt	7440-48-4	FALSE	FALSE	10	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	110
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Copper	7440-50-8	FALSE	FALSE	240	2.0	4.0	mg/kg	TRUE	Dry	2					SC																	120
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Iron	7439-89-6	FALSE	FALSE	37000	50	100	mg/kg	TRUE	Dry	2					SC																	130
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	1400	1.5	3.0	mg/kg	TRUE	Dry	2					SC																	140
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Magnesium	7439-95-4	FALSE	FALSE	5400	25	50	mg/kg	TRUE	Dry	2					SC			J, Q4														150
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Manganese	7439-96-5	FALSE	FALSE	550	2.5	5.0	mg/kg	TRUE	Dry	2					SC																	160
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Molybdenum	7439-98-7	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2					SC			U														170
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Nickel	7440-02-0	FALSE	FALSE	24	2.5	5.0	mg/kg	TRUE	Dry	2					SC																	180
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Potassium	7440-09-7	FALSE	FALSE	5400	250	500	mg/kg	TRUE	Dry	2					SC																	190
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Antimony	7440-36-0	FALSE	FALSE	7.8	1.0	2.0	mg/kg	TRUE	Dry	2					SC			J, Q4														20
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Selenium	7782-49-2	FALSE	FALSE	3.5	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	200
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Silver	7440-22-4	FALSE	FALSE	9.7	0.50	1.0	mg/kg	TRUE	Dry	2					SC																	220
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Sodium	7440-23-5	FALSE	FALSE	310	25	50	mg/kg	TRUE	Dry	2					SC																	230
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Thallium	7440-28-0	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2					SC			U														250
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Vanadium	7440-62-2	FALSE	FALSE	46	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	280
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Zinc	7440-66-6	FALSE	FALSE	1700	4.0	8.0	mg/kg	TRUE	Dry	2					SC																	290
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	390	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	30
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Barium	7440-39-3	FALSE	FALSE	190	2.5	5.0	mg/kg	TRUE	Dry	2					SC																	40
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Beryllium	7440-41-7	FALSE	FALSE	0.56	0.05	0.10	mg/kg	TRUE	Dry	2					SC																	50
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cadmium	7440-43-9	FALSE	FALSE	7.1	0.25	0.50	mg/kg	TRUE	Dry	2					SC																	70
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	13336WellsSt	1307058-02	Solid	Soil	07/11/2013 15:56:00	08/12/2013 08:14:00	08/13/2013 14:00:45	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Calcium	7440-70-2	FALSE	FALSE	9400	50	100	mg/kg	TRUE	Dry	2					SC																	80
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Aluminum	7429-90-5	FALSE	FALSE	19000	50	100	mg/kg	TRUE	Dry	2					SC																	10
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Chromium	7440-47-3	FALSE	FALSE	25	0.50	1.0	mg/kg	TRUE	Dry	2					SC																	100
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cobalt	7440-48-4	FALSE	FALSE	13	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	110
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Copper	7440-50-8	FALSE	FALSE	71	2.0	4.0	mg/kg	TRUE	Dry	2					SC																	120
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Iron	7439-89-6	FALSE	FALSE	45000	50	100	mg/kg	TRUE	Dry	2					SC																	130
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	400	1.5	3.0	mg/kg	TRUE	Dry	2					SC																	140
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Magnesium	7439-95-4	FALSE	FALSE	6600	25	50	mg/kg	TRUE	Dry	2					SC																	150
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Manganese	7439-96-5	FALSE	FALSE	560	2.5	5.0	mg/kg	TRUE	Dry	2					SC																	160
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Molybdenum	7439-98-7	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2					SC			U														170
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Nickel	7440-02-0	FALSE	FALSE	18	2.5	5.0	mg/kg	TRUE	Dry	2					SC																	180
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Potassium	7440-09-7	FALSE	FALSE	3400	250	500	mg/kg	TRUE	Dry	2					SC																	190
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Antimony	7440-36-0	FALSE	FALSE	2.9	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	20
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Selenium	7782-49-2	FALSE	FALSE	3.4	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	200
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Silver	7440-22-4	FALSE	FALSE	2.3	0.50	1.0	mg/kg	TRUE	Dry	2					SC																	220
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Sodium	7440-23-5	FALSE	FALSE	140	25	50	mg/kg	TRUE	Dry	2					SC																	230
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Thallium	7440-28-0	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2					SC			U														250
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Vanadium	7440-62-2	FALSE	FALSE	79	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	280
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Zinc	7440-66-6	FALSE	FALSE	540	4.0	8.0	mg/kg	TRUE	Dry	2					SC																	290
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	330	1.0	2.0	mg/kg	TRUE	Dry	2					SC																	30
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Barium	7440-39-3	FALSE	FALSE	130	2.5	5.0	mg/kg	TRUE	Dry	2					SC																	40
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Beryllium	7440-41-7	FALSE	FALSE	0.41	0.05	0.10	mg/kg	TRUE	Dry	2					SC																	50
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cadmium	7440-43-9	FALSE	FALSE	2.2	0.25	0.50	mg/kg	TRUE	Dry	2					SC																	70
California Site Cleanup Section 1	Iron King Mine April-May 2013 Sampling	R13S75	EPA Region 9 Laboratory	GulchYard	1307058-03	Solid	Soil	07/11/2013 11:00:00	08/12/2013 08:14:00	08/13/2013 14:26:25	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Calcium	7440-70-2	FALSE	FALSE	9400	50	100	mg/kg	TRUE	Dry	2					SC																	80

LABNAME	LABSAMPID	QCTYPE	MATRIX	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	RPToMDL	BASIS	DILUTION	SOURCEID	SOURCERES	SPIKELEVEL	RECOVERY	RPD	UPPERCL	LOWERCL	RPDCL	ANALYST	PSOLIDS	LNOTE	ANOTE	ANALYTEORDER
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Aluminum	7429-90-5	FALSE	FALSE	ND	50	100	mg/kg	TRUE	Dry	2									SC			U	10
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Chromium	7440-47-3	FALSE	FALSE	ND	0.50	1.0	mg/kg	TRUE	Dry	2									SC			U	100
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cobalt	7440-48-4	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Dry	2									SC			U	110
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Copper	7440-50-8	FALSE	FALSE	ND	2.0	4.0	mg/kg	TRUE	Dry	2									SC			U	120
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Iron	7439-89-6	FALSE	FALSE	ND	50	100	mg/kg	TRUE	Dry	2									SC			U	130
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	ND	1.5	3.0	mg/kg	TRUE	Dry	2									SC			U	140
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Magnesium	7439-95-4	FALSE	FALSE	ND	25	50	mg/kg	TRUE	Dry	2									SC			U	150
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Manganese	7439-96-5	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2									SC			U	160
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Molybdenum	7439-98-7	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2									SC			U	170
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Nickel	7440-02-0	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2									SC			U	180
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Potassium	7440-09-7	FALSE	FALSE	ND	250	500	mg/kg	TRUE	Dry	2									SC			U	190
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Antimony	7440-36-0	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Dry	2									SC			U	20
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Selenium	7782-49-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Dry	2									SC			U	200
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Silver	7440-22-4	FALSE	FALSE	ND	0.50	1.0	mg/kg	TRUE	Dry	2									SC			U	220
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Sodium	7440-23-5	FALSE	FALSE	ND	25	50	mg/kg	TRUE	Dry	2									SC			U	230
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Thallium	7440-28-0	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2									SC			U	250
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Vanadium	7440-62-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Dry	2									SC			U	280
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Zinc	7440-66-6	FALSE	FALSE	ND	4.0	8.0	mg/kg	TRUE	Dry	2									SC			U	290
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	ND	1.0	2.0	mg/kg	TRUE	Dry	2									SC			U	30
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Barium	7440-39-3	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2									SC			U	40
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Beryllium	7440-41-7	FALSE	FALSE	ND	0.05	0.10	mg/kg	TRUE	Dry	2									SC			U	50
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cadmium	7440-43-9	FALSE	FALSE	ND	0.25	0.50	mg/kg	TRUE	Dry	2									SC			U	70
EPA Region 9 Laboratory	B13H062-BLK1	Blank	Solid	08/12/2013 08:14:00	08/13/2013 13:36:15	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Calcium	7440-70-2	FALSE	FALSE	ND	50	100	mg/kg	TRUE	Dry	2									SC			U	80
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Aluminum	7429-90-5	FALSE	FALSE	17700	50	100	mg/kg	TRUE	Dry	2	1307058-02	16900	385	204		125	75	20	SC			Q10	10
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Chromium	7440-47-3	FALSE	FALSE	65.2	0.50	1.0	mg/kg	TRUE	Dry	2	1307058-02	29.6	38.5	93		125	75	20	SC				100
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cobalt	7440-48-4	FALSE	FALSE	96.7	1.0	2.0	mg/kg	TRUE	Dry	2	1307058-02	10.2	96.2	90		125	75	20	SC				110
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Copper	7440-50-8	FALSE	FALSE	285	2.0	4.0	mg/kg	TRUE	Dry	2	1307058-02	238	48.1	97		125	75	20	SC			Q10	120
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Iron	7439-89-6	FALSE	FALSE	37200	50	100	mg/kg	TRUE	Dry	2	1307058-02	36700	192	243		125	75	20	SC			Q10	130
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	1480	1.5	3.0	mg/kg	TRUE	Dry	2	1307058-02	1380	96.2	112		125	75	20	SC			Q10	140
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Magnesium	7439-95-4	FALSE	FALSE	7340	25	50	mg/kg	TRUE	Dry	2	1307058-02	5440	1920	99		125	75	20	SC				150
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Manganese	7439-96-5	FALSE	FALSE	628	2.5	5.0	mg/kg	TRUE	Dry	2	1307058-02	551	96.2	80		125	75	20	SC			Q10	160
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Molybdenum	7439-98-7	FALSE	FALSE	74.8	2.5	5.0	mg/kg	TRUE	Dry	2	1307058-02	ND	96.2	78		125	75	20	SC				170
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Nickel	7440-02-0	FALSE	FALSE	111	2.5	5.0	mg/kg	TRUE	Dry	2	1307058-02	24.1	96.2	91		125	75	20	SC				180
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Potassium	7440-09-7	FALSE	FALSE	7440	250	500	mg/kg	TRUE	Dry	2	1307058-02	5380	1920	107		125	75	20	SC				190
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Antimony	7440-36-0	FALSE	FALSE	30.4	1.0	2.0	mg/kg	TRUE	Dry	2	1307058-02	7.80	96.2	24		125	75	20	SC				20
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Selenium	7782-49-2	FALSE	FALSE	372	1.0	2.0	mg/kg	TRUE	Dry	2	1307058-02	3.46	385	96		125	75	20	SC				200
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Silver	7440-22-4	FALSE	FALSE	19.3	0.50	1.0	mg/kg	TRUE	Dry	2	1307058-02	9.71	9.62	100		125	75	20	SC				220
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Sodium	7440-23-5	FALSE	FALSE	2100	25	50	mg/kg	TRUE	Dry	2	1307058-02	311	1920	93		125	75	20	SC				230
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Thallium	7440-28-0	FALSE	FALSE	346	2.5	5.0	mg/kg	TRUE	Dry	2	1307058-02	ND	385	90		125	75	20	SC				250
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Vanadium	7440-62-2	FALSE	FALSE	137	1.0	2.0	mg/kg	TRUE	Dry	2	1307058-02	45.9	96.2	95		125	75	20	SC				280
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Zinc	7440-66-6	FALSE	FALSE	1790	4.0	8.0	mg/kg	TRUE	Dry	2	1307058-02	1680	96.2	113		125	75	20	SC			Q10	290
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	769	1.0	2.0	mg/kg	TRUE	Dry	2	1307058-02	387	385	99		125	75	20	SC				30
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Barium	7440-39-3	FALSE	FALSE	550	2.5	5.0	mg/kg	TRUE	Dry	2	1307058-02	191	385	93		125	75	20	SC				40
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Beryllium	7440-41-7	FALSE	FALSE	9.61	0.05	0.10	mg/kg	TRUE	Dry	2	1307058-02	0.556	9.62	94		125	75	20	SC				50
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cadmium	7440-43-9	FALSE	FALSE	15.8	0.25	0.50	mg/kg	TRUE	Dry	2	1307058-02	7.09	9.62	91		125	75	20	SC				70
EPA Region 9 Laboratory	B13H062-MS1	Matrix Spike	Solid	08/12/2013 08:14:00	08/13/2013 14:09:47	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Calcium	7440-70-2	FALSE	FALSE	11300	50	100	mg/kg	TRUE	Dry	2	1307058-02	9400	1920	98		125	75	20	SC			Q10	80
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Aluminum	7429-90-5	FALSE	FALSE	19600	50	100	mg/kg	TRUE	Dry	2	1307058-02	16900	396	666	10	125	75	20	SC			Q10	10
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Chromium	7440-47-3	FALSE	FALSE	68.8	0.50	1.0	mg/kg	TRUE	Dry	2	1307058-02	29.6	39.6	99	5	125	75	20	SC				100
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cobalt	7440-48-4	FALSE	FALSE	107	1.0	2.0	mg/kg	TRUE	Dry	2	1307058-02	10.2	99.0	98	11	125	75	20	SC				110
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Copper	7440-50-8	FALSE	FALSE	317	2.0	4.0	mg/kg	TRUE	Dry	2	1307058-02	238	49.5	160	11	125	75	20	SC			Q10	120
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Iron	7439-89-6	FALSE	FALSE	39900	50	100	mg/kg	TRUE	Dry	2	1307058-02	36700	198	1600	7	125	75	20	SC			Q10	130
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	1510	1.5	3.0	mg/kg	TRUE	Dry	2	1307058-02	1380	99.0	134	2	125	75	20	SC			Q10	140
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Magnesium	7439-95-4	FALSE	FALSE	7940	25	50	mg/kg	TRUE	Dry	2	1307058-02	5440	1980	126	8	125	75	20	SC				150
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Manganese	7439-96-5	FALSE	FALSE	682	2.5	5.0	mg/kg	TRUE	Dry	2	1307058-02	551	99.0	132	8	125	75	20	SC			Q10	160
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Molybdenum	7439-98-7	FALSE	FALSE	78.8	2.5	5.0	mg/kg	TRUE	Dry	2	1307058-02	ND	99.0	80	5	125	75	20	SC				170
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Nickel	7440-02-0	FALSE	FALSE	118	2.5	5.0	mg/kg	TRUE	Dry	2	1307058-02	24.1	99.0	95	6	125	75	20	SC				180
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Potassium	7440-09-7	FALSE	FALSE	7590	250	500	mg/kg	TRUE	Dry	2	1307058-02	5380	1980	111	2	125	75	20	SC				190
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Antimony	7440-36-0	FALSE	FALSE	30.8	1.0	2.0	mg/kg	TRUE	Dry	2	1307058-02	7.80	99.0	23	1	125	75	20	SC				20
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Selenium	7782-49-2	FALSE	FALSE	392	1.0	2.0	mg/kg	TRUE	Dry	2	1307058-02	3.46	396	98	5	125	75	20	SC				200
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Silver	7440-22-4	FALSE	FALSE	20.1	0.50	1.0	mg/kg	TRUE	Dry	2	1307058-02	9.71	9.90	105	4	125	75	20	SC				220
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Sodium	7440-23-5	FALSE	FALSE	2400	25	50	mg/kg	TRUE	Dry	2	1307058-02	311	1980	106	13	125	75	20	SC				230
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Thallium	7440-28-0	FALSE	FALSE	363	2.5	5.0	mg/kg	TRUE	Dry	2	1307058-02	ND	396	92	5	125	75	20	SC				250
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Vanadium	7440-62-2	FALSE	FALSE	141	1.0	2.0	mg/kg	TRUE	Dry	2	1307058-02	45.9	99.0	96	3	125	75	20	SC				280
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Zinc	7440-66-6	FALSE	FALSE	1880	4.0	8.0	mg/kg	TRUE	Dry	2	1307058-02	1680	99.0	201	5	125	75	20	SC			Q10	290
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	806	1.0	2.0	mg/kg	TRUE	Dry	2	1307058-02	387	396	106	5	125	75	20	SC				30
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Barium	7440-39-3	FALSE	FALSE	609	2.5	5.0	mg/kg	TRUE	Dry	2	1307058-02	191	396	106	10	125	75	20	SC				40
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Beryllium	7440-41-7	FALSE	FALSE	10.1	0.05	0.10	mg/kg	TRUE	Dry	2	1307058-02	0.556	9.90	97	5	125	75	20	SC				50
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cadmium	7440-43-9	FALSE	FALSE	16.3	0.25	0.50	mg/kg	TRUE	Dry	2	1307058-02	7.09	9.90	93	3	125	75	20	SC				70
EPA Region 9 Laboratory	B13H062-MSD1	Matrix Spike Dup	Solid	08/12/2013 08:14:00	08/13/2013 14:18:06	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Calcium	7440-70-2	FALSE	FALSE	12300	50	100	mg/kg	TRUE	Dry	2	1307058-02	9400	1980	144	8	125	75	20	SC			Q10	80
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Aluminum	7429-90-5	FALSE	FALSE	141	50	100	mg/kg	TRUE	Dry	2			115	122		152	47.6		SC				10
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Chromium	7440-47-3	FALSE	FALSE	29.9	0.50	1.0	mg/kg	TRUE	Dry	2			27.1	110		132	68.3		SC				100
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cobalt	7440-48-4	FALSE	FALSE	41.1	1.0	2.0	mg/kg	TRUE	Dry	2			37.5	110		135	64.7		SC				110
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Copper	7440-50-8	FALSE	FALSE	1770	2.0	4.0	mg/kg	TRUE	Dry	2			1770	100		126	74.6		SC				120
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Iron	7439-89-6	FALSE	FALSE	7530	50	100	mg/kg	TRUE	Dry	2			6480	116		134	66.2		SC				130
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Lead	7439-92-1	FALSE	FALSE	60.5	1.5	3.0	mg/kg	TRUE	Dry	2			57.0	106		127	72.8		SC				140
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Magnesium	7439-95-4	FALSE	FALSE	31800	25	50	mg/kg	TRUE	Dry	2			29200	109		130	70.2		SC				150
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Manganese	7439-96-5	FALSE	FALSE	70.5	2.5	5.0	mg/kg	TRUE	Dry	2			61.1	115		132	68.2		SC				160
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Nickel	7440-02-0	FALSE	FALSE	17.3	2.5	5.0	mg/kg	TRUE	Dry	2			16.3	106		145	55.2		SC				180
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Potassium	7440-09-7	FALSE	FALSE	ND	250	500	mg/kg	TRUE	Dry	2			39.8			215	0		SC			U	190
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Antimony	7440-36-0	FALSE	FALSE	65.8	1.0	2.0	mg/kg	TRUE	Dry	2			66.1	100		158	41.2		SC				20
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Selenium	7782-49-2	FALSE	FALSE	12.2	1.0	2.0	mg/kg	TRUE	Dry	2			10.0	122		159	41		SC				200
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Silver	7440-22-4	FALSE	FALSE	6.24	0.50	1.0	mg/kg	TRUE	Dry	2			5.91	106		154	45.8		SC				220

LABNAME	LABSAMPID	QCTYPE	MATRIX	PREPDATE	ANADATE	BATCH	METHODCODE	METHODNAME	PREPNAME	ANALYTE	CASNUMBER	SURROGATE	TIC	RESULT	DL	RL	UNITS	RPTtoMDL	BASIS	DILUTION	SOURCEID	SOURCERES	SPIKELEVEL	RECOVERY	RPD	UPPERCL	LOWERCL	RPDCL	ANALYST	PSOLIDS	LNOTE	ANOTE	ANALYTEORDER
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Sodium	7440-23-5	FALSE	FALSE	ND	25	50	mg/kg	TRUE	Dry	2			72.6			298	0		SC			U	230
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Thallium	7440-28-0	FALSE	FALSE	6.50	2.5	5.0	mg/kg	TRUE	Dry	2			9.51	68		169	30.5		SC				250
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Vanadium	7440-62-2	FALSE	FALSE	19.2	1.0	2.0	mg/kg	TRUE	Dry	2			17.6	109		135	65.9		SC				280
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Zinc	7440-66-6	FALSE	FALSE	51.7	4.0	8.0	mg/kg	TRUE	Dry	2			47.6	109		157	43.2		SC				290
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Arsenic	7440-38-2	FALSE	FALSE	307	1.0	2.0	mg/kg	TRUE	Dry	2			253	121		139	60.9		SC				30
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Barium	7440-39-3	FALSE	FALSE	ND	2.5	5.0	mg/kg	TRUE	Dry	2			1.60			138	62.5		SC			U	40
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Beryllium	7440-41-7	FALSE	FALSE	5.32	0.05	0.10	mg/kg	TRUE	Dry	2			4.91	108		139	61.2		SC				50
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Cadmium	7440-43-9	FALSE	FALSE	11.3	0.25	0.50	mg/kg	TRUE	Dry	2			10.9	103		128	70.6		SC				70
EPA Region 9 Laboratory	B13H062-SRM1	Reference	Solid	08/12/2013 08:14:00	08/13/2013 13:42:27	B13H062	Metals by 6010	6010C/SOP503	3050B Sld Acid Dig	Calcium	7440-70-2	FALSE	FALSE	55000	50	100	mg/kg	TRUE	Dry	2			44300	124		132	68.6		SC				80

QUALIFIER	DESCRIPTION
J	The reported result for this analyte should be considered an estimated value.
Q10	The analyte concentration in the unfortified sample is significantly greater than the concentration spiked into the matrix spike and matrix spike duplicate. The reported spike recovery is not a meaningful measure of the dataset's analytical accuracy.
Q4	The matrix spike and/or matrix spike duplicate associated with this sample did not meet recovery criteria for this analyte (see MS/MSD results for this batch in QC summary)
U	This analyte was not detected.

From: Natalia.Raykhman@CH2M.com [Natalia.Raykhman@CH2M.com]
To: Dennis.Shelton@CH2M.com [Dennis.Shelton@CH2M.com]
CC:
Subject: FW: Metals and Bioaccessible metals analysis results for Iron King Mine April-May 2013 Sampling SDG 13210B
Sent: Wednesday, August 21, 2013 11:51:08
Attachment 1: 13210b_total_metals.pdf
Attachment 2: 13210b_total_metals.xls
Attachment 3: 13210b_in vitro_metals.pdf
Attachment 4: 13210b_in vitro_metals.xls
Attachment 5: 13210b_bioaccess calc.xls
Attachment 6: IKHS_July 2013 BioPV_QC.xlsx

From: searles, zizi [mailto:searles.zizi@epa.gov]
Sent: Friday, August 16, 2013 4:55 PM
To: Raykhman, Natalia/SCO
Subject: FW: Metals and Bioaccessible metals analysis results for Iron King Mine April-May 2013 Sampling SDG 13210B

From: Berges, Jack
Sent: Friday, August 16, 2013 4:53 PM
To: searles, zizi
Subject: Metals and Bioaccessible metals analysis results for Iron King Mine April-May 2013 Sampling SDG 13210B

Metals and bioaccessible metals analysis results for Iron King Mine April-May 2013 Sampling SDG 13210B, project R13S75, are attached.

Jack Berges
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Environmental Services SERAS
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Edison, NJ 08837-3679
Telephone: 732-321-4200, Facsimile: 732-494-4021

DATE: 10/21/2013

TO: R. Singhvi, ERTC/EPA

FROM: Misty Barkley, Analytical Support Chemist MB

SUBJECT: Preliminary Results of Project: Iron King WA# 0-146.

Attached please find the preliminary results of the above referenced project for the following samples.

Date Received	chain of custody	No of Samples	Analysis Requested	Matrix	Lab Job No	Prelim Due	Prelim Rec
09/18/13	06608	19	IVBA	Soil	L14515	10/03/13	10/03/13

cc: G. Depasquale
J. Patel
D. Killeen
D. Aloysius
T. Johnson

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Case Narrative

Lockheed Martin

September 30, 2013

Project ID: 4101015884
ACZ Project ID: L14515

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 19 soil samples from Lockheed Martin on September 18, 2013. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L14515. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

Holding Times

All analyses were performed within EPA recommended holding times.

Sample Analysis

These samples were analyzed for inorganic parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports.

1. For Arsenic, IVBA values flagged with a "B7", arsenic was detected in the Prep Blank (PBS) above the control limits at 0.00287 mg/Kg. No further action was taken since the sample values were >10 times the concentration detected in the PBS.

2. For Arsenic, IVBA values flagged with an "M3", the MS2 recovery was 130.6%. The control limits are 75-125%. No further action was taken since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LFB) was acceptable.

3. For Arsenic, Total values flagged with an "M3", the MS/MSD recoveries were 216.2% and 72.3% respectively. The control limits are 75-125%. No further action was taken since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCSS) was acceptable.

4. For Lead, Total values flagged with an "M3", the MSD recovery was -229.6%. The control limits are 75-125%. No further action was taken since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCSS) was acceptable.

5. For Lead, IVBA values flagged with a "D2", the sample required a dilution since lead exceeded the calibration range.

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Inorganic Analytical Results

Lockheed Martin
Project ID: 4101015884
Sample ID: 417

ACZ Sample ID: ***L14515-01***
Date Sampled: *04/30/13 00:00*
Date Received: *09/18/13*
Sample Matrix: *Soil*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Arsenic (IVBA)	M6020 ICP-MS	20	3.690		*	mg/L	0.004	0.02	09/26/13 15:03	msh
Arsenic IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		15			%			09/27/13 10:46	calc
Arsenic, total (3050)	M6020 ICP-MS	20800	2550		*	mg/Kg	4	20	09/26/13 20:40	pmc
Lead (IVBA)	M6020 ICP-MS	20	0.062			mg/L	0.002	0.01	09/26/13 15:03	msh
Lead IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		0.165			%			09/27/13 10:46	calc
Lead RBA (In Vivo Drexler & Brattin Estimation)	Calculation (EPA 9200.1-86)		0.117			%			09/27/13 10:46	calc
Lead, total (3050)	M6020 ICP-MS	20800	3760		*	mg/Kg	2	10	09/26/13 20:40	pmc

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	CLPSOW390, PART F, D-98	1	90.9		*	%	0.1	0.5	09/18/13 18:07	spl

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972								09/18/13 16:03	spl
Digestion - Hot Plate	M3050B ICP-MS								09/24/13 11:36	mss2
In Vitro Bioaccessibility Assay	EPA 9200.1-86								09/24/13 13:00	brd
Sieve-250 um (60 mesh)	ASA No.9, 15-4.2.2								09/19/13 12:18	spl

** Please refer to Qualifier Reports for details.*

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Inorganic Analytical Results

Lockheed Martin
Project ID: 4101015884
Sample ID: 431

ACZ Sample ID: ***L14515-02***
Date Sampled: *04/30/13 00:00*
Date Received: *09/18/13*
Sample Matrix: *Soil*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Arsenic (IVBA)	M6020 ICP-MS	20	1.050		*	mg/L	0.004	0.02	09/26/13 15:10	msh
Arsenic IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		24			%			09/27/13 10:46	calc
Arsenic, total (3050)	M6020 ICP-MS	10300	447		*	mg/Kg	2	10	09/26/13 19:13	pmc
Lead (IVBA)	M6020 ICP-MS	20	0.883			mg/L	0.002	0.01	09/26/13 15:10	msh
Lead IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		15			%			09/27/13 10:46	calc
Lead RBA (In Vivo Drexler & Brattin Estimation)	Calculation (EPA 9200.1-86)		14			%			09/27/13 10:46	calc
Lead, total (3050)	M6020 ICP-MS	10300	572		*	mg/Kg	1	5	09/26/13 19:13	pmc

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	CLPSOW390, PART F, D-98	1	97.9		*	%	0.1	0.5	09/18/13 19:11	spl

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972								09/18/13 16:06	spl
Digestion - Hot Plate	M3050B ICP-MS								09/24/13 12:25	mss2
In Vitro Bioaccessibility Assay	EPA 9200.1-86								09/24/13 15:15	brd
Sieve-250 um (60 mesh)	ASA No.9, 15-4.2.2								09/19/13 12:22	spl

** Please refer to Qualifier Reports for details.*

ACZ Laboratories, Inc.
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Inorganic Analytical Results

Lockheed Martin
Project ID: 4101015884
Sample ID: 442

ACZ Sample ID: ***L14515-03***
Date Sampled: *04/30/13 00:00*
Date Received: *09/18/13*
Sample Matrix: *Soil*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Arsenic (IVBA)	M6020 ICP-MS	20	0.379		*	mg/L	0.004	0.02	09/26/13 15:16	msh
Arsenic IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		1.3			%			09/27/13 10:46	calc
Arsenic, total (3050)	M6020 ICP-MS	21000	2990		*	mg/Kg	4	20	09/26/13 20:56	pmc
Lead (IVBA)	M6020 ICP-MS	20	0.165			mg/L	0.002	0.01	09/26/13 15:16	msh
Lead IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		0.306			%			09/27/13 10:46	calc
Lead RBA (In Vivo Drexler & Brattin Estimation)	Calculation (EPA 9200.1-86)		0.241			%			09/27/13 10:46	calc
Lead, total (3050)	M6020 ICP-MS	21000	5390		*	mg/Kg	2	10	09/26/13 20:56	pmc

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	CLPSOW390, PART F, D-98	1	80.8		*	%	0.1	0.5	09/18/13 20:15	spl

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972								09/18/13 16:09	spl
Digestion - Hot Plate	M3050B ICP-MS								09/24/13 12:41	mss2
In Vitro Bioaccessibility Assay	EPA 9200.1-86								09/24/13 16:45	brd
Sieve-250 um (60 mesh)	ASA No.9, 15-4.2.2								09/19/13 12:26	spl

** Please refer to Qualifier Reports for details.*

ACZ Laboratories, Inc.
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Inorganic Analytical Results

Lockheed Martin
Project ID: 4101015884
Sample ID: 451

ACZ Sample ID: ***L14515-04***
Date Sampled: *04/30/13 00:00*
Date Received: *09/18/13*
Sample Matrix: *Soil*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Arsenic (IVBA)	M6020 ICP-MS	20	1.380		*	mg/L	0.004	0.02	09/26/13 15:26	msh
Arsenic IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		24			%			09/27/13 10:46	calc
Arsenic, total (3050)	M6020 ICP-MS	10300	585		*	mg/Kg	2	10	09/26/13 19:26	pmc
Lead (IVBA)	M6020 ICP-MS	20	0.788			mg/L	0.002	0.01	09/26/13 15:26	msh
Lead IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		11			%			09/27/13 10:46	calc
Lead RBA (In Vivo Drexler & Brattin Estimation)	Calculation (EPA 9200.1-86)		9.8			%			09/27/13 10:46	calc
Lead, total (3050)	M6020 ICP-MS	10300	704		*	mg/Kg	1	5	09/26/13 19:26	pmc

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	CLPSOW390, PART F, D-98	1	94.0		*	%	0.1	0.5	09/18/13 21:19	spl

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972								09/18/13 16:12	spl
Digestion - Hot Plate	M3050B ICP-MS								09/24/13 12:57	mss2
In Vitro Bioaccessibility Assay	EPA 9200.1-86								09/24/13 17:30	brd
Sieve-250 um (60 mesh)	ASA No.9, 15-4.2.2								09/19/13 12:30	spl

** Please refer to Qualifier Reports for details.*

ACZ Laboratories, Inc.
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Inorganic Analytical Results

Lockheed Martin
Project ID: 4101015884
Sample ID: 467

ACZ Sample ID: ***L14515-05***
Date Sampled: *04/30/13 00:00*
Date Received: *09/18/13*
Sample Matrix: *Soil*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Arsenic (IVBA)	M6020 ICP-MS	20	1.700		*	mg/L	0.004	0.02	09/26/13 15:29	msh
Arsenic IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		12			%			09/27/13 10:46	calc
Arsenic, total (3050)	M6020 ICP-MS	10200	1480		*	mg/Kg	2	10	09/26/13 19:29	pmc
Lead (IVBA)	M6020 ICP-MS	20	0.019			mg/L	0.002	0.01	09/26/13 15:29	msh
Lead IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		0.0			%			09/27/13 10:46	calc
Lead RBA (In Vivo Drexler & Brattin Estimation)	Calculation (EPA 9200.1-86)		0.0			%			09/27/13 10:46	calc
Lead, total (3050)	M6020 ICP-MS	10200	2860		*	mg/Kg	1	5	09/26/13 19:29	pmc

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	CLPSOW390, PART F, D-98	1	94.9		*	%	0.1	0.5	09/18/13 22:22	spl

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972								09/18/13 16:15	spl
Digestion - Hot Plate	M3050B ICP-MS								09/24/13 13:13	mss2
In Vitro Bioaccessibility Assay	EPA 9200.1-86								09/24/13 18:15	brd
Sieve-250 um (60 mesh)	ASA No.9, 15-4.2.2								09/19/13 12:34	spl

** Please refer to Qualifier Reports for details.*

ACZ Laboratories, Inc.
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Inorganic Analytical Results

Lockheed Martin
Project ID: 4101015884
Sample ID: 477

ACZ Sample ID: ***L14515-06***
Date Sampled: *04/30/13 00:00*
Date Received: *09/18/13*
Sample Matrix: *Soil*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Arsenic (IVBA)	M6020 ICP-MS	20	0.844		*	mg/L	0.004	0.02	09/26/13 15:32	msh
Arsenic IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		2.4			%			09/27/13 10:46	calc
Arsenic, total (3050)	M6020 ICP-MS	25500	3580		*	mg/Kg	5	30	09/26/13 20:59	pmc
Lead (IVBA)	M6020 ICP-MS	20	0.418			mg/L	0.002	0.01	09/26/13 15:32	msh
Lead IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		1.4			%			09/27/13 10:46	calc
Lead RBA (In Vivo Drexler & Brattin Estimation)	Calculation (EPA 9200.1-86)		1.2			%			09/27/13 10:46	calc
Lead, total (3050)	M6020 ICP-MS	25500	2960		*	mg/Kg	3	10	09/26/13 20:59	pmc

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	CLPSOW390, PART F, D-98	1	95.4		*	%	0.1	0.5	09/18/13 23:26	spl

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972								09/18/13 16:18	spl
Digestion - Hot Plate	M3050B ICP-MS								09/24/13 13:29	mss2
In Vitro Bioaccessibility Assay	EPA 9200.1-86								09/24/13 19:00	brd
Sieve-250 um (60 mesh)	ASA No.9, 15-4.2.2								09/19/13 12:38	spl

** Please refer to Qualifier Reports for details.*

ACZ Laboratories, Inc.
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Inorganic Analytical Results

Lockheed Martin
Project ID: 4101015884
Sample ID: 485

ACZ Sample ID: ***L14515-07***
Date Sampled: *04/30/13 00:00*
Date Received: *09/18/13*
Sample Matrix: *Soil*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Arsenic (IVBA)	M6020 ICP-MS	20	2.670		*	mg/L	0.004	0.02	09/26/13 15:39	msh
Arsenic IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		6.4			%			09/27/13 10:46	calc
Arsenic, total (3050)	M6020 ICP-MS	41200	4180		*	mg/Kg	8	40	09/26/13 21:03	pmc
Lead (IVBA)	M6020 ICP-MS	20	0.074			mg/L	0.002	0.01	09/26/13 15:39	msh
Lead IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		0.172			%			09/27/13 10:46	calc
Lead RBA (In Vivo Drexler & Brattin Estimation)	Calculation (EPA 9200.1-86)		0.123			%			09/27/13 10:46	calc
Lead, total (3050)	M6020 ICP-MS	41200	4290		*	mg/Kg	4	20	09/26/13 21:03	pmc

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	CLPSOW390, PART F, D-98	1	93.9		*	%	0.1	0.5	09/19/13 0:30	spl

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972								09/18/13 16:22	spl
Digestion - Hot Plate	M3050B ICP-MS								09/24/13 13:46	mss2
In Vitro Bioaccessibility Assay	EPA 9200.1-86								09/24/13 19:45	brd
Sieve-250 um (60 mesh)	ASA No.9, 15-4.2.2								09/19/13 12:42	spl

** Please refer to Qualifier Reports for details.*

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Inorganic Analytical Results

Lockheed Martin
Project ID: 4101015884
Sample ID: 486

ACZ Sample ID: ***L14515-08***
Date Sampled: *04/30/13 00:00*
Date Received: *09/18/13*
Sample Matrix: *Soil*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Arsenic (IVBA)	M6020 ICP-MS	20	1.070		*	mg/L	0.004	0.02	09/26/13 15:42	msh
Arsenic IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		6.1			%			09/27/13 10:47	calc
Arsenic, total (3050)	M6020 ICP-MS	10200	1750		*	mg/Kg	2	10	09/26/13 19:39	pmc
Lead (IVBA)	M6020 ICP-MS	20	0.122			mg/L	0.002	0.01	09/26/13 15:42	msh
Lead IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		0.319			%			09/27/13 10:47	calc
Lead RBA (In Vivo Drexler & Brattin Estimation)	Calculation (EPA 9200.1-86)		0.252			%			09/27/13 10:47	calc
Lead, total (3050)	M6020 ICP-MS	10200	3820		*	mg/Kg	1	5	09/26/13 19:39	pmc

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	CLPSOW390, PART F, D-98	1	93.2		*	%	0.1	0.5	09/19/13 1:34	spl

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972								09/18/13 16:25	spl
Digestion - Hot Plate	M3050B ICP-MS								09/24/13 14:02	mss2
In Vitro Bioaccessibility Assay	EPA 9200.1-86								09/24/13 20:30	brd
Sieve-250 um (60 mesh)	ASA No.9, 15-4.2.2								09/19/13 12:46	spl

** Please refer to Qualifier Reports for details.*

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Inorganic Analytical Results

Lockheed Martin
Project ID: 4101015884
Sample ID: 513

ACZ Sample ID: ***L14515-09***
Date Sampled: *04/29/13 00:00*
Date Received: *09/18/13*
Sample Matrix: *Soil*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Arsenic (IVBA)	M6020 ICP-MS	20	1.860		*	mg/L	0.004	0.02	09/26/13 15:45	msh
Arsenic IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		21			%			09/27/13 10:47	calc
Arsenic, total (3050)	M6020 ICP-MS	10100	888		*	mg/Kg	2	10	09/26/13 19:42	pmc
Lead (IVBA)	M6020 ICP-MS	20	0.008	B	*	mg/L	0.002	0.01	09/26/13 15:45	msh
Lead IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		0.364			%			09/27/13 10:47	calc
Lead RBA (In Vivo Drexler & Brattin Estimation)	Calculation (EPA 9200.1-86)		0.291			%			09/27/13 10:47	calc
Lead, total (3050)	M6020 ICP-MS	10100	220		*	mg/Kg	1	5	09/26/13 19:42	pmc

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	CLPSOW390, PART F, D-98	1	97.9		*	%	0.1	0.5	09/19/13 2:38	spl

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972								09/18/13 16:28	spl
Digestion - Hot Plate	M3050B ICP-MS								09/24/13 14:18	mss2
In Vitro Bioaccessibility Assay	EPA 9200.1-86								09/24/13 21:15	brd
Sieve-250 um (60 mesh)	ASA No.9, 15-4.2.2								09/19/13 12:50	spl

** Please refer to Qualifier Reports for details.*

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Inorganic Analytical Results

Lockheed Martin
Project ID: 4101015884
Sample ID: 515

ACZ Sample ID: ***L14515-10***
Date Sampled: *04/29/13 00:00*
Date Received: *09/18/13*
Sample Matrix: *Soil*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Arsenic (IVBA)	M6020 ICP-MS	200	22.70		*	mg/L	0.04	0.2	09/26/13 16:43	msh
Arsenic IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		57			%			09/27/13 10:47	calc
Arsenic, total (3050)	M6020 ICP-MS	105000	3960		*	mg/Kg	20	100	09/26/13 19:45	pmc
Lead (IVBA)	M6020 ICP-MS	20	0.004	B	*	mg/L	0.002	0.01	09/26/13 15:48	msh
Lead IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		0.182			%			09/27/13 10:47	calc
Lead RBA (In Vivo Drexler & Brattin Estimation)	Calculation (EPA 9200.1-86)		0.132			%			09/27/13 10:47	calc
Lead, total (3050)	M6020 ICP-MS	105000	220		*	mg/Kg	10	50	09/26/13 19:45	pmc

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	CLPSOW390, PART F, D-98	1	93.0		*	%	0.1	0.5	09/19/13 3:41	spl

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972								09/18/13 16:31	spl
Digestion - Hot Plate	M3050B ICP-MS								09/24/13 14:34	mss2
In Vitro Bioaccessibility Assay	EPA 9200.1-86								09/24/13 22:00	brd
Sieve-250 um (60 mesh)	ASA No.9, 15-4.2.2								09/19/13 12:54	spl

** Please refer to Qualifier Reports for details.*

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Inorganic Analytical Results

Lockheed Martin
Project ID: 4101015884
Sample ID: 527

ACZ Sample ID: ***L14515-11***
Date Sampled: *04/29/13 00:00*
Date Received: *09/18/13*
Sample Matrix: *Soil*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Arsenic (IVBA)	M6020 ICP-MS	20	3.120		*	mg/L	0.004	0.02	09/26/13 15:52	msh
Arsenic IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		4.6			%			09/27/13 10:47	calc
Arsenic, total (3050)	M6020 ICP-MS	50500	6730		*	mg/Kg	10	50	09/26/13 21:06	pmc
Lead (IVBA)	M6020 ICP-MS	20	0.047			mg/L	0.002	0.01	09/26/13 15:52	msh
Lead IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		0.0			%			09/27/13 10:47	calc
Lead RBA (In Vivo Drexler & Brattin Estimation)	Calculation (EPA 9200.1-86)		0.0			%			09/27/13 10:47	calc
Lead, total (3050)	M6020 ICP-MS	50500	9490		*	mg/Kg	5	30	09/26/13 21:06	pmc

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	CLPSOW390, PART F, D-98	1	98.5		*	%	0.1	0.5	09/19/13 4:45	spl

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972								09/18/13 16:34	spl
Digestion - Hot Plate	M3050B ICP-MS								09/24/13 14:50	mss2
In Vitro Bioaccessibility Assay	EPA 9200.1-86								09/24/13 22:45	brd
Sieve-250 um (60 mesh)	ASA No.9, 15-4.2.2								09/19/13 12:58	spl

** Please refer to Qualifier Reports for details.*

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Inorganic Analytical Results

Lockheed Martin
Project ID: 4101015884
Sample ID: 621

ACZ Sample ID: ***L14515-12***
Date Sampled: *04/30/13 00:00*
Date Received: *09/18/13*
Sample Matrix: *Soil*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Arsenic (IVBA)	M6020 ICP-MS	20	0.124		*	mg/L	0.004	0.02	09/26/13 16:04	msh
Arsenic IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		4			%			09/27/13 10:47	calc
Arsenic, total (3050)	M6020 ICP-MS	10200	310		*	mg/Kg	2	10	09/26/13 19:51	pmc
Lead (IVBA)	M6020 ICP-MS	20	0.219			mg/L	0.002	0.01	09/26/13 16:04	msh
Lead IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		18			%			09/27/13 10:47	calc
Lead RBA (In Vivo Drexler & Brattin Estimation)	Calculation (EPA 9200.1-86)		15			%			09/27/13 10:47	calc
Lead, total (3050)	M6020 ICP-MS	10200	125		*	mg/Kg	1	5	09/26/13 19:51	pmc

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	CLPSOW390, PART F, D-98	1	95.3		*	%	0.1	0.5	09/19/13 5:49	spl

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972								09/18/13 16:37	spl
Digestion - Hot Plate	M3050B ICP-MS								09/24/13 15:06	mss2
In Vitro Bioaccessibility Assay	EPA 9200.1-86								09/25/13 1:00	brd
Sieve-250 um (60 mesh)	ASA No.9, 15-4.2.2								09/19/13 13:02	spl

** Please refer to Qualifier Reports for details.*

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Inorganic Analytical Results

Lockheed Martin
Project ID: 4101015884
Sample ID: 669

ACZ Sample ID: ***L14515-13***
Date Sampled: *05/01/13 00:00*
Date Received: *09/18/13*
Sample Matrix: *Soil*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Arsenic (IVBA)	M6020 ICP-MS	20	0.314		*	mg/L	0.004	0.02	09/26/13 16:11	msh
Arsenic IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		10			%			09/27/13 10:47	calc
Arsenic, total (3050)	M6020 ICP-MS	10100	305		*	mg/Kg	2	10	09/26/13 19:55	pmc
Lead (IVBA)	M6020 ICP-MS	20	0.262			mg/L	0.002	0.01	09/26/13 16:11	msh
Lead IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		14			%			09/27/13 10:47	calc
Lead RBA (In Vivo Drexler & Brattin Estimation)	Calculation (EPA 9200.1-86)		13			%			09/27/13 10:47	calc
Lead, total (3050)	M6020 ICP-MS	10100	184		*	mg/Kg	1	5	09/26/13 19:55	pmc

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	CLPSOW390, PART F, D-98	1	98.4		*	%	0.1	0.5	09/19/13 6:53	spl

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972								09/18/13 16:40	spl
Digestion - Hot Plate	M3050B ICP-MS								09/24/13 15:23	mss2
In Vitro Bioaccessibility Assay	EPA 9200.1-86								09/25/13 2:30	brd
Sieve-250 um (60 mesh)	ASA No.9, 15-4.2.2								09/19/13 13:06	spl

** Please refer to Qualifier Reports for details.*

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Inorganic Analytical Results

Lockheed Martin
Project ID: 4101015884
Sample ID: 701

ACZ Sample ID: ***L14515-14***
Date Sampled: *05/02/13 00:00*
Date Received: *09/18/13*
Sample Matrix: *Soil*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Arsenic (IVBA)	M6020 ICP-MS	20	1.250		*	mg/L	0.004	0.02	09/26/13 16:14	msh
Arsenic IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		15			%			09/27/13 10:47	calc
Arsenic, total (3050)	M6020 ICP-MS	10100	841		*	mg/Kg	2	10	09/26/13 20:04	pmc
Lead (IVBA)	M6020 ICP-MS	20	0.172			mg/L	0.002	0.01	09/26/13 16:14	msh
Lead IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		3.5			%			09/27/13 10:47	calc
Lead RBA (In Vivo Drexler & Brattin Estimation)	Calculation (EPA 9200.1-86)		3.1			%			09/27/13 10:47	calc
Lead, total (3050)	M6020 ICP-MS	10100	490		*	mg/Kg	1	5	09/26/13 20:04	pmc

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	CLPSOW390, PART F, D-98	1	98.4		*	%	0.1	0.5	09/19/13 7:57	spl

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972								09/18/13 16:44	spl
Digestion - Hot Plate	M3050B ICP-MS								09/24/13 15:39	mss2
In Vitro Bioaccessibility Assay	EPA 9200.1-86								09/25/13 3:15	brd
Sieve-250 um (60 mesh)	ASA No.9, 15-4.2.2								09/19/13 13:10	spl

** Please refer to Qualifier Reports for details.*

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Inorganic Analytical Results

Lockheed Martin
Project ID: 4101015884
Sample ID: 820

ACZ Sample ID: ***L14515-15***
Date Sampled: *05/01/13 00:00*
Date Received: *09/18/13*
Sample Matrix: *Soil*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Arsenic (IVBA)	M6020 ICP-MS	20	1.120		*	mg/L	0.004	0.02	09/26/13 16:17	msh
Arsenic IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		17			%			09/27/13 10:47	calc
Arsenic, total (3050)	M6020 ICP-MS	10200	660		*	mg/Kg	2	10	09/26/13 20:19	pmc
Lead (IVBA)	M6020 ICP-MS	20	0.019			mg/L	0.002	0.01	09/26/13 16:17	msh
Lead IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		0.171			%			09/27/13 10:47	calc
Lead RBA (In Vivo Drexler & Brattin Estimation)	Calculation (EPA 9200.1-86)		0.122			%			09/27/13 10:47	calc
Lead, total (3050)	M6020 ICP-MS	10200	1110		*	mg/Kg	1	5	09/26/13 20:19	pmc

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	CLPSOW390, PART F, D-98	1	81.8		*	%	0.1	0.5	09/19/13 9:01	spl

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972								09/18/13 16:47	spl
Digestion - Hot Plate	M3050B ICP-MS								09/24/13 15:55	mss2
In Vitro Bioaccessibility Assay	EPA 9200.1-86								09/25/13 4:00	brd
Sieve-250 um (60 mesh)	ASA No.9, 15-4.2.2								09/19/13 13:14	spl

** Please refer to Qualifier Reports for details.*

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Inorganic Analytical Results

Lockheed Martin
Project ID: 4101015884
Sample ID: 861

ACZ Sample ID: ***L14515-16***
Date Sampled: *05/01/13 00:00*
Date Received: *09/18/13*
Sample Matrix: *Soil*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Arsenic (IVBA)	M6020 ICP-MS	20	0.281		*	mg/L	0.004	0.02	09/26/13 16:21	msh
Arsenic IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		5.7			%			09/27/13 10:47	calc
Arsenic, total (3050)	M6020 ICP-MS	10100	497		*	mg/Kg	2	10	09/26/13 20:24	pmc
Lead (IVBA)	M6020 ICP-MS	20	0.033			mg/L	0.002	0.01	09/26/13 16:21	msh
Lead IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		0.456			%			09/27/13 10:47	calc
Lead RBA (In Vivo Drexler & Brattin Estimation)	Calculation (EPA 9200.1-86)		0.373			%			09/27/13 10:47	calc
Lead, total (3050)	M6020 ICP-MS	10100	723		*	mg/Kg	1	5	09/26/13 20:24	pmc

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	CLPSOW390, PART F, D-98	1	97.8		*	%	0.1	0.5	09/19/13 10:04	spl

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972								09/18/13 16:50	spl
Digestion - Hot Plate	M3050B ICP-MS								09/24/13 16:11	mss2
In Vitro Bioaccessibility Assay	EPA 9200.1-86								09/25/13 4:45	brd
Sieve-250 um (60 mesh)	ASA No.9, 15-4.2.2								09/19/13 13:18	spl

** Please refer to Qualifier Reports for details.*

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Inorganic Analytical Results

Lockheed Martin
Project ID: 4101015884
Sample ID: 865

ACZ Sample ID: ***L14515-17***
Date Sampled: *05/01/13 00:00*
Date Received: *09/18/13*
Sample Matrix: *Soil*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Arsenic (IVBA)	M6020 ICP-MS	20	0.627		*	mg/L	0.004	0.02	09/26/13 16:27	msh
Arsenic IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		9.7			%			09/27/13 10:47	calc
Arsenic, total (3050)	M6020 ICP-MS	10100	649		*	mg/Kg	2	10	09/26/13 20:27	pmc
Lead (IVBA)	M6020 ICP-MS	20	0.016			mg/L	0.002	0.01	09/26/13 16:27	msh
Lead IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		0.155			%			09/27/13 10:47	calc
Lead RBA (In Vivo Drexler & Brattin Estimation)	Calculation (EPA 9200.1-86)		0.108			%			09/27/13 10:47	calc
Lead, total (3050)	M6020 ICP-MS	10100	1030		*	mg/Kg	1	5	09/26/13 20:27	pmc

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	CLPSOW390, PART F, D-98	1	98.0		*	%	0.1	0.5	09/19/13 11:08	spl

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972								09/18/13 16:53	spl
Digestion - Hot Plate	M3050B ICP-MS								09/24/13 16:27	mss2
In Vitro Bioaccessibility Assay	EPA 9200.1-86								09/25/13 5:30	brd
Sieve-250 um (60 mesh)	ASA No.9, 15-4.2.2								09/19/13 13:22	spl

** Please refer to Qualifier Reports for details.*

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Inorganic Analytical Results

Lockheed Martin
Project ID: 4101015884
Sample ID: 873

ACZ Sample ID: ***L14515-18***
Date Sampled: *05/01/13 00:00*
Date Received: *09/18/13*
Sample Matrix: *Soil*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Arsenic (IVBA)	M6020 ICP-MS	20	0.774		*	mg/L	0.004	0.02	09/26/13 16:30	msh
Arsenic IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		11			%			09/27/13 10:47	calc
Arsenic, total (3050)	M6020 ICP-MS	10100	680		*	mg/Kg	2	10	09/26/13 20:31	pmc
Lead (IVBA)	M6020 ICP-MS	20	0.033			mg/L	0.002	0.01	09/26/13 16:30	msh
Lead IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		0.369			%			09/27/13 10:47	calc
Lead RBA (In Vivo Drexler & Brattin Estimation)	Calculation (EPA 9200.1-86)		0.296			%			09/27/13 10:47	calc
Lead, total (3050)	M6020 ICP-MS	10100	894		*	mg/Kg	1	5	09/26/13 20:31	pmc

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	CLPSOW390, PART F, D-98	1	97.1		*	%	0.1	0.5	09/19/13 13:16	spl

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972								09/18/13 16:56	spl
Digestion - Hot Plate	M3050B ICP-MS								09/24/13 16:43	mss2
In Vitro Bioaccessibility Assay	EPA 9200.1-86								09/25/13 6:15	brd
Sieve-250 um (60 mesh)	ASA No.9, 15-4.2.2								09/19/13 13:26	spl

** Please refer to Qualifier Reports for details.*

ACZ Laboratories, Inc.
2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

Inorganic Analytical Results

Lockheed Martin
Project ID: 4101015884
Sample ID: 879

ACZ Sample ID: ***L14515-19***
Date Sampled: *05/01/13 00:00*
Date Received: *09/18/13*
Sample Matrix: *Soil*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Arsenic (IVBA)	M6020 ICP-MS	20	1.160		*	mg/L	0.004	0.02	09/26/13 16:34	msh
Arsenic IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		13			%			09/27/13 10:47	calc
Arsenic, total (3050)	M6020 ICP-MS	10200	892		*	mg/Kg	2	10	09/26/13 20:34	pmc
Lead (IVBA)	M6020 ICP-MS	20	0.007	B	*	mg/L	0.002	0.01	09/26/13 16:34	msh
Lead IVBA% (In Vitro RBA)	Calculation (EPA 9200.1-86)		0.0			%			09/27/13 10:47	calc
Lead RBA (In Vivo Drexler & Brattin Estimation)	Calculation (EPA 9200.1-86)		0.0			%			09/27/13 10:47	calc
Lead, total (3050)	M6020 ICP-MS	10200	1630		*	mg/Kg	1	5	09/26/13 20:34	pmc

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	CLPSOW390, PART F, D-98	1	95.3		*	%	0.1	0.5	09/19/13 14:20	spl

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972								09/18/13 16:59	spl
Digestion - Hot Plate	M3050B ICP-MS								09/24/13 16:59	mss2
In Vitro Bioaccessibility Assay	EPA 9200.1-86								09/25/13 7:00	brd
Sieve-250 um (60 mesh)	ASA No.9, 15-4.2.2								09/19/13 13:30	spl

** Please refer to Qualifier Reports for details.*

REAC, Edis[redacted] NJ
(732) 321-4200
EPA Contract 68-C99-223

L14515 Chain of Custody

CHAIN OF CUST[redacted] RECORD L14515

Project Name: _____
Project Number: SERAS-0146
LM Contact: Misty Barkley Phone: 732-321-4205

No: 06608
Sheet 01 of 01 (Do not copy)
(for addnl. samples use new form)

Sample Identification — **Analyses Requested**

REAC#	Sample No	Sampling Location	Matrix	Date Collected	# of Bottles	Container/Preservative	9/17/13 JVBA
	417	N/A	Soil	4/30/13	1	Ziplock Bag/~~Cold 4°C~~ Cold 4°C	✓
	431						✓
	442						✓
	451						✓
	467						✓
	477						✓
	485						✓
	486						✓
	513			4/29/13			✓
	515						✓
	527						✓
	621			4/30/13			✓
	669			5/1/13			✓
	701			5/2/13			✓
	820			5/1/13			✓
	861						✓
	865						✓
	873						✓
	879						✓

JM 9/17/13

Matrix:
A- Air — PW- Potable Water
AT- Animal Tissue — S- Soil
DL- Drum Liquids — SD- Sediment
DS- Drum Solids — SL- Sludge
GW- Groundwater — SW- Surface Water
O- Oil — TX- TCLP Extract
PR- Product — W- Water
PT- Plant Tissue — X- Other

Special Instructions: Payment = Visa Card
Call Misty Barkley

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #:
9-3066
9-3067

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished by	Date	Received by	Date	Time
All Analysis	[redacted]	9/17/13							LRC 9-18-13	10:00	

U.S. GPO: 2000-621-151

From: Dhont.Jeff@epa.gov [Dhont.Jeff@epa.gov]
To: Natalia.Raykhman@CH2M.com [Natalia.Raykhman@CH2M.com]; Dennis.Shelton@CH2M.com [Dennis.Shelton@CH2M.com]
CC:
Subject: Bioaccessibility Data
Sent: Tuesday, November 05, 2013 10:27:52
Attachment 1: image001.gif
Attachment 2: IronKingMine43891_CLPSampleIDs.pdf
Attachment 3: 0146-DLP-102113.pdf
Attachment 4: SERAS-146-DAR-101713.pdf
Attachment 5: SERAS-146-DCSV-101713.csv

Natasha/Dennis:

Here are the bioaccessibility data from Zizi's recent submission of archived Phase 2/3 XRF samples from the lab. These can be used to evaluate the UCL of the regression transformed (i.e. predicted bioavailability) values. The matter of whether the regression equation should be adjusted is still out there per my email yesterday.

Also, there is the basis here for us to compare the concentration result for input to the bioaccessibility test (i.e. the percentage is calculated using the concentrations for what went in versus what went out of the test) – these samples are sieved first – to compare to the XRF result for that same sample which is bulk (unseived). The idea is that we can then see whether the finer fraction has consistently higher arsenic or not. My understanding from Regions 2 and 8 is that this is not always true.

Jeff

From: searles, zizi
Sent: Tuesday, November 05, 2013 9:18 AM
To: DHONT, JEFF
Subject: RE: Thanks and a few more needs

Attached are the in-vitro results. To compare the samples to XRF data just reference the field ID. The field ID for the in-vitro samples and the XRF results are the same.

Spatial locations for the results can be plotted using the coordinates that correspond to the field ID.

From: DHONT, JEFF
Sent: Monday, November 04, 2013 5:20 PM
To: searles, zizi
Subject: Thanks and a few more needs

Zizi,

Thanks for the stuff you sent today. I am having trouble locating the results Dave A sent from the bioaccessibility samples you pulled from the R9 lab. They are somewhere in my outlook but I'm not having them pop up. Can you reforward please. I need to get these to Hill to recheck the UCL for bioavailability. Also, did you note which samples you collected and what their coordinates were? Hill will want to place them in space as they've done with the other in-vitro analyses. Finally, I will want to compare the sieved

raw concentration result to the result we have for those data with XRF (which is bulk soil) to see whether they were significantly or consistently higher in the sieved data (arsenic concentration).

I hope your son is feeling better.

Thanks
Jeff

Jeffrey A. Dhont
Environmental Scientist / Superfund Project Manager
U.S. Environmental Protection Agency, Region IX
75 Hawthorne Street Mail Stop SFD-6-2
San Francisco, CA 94105

(415) 972-3020
dhont.jeff@epa.gov

What's *your* lifecycle footprint?

MY96Q1	MY96Q2	MY96Q3
MY96Q4	MY96Q5	MY96Q6
MY96Q7	MY96Q8	MY96Q9
MY96R0	MY96R1	MY96R2
MY96R3	MY96R4	MY96R5
MY96R6	MY96R7	MY96R8
MY96R9	MY96S0	MY96S1
MY96S2	MY96S3	MY96S4
MY96S5	MY96S6	MY96S7
MY96S8	MY96S9	MY96T0

MY96T1	MY96T2	MY96T3
MY96T4	MY96T5	MY96T6
MY96T7	MY96T8	MY96T9
MY96W0	MY96W1	MY96W2
MY96W3	MY96W4	MY96W5
MY96W6	MY96W7	MY96W8
MY96W9	MY96X0	MY96X1
MY96X2	MY96X3	MY96X4
MY96X5	MY96X6	MY96X7
MY96X8	MY96X9	MY96Y0

MY96Y1	MY96Y2	MY96Y3
MY96Y4	MY96Y5	MY96Y6
MY96Y7	MY96Y8	MY96Y9
MY96Z0	MY96Z1	MY96Z2
MY96Z3	MY96Z4	MY96Z5
MY96Z6	MY96Z7	MY96Z8
MY96Z9	MY9700	MY9701
MY9702	MY9703	MY9704
MY9705	MY9706	MY9707
MY9708	MY9709	MY9710

MY9711	MY9712	MY9713
MY9714	MY9715	MY9716
MY9717	MY9718	MY9719
MY9720	MY9721	MY9722
MY9723	MY9724	MY9725
MY9726	MY9727	MY9728
MY9729	MY9730	MY9731
MY9732	MY9733	MY9734
MY9735	MY9736	MY9737
MY9738	MY9739	MY9740

MY9741	MY9742	MY9743
MY9744	MY9745	MY9746
MY9747	MY9748	MY9749
MY9750	MY9751	MY9752
MY9753	MY9754	MY9755
MY9756	MY9757	MY9758
MY9759	MY9760	MY9761
MY9762	MY9763	MY9764
MY9765	MY9766	MY9767
MY9768	MY9769	MY9770

MY9771	MY9772	MY9773
MY9774	MY9775	MY9776
MY9777	MY9778	MY9779
MY9780	MY9781	MY9782
MY9783	MY9784	MY9785
MY9786	MY9787	MY9788
MY9789	MY9790	MY9791
MY9792	MY9793	MY9794
MY9795	MY9796	MY9797
MY9798	MY9799	MY97A0

MY97A1	MY97A2	MY97A3
MY97A4	MY97A5	MY97A6
MY97A7	MY97A8	MY97A9
MY97B0	MY97B1	MY97B2
MY97B3	MY97B4	MY97B5
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MY97C5	MY97C6	MY97C7
MY97C8	MY97C9	MY97D0

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MY97E9	MY97F0	MY97F1
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MY97F8	MY97F9	MY97G0

MY97G1	MY97G2	MY97G3
MY97G4	MY97G5	MY97G6
MY97G7	MY97G8	MY97G9
MY97H0	MY97H1	MY97H2
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MY97H6	MY97H7	MY97H8
MY97H9	MY97J0	MY97J1
MY97J2	MY97J3	MY97J4
MY97J5	MY97J6	MY97J7
MY97J8	MY97J9	MY97K0

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MY97K4	MY97K5	MY97K6
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MY97L6	MY97L7	MY97L8
MY97L9	MY97M0	MY97M1
MY97M2	MY97M3	MY97M4
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MY97M8	MY97M9	MY97N0

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MY97N4	MY97N5	MY97N6
MY97N7	MY97N8	MY97N9
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MY97P3	MY97P4	MY97P5
MY97P6	MY97P7	MY97P8
MY97P9	MY97Q0	MY97Q1
MY97Q2	MY97Q3	MY97Q4
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MY97Q8	MY97Q9	MY97R0

MY97R1	MY97R2	MY97R3
MY97R4	MY97R5	MY97R6
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MY97W7	MY97W8	MY97W9
MY97X0	MY97X1	MY97X2
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MY97X6	MY97X7	MY97X8
MY97X9	MY97Y0	MY97Y1
MY97Y2	MY97Y3	MY97Y4
MY97Y5	MY97Y6	MY97Y7
MY97Y8	MY97Y9	MY97Z0

MY97Z1	MY97Z2	MY97Z3
MY97Z4	MY97Z5	MY97Z6
MY97Z7	MY97Z8	MY97Z9
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MY9803	MY9804	MY9805
MY9806	MY9807	MY9808
MY9809	MY9810	MY9811
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MY9815	MY9816	MY9817
MY9818	MY9819	MY9820

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MY9833	MY9834	MY9835
MY9836	MY9837	MY9838
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MY9842	MY9843	MY9844
MY9845	MY9846	MY9847
MY9848	MY9849	MY9850

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MY9863	MY9864	MY9865
MY9866	MY9867	MY9868
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MY9872	MY9873	MY9874
MY9875	MY9876	MY9877
MY9878	MY9879	MY9880

MY9881	MY9882	MY9883
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MY9887	MY9888	MY9889
MY9890	MY9891	MY9892
MY9893	MY9894	MY9895
MY9896	MY9897	MY9898
MY9899	MY98A0	

ANALYTICAL REPORT

Prepared by
Lockheed Martin Information Systems and Global Services/Environmental Services
Scientific, Engineering, Response and Analytical Services

Iron King Mine Site Hydrologic Restoration
Dewey-Humboldt, Arizona

October 2013

EPA Work Assignment No. SERAS-146
LOCKHEED MARTIN Work Order SER00146
EPA Contract No. EP-W-09-031

Submitted to
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EPA-ERT
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10/1/13

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QA/QC Officer

10/17/13

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Topic

Appendix A will be furnished on request.

Environmental Response Team/Scientific Engineering, Response and Analytical Services
2890 Woodbridge Avenue, Building 209 Annex
Edison NJ 08837

TESTING LABORATORIES INFORMATION

Analysis of Metals in Soil by SERAS SOP# 1811, *"Digestion and Analysis of Metals by Inductively Coupled Plasma/Atomic Emission Spectrometry (ICP-AES)"*

ERT/SERAS Laboratory
2890 Woodbridge Avenue
Edison, NJ 08837

All analyses were performed according to our NELAP-approved quality assurance program. The test results meet the requirements of the current NELAP standards, where applicable, except as noted in the laboratory case narrative provided. Results are intended to be considered in their entirety and apply only to those analyzed and reported herein.

ERT/SERAS Laboratory is certified by the New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID # 12023 for metals analysis in soil.

Environmental Response Team/Scientific Engineering, Response and Analytical Services
2890 Woodbridge Avenue, Building 209 Annex
Edison NJ 08837

Detailed Sample Information

SERAS Sample #	Field Sample #
R309003-01	417
R309003-02	431
R309003-03	442
R309003-04	451
R309003-05	467
R309003-06	477
R309003-07	485
R309003-08	486
R309003-09	513
R309003-10	515
R309003-11	527
R309003-12	621
R309003-13	669
R309003-14	701
R309003-15	820
R309003-16	861
R309003-17	865
R309003-18	873
R309003-19	879

Introduction

SERAS personnel, in response to WA# SERAS-146, provided analytical support for environmental samples collected from the Iron King Mine Site Hydrologic Restoration Site in Dewey-Humboldt, Arizona as described in the following table. The support also included QA/QC, data review and preparation of an analytical report containing analytical and QA/QC results.

The samples analyzed at SERAS were treated with procedures consistent with those specified in SERAS SOP #1008, *Sample Receiving, Handling and Storage* and SERAS SOP #1009, *Operation of Refrigeration Units.*

Chain of Custody #	Number of Samples	Sampling Date	Date Received	Date Analyzed	Matrix	Analysis/ Method	Laboratory	Data Package
06607	3	04/29/13	09/16/13	09/19/13 and 09/20/13	Soil	Metals/SERAS SOP# 1811	ERT/SERAS	Y 185
	9	04/30/13						
	6	05/01/13						
	1	05/02/13						

Case Narrative

Sampling was conducted as per the site-specific Quality Assurance Project Plan (QAPP) and analyzed by the analytical methods as stated in the QAPP. The laboratory reported the data to three significant figures. Any other representation of the data is the responsibility of the user. Data were validated using a Stage 4 validation done manually (S4VM) in accordance with the "Guidance for Labeling Externally Validated Data for Superfund Use." All data validation flags have been inserted into the results tables.

Metals in Soil Package Y 185

The initial analysis of samples 431, 451 and 621 for thallium resulted in concentrations with negative values for which the absolute values exceeded the reporting limit (RL) that may be indicative of matrix interference. Data for these samples were reported from diluted analyses resulting in elevated RLs.

The initial analysis of samples 442, 486, 513 and 701 for beryllium resulted in in concentrations with negative values for which the absolute values exceeded the RL that may be indicative of matrix interference. Data for these samples were reported from diluted analyses resulting in elevated RLs.

Copper was above and thallium was below the percent recovery criteria for the MS/MSD of sample 513. Copper (J) and thallium (UJ) results are qualified estimated for samples 417, 431, 442, 451, 467, 477, 485, 486, 513, 515, 527, 621, 669, 701, 820, 861, 865, 873 and 879.

Summary of Abbreviations

BFB	Bromofluorobenzene
C	Centigrade
CLP	Contract Laboratory Program
COC	Chain of Custody
conc	concentration
cont	continued
CRDL	Contract Required Detection Limit
CRQL	Contract Required Quantitation Limit
D	(Surrogate Table) value is from a diluted sample and was not calculated
Dioxin	Polychlorinated dibenzo-p-dioxins (PCDD) and Polychlorinated dibenzofurans (PCDF)
DFTPP	Decafluorotriphenylphosphine
EMPC	Estimated maximum possible concentration
GC/MS	Gas Chromatography/ Mass Spectrometry
IS	Internal Standard
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MDA	Minimum Detectable Activity
MS (BS)	Matrix Spike (Blank Spike)
MSD (BSD)	Matrix Spike Duplicate (Blank Spike Duplicate)
MW	Molecular Weight
NA	Not Applicable or Not Available
NAD	Normalized Absolute Difference
NC	Not Calculated
NR	Not Requested/Not Reported
NS	Not Spiked
% D	Percent Difference
% REC	Percent Recovery
SOP	Standard Operating Procedure
ppbv	parts per billion by volume
ppm	parts per million
pptv	parts per trillion by volume
PQL	Practical Quantitation Limit
PAL	Performance Acceptance Limit
QA/QC	Quality Assurance/Quality Control
QL	Quantitation Limit
RL	Reporting Limit
RPD	Relative Percent Difference
RSD	Relative Standard Deviation
SERAS	Scientific, Engineering, Response and Analytical Services
SIM	Selected Ion Monitoring
Sur	Surrogate
TIC	Tentatively Identified Compound
TCLP	Toxicity Characteristic Leaching Procedure
VOC	Volatile Organic Compound
*	Value exceeds the acceptable QC limits

m^3	cubic meter	g	gram	kg	kilogram	L	liter
µg	microgram	µL	microliter	mg	milligram	mL	milliliter
ng	nanogram	pg	picogram	pCi	picocurie	s	sigma

Data Validation Flags

J	Value is estimated	R	Value is unusable
J+	Value is estimated high (metals only)	U	Not detected
J-	Value is estimated low (metals only)	UJ	Not detected and RL is estimated
N	Presumptively present (Aroclors only)		

Rev. 1/14/09

Environmental Response Team/Scientific Engineering, Response and Analytical Services
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Edison NJ 08837

Table 1.1 Results of the Analysis for Metals in Soil
WA# SERAS-146 Iron King Mine site
Results Based on Dry Weight

Method SERAS SOP 1811

SERAS Laboratory Number	NA	R309003-01	R309003-02	R309003-03
Sample Number	Method Blank-091813	417	431	442
Sample Location	Lab	N/A	N/A	N/A
Percent Solids	NA	92	98	82

Analyte	Result mg/kg	RL mg/kg	Result mg/kg	RL mg/kg	Result mg/kg	RL mg/kg	Result mg/kg	RL mg/kg
Aluminum	U	8.50	11700	8.46	17800	7.12	2210	9.58
Antimony	U	1.20	63.9	1.19	6.11	1.01	119	1.35
Arsenic	U	1.00	2420	0.995	273	0.838	3840	5.64
Barium	U	0.300	71.7	0.299	182	0.251	43.4	0.338
Beryllium	U	0.100	U	0.0995	0.338	0.0838	U	0.563
Cadmium	U	0.200	5.47	0.199	3.53	0.168	0.862	0.225
Calcium	U	6.00	39800	5.97	17300	5.03	50000	6.76
Chromium	U	0.400	13.4	0.398	24.2	0.335	3.14	0.451
Cobalt	U	0.200	6.57	0.199	16.0	0.168	1.62	0.225
Copper	U	0.500	172 J	0.498	67.4 J	0.419	174 J	0.564
Iron	U	30.0	76500	29.9	35100	25.1	123000	169
Lead	U	1.00	3270	0.995	375	0.838	5740	1.13
Magnesium	U	20.0	8320	19.9	7310	16.8	1070	22.5
Manganese	U	0.300	646	0.299	781	0.251	34.3	0.338
Nickel	U	0.500	7.47	0.498	25.8	0.419	U	0.564
Potassium	U	50.0	2330	49.8	2800	41.9	1430	56.4
Selenium	U	1.80	47.7	1.79	3.15	1.51	138	2.03
Silver	U	0.500	16.6	0.498	1.65	0.419	29.6	0.564
Sodium	U	30.0	887	29.9	99.8	25.1	1550	33.8
Thallium	U	1.20	U J	1.19	U J	5.03	1.65 J	1.35
Vanadium	U	0.400	50.9	0.398	51.3	0.335	59.7	0.451
Zinc	U	2.50	2050	2.49	944	2.09	708	2.82

Table 1.1 (cont) Results of the Analysis for Metals in Soil
WA# SERAS-146 Iron King Mine site
Results Based on Dry Weight

Method SERAS SOP 1811

SERAS Laboratory Number	R309003-04	R309003-05	R309003-06	R309003-07
Sample Number	451	467	477	485
Sample Location	N/A	N/A	N/A	N/A
Percent Solids	95	95	96	95

Analyte	Result mg/kg	RL mg/kg	Result mg/kg	RL mg/kg	Result mg/kg	RL mg/kg	Result mg/kg	RL mg/kg
Aluminum	24700	7.53	20100	8.41	18300	7.85	17300	8.10
Antimony	11.0	1.06	40.2	1.19	61.8	1.11	63.3	1.14
Arsenic	603	0.886	1350	0.989	3720	4.62	4080	4.77
Barium	244	0.266	173	0.297	47.2	0.277	63.3	0.286
Beryllium	0.444	0.0886	U	0.0989	U	0.0923	0.116	0.0953
Cadmium	4.79	0.177	2.98	0.198	3.18	0.185	19.1	0.191
Calcium	16100	5.32	5910	5.94	14700	5.54	22000	5.72
Chromium	28.4	0.354	22.3	0.396	27.3	0.369	30.8	0.381
Cobalt	19.6	0.177	9.83	0.198	2.94	0.185	15.9	0.191
Copper	108 J	0.443	154 J	0.495	69.9 J	0.462	188 J	0.477
Iron	52400	26.6	66100	29.7	121000	139	86000	28.6
Lead	823	0.886	2850	0.989	3060	0.923	3740	0.953
Magnesium	10200	17.7	6710	19.8	12500	18.5	14700	19.1
Manganese	838	0.266	339	0.297	298	0.277	711	0.286
Nickel	26.3	0.443	14.2	0.495	6.78	0.462	17.8	0.477
Potassium	3930	44.3	2950	49.5	776	46.2	1420	47.7
Selenium	6.58	1.59	20.0	1.78	46.8	1.66	53.5	1.72
Silver	3.60	0.443	13.9	0.495	14.2	0.462	13.3	0.477
Sodium	195	26.6	275	29.7	305	27.7	571	28.6
Thallium	U J	5.32	U J	1.19	U J	1.11	U J	1.14
Vanadium	63.2	0.354	62.5	0.396	66.6	0.369	69.5	0.381
Zinc	1240	2.22	1110	2.47	1700	2.31	5410	2.38

Table 1.1 (cont) Results of the Analysis for Metals in Soil
WA# SERAS-146 Iron King Mine site
Results Based on Dry Weight

Method SERAS SOP 1811

SERAS Laboratory Number	R309003-08		R309003-09		R309003-10		R309003-11	
Sample Number	486		513		515		527	
Sample Location	N/A		N/A		N/A		N/A	
Percent Solids	94		98		94		99	
Analyte	Result mg/kg	RL mg/kg	Result mg/kg	RL mg/kg	Result mg/kg	RL mg/kg	Result mg/kg	RL mg/kg
Aluminum	10600	8.00	12800	8.11	25700	7.74	3570	7.15
Antimony	63.4	1.13	6.99	1.14	4.24	1.09	86.3	1.01
Arsenic	1710	0.941	838	0.954	4340	4.55	4920	4.21
Barium	83.1	0.282	87.7	0.286	147	0.273	1470	0.253
Beryllium	U	0.471	U	0.477	U	0.0911	0.149	0.0842
Cadmium	4.76	0.188	2.03	0.191	26.2	0.182	6.19	0.168
Calcium	22200	5.65	5910	5.72	16400	5.46	1740	5.05
Chromium	16.5	0.377	28.0	0.381	40.2	0.364	20.1	0.337
Cobalt	6.86	0.188	9.29	0.191	13.1	0.182	1.87	0.168
Copper	95.7 J	0.471	114 J	0.477	382 J	0.455	643 J	0.421
Iron	56000	28.2	62200	28.6	70800	27.3	45400	25.3
Lead	4100	0.941	249	0.954	226	0.911	6290	0.842
Magnesium	5390	18.8	4900	19.1	8330	18.2	477	16.8
Manganese	197	0.282	159	0.286	248	0.273	75.4	0.253
Nickel	9.00	0.471	14.2	0.477	22.6	0.455	5.69	0.421
Potassium	1860	47.1	2440	47.7	3300	45.5	2610	42.1
Selenium	35.9	1.69	22.0	1.72	16.1	1.64	3.11	1.52
Silver	21.5	0.471	1.13	0.477	1.19	0.455	78.3	0.421
Sodium	466	28.2	410	28.6	459	27.3	110	25.3
Thallium	U J	1.13	U J	1.14	U J	1.09	U J	1.01
Vanadium	53.3	0.377	66.2	0.381	59.8	0.364	35.8	0.337
Zinc	1720	2.35	462	2.38	3640	2.28	1360	2.10

Table 1.1 (cont) Results of the Analysis for Metals in Soil
WA# SERAS-146 Iron King Mine site
Results Based on Dry Weight

Method SERAS SOP 1811

SERAS Laboratory Number	R309003-12		R309003-13		R309003-14		R309003-15	
Sample Number	621		669		701		820	
Sample Location	N/A		N/A		N/A		N/A	
Percent Solids	96		98		99		82	
Analyte	Result mg/kg	RL mg/kg	Result mg/kg	RL mg/kg	Result mg/kg	RL mg/kg	Result mg/kg	RL mg/kg
Aluminum	27500	8.29	17200	8.03	17600	7.34	19900	7.67
Antimony	2.38	1.17	3.92	1.13	11.4	1.04	22.5	1.08
Arsenic	174	0.975	223	0.945	591	0.863	726	0.902
Barium	536	0.293	95.3	0.283	74.5	0.259	158	0.271
Beryllium	0.378	0.0975	U	0.0945	U	0.863	U	0.0902
Cadmium	2.69	0.195	2.06	0.189	4.68	0.173	3.06	0.180
Calcium	47700	5.85	6910	5.67	6600	5.18	5480	5.41
Chromium	40.7	0.390	16.8	0.378	20.2	0.345	22.2	0.361
Cobalt	47.0	0.195	15.7	0.189	14.9	0.173	10.7	0.180
Copper	1260 J	0.488	78.2 J	0.472	76.6 J	0.432	112 J	0.451
Iron	48400	29.3	44300	28.3	51900	25.9	57500	27.1
Lead	102	0.975	147	0.945	363	0.863	1290	0.902
Magnesium	15600	19.5	6350	18.9	7020	17.3	6550	18.0
Manganese	876	0.293	453	0.283	407	0.259	359	0.271
Nickel	108	0.488	14.7	0.472	12.7	0.432	14.8	0.451
Potassium	3490	48.8	2880	47.2	2630	43.2	3350	45.1
Selenium	5.14	1.76	U	1.70	4.22	1.55	12.0	1.62
Silver	2.51	0.488	0.701	0.472	1.82	0.432	7.40	0.451
Sodium	257	29.3	84.4	28.3	90.9	25.9	156	27.1
Thallium	U J	5.85	U J	1.13	U J	1.04	U J	1.08
Vanadium	61.1	0.390	70.5	0.378	67.0	0.345	63.8	0.361
Zinc	451	2.44	655	2.36	1480	2.16	978	2.26

Table 1.1 (cont) Results of the Analysis for Metals in Soil
WA# SERAS-146 Iron King Mine site
Results Based on Dry Weight

Method SERAS SOP 1811

SERAS Laboratory Number	R309003-16	R309003-17	R309003-18	R309003-19
Sample Number	861	865	873	879
Sample Location	N/A	N/A	N/A	N/A
Percent Solids	99	98	97	95

Analyte	Result mg/kg		RL mg/kg	Result mg/kg		RL mg/kg	Result mg/kg		RL mg/kg	Result mg/kg		RL mg/kg
Aluminum	14700		7.53	14400		7.93	19800		8.02	22600		8.30
Antimony	8.50		1.06	14.6		1.12	11.4		1.13	27.3		1.17
Arsenic	330		0.886	494		0.933	530		0.944	896		0.976
Barium	105		0.266	112		0.280	214		0.283	204		0.293
Beryllium	0.144		0.0886	U		0.0933	0.124		0.0944	0.110		0.0976
Cadmium	2.71		0.177	2.79		0.187	4.12		0.189	5.17		0.195
Calcium	4380		5.32	5210		5.60	7520		5.66	8360		5.86
Chromium	19.8		0.354	18.1		0.373	27.6		0.378	26.3		0.391
Cobalt	14.1		0.177	13.9		0.187	18.7		0.189	14.0		0.195
Copper	76.5	J	0.443	87.3	J	0.466	105	J	0.472	141	J	0.488
Iron	39400		26.6	45500		28.0	44600		28.3	58100		29.3
Lead	478		0.886	860		0.933	760		0.944	1910		0.976
Magnesium	6180		17.7	5460		18.7	8650		18.9	7430		19.5
Manganese	461		0.266	399		0.280	556		0.283	440		0.293
Nickel	16.7		0.443	14.9		0.466	45.1		0.472	19.8		0.488
Potassium	2220		44.3	2740		46.6	2600		47.2	3230		48.8
Selenium	3.76		1.59	6.86		1.68	5.40		1.70	13.2		1.76
Silver	2.10		0.443	4.16		0.466	3.53		0.472	9.75		0.488
Sodium	130		26.6	193		28.0	582		28.3	278		29.3
Thallium	U	J	1.06	U	J	1.12	U	J	1.13	U	J	1.17
Vanadium	50.4		0.354	56.2		0.373	61.8		0.378	64.8		0.391
Zinc	949		2.22	844		2.33	1300		2.36	1640		2.44

Environmental Response Team/Scientific Engineering, Response and Analytical Services
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Table 2.1 Results of the LCS Analysis for Metals in Soil
WA# SERAS-146 Iron King Mine site

Sample ID: LCS 09/19/13

Analyte	Conc. Recovered mg/kg	Certified Value mg/kg	% Recovery	PALs mg/kg
Aluminum	10300	8840	117	4780 - 12900
Antimony	153	88.2	173	D.L. - 204
Arsenic	97.2	99.6	98	80.5 - 119
Barium	301	310	97	258 - 362
Beryllium	69.2	72.3	96	59.4 - 85.1
Cadmium	183	182	101	149 - 215
Calcium	6510	6790	96	5610 - 7980
Chromium	135	136	99	109 - 164
Cobalt	130	128	102	106 - 149
Copper	96.9	102	95	82.7 - 121
Iron	13600	12600	108	5180 - 19900
Lead	113	115	98	94.1 - 137
Magnesium	2990	3010	99	2320 - 3700
Manganese	316	323	98	266 - 379
Nickel	159	153	104	126 - 180
Potassium	3060	2840	108	2020 - 3670
Selenium	148	150	99	116 - 184
Silver	37.1	40.4	92	30.0 - 50.4
Sodium	2650	2760	96	1960 - 3550
Thallium	142	174	82	137 - 212
Vanadium	98.8	97.6	101	75.2 - 120
Zinc	154	161	96	130 - 192

PAL - Performance Acceptance Limits
Note: Antimony, Total concentration 232 mg/kg and PT-PALs 23.2 - 255 mg/kg

Environmental Response Team/Scientific Engineering, Response and Analytical Services
2890 Woodbridge Avenue, Building 209 Annex
Edison NJ 08837

Table 2.2 Results of the MS/MSD Analysis for Metals in Soil
WA# SERAS-146 Iron King Mine site
Results Based on Dry Weight

Sample ID: 513

Analyte	Sample Result mg/kg	MS Spike Added mg/kg	MS Result mg/kg	MS % Recovery		MSD Spike Added mg/kg	MSD Result mg/kg	MSD % Recovery	RPD	QC Limits RPD	QC Limits %Recovery
Aluminum	12800	769	12800	NC		741	11800	NC	8	20	75-125
Antimony	6.99	38.4	39.4	84		37.0	38.3	85	3	20	34-130
Arsenic	838	38.4	919	NC		37.0	886	NC	4	20	75-125
Barium	87.7	38.4	127	102		37.0	122	93	4	20	75-125
Beryllium	U	38.4	37.1	97		37.0	36.4	98	2	20	75-125
Cadmium	2.03	38.4	40.4	100		37.0	38.8	99	4	20	75-125
Calcium	5910	769	6240	NC		741	6230	NC	0	20	75-125
Chromium	28.0	38.4	66.7	101		37.0	63.1	95	6	20	75-125
Cobalt	9.29	38.4	47.6	100		37.0	45.6	98	4	20	75-125
Copper	114	38.4	163	128	*	37.0	153	105	6	20	75-125
Iron	62200	769	64900	NC		741	62600	NC	4	20	75-125
Lead	249	38.4	282	NC		37.0	291	NC	3	20	75-125
Magnesium	4900	769	5670	NC		741	5400	NC	5	20	75-125
Manganese	159	38.4	196	NC		37.0	190	NC	3	20	75-125
Nickel	14.2	38.4	53.7	103		37.0	50.7	99	6	20	75-125
Potassium	2440	769	3240	104		741	3130	93	3	20	75-125
Selenium	22.0	38.4	58.6	95		37.0	57.2	95	2	20	75-125
Silver	1.13	38.4	37.7	95		37.0	36.3	95	4	20	75-125
Sodium	410	769	1180	100		741	1150	100	3	20	75-125
Thallium	U	38.4	28.3	74	*	37.0	32.7	88	14	20	75-125
Vanadium	66.2	38.4	108	109		37.0	103	99	5	20	75-125
Zinc	462	38.4	509	NC		37.0	499	NC	2	20	75-125

Table 2.3 Results of the Post Digestion Spike (PDS) Analysis for Metals in Soil
WA# SERAS-146 Iron King Mine Site

Sample ID: 513

Analyte	Sample Result µg/L	PDS Spike Added µg/L	PDS Result µg/L	PDS % Recovery	Recommended QC Limits %Recovery
Copper	1190	200	1320	NC	80-120
Thallium	U	400	368	92	80-120

REAC, Edison, NJ
(732) 321-4200
EPA Contract 68-C99-223

SERAS-146-DAR-10/13

CHAIN OF CUSTODY RECORD

Project Name: Iron Kin Mine
Project Number: SERAS-146
LM Contact: Dave Aloysius Phone: 732-494-4058

No: 06607
Sheet 01 of 01 (Do not copy)
(for addnl. samples use new form)

WO# R309003

Sample Identification | **Analyses Requested**

REAC #	Sample No	Sampling Location	Matrix	Date Collected	# of Bottles	Container/Preservative	TAL Metals*
01	417	N/A	Soil	4/30/13	1	4oz Jar / Cold 4°C	✓
02	431	↓	↓	↓	↓	↓	✓
03	442						✓
04	451						✓
05	467						✓
06	477						✓
07	485						✓
08	486			↓			✓
09	513			4/29/13			✓
10	515			↓			✓
11	527			↓			✓
12	621			4/30/13			✓
13	669			5/1/13			✓
14	701			5/2/13			✓
15	820			5/1/13			✓
16	861			↓			✓
17	865						✓
18	873						✓
19	879	↓	↓	↓	↓	↓	✓

9/16/13

*TAL Metals includes Hg.

Matrix:

A- Air
AT-Animal Tissue
DL- Drum Liquids
DS- Drum Solids
GW- Groundwater
O- Oil
PR-Product
PT-Plant Tissue
PW- Potable Water
S- Soil
SD- Sediment
SL- Sludge
SW- Surface Water
TX-TCLP Extract
W- Water
X- Other

Special Instructions:

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #:
9-3066
9-3067

Items/Reason	Relinquished by	Date	Received by	Date	Time
All Analysis		9/16/13		9/16/13	15:10

Items/Reason	Relinquished by	Date	Received by	Date	Time

☆ U.S. GPO: 2000-521-151

ENVIRONMENTAL PROTECTION AGENCY
Region 9 Laboratory

CHAIN OF CUSTODY RECORD

1337 S. 46th St., Bldg. 201
Richmond, CA 94804-4698

ERAS-146-DAR-101713

PROJ. NO. | PROJECT NAME: Iron King Mine – Humboldt Smelter

SAMPLERS: (Signature) Zi Zi Searles

DATE	TIME	MATRIX (S=Soil)	COMP.	GRAB	SAMPLE IDENTIFICATION	NO. OF CONTAINERS	WO# 309003	REMARKS
4/30/13	3:41 PM	S		X	417	1	01	In-Vitro bioaccessibility assay for lead & arsenic SOP EPA 9200.1-86
4/30/13	4:05 PM	S		X	431	1	02	
4/30/13	4:44 PM	S		X	442	1	03	
4/30/13	5:28 PM	S		X	451	1	04	
4/30/13	6:55 PM	S		X	467	1	05	
4/30/13	1:54 PM	S		X	477	1	06	
4/30/13	1:54 PM	S		X	485	1	07	
4/30/13	1:54 PM	S		X	486	1	08	
4/24/13	2:26 PM	S		X	513	1	09	
4/29/13	2:28 PM	S		X	515	1	10	
4/29/13	3:10 PM	S		X	527	1	11	
4/30/13	3:12 PM	S		X	621	1	12	
5/1/13	1:42	S		X	669	1	13	
5/2/13	6:11 AM	S		X	701	1	14	
5/1/13	8:02	S		X	820	1	15	

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Zi Searles	9/6/13 4:45 PM	Room Temp 9/16/13 10:00			
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received for Laboratory by: (Signature)	Date / Time	Temp.	Seals Intact (Y/N)	Conditions / Remarks	

010

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

9-3066

ENVIRONMENTAL PROTECTION AGENCY
Region 9 Laboratory

CHAIN OF CUSTODY RECORD

1337 S. 46 t., Bldg. 201
Richmond, CA 94804-4698

ERAS-146-DAR-101713

PROJ. NO.

PROJECT NAME: Iron King Mine - Humboldt Smelter

SAMPLERS: (Signature) Z. Z. Searles

DATE	TIME	MATRIX (S=Soil)	COMP.	GRAB	SAMPLE IDENTIFICATION	NO. OF CONTAINERS	WO# R309003	REMARKS
5/1/13	10:32 AM	S		X	861	1	16	In-Vitro bioaccessibility
5/1/13	10:40 AM	S		X	865	1	17	assay for lead &
5/1/13	10:52 AM	S		X	873	1	18	arsenic
5/1/13	11:04 AM	S		X	879	1	19	SOP
		S		X				EPA 9200.1-86
		S		X				
		S		X				
		S		X				
		S		X				
		S		X				
		S		X				
		S		X				
		S		X				
		S		X				
		S		X				

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Z. Searles	9/6/13 4:45 PM	Room Temp 9/16/13 10:00			
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Received for Laboratory by: (Signature)	Date / Time	Temp. / Seals Intact (Y/N)	Conditions / Remarks		

011

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

9-3067

Samp_No	Location	Sublocation	Matrix_ID	Lab_Name	Analytical_Method	Analyte	Result	Result_Units	Result_Qualifier	Reporting_Limit	Reporting_Limit_Units	Analysis	Percent_Solids	WA#	QAFlag	Comment	Date_Analyzed	Lab_Samp_No	Result_Type_Code	QC_Type	Percent_Lipids	Amount_Spiked	Amount_Spiked_Units	Percent_Recovery	Percent_Recovery_Limits	RPD	RPD_Limits
Method Blank-091813	Lab		Soil		SERAS SOP 1811	Aluminum	8.5	mg/kg	U	8.5	mg/kg	Metals	NA	SERAS-146	1												
Method Blank-091813	Lab		Soil		SERAS SOP 1811	Antimony	1.2	mg/kg	U	1.2	mg/kg	Metals	NA	SERAS-146	1												
Method Blank-091813	Lab		Soil		SERAS SOP 1811	Arsenic	1	mg/kg	U	1	mg/kg	Metals	NA	SERAS-146	1												
Method Blank-091813	Lab		Soil		SERAS SOP 1811	Barium	0.3	mg/kg	U	0.3	mg/kg	Metals	NA	SERAS-146	1												
Method Blank-091813	Lab		Soil		SERAS SOP 1811	Beryllium	0.1	mg/kg	U	0.1	mg/kg	Metals	NA	SERAS-146	1												
Method Blank-091813	Lab		Soil		SERAS SOP 1811	Cadmium	0.2	mg/kg	U	0.2	mg/kg	Metals	NA	SERAS-146	1												
Method Blank-091813	Lab		Soil		SERAS SOP 1811	Calcium	6	mg/kg	U	6	mg/kg	Metals	NA	SERAS-146	1												
Method Blank-091813	Lab		Soil		SERAS SOP 1811	Chromium	0.4	mg/kg	U	0.4	mg/kg	Metals	NA	SERAS-146	1												
Method Blank-091813	Lab		Soil		SERAS SOP 1811	Cobalt	0.2	mg/kg	U	0.2	mg/kg	Metals	NA	SERAS-146	1												
Method Blank-091813	Lab		Soil		SERAS SOP 1811	Copper	0.5	mg/kg	U	0.5	mg/kg	Metals	NA	SERAS-146	1												
Method Blank-091813	Lab		Soil		SERAS SOP 1811	Iron	30	mg/kg	U	30	mg/kg	Metals	NA	SERAS-146	1												
Method Blank-091813	Lab		Soil		SERAS SOP 1811	Lead	1	mg/kg	U	1	mg/kg	Metals	NA	SERAS-146	1												
Method Blank-091813	Lab		Soil		SERAS SOP 1811	Magnesium	20	mg/kg	U	20	mg/kg	Metals	NA	SERAS-146	1												
Method Blank-091813	Lab		Soil		SERAS SOP 1811	Manganese	0.3	mg/kg	U	0.3	mg/kg	Metals	NA	SERAS-146	1												
Method Blank-091813	Lab		Soil		SERAS SOP 1811	Nickel	0.5	mg/kg	U	0.5	mg/kg	Metals	NA	SERAS-146	1												
Method Blank-091813	Lab		Soil		SERAS SOP 1811	Potassium	50	mg/kg	U	50	mg/kg	Metals	NA	SERAS-146	1												
Method Blank-091813	Lab		Soil		SERAS SOP 1811	Selenium	1.8	mg/kg	U	1.8	mg/kg	Metals	NA	SERAS-146	1												
Method Blank-091813	Lab		Soil		SERAS SOP 1811	Silver	0.5	mg/kg	U	0.5	mg/kg	Metals	NA	SERAS-146	1												
Method Blank-091813	Lab		Soil		SERAS SOP 1811	Sodium	30	mg/kg	U	30	mg/kg	Metals	NA	SERAS-146	1												
Method Blank-091813	Lab		Soil		SERAS SOP 1811	Thallium	1.2	mg/kg	U	1.2	mg/kg	Metals	NA	SERAS-146	1												
Method Blank-091813	Lab		Soil		SERAS SOP 1811	Vanadium	0.4	mg/kg	U	0.4	mg/kg	Metals	NA	SERAS-146	1												
Method Blank-091813	Lab		Soil		SERAS SOP 1811	Zinc	2.5	mg/kg	U	2.5	mg/kg	Metals	NA	SERAS-146	1												
417	N/A		Soil		SERAS SOP 1811	Aluminum	11700	mg/kg		8.46	mg/kg	Metals	92	SERAS-146	1												
417	N/A		Soil		SERAS SOP 1811	Antimony	63.9	mg/kg		1.19	mg/kg	Metals	92	SERAS-146	1												
417	N/A		Soil		SERAS SOP 1811	Arsenic	2420	mg/kg		0.995	mg/kg	Metals	92	SERAS-146	1												
417	N/A		Soil		SERAS SOP 1811	Barium	71.7	mg/kg		0.299	mg/kg	Metals	92	SERAS-146	1												
417	N/A		Soil		SERAS SOP 1811	Beryllium	0.0995	mg/kg	U	0.0995	mg/kg	Metals	92	SERAS-146	1												
417	N/A		Soil		SERAS SOP 1811	Cadmium	5.47	mg/kg		0.199	mg/kg	Metals	92	SERAS-146	1												
417	N/A		Soil		SERAS SOP 1811	Calcium	39800	mg/kg		5.97	mg/kg	Metals	92	SERAS-146	1												
417	N/A		Soil		SERAS SOP 1811	Chromium	13.4	mg/kg		0.398	mg/kg	Metals	92	SERAS-146	1												
417	N/A		Soil		SERAS SOP 1811	Cobalt	6.57	mg/kg		0.199	mg/kg	Metals	92	SERAS-146	1												
417	N/A		Soil		SERAS SOP 1811	Copper	172	mg/kg	J	0.498	mg/kg	Metals	92	SERAS-146	1												
417	N/A		Soil		SERAS SOP 1811	Iron	76500	mg/kg		29.9	mg/kg	Metals	92	SERAS-146	1												
417	N/A		Soil		SERAS SOP 1811	Lead	3270	mg/kg		0.995	mg/kg	Metals	92	SERAS-146	1												
417	N/A		Soil		SERAS SOP 1811	Magnesium	8320	mg/kg		19.9	mg/kg	Metals	92	SERAS-146	1												
417	N/A		Soil		SERAS SOP 1811	Manganese	646	mg/kg		0.299	mg/kg	Metals	92	SERAS-146	1												
417	N/A		Soil		SERAS SOP 1811	Nickel	7.47	mg/kg		0.498	mg/kg	Metals	92	SERAS-146	1												
417	N/A		Soil		SERAS SOP 1811	Potassium	2330	mg/kg		49.8	mg/kg	Metals	92	SERAS-146	1												
417	N/A		Soil		SERAS SOP 1811	Selenium	47.7	mg/kg		1.79	mg/kg	Metals	92	SERAS-146	1												
417	N/A		Soil		SERAS SOP 1811	Silver	16.6	mg/kg		0.498	mg/kg	Metals	92	SERAS-146	1												
417	N/A		Soil		SERAS SOP 1811	Sodium	887	mg/kg		29.9	mg/kg	Metals	92	SERAS-146	1												
417	N/A		Soil		SERAS SOP 1811	Thallium	1.19	mg/kg	UJ	1.19	mg/kg	Metals	92	SERAS-146	1												
417	N/A		Soil		SERAS SOP 1811	Vanadium	50.9	mg/kg		0.398	mg/kg	Metals	92	SERAS-146	1												
417	N/A		Soil		SERAS SOP 1811	Zinc	2050	mg/kg		2.49	mg/kg	Metals	92	SERAS-146	1												
431	N/A		Soil		SERAS SOP 1811	Aluminum	17800	mg/kg		7.12	mg/kg	Metals	98	SERAS-146	1												
431	N/A		Soil		SERAS SOP 1811	Antimony	6.11	mg/kg		1.01	mg/kg	Metals	98	SERAS-146	1												
431	N/A		Soil		SERAS SOP 1811	Arsenic	273	mg/kg		0.838	mg/kg	Metals	98	SERAS-146	1												
431	N/A		Soil		SERAS SOP 1811	Barium	182	mg/kg		0.251	mg/kg	Metals	98	SERAS-146	1												
431	N/A		Soil		SERAS SOP 1811	Beryllium	0.338	mg/kg		0.0838	mg/kg	Metals	98	SERAS-146	1												
431	N/A		Soil		SERAS SOP 1811	Cadmium	3.53	mg/kg		0.168	mg/kg	Metals	98	SERAS-146	1												
431	N/A		Soil		SERAS SOP 1811	Calcium	17300	mg/kg		5.03	mg/kg	Metals	98	SERAS-146	1												
431	N/A		Soil		SERAS SOP 1811	Chromium	24.2	mg/kg		0.335	mg/kg	Metals	98	SERAS-146	1												
431	N/A		Soil		SERAS SOP 1811	Cobalt	16	mg/kg		0.168	mg/kg	Metals	98	SERAS-146	1												
431	N/A		Soil		SERAS SOP 1811	Copper	67.4	mg/kg	J	0.419	mg/kg	Metals	98	SERAS-146	1												
431	N/A		Soil		SERAS SOP 1811	Iron	35100	mg/kg		25.1	mg/kg	Metals	98	SERAS-146	1												
431	N/A		Soil		SERAS SOP 1811	Lead	375	mg/kg		0.838	mg/kg	Metals	98	SERAS-146	1												
431	N/A		Soil		SERAS SOP 1811	Magnesium	7310	mg/kg		16.8	mg/kg	Metals	98	SERAS-146	1												
431	N/A		Soil		SERAS SOP 1811	Manganese	781	mg/kg		0.251	mg/kg	Metals	98	SERAS-146	1												
431	N/A		Soil		SERAS SOP 1811	Nickel	25.8	mg/kg		0.419	mg/kg	Metals	98	SERAS-146	1												
431	N/A		Soil		SERAS SOP 1811	Potassium	2800	mg/kg		41.9	mg/kg	Metals	98	SERAS-146	1												
431	N/A		Soil		SERAS SOP 1811	Selenium	3.15	mg/kg		1.51	mg/kg	Metals	98	SERAS-146	1												
431	N/A		Soil		SERAS SOP 1811	Silver	1.65	mg/kg		0.419	mg/kg	Metals	98	SERAS-146	1												
431	N/A		Soil		SERAS SOP 1811	Sodium	99.8	mg/kg		25.1	mg/kg	Metals	98	SERAS-146	1												
431	N/A		Soil		SERAS SOP 1811	Thallium	5.03	mg/kg	UJ	5.03	mg/kg	Metals	98	SERAS-146	1												
431	N/A		Soil		SERAS SOP 1811	Vanadium	51.3	mg/kg		0.335	mg/kg	Metals	98	SERAS-146	1												
431	N/A		Soil		SERAS SOP 1811	Zinc	944	mg/kg		2.09	mg/kg	Metals	98	SERAS-146	1												
442	N/A		Soil		SERAS SOP 1811	Aluminum	2210	mg/kg		9.58	mg/kg	Metals	82	SERAS-146	1												
442	N/A		Soil		SERAS SOP 1811	Antimony	119	mg/kg		1.35	mg/kg	Metals	82	SERAS-146	1												
442	N/A		Soil		SERAS SOP 1811	Arsenic	3840	mg/kg		5.64	mg/kg	Metals	82	SERAS-146	1												
442	N/A		Soil		SERAS SOP 1811	Barium	43.4	mg/kg		0.338	mg/kg	Metals	82	SERAS-146	1												
442	N/A		Soil		SERAS SOP 1811	Beryllium	0.563	mg/kg	U	0.563	mg/kg	Metals	82	SERAS-146	1												
442	N/A		Soil		SERAS SOP 1811	Cadmium	0.862	mg/kg		0.225	mg/kg	Metals	82	SERAS-146	1												
442	N/A		Soil		SERAS SOP 1811	Calcium	50000	mg/kg		6.76	mg/kg	Metals	82	SERAS-146	1												
442	N/A		Soil		SERAS SOP 1811	Chromium	3.14	mg/kg		0.451	mg/kg	Metals	82	SERAS-146	1												
442	N/A		Soil		SERAS SOP 1811	Cobalt	1.62	mg/kg		0.225	mg/kg	Metals	82	SERAS-146	1												
442	N/A		Soil		SERAS SOP 1811	Copper	174	mg/kg	J	0.564	mg/kg	Metals	82	SERAS-146	1												

Samp_No	Location	Sublocation	Matrix_ID	Lab_Name	Analytical_Method	Analyte	Result	Result_Units	Result_Qualifier	Reporting_Limit	Reporting_Limit_Units	Analysis	Percent_Solids	WA#	QAFlag	Comment	Date_Analyzed	Lab_Samp_No	Result_Type_Code	QC_Type	Percent_Lipids	Amount_Spiked	Amount_Spiked_Units	Percent_Recovery	Percent_Recovery_Limits	RPD	RPD_Limits
442	N/A		Soil		SERAS SOP 1811	Iron	123000	mg/kg		169	mg/kg	Metals	82	SERAS-146	1												
442	N/A		Soil		SERAS SOP 1811	Lead	5740	mg/kg		1.13	mg/kg	Metals	82	SERAS-146	1												
442	N/A		Soil		SERAS SOP 1811	Magnesium	1070	mg/kg		22.5	mg/kg	Metals	82	SERAS-146	1												
442	N/A		Soil		SERAS SOP 1811	Manganese	34.3	mg/kg		0.338	mg/kg	Metals	82	SERAS-146	1												
442	N/A		Soil		SERAS SOP 1811	Nickel	0.564	mg/kg	U	0.564	mg/kg	Metals	82	SERAS-146	1												
442	N/A		Soil		SERAS SOP 1811	Potassium	1430	mg/kg		56.4	mg/kg	Metals	82	SERAS-146	1												
442	N/A		Soil		SERAS SOP 1811	Selenium	138	mg/kg		2.03	mg/kg	Metals	82	SERAS-146	1												
442	N/A		Soil		SERAS SOP 1811	Silver	29.6	mg/kg		0.564	mg/kg	Metals	82	SERAS-146	1												
442	N/A		Soil		SERAS SOP 1811	Sodium	1550	mg/kg		33.8	mg/kg	Metals	82	SERAS-146	1												
442	N/A		Soil		SERAS SOP 1811	Thallium	1.65	mg/kg	J	1.35	mg/kg	Metals	82	SERAS-146	1												
442	N/A		Soil		SERAS SOP 1811	Vanadium	59.7	mg/kg		0.451	mg/kg	Metals	82	SERAS-146	1												
442	N/A		Soil		SERAS SOP 1811	Zinc	708	mg/kg		2.82	mg/kg	Metals	82	SERAS-146	1												
451	N/A		Soil		SERAS SOP 1811	Aluminum	24700	mg/kg		7.53	mg/kg	Metals	95	SERAS-146	1												
451	N/A		Soil		SERAS SOP 1811	Antimony	11	mg/kg		1.06	mg/kg	Metals	95	SERAS-146	1												
451	N/A		Soil		SERAS SOP 1811	Arsenic	603	mg/kg		0.886	mg/kg	Metals	95	SERAS-146	1												
451	N/A		Soil		SERAS SOP 1811	Barium	244	mg/kg		0.266	mg/kg	Metals	95	SERAS-146	1												
451	N/A		Soil		SERAS SOP 1811	Beryllium	0.444	mg/kg		0.0886	mg/kg	Metals	95	SERAS-146	1												
451	N/A		Soil		SERAS SOP 1811	Cadmium	4.79	mg/kg		0.177	mg/kg	Metals	95	SERAS-146	1												
451	N/A		Soil		SERAS SOP 1811	Calcium	16100	mg/kg		5.32	mg/kg	Metals	95	SERAS-146	1												
451	N/A		Soil		SERAS SOP 1811	Chromium	28.4	mg/kg		0.354	mg/kg	Metals	95	SERAS-146	1												
451	N/A		Soil		SERAS SOP 1811	Cobalt	19.6	mg/kg		0.177	mg/kg	Metals	95	SERAS-146	1												
451	N/A		Soil		SERAS SOP 1811	Copper	108	mg/kg	J	0.443	mg/kg	Metals	95	SERAS-146	1												
451	N/A		Soil		SERAS SOP 1811	Iron	52400	mg/kg		26.6	mg/kg	Metals	95	SERAS-146	1												
451	N/A		Soil		SERAS SOP 1811	Lead	823	mg/kg		0.886	mg/kg	Metals	95	SERAS-146	1												
451	N/A		Soil		SERAS SOP 1811	Magnesium	10200	mg/kg		17.7	mg/kg	Metals	95	SERAS-146	1												
451	N/A		Soil		SERAS SOP 1811	Manganese	838	mg/kg		0.266	mg/kg	Metals	95	SERAS-146	1												
451	N/A		Soil		SERAS SOP 1811	Nickel	26.3	mg/kg		0.443	mg/kg	Metals	95	SERAS-146	1												
451	N/A		Soil		SERAS SOP 1811	Potassium	3930	mg/kg		44.3	mg/kg	Metals	95	SERAS-146	1												
451	N/A		Soil		SERAS SOP 1811	Selenium	6.58	mg/kg		1.59	mg/kg	Metals	95	SERAS-146	1												
451	N/A		Soil		SERAS SOP 1811	Silver	3.6	mg/kg		0.443	mg/kg	Metals	95	SERAS-146	1												
451	N/A		Soil		SERAS SOP 1811	Sodium	195	mg/kg		26.6	mg/kg	Metals	95	SERAS-146	1												
451	N/A		Soil		SERAS SOP 1811	Thallium	5.32	mg/kg	UJ	5.32	mg/kg	Metals	95	SERAS-146	1												
451	N/A		Soil		SERAS SOP 1811	Vanadium	63.2	mg/kg		0.354	mg/kg	Metals	95	SERAS-146	1												
451	N/A		Soil		SERAS SOP 1811	Zinc	1240	mg/kg		2.22	mg/kg	Metals	95	SERAS-146	1												
467	N/A		Soil		SERAS SOP 1811	Aluminum	20100	mg/kg		8.41	mg/kg	Metals	95	SERAS-146	1												
467	N/A		Soil		SERAS SOP 1811	Antimony	40.2	mg/kg		1.19	mg/kg	Metals	95	SERAS-146	1												
467	N/A		Soil		SERAS SOP 1811	Arsenic	1350	mg/kg		0.989	mg/kg	Metals	95	SERAS-146	1												
467	N/A		Soil		SERAS SOP 1811	Barium	173	mg/kg		0.297	mg/kg	Metals	95	SERAS-146	1												
467	N/A		Soil		SERAS SOP 1811	Beryllium	0.0989	mg/kg	U	0.0989	mg/kg	Metals	95	SERAS-146	1												
467	N/A		Soil		SERAS SOP 1811	Cadmium	2.98	mg/kg		0.198	mg/kg	Metals	95	SERAS-146	1												
467	N/A		Soil		SERAS SOP 1811	Calcium	5910	mg/kg		5.94	mg/kg	Metals	95	SERAS-146	1												
467	N/A		Soil		SERAS SOP 1811	Chromium	22.3	mg/kg		0.396	mg/kg	Metals	95	SERAS-146	1												
467	N/A		Soil		SERAS SOP 1811	Cobalt	9.83	mg/kg		0.198	mg/kg	Metals	95	SERAS-146	1												
467	N/A		Soil		SERAS SOP 1811	Copper	154	mg/kg	J	0.495	mg/kg	Metals	95	SERAS-146	1												
467	N/A		Soil		SERAS SOP 1811	Iron	66100	mg/kg		29.7	mg/kg	Metals	95	SERAS-146	1												
467	N/A		Soil		SERAS SOP 1811	Lead	2850	mg/kg		0.989	mg/kg	Metals	95	SERAS-146	1												
467	N/A		Soil		SERAS SOP 1811	Magnesium	6710	mg/kg		19.8	mg/kg	Metals	95	SERAS-146	1												
467	N/A		Soil		SERAS SOP 1811	Manganese	339	mg/kg		0.297	mg/kg	Metals	95	SERAS-146	1												
467	N/A		Soil		SERAS SOP 1811	Nickel	14.2	mg/kg		0.495	mg/kg	Metals	95	SERAS-146	1												
467	N/A		Soil		SERAS SOP 1811	Potassium	2950	mg/kg		49.5	mg/kg	Metals	95	SERAS-146	1												
467	N/A		Soil		SERAS SOP 1811	Selenium	20	mg/kg		1.78	mg/kg	Metals	95	SERAS-146	1												
467	N/A		Soil		SERAS SOP 1811	Silver	13.9	mg/kg		0.495	mg/kg	Metals	95	SERAS-146	1												
467	N/A		Soil		SERAS SOP 1811	Sodium	275	mg/kg		29.7	mg/kg	Metals	95	SERAS-146	1												
467	N/A		Soil		SERAS SOP 1811	Thallium	1.19	mg/kg	UJ	1.19	mg/kg	Metals	95	SERAS-146	1												
467	N/A		Soil		SERAS SOP 1811	Vanadium	62.5	mg/kg		0.396	mg/kg	Metals	95	SERAS-146	1												
467	N/A		Soil		SERAS SOP 1811	Zinc	1110	mg/kg		2.47	mg/kg	Metals	95	SERAS-146	1												
477	N/A		Soil		SERAS SOP 1811	Aluminum	18300	mg/kg		7.85	mg/kg	Metals	96	SERAS-146	1												
477	N/A		Soil		SERAS SOP 1811	Antimony	61.8	mg/kg		1.11	mg/kg	Metals	96	SERAS-146	1												
477	N/A		Soil		SERAS SOP 1811	Arsenic	3720	mg/kg		4.62	mg/kg	Metals	96	SERAS-146	1												
477	N/A		Soil		SERAS SOP 1811	Barium	47.2	mg/kg		0.277	mg/kg	Metals	96	SERAS-146	1												
477	N/A		Soil		SERAS SOP 1811	Beryllium	0.0923	mg/kg	U	0.0923	mg/kg	Metals	96	SERAS-146	1												
477	N/A		Soil		SERAS SOP 1811	Cadmium	3.18	mg/kg		0.185	mg/kg	Metals	96	SERAS-146	1												
477	N/A		Soil		SERAS SOP 1811	Calcium	14700	mg/kg		5.54	mg/kg	Metals	96	SERAS-146	1												
477	N/A		Soil		SERAS SOP 1811	Chromium	27.3	mg/kg		0.369	mg/kg	Metals	96	SERAS-146	1												
477	N/A		Soil		SERAS SOP 1811	Cobalt	2.94	mg/kg		0.185	mg/kg	Metals	96	SERAS-146	1												
477	N/A		Soil		SERAS SOP 1811	Copper	69.9	mg/kg	J	0.462	mg/kg	Metals	96	SERAS-146	1												
477	N/A		Soil		SERAS SOP 1811	Iron	121000	mg/kg		139	mg/kg	Metals	96	SERAS-146	1												
477	N/A		Soil		SERAS SOP 1811	Lead	3060	mg/kg		0.923	mg/kg	Metals	96	SERAS-146	1												
477	N/A		Soil		SERAS SOP 1811	Magnesium	12500	mg/kg		18.5	mg/kg	Metals	96	SERAS-146	1												
477	N/A		Soil		SERAS SOP 1811	Manganese	298	mg/kg		0.277	mg/kg	Metals	96	SERAS-146	1												
477	N/A		Soil		SERAS SOP 1811	Nickel	6.78	mg/kg		0.462	mg/kg	Metals	96	SERAS-146	1												
477	N/A		Soil		SERAS SOP 1811	Potassium	776	mg/kg		46.2	mg/kg	Metals	96	SERAS-146	1												
477	N/A		Soil		SERAS SOP 1811	Selenium	46.8	mg/kg		1.66	mg/kg	Metals	96	SERAS-146	1												
477	N/A		Soil		SERAS SOP 1811	Silver	14.2	mg/kg		0.462	mg/kg	Metals	96	SERAS-146	1												
477	N/A		Soil		SERAS SOP 1811	Sodium	305	mg/kg		27.7	mg/kg	Metals	96	SERAS-146	1												
477	N/A		Soil		SERAS SOP 1811	Thallium	1.11	mg/kg	UJ	1.11	mg/kg	Metals	96	SERAS-146	1												

Samp_No	Location	Sublocation	Matrix_ID	Lab_Name	Analytical_Method	Analyte	Result	Result_Units	Result_Qualifier	Reporting_Limit	Reporting_Limit_Units	Analysis	Percent_Solids	WA#	QAFlag	Comment	Date_Analyzed	Lab_Samp_No	Result_Type_Code	QC_Type	Percent_Lipids	Amount_Spiked	Amount_Spiked_Units	Percent_Recovery	Percent_Recovery_Limits	RPD	RPD_Limits
477	N/A		Soil		SERAS SOP 1811	Vanadium	66.6	mg/kg		0.369	mg/kg	Metals	96	SERAS-146	1												
477	N/A		Soil		SERAS SOP 1811	Zinc	1700	mg/kg		2.31	mg/kg	Metals	96	SERAS-146	1												
485	N/A		Soil		SERAS SOP 1811	Aluminum	17300	mg/kg		8.1	mg/kg	Metals	95	SERAS-146	1												
485	N/A		Soil		SERAS SOP 1811	Antimony	63.3	mg/kg		1.14	mg/kg	Metals	95	SERAS-146	1												
485	N/A		Soil		SERAS SOP 1811	Arsenic	4080	mg/kg		4.77	mg/kg	Metals	95	SERAS-146	1												
485	N/A		Soil		SERAS SOP 1811	Barium	63.3	mg/kg		0.286	mg/kg	Metals	95	SERAS-146	1												
485	N/A		Soil		SERAS SOP 1811	Beryllium	0.116	mg/kg		0.0953	mg/kg	Metals	95	SERAS-146	1												
485	N/A		Soil		SERAS SOP 1811	Cadmium	19.1	mg/kg		0.191	mg/kg	Metals	95	SERAS-146	1												
485	N/A		Soil		SERAS SOP 1811	Calcium	22000	mg/kg		5.72	mg/kg	Metals	95	SERAS-146	1												
485	N/A		Soil		SERAS SOP 1811	Chromium	30.8	mg/kg		0.381	mg/kg	Metals	95	SERAS-146	1												
485	N/A		Soil		SERAS SOP 1811	Cobalt	15.9	mg/kg		0.191	mg/kg	Metals	95	SERAS-146	1												
485	N/A		Soil		SERAS SOP 1811	Copper	188	mg/kg	J	0.477	mg/kg	Metals	95	SERAS-146	1												
485	N/A		Soil		SERAS SOP 1811	Iron	86000	mg/kg		28.6	mg/kg	Metals	95	SERAS-146	1												
485	N/A		Soil		SERAS SOP 1811	Lead	3740	mg/kg		0.953	mg/kg	Metals	95	SERAS-146	1												
485	N/A		Soil		SERAS SOP 1811	Magnesium	14700	mg/kg		19.1	mg/kg	Metals	95	SERAS-146	1												
485	N/A		Soil		SERAS SOP 1811	Manganese	711	mg/kg		0.286	mg/kg	Metals	95	SERAS-146	1												
485	N/A		Soil		SERAS SOP 1811	Nickel	17.8	mg/kg		0.477	mg/kg	Metals	95	SERAS-146	1												
485	N/A		Soil		SERAS SOP 1811	Potassium	1420	mg/kg		47.7	mg/kg	Metals	95	SERAS-146	1												
485	N/A		Soil		SERAS SOP 1811	Selenium	53.5	mg/kg		1.72	mg/kg	Metals	95	SERAS-146	1												
485	N/A		Soil		SERAS SOP 1811	Silver	13.3	mg/kg		0.477	mg/kg	Metals	95	SERAS-146	1												
485	N/A		Soil		SERAS SOP 1811	Sodium	571	mg/kg		28.6	mg/kg	Metals	95	SERAS-146	1												
485	N/A		Soil		SERAS SOP 1811	Thallium	1.14	mg/kg	UJ	1.14	mg/kg	Metals	95	SERAS-146	1												
485	N/A		Soil		SERAS SOP 1811	Vanadium	69.5	mg/kg		0.381	mg/kg	Metals	95	SERAS-146	1												
485	N/A		Soil		SERAS SOP 1811	Zinc	5410	mg/kg		2.38	mg/kg	Metals	95	SERAS-146	1												
486	N/A		Soil		SERAS SOP 1811	Aluminum	10600	mg/kg		8	mg/kg	Metals	94	SERAS-146	1												
486	N/A		Soil		SERAS SOP 1811	Antimony	63.4	mg/kg		1.13	mg/kg	Metals	94	SERAS-146	1												
486	N/A		Soil		SERAS SOP 1811	Arsenic	1710	mg/kg		0.941	mg/kg	Metals	94	SERAS-146	1												
486	N/A		Soil		SERAS SOP 1811	Barium	83.1	mg/kg		0.282	mg/kg	Metals	94	SERAS-146	1												
486	N/A		Soil		SERAS SOP 1811	Beryllium	0.471	mg/kg	U	0.471	mg/kg	Metals	94	SERAS-146	1												
486	N/A		Soil		SERAS SOP 1811	Cadmium	4.76	mg/kg		0.188	mg/kg	Metals	94	SERAS-146	1												
486	N/A		Soil		SERAS SOP 1811	Calcium	22200	mg/kg		5.65	mg/kg	Metals	94	SERAS-146	1												
486	N/A		Soil		SERAS SOP 1811	Chromium	16.5	mg/kg		0.377	mg/kg	Metals	94	SERAS-146	1												
486	N/A		Soil		SERAS SOP 1811	Cobalt	6.86	mg/kg		0.188	mg/kg	Metals	94	SERAS-146	1												
486	N/A		Soil		SERAS SOP 1811	Copper	95.7	mg/kg	J	0.471	mg/kg	Metals	94	SERAS-146	1												
486	N/A		Soil		SERAS SOP 1811	Iron	56000	mg/kg		28.2	mg/kg	Metals	94	SERAS-146	1												
486	N/A		Soil		SERAS SOP 1811	Lead	4100	mg/kg		0.941	mg/kg	Metals	94	SERAS-146	1												
486	N/A		Soil		SERAS SOP 1811	Magnesium	5390	mg/kg		18.8	mg/kg	Metals	94	SERAS-146	1												
486	N/A		Soil		SERAS SOP 1811	Manganese	197	mg/kg		0.282	mg/kg	Metals	94	SERAS-146	1												
486	N/A		Soil		SERAS SOP 1811	Nickel	9	mg/kg		0.471	mg/kg	Metals	94	SERAS-146	1												
486	N/A		Soil		SERAS SOP 1811	Potassium	1860	mg/kg		47.1	mg/kg	Metals	94	SERAS-146	1												
486	N/A		Soil		SERAS SOP 1811	Selenium	35.9	mg/kg		1.69	mg/kg	Metals	94	SERAS-146	1												
486	N/A		Soil		SERAS SOP 1811	Silver	21.5	mg/kg		0.471	mg/kg	Metals	94	SERAS-146	1												
486	N/A		Soil		SERAS SOP 1811	Sodium	466	mg/kg		28.2	mg/kg	Metals	94	SERAS-146	1												
486	N/A		Soil		SERAS SOP 1811	Thallium	1.13	mg/kg	UJ	1.13	mg/kg	Metals	94	SERAS-146	1												
486	N/A		Soil		SERAS SOP 1811	Vanadium	53.3	mg/kg		0.377	mg/kg	Metals	94	SERAS-146	1												
486	N/A		Soil		SERAS SOP 1811	Zinc	1720	mg/kg		2.35	mg/kg	Metals	94	SERAS-146	1												
513	N/A		Soil		SERAS SOP 1811	Aluminum	12800	mg/kg		8.11	mg/kg	Metals	98	SERAS-146	1												
513	N/A		Soil		SERAS SOP 1811	Antimony	6.99	mg/kg		1.14	mg/kg	Metals	98	SERAS-146	1												
513	N/A		Soil		SERAS SOP 1811	Arsenic	838	mg/kg		0.954	mg/kg	Metals	98	SERAS-146	1												
513	N/A		Soil		SERAS SOP 1811	Barium	87.7	mg/kg		0.286	mg/kg	Metals	98	SERAS-146	1												
513	N/A		Soil		SERAS SOP 1811	Beryllium	0.477	mg/kg	U	0.477	mg/kg	Metals	98	SERAS-146	1												
513	N/A		Soil		SERAS SOP 1811	Cadmium	2.03	mg/kg		0.191	mg/kg	Metals	98	SERAS-146	1												
513	N/A		Soil		SERAS SOP 1811	Calcium	5910	mg/kg		5.72	mg/kg	Metals	98	SERAS-146	1												
513	N/A		Soil		SERAS SOP 1811	Chromium	28	mg/kg		0.381	mg/kg	Metals	98	SERAS-146	1												
513	N/A		Soil		SERAS SOP 1811	Cobalt	9.29	mg/kg		0.191	mg/kg	Metals	98	SERAS-146	1												
513	N/A		Soil		SERAS SOP 1811	Copper	114	mg/kg	J	0.477	mg/kg	Metals	98	SERAS-146	1												
513	N/A		Soil		SERAS SOP 1811	Iron	62200	mg/kg		28.6	mg/kg	Metals	98	SERAS-146	1												
513	N/A		Soil		SERAS SOP 1811	Lead	249	mg/kg		0.954	mg/kg	Metals	98	SERAS-146	1												
513	N/A		Soil		SERAS SOP 1811	Magnesium	4900	mg/kg		19.1	mg/kg	Metals	98	SERAS-146	1												
513	N/A		Soil		SERAS SOP 1811	Manganese	159	mg/kg		0.286	mg/kg	Metals	98	SERAS-146	1												
513	N/A		Soil		SERAS SOP 1811	Nickel	14.2	mg/kg		0.477	mg/kg	Metals	98	SERAS-146	1												
513	N/A		Soil		SERAS SOP 1811	Potassium	2440	mg/kg		47.7	mg/kg	Metals	98	SERAS-146	1												
513	N/A		Soil		SERAS SOP 1811	Selenium	22	mg/kg		1.72	mg/kg	Metals	98	SERAS-146	1												
513	N/A		Soil		SERAS SOP 1811	Silver	1.13	mg/kg		0.477	mg/kg	Metals	98	SERAS-146	1												
513	N/A		Soil		SERAS SOP 1811	Sodium	410	mg/kg		28.6	mg/kg	Metals	98	SERAS-146	1												
513	N/A		Soil		SERAS SOP 1811	Thallium	1.14	mg/kg	UJ	1.14	mg/kg	Metals	98	SERAS-146	1												
513	N/A		Soil		SERAS SOP 1811	Vanadium	66.2	mg/kg		0.381	mg/kg	Metals	98	SERAS-146	1												
513	N/A		Soil		SERAS SOP 1811	Zinc	462	mg/kg		2.38	mg/kg	Metals	98	SERAS-146	1												
515	N/A		Soil		SERAS SOP 1811	Aluminum	25700	mg/kg		7.74	mg/kg	Metals	94	SERAS-146	1												
515	N/A		Soil		SERAS SOP 1811	Antimony	4.24	mg/kg		1.09	mg/kg	Metals	94	SERAS-146	1												
515	N/A		Soil		SERAS SOP 1811	Arsenic	4340	mg/kg		4.55	mg/kg	Metals	94	SERAS-146	1												
515	N/A		Soil		SERAS SOP 1811	Barium	147	mg/kg		0.273	mg/kg	Metals	94	SERAS-146	1												
515	N/A		Soil		SERAS SOP 1811	Beryllium	0.0911	mg/kg	U	0.0911	mg/kg	Metals	94	SERAS-146	1												
515	N/A		Soil		SERAS SOP 1811	Cadmium	26.2	mg/kg		0.182	mg/kg	Metals	94	SERAS-146	1												
515	N/A		Soil		SERAS SOP 1811	Calcium	16400	mg/kg		5.46	mg/kg	Metals	94	SERAS-146	1												
515	N/A		Soil		SERAS SOP 1811	Chromium	40.2	mg/kg		0.364	mg/kg	Metals	94	SERAS-146	1												

Samp_No	Location	Sublocation	Matrix_ID	Lab_Name	Analytical_Method	Analyte	Result	Result_Units	Result_Qualifier	Reporting_Limit	Reporting_Limit_Units	Analysis	Percent_Solids	WA#	QAFlag	Comment	Date_Analyzed	Lab_Samp_No	Result_Type_Code	QC_Type	Percent_Lipids	Amount_Spiked	Amount_Spiked_Units	Percent_Recovery	Percent_Recovery_Limits	RPD	RPD_Limits
515	N/A		Soil		SERAS SOP 1811	Cobalt	13.1	mg/kg		0.182	mg/kg	Metals	94	SERAS-146	1												
515	N/A		Soil		SERAS SOP 1811	Copper	382	mg/kg	J	0.455	mg/kg	Metals	94	SERAS-146	1												
515	N/A		Soil		SERAS SOP 1811	Iron	70800	mg/kg		27.3	mg/kg	Metals	94	SERAS-146	1												
515	N/A		Soil		SERAS SOP 1811	Lead	226	mg/kg		0.911	mg/kg	Metals	94	SERAS-146	1												
515	N/A		Soil		SERAS SOP 1811	Magnesium	8330	mg/kg		18.2	mg/kg	Metals	94	SERAS-146	1												
515	N/A		Soil		SERAS SOP 1811	Manganese	248	mg/kg		0.273	mg/kg	Metals	94	SERAS-146	1												
515	N/A		Soil		SERAS SOP 1811	Nickel	22.6	mg/kg		0.455	mg/kg	Metals	94	SERAS-146	1												
515	N/A		Soil		SERAS SOP 1811	Potassium	3300	mg/kg		45.5	mg/kg	Metals	94	SERAS-146	1												
515	N/A		Soil		SERAS SOP 1811	Selenium	16.1	mg/kg		1.64	mg/kg	Metals	94	SERAS-146	1												
515	N/A		Soil		SERAS SOP 1811	Silver	1.19	mg/kg		0.455	mg/kg	Metals	94	SERAS-146	1												
515	N/A		Soil		SERAS SOP 1811	Sodium	459	mg/kg		27.3	mg/kg	Metals	94	SERAS-146	1												
515	N/A		Soil		SERAS SOP 1811	Thallium	1.09	mg/kg	UJ	1.09	mg/kg	Metals	94	SERAS-146	1												
515	N/A		Soil		SERAS SOP 1811	Vanadium	59.8	mg/kg		0.364	mg/kg	Metals	94	SERAS-146	1												
515	N/A		Soil		SERAS SOP 1811	Zinc	3640	mg/kg		2.28	mg/kg	Metals	94	SERAS-146	1												
527	N/A		Soil		SERAS SOP 1811	Aluminum	3570	mg/kg		7.15	mg/kg	Metals	99	SERAS-146	1												
527	N/A		Soil		SERAS SOP 1811	Antimony	86.3	mg/kg		1.01	mg/kg	Metals	99	SERAS-146	1												
527	N/A		Soil		SERAS SOP 1811	Arsenic	4920	mg/kg		4.21	mg/kg	Metals	99	SERAS-146	1												
527	N/A		Soil		SERAS SOP 1811	Barium	1470	mg/kg		0.253	mg/kg	Metals	99	SERAS-146	1												
527	N/A		Soil		SERAS SOP 1811	Beryllium	0.149	mg/kg		0.0842	mg/kg	Metals	99	SERAS-146	1												
527	N/A		Soil		SERAS SOP 1811	Cadmium	6.19	mg/kg		0.168	mg/kg	Metals	99	SERAS-146	1												
527	N/A		Soil		SERAS SOP 1811	Calcium	1740	mg/kg		5.05	mg/kg	Metals	99	SERAS-146	1												
527	N/A		Soil		SERAS SOP 1811	Chromium	20.1	mg/kg		0.337	mg/kg	Metals	99	SERAS-146	1												
527	N/A		Soil		SERAS SOP 1811	Cobalt	1.87	mg/kg		0.168	mg/kg	Metals	99	SERAS-146	1												
527	N/A		Soil		SERAS SOP 1811	Copper	643	mg/kg	J	0.421	mg/kg	Metals	99	SERAS-146	1												
527	N/A		Soil		SERAS SOP 1811	Iron	45400	mg/kg		25.3	mg/kg	Metals	99	SERAS-146	1												
527	N/A		Soil		SERAS SOP 1811	Lead	6290	mg/kg		0.842	mg/kg	Metals	99	SERAS-146	1												
527	N/A		Soil		SERAS SOP 1811	Magnesium	477	mg/kg		16.8	mg/kg	Metals	99	SERAS-146	1												
527	N/A		Soil		SERAS SOP 1811	Manganese	75.4	mg/kg		0.253	mg/kg	Metals	99	SERAS-146	1												
527	N/A		Soil		SERAS SOP 1811	Nickel	5.69	mg/kg		0.421	mg/kg	Metals	99	SERAS-146	1												
527	N/A		Soil		SERAS SOP 1811	Potassium	2610	mg/kg		42.1	mg/kg	Metals	99	SERAS-146	1												
527	N/A		Soil		SERAS SOP 1811	Selenium	3.11	mg/kg		1.52	mg/kg	Metals	99	SERAS-146	1												
527	N/A		Soil		SERAS SOP 1811	Silver	78.3	mg/kg		0.421	mg/kg	Metals	99	SERAS-146	1												
527	N/A		Soil		SERAS SOP 1811	Sodium	110	mg/kg		25.3	mg/kg	Metals	99	SERAS-146	1												
527	N/A		Soil		SERAS SOP 1811	Thallium	1.01	mg/kg	UJ	1.01	mg/kg	Metals	99	SERAS-146	1												
527	N/A		Soil		SERAS SOP 1811	Vanadium	35.8	mg/kg		0.337	mg/kg	Metals	99	SERAS-146	1												
527	N/A		Soil		SERAS SOP 1811	Zinc	1360	mg/kg		2.1	mg/kg	Metals	99	SERAS-146	1												
621	N/A		Soil		SERAS SOP 1811	Aluminum	27500	mg/kg		8.29	mg/kg	Metals	96	SERAS-146	1												
621	N/A		Soil		SERAS SOP 1811	Antimony	2.38	mg/kg		1.17	mg/kg	Metals	96	SERAS-146	1												
621	N/A		Soil		SERAS SOP 1811	Arsenic	174	mg/kg		0.975	mg/kg	Metals	96	SERAS-146	1												
621	N/A		Soil		SERAS SOP 1811	Barium	536	mg/kg		0.293	mg/kg	Metals	96	SERAS-146	1												
621	N/A		Soil		SERAS SOP 1811	Beryllium	0.378	mg/kg		0.0975	mg/kg	Metals	96	SERAS-146	1												
621	N/A		Soil		SERAS SOP 1811	Cadmium	2.69	mg/kg		0.195	mg/kg	Metals	96	SERAS-146	1												
621	N/A		Soil		SERAS SOP 1811	Calcium	47700	mg/kg		5.85	mg/kg	Metals	96	SERAS-146	1												
621	N/A		Soil		SERAS SOP 1811	Chromium	40.7	mg/kg		0.39	mg/kg	Metals	96	SERAS-146	1												
621	N/A		Soil		SERAS SOP 1811	Cobalt	47	mg/kg		0.195	mg/kg	Metals	96	SERAS-146	1												
621	N/A		Soil		SERAS SOP 1811	Copper	1260	mg/kg	J	0.488	mg/kg	Metals	96	SERAS-146	1												
621	N/A		Soil		SERAS SOP 1811	Iron	48400	mg/kg		29.3	mg/kg	Metals	96	SERAS-146	1												
621	N/A		Soil		SERAS SOP 1811	Lead	102	mg/kg		0.975	mg/kg	Metals	96	SERAS-146	1												
621	N/A		Soil		SERAS SOP 1811	Magnesium	15600	mg/kg		19.5	mg/kg	Metals	96	SERAS-146	1												
621	N/A		Soil		SERAS SOP 1811	Manganese	876	mg/kg		0.293	mg/kg	Metals	96	SERAS-146	1												
621	N/A		Soil		SERAS SOP 1811	Nickel	108	mg/kg		0.488	mg/kg	Metals	96	SERAS-146	1												
621	N/A		Soil		SERAS SOP 1811	Potassium	3490	mg/kg		48.8	mg/kg	Metals	96	SERAS-146	1												
621	N/A		Soil		SERAS SOP 1811	Selenium	5.14	mg/kg		1.76	mg/kg	Metals	96	SERAS-146	1												
621	N/A		Soil		SERAS SOP 1811	Silver	2.51	mg/kg		0.488	mg/kg	Metals	96	SERAS-146	1												
621	N/A		Soil		SERAS SOP 1811	Sodium	257	mg/kg		29.3	mg/kg	Metals	96	SERAS-146	1												
621	N/A		Soil		SERAS SOP 1811	Thallium	5.85	mg/kg	UJ	5.85	mg/kg	Metals	96	SERAS-146	1												
621	N/A		Soil		SERAS SOP 1811	Vanadium	61.1	mg/kg		0.39	mg/kg	Metals	96	SERAS-146	1												
621	N/A		Soil		SERAS SOP 1811	Zinc	451	mg/kg		2.44	mg/kg	Metals	96	SERAS-146	1												
669	N/A		Soil		SERAS SOP 1811	Aluminum	17200	mg/kg		8.03	mg/kg	Metals	98	SERAS-146	1												
669	N/A		Soil		SERAS SOP 1811	Antimony	3.92	mg/kg		1.13	mg/kg	Metals	98	SERAS-146	1												
669	N/A		Soil		SERAS SOP 1811	Arsenic	223	mg/kg		0.945	mg/kg	Metals	98	SERAS-146	1												
669	N/A		Soil		SERAS SOP 1811	Barium	95.3	mg/kg		0.283	mg/kg	Metals	98	SERAS-146	1												
669	N/A		Soil		SERAS SOP 1811	Beryllium	0.0945	mg/kg	U	0.0945	mg/kg	Metals	98	SERAS-146	1												
669	N/A		Soil		SERAS SOP 1811	Cadmium	2.06	mg/kg		0.189	mg/kg	Metals	98	SERAS-146	1												
669	N/A		Soil		SERAS SOP 1811	Calcium	6910	mg/kg		5.67	mg/kg	Metals	98	SERAS-146	1												
669	N/A		Soil		SERAS SOP 1811	Chromium	16.8	mg/kg		0.378	mg/kg	Metals	98	SERAS-146	1												
669	N/A		Soil		SERAS SOP 1811	Cobalt	15.7	mg/kg		0.189	mg/kg	Metals	98	SERAS-146	1												
669	N/A		Soil		SERAS SOP 1811	Copper	78.2	mg/kg	J	0.472	mg/kg	Metals	98	SERAS-146	1												
669	N/A		Soil		SERAS SOP 1811	Iron	44300	mg/kg		28.3	mg/kg	Metals	98	SERAS-146	1												
669	N/A		Soil		SERAS SOP 1811	Lead	147	mg/kg		0.945	mg/kg	Metals	98	SERAS-146	1												
669	N/A		Soil		SERAS SOP 1811	Magnesium	6350	mg/kg		18.9	mg/kg	Metals	98	SERAS-146	1												
669	N/A		Soil		SERAS SOP 1811	Manganese	453	mg/kg		0.283	mg/kg	Metals	98	SERAS-146	1												
669	N/A		Soil		SERAS SOP 1811	Nickel	14.7	mg/kg		0.472	mg/kg	Metals	98	SERAS-146	1												
669	N/A		Soil		SERAS SOP 1811	Potassium	2880	mg/kg		47.2	mg/kg	Metals	98	SERAS-146	1												
669	N/A		Soil		SERAS SOP 1811	Selenium	1.7	mg/kg	U	1.7	mg/kg	Metals	98	SERAS-146	1												
669	N/A		Soil		SERAS SOP 1811	Silver	0.701	mg/kg		0.472	mg/kg	Metals	98	SERAS-146	1												

Samp_No	Location	Sublocation	Matrix_ID	Lab_Name	Analytical_Method	Analyte	Result	Result_Units	Result_Qualifier	Reporting_Limit	Reporting_Limit_Units	Analysis	Percent_Solids	WA#	QAFlag	Comment	Date_Analyzed	Lab_Samp_No	Result_Type_Code	QC_Type	Percent_Lipids	Amount_Spiked	Amount_Spiked_Units	Percent_Recovery	Percent_Recovery_Limits	RPD	RPD_Limits
669	N/A		Soil		SERAS SOP 1811	Sodium	84.4	mg/kg		28.3	mg/kg	Metals	98	SERAS-146	1												
669	N/A		Soil		SERAS SOP 1811	Thallium	1.13	mg/kg	UJ	1.13	mg/kg	Metals	98	SERAS-146	1												
669	N/A		Soil		SERAS SOP 1811	Vanadium	70.5	mg/kg		0.378	mg/kg	Metals	98	SERAS-146	1												
669	N/A		Soil		SERAS SOP 1811	Zinc	655	mg/kg		2.36	mg/kg	Metals	98	SERAS-146	1												
701	N/A		Soil		SERAS SOP 1811	Aluminum	17600	mg/kg		7.34	mg/kg	Metals	99	SERAS-146	1												
701	N/A		Soil		SERAS SOP 1811	Antimony	11.4	mg/kg		1.04	mg/kg	Metals	99	SERAS-146	1												
701	N/A		Soil		SERAS SOP 1811	Arsenic	591	mg/kg		0.863	mg/kg	Metals	99	SERAS-146	1												
701	N/A		Soil		SERAS SOP 1811	Barium	74.5	mg/kg		0.259	mg/kg	Metals	99	SERAS-146	1												
701	N/A		Soil		SERAS SOP 1811	Beryllium	0.863	mg/kg	U	0.863	mg/kg	Metals	99	SERAS-146	1												
701	N/A		Soil		SERAS SOP 1811	Cadmium	4.68	mg/kg		0.173	mg/kg	Metals	99	SERAS-146	1												
701	N/A		Soil		SERAS SOP 1811	Calcium	6600	mg/kg		5.18	mg/kg	Metals	99	SERAS-146	1												
701	N/A		Soil		SERAS SOP 1811	Chromium	20.2	mg/kg		0.345	mg/kg	Metals	99	SERAS-146	1												
701	N/A		Soil		SERAS SOP 1811	Cobalt	14.9	mg/kg		0.173	mg/kg	Metals	99	SERAS-146	1												
701	N/A		Soil		SERAS SOP 1811	Copper	76.6	mg/kg	J	0.432	mg/kg	Metals	99	SERAS-146	1												
701	N/A		Soil		SERAS SOP 1811	Iron	51900	mg/kg		25.9	mg/kg	Metals	99	SERAS-146	1												
701	N/A		Soil		SERAS SOP 1811	Lead	363	mg/kg		0.863	mg/kg	Metals	99	SERAS-146	1												
701	N/A		Soil		SERAS SOP 1811	Magnesium	7020	mg/kg		17.3	mg/kg	Metals	99	SERAS-146	1												
701	N/A		Soil		SERAS SOP 1811	Manganese	407	mg/kg		0.259	mg/kg	Metals	99	SERAS-146	1												
701	N/A		Soil		SERAS SOP 1811	Nickel	12.7	mg/kg		0.432	mg/kg	Metals	99	SERAS-146	1												
701	N/A		Soil		SERAS SOP 1811	Potassium	2630	mg/kg		43.2	mg/kg	Metals	99	SERAS-146	1												
701	N/A		Soil		SERAS SOP 1811	Selenium	4.22	mg/kg		1.55	mg/kg	Metals	99	SERAS-146	1												
701	N/A		Soil		SERAS SOP 1811	Silver	1.82	mg/kg		0.432	mg/kg	Metals	99	SERAS-146	1												
701	N/A		Soil		SERAS SOP 1811	Sodium	90.9	mg/kg		25.9	mg/kg	Metals	99	SERAS-146	1												
701	N/A		Soil		SERAS SOP 1811	Thallium	1.04	mg/kg	UJ	1.04	mg/kg	Metals	99	SERAS-146	1												
701	N/A		Soil		SERAS SOP 1811	Vanadium	67	mg/kg		0.345	mg/kg	Metals	99	SERAS-146	1												
701	N/A		Soil		SERAS SOP 1811	Zinc	1480	mg/kg		2.16	mg/kg	Metals	99	SERAS-146	1												
820	N/A		Soil		SERAS SOP 1811	Aluminum	19900	mg/kg		7.67	mg/kg	Metals	82	SERAS-146	1												
820	N/A		Soil		SERAS SOP 1811	Antimony	22.5	mg/kg		1.08	mg/kg	Metals	82	SERAS-146	1												
820	N/A		Soil		SERAS SOP 1811	Arsenic	726	mg/kg		0.902	mg/kg	Metals	82	SERAS-146	1												
820	N/A		Soil		SERAS SOP 1811	Barium	158	mg/kg		0.271	mg/kg	Metals	82	SERAS-146	1												
820	N/A		Soil		SERAS SOP 1811	Beryllium	0.0902	mg/kg	U	0.0902	mg/kg	Metals	82	SERAS-146	1												
820	N/A		Soil		SERAS SOP 1811	Cadmium	3.06	mg/kg		0.18	mg/kg	Metals	82	SERAS-146	1												
820	N/A		Soil		SERAS SOP 1811	Calcium	5480	mg/kg		5.41	mg/kg	Metals	82	SERAS-146	1												
820	N/A		Soil		SERAS SOP 1811	Chromium	22.2	mg/kg		0.361	mg/kg	Metals	82	SERAS-146	1												
820	N/A		Soil		SERAS SOP 1811	Cobalt	10.7	mg/kg		0.18	mg/kg	Metals	82	SERAS-146	1												
820	N/A		Soil		SERAS SOP 1811	Copper	112	mg/kg	J	0.451	mg/kg	Metals	82	SERAS-146	1												
820	N/A		Soil		SERAS SOP 1811	Iron	57500	mg/kg		27.1	mg/kg	Metals	82	SERAS-146	1												
820	N/A		Soil		SERAS SOP 1811	Lead	1290	mg/kg		0.902	mg/kg	Metals	82	SERAS-146	1												
820	N/A		Soil		SERAS SOP 1811	Magnesium	6550	mg/kg		18	mg/kg	Metals	82	SERAS-146	1												
820	N/A		Soil		SERAS SOP 1811	Manganese	359	mg/kg		0.271	mg/kg	Metals	82	SERAS-146	1												
820	N/A		Soil		SERAS SOP 1811	Nickel	14.8	mg/kg		0.451	mg/kg	Metals	82	SERAS-146	1												
820	N/A		Soil		SERAS SOP 1811	Potassium	3350	mg/kg		45.1	mg/kg	Metals	82	SERAS-146	1												
820	N/A		Soil		SERAS SOP 1811	Selenium	12	mg/kg		1.62	mg/kg	Metals	82	SERAS-146	1												
820	N/A		Soil		SERAS SOP 1811	Silver	7.4	mg/kg		0.451	mg/kg	Metals	82	SERAS-146	1												
820	N/A		Soil		SERAS SOP 1811	Sodium	156	mg/kg		27.1	mg/kg	Metals	82	SERAS-146	1												
820	N/A		Soil		SERAS SOP 1811	Thallium	1.08	mg/kg	UJ	1.08	mg/kg	Metals	82	SERAS-146	1												
820	N/A		Soil		SERAS SOP 1811	Vanadium	63.8	mg/kg		0.361	mg/kg	Metals	82	SERAS-146	1												
820	N/A		Soil		SERAS SOP 1811	Zinc	978	mg/kg		2.26	mg/kg	Metals	82	SERAS-146	1												
861	N/A		Soil		SERAS SOP 1811	Aluminum	14700	mg/kg		7.53	mg/kg	Metals	99	SERAS-146	1												
861	N/A		Soil		SERAS SOP 1811	Antimony	8.5	mg/kg		1.06	mg/kg	Metals	99	SERAS-146	1												
861	N/A		Soil		SERAS SOP 1811	Arsenic	330	mg/kg		0.886	mg/kg	Metals	99	SERAS-146	1												
861	N/A		Soil		SERAS SOP 1811	Barium	105	mg/kg		0.266	mg/kg	Metals	99	SERAS-146	1												
861	N/A		Soil		SERAS SOP 1811	Beryllium	0.144	mg/kg		0.0886	mg/kg	Metals	99	SERAS-146	1												
861	N/A		Soil		SERAS SOP 1811	Cadmium	2.71	mg/kg		0.177	mg/kg	Metals	99	SERAS-146	1												
861	N/A		Soil		SERAS SOP 1811	Calcium	4380	mg/kg		5.32	mg/kg	Metals	99	SERAS-146	1												
861	N/A		Soil		SERAS SOP 1811	Chromium	19.8	mg/kg		0.354	mg/kg	Metals	99	SERAS-146	1												
861	N/A		Soil		SERAS SOP 1811	Cobalt	14.1	mg/kg		0.177	mg/kg	Metals	99	SERAS-146	1												
861	N/A		Soil		SERAS SOP 1811	Copper	76.5	mg/kg	J	0.443	mg/kg	Metals	99	SERAS-146	1												
861	N/A		Soil		SERAS SOP 1811	Iron	39400	mg/kg		26.6	mg/kg	Metals	99	SERAS-146	1												
861	N/A		Soil		SERAS SOP 1811	Lead	478	mg/kg		0.886	mg/kg	Metals	99	SERAS-146	1												
861	N/A		Soil		SERAS SOP 1811	Magnesium	6180	mg/kg		17.7	mg/kg	Metals	99	SERAS-146	1												
861	N/A		Soil		SERAS SOP 1811	Manganese	461	mg/kg		0.266	mg/kg	Metals	99	SERAS-146	1												
861	N/A		Soil		SERAS SOP 1811	Nickel	16.7	mg/kg		0.443	mg/kg	Metals	99	SERAS-146	1												
861	N/A		Soil		SERAS SOP 1811	Potassium	2220	mg/kg		44.3	mg/kg	Metals	99	SERAS-146	1												
861	N/A		Soil		SERAS SOP 1811	Selenium	3.76	mg/kg		1.59	mg/kg	Metals	99	SERAS-146	1												
861	N/A		Soil		SERAS SOP 1811	Silver	2.1	mg/kg		0.443	mg/kg	Metals	99	SERAS-146	1												
861	N/A		Soil		SERAS SOP 1811	Sodium	130	mg/kg		26.6	mg/kg	Metals	99	SERAS-146	1												
861	N/A		Soil		SERAS SOP 1811	Thallium	1.06	mg/kg	UJ	1.06	mg/kg	Metals	99	SERAS-146	1												
861	N/A		Soil		SERAS SOP 1811	Vanadium	50.4	mg/kg		0.354	mg/kg	Metals	99	SERAS-146	1												
861	N/A		Soil		SERAS SOP 1811	Zinc	949	mg/kg		2.22	mg/kg	Metals	99	SERAS-146	1												
865	N/A		Soil		SERAS SOP 1811	Aluminum	14400	mg/kg		7.93	mg/kg	Metals	98	SERAS-146	1												
865	N/A		Soil		SERAS SOP 1811	Antimony	14.6	mg/kg		1.12	mg/kg	Metals	98	SERAS-146	1												
865	N/A		Soil		SERAS SOP 1811	Arsenic	494	mg/kg		0.933	mg/kg	Metals	98	SERAS-146	1												
865	N/A		Soil		SERAS SOP 1811	Barium	112	mg/kg		0.28	mg/kg	Metals	98	SERAS-146	1												
865	N/A		Soil		SERAS SOP 1811	Beryllium	0.0933	mg/kg	U	0.0933	mg/kg	Metals	98	SERAS-146	1												
865	N/A		Soil		SERAS SOP 1811	Cadmium	2.79	mg/kg		0.187	mg/kg	Metals	98	SERAS-146	1												

Samp_No	Location	Sublocation	Matrix_ID	Lab_Name	Analytical_Method	Analyte	Result	Result_Units	Result_Qualifier	Reporting_Limit	Reporting_Limit_Units	Analysis	Percent_Solids	WA#	QAFlag	Comment	Date_Analyzed	Lab_Samp_No	Result_Type_Code	QC_Type	Percent_Lipids	Amount_Spiked	Amount_Spiked_Units	Percent_Recovery	Percent_Recovery_Limits	RPD	RPD_Limits
865	N/A		Soil		SERAS SOP 1811	Calcium	5210	mg/kg		5.6	mg/kg	Metals	98	SERAS-146	1												
865	N/A		Soil		SERAS SOP 1811	Chromium	18.1	mg/kg		0.373	mg/kg	Metals	98	SERAS-146	1												
865	N/A		Soil		SERAS SOP 1811	Cobalt	13.9	mg/kg		0.187	mg/kg	Metals	98	SERAS-146	1												
865	N/A		Soil		SERAS SOP 1811	Copper	87.3	mg/kg	J	0.466	mg/kg	Metals	98	SERAS-146	1												
865	N/A		Soil		SERAS SOP 1811	Iron	45500	mg/kg		28	mg/kg	Metals	98	SERAS-146	1												
865	N/A		Soil		SERAS SOP 1811	Lead	860	mg/kg		0.933	mg/kg	Metals	98	SERAS-146	1												
865	N/A		Soil		SERAS SOP 1811	Magnesium	5460	mg/kg		18.7	mg/kg	Metals	98	SERAS-146	1												
865	N/A		Soil		SERAS SOP 1811	Manganese	399	mg/kg		0.28	mg/kg	Metals	98	SERAS-146	1												
865	N/A		Soil		SERAS SOP 1811	Nickel	14.9	mg/kg		0.466	mg/kg	Metals	98	SERAS-146	1												
865	N/A		Soil		SERAS SOP 1811	Potassium	2740	mg/kg		46.6	mg/kg	Metals	98	SERAS-146	1												
865	N/A		Soil		SERAS SOP 1811	Selenium	6.86	mg/kg		1.68	mg/kg	Metals	98	SERAS-146	1												
865	N/A		Soil		SERAS SOP 1811	Silver	4.16	mg/kg		0.466	mg/kg	Metals	98	SERAS-146	1												
865	N/A		Soil		SERAS SOP 1811	Sodium	193	mg/kg		28	mg/kg	Metals	98	SERAS-146	1												
865	N/A		Soil		SERAS SOP 1811	Thallium	1.12	mg/kg	UJ	1.12	mg/kg	Metals	98	SERAS-146	1												
865	N/A		Soil		SERAS SOP 1811	Vanadium	56.2	mg/kg		0.373	mg/kg	Metals	98	SERAS-146	1												
865	N/A		Soil		SERAS SOP 1811	Zinc	844	mg/kg		2.33	mg/kg	Metals	98	SERAS-146	1												
873	N/A		Soil		SERAS SOP 1811	Aluminum	19800	mg/kg		8.02	mg/kg	Metals	97	SERAS-146	1												
873	N/A		Soil		SERAS SOP 1811	Antimony	11.4	mg/kg		1.13	mg/kg	Metals	97	SERAS-146	1												
873	N/A		Soil		SERAS SOP 1811	Arsenic	530	mg/kg		0.944	mg/kg	Metals	97	SERAS-146	1												
873	N/A		Soil		SERAS SOP 1811	Barium	214	mg/kg		0.283	mg/kg	Metals	97	SERAS-146	1												
873	N/A		Soil		SERAS SOP 1811	Beryllium	0.124	mg/kg		0.0944	mg/kg	Metals	97	SERAS-146	1												
873	N/A		Soil		SERAS SOP 1811	Cadmium	4.12	mg/kg		0.189	mg/kg	Metals	97	SERAS-146	1												
873	N/A		Soil		SERAS SOP 1811	Calcium	7520	mg/kg		5.66	mg/kg	Metals	97	SERAS-146	1												
873	N/A		Soil		SERAS SOP 1811	Chromium	27.6	mg/kg		0.378	mg/kg	Metals	97	SERAS-146	1												
873	N/A		Soil		SERAS SOP 1811	Cobalt	18.7	mg/kg		0.189	mg/kg	Metals	97	SERAS-146	1												
873	N/A		Soil		SERAS SOP 1811	Copper	105	mg/kg	J	0.472	mg/kg	Metals	97	SERAS-146	1												
873	N/A		Soil		SERAS SOP 1811	Iron	44600	mg/kg		28.3	mg/kg	Metals	97	SERAS-146	1												
873	N/A		Soil		SERAS SOP 1811	Lead	760	mg/kg		0.944	mg/kg	Metals	97	SERAS-146	1												
873	N/A		Soil		SERAS SOP 1811	Magnesium	8650	mg/kg		18.9	mg/kg	Metals	97	SERAS-146	1												
873	N/A		Soil		SERAS SOP 1811	Manganese	556	mg/kg		0.283	mg/kg	Metals	97	SERAS-146	1												
873	N/A		Soil		SERAS SOP 1811	Nickel	45.1	mg/kg		0.472	mg/kg	Metals	97	SERAS-146	1												
873	N/A		Soil		SERAS SOP 1811	Potassium	2600	mg/kg		47.2	mg/kg	Metals	97	SERAS-146	1												
873	N/A		Soil		SERAS SOP 1811	Selenium	5.4	mg/kg		1.7	mg/kg	Metals	97	SERAS-146	1												
873	N/A		Soil		SERAS SOP 1811	Silver	3.53	mg/kg		0.472	mg/kg	Metals	97	SERAS-146	1												
873	N/A		Soil		SERAS SOP 1811	Sodium	582	mg/kg		28.3	mg/kg	Metals	97	SERAS-146	1												
873	N/A		Soil		SERAS SOP 1811	Thallium	1.13	mg/kg	UJ	1.13	mg/kg	Metals	97	SERAS-146	1												
873	N/A		Soil		SERAS SOP 1811	Vanadium	61.8	mg/kg		0.378	mg/kg	Metals	97	SERAS-146	1												
873	N/A		Soil		SERAS SOP 1811	Zinc	1300	mg/kg		2.36	mg/kg	Metals	97	SERAS-146	1												
879	N/A		Soil		SERAS SOP 1811	Aluminum	22600	mg/kg		8.3	mg/kg	Metals	95	SERAS-146	1												
879	N/A		Soil		SERAS SOP 1811	Antimony	27.3	mg/kg		1.17	mg/kg	Metals	95	SERAS-146	1												
879	N/A		Soil		SERAS SOP 1811	Arsenic	896	mg/kg		0.976	mg/kg	Metals	95	SERAS-146	1												
879	N/A		Soil		SERAS SOP 1811	Barium	204	mg/kg		0.293	mg/kg	Metals	95	SERAS-146	1												
879	N/A		Soil		SERAS SOP 1811	Beryllium	0.11	mg/kg		0.0976	mg/kg	Metals	95	SERAS-146	1												
879	N/A		Soil		SERAS SOP 1811	Cadmium	5.17	mg/kg		0.195	mg/kg	Metals	95	SERAS-146	1												
879	N/A		Soil		SERAS SOP 1811	Calcium	8360	mg/kg		5.86	mg/kg	Metals	95	SERAS-146	1												
879	N/A		Soil		SERAS SOP 1811	Chromium	26.3	mg/kg		0.391	mg/kg	Metals	95	SERAS-146	1												
879	N/A		Soil		SERAS SOP 1811	Cobalt	14	mg/kg		0.195	mg/kg	Metals	95	SERAS-146	1												
879	N/A		Soil		SERAS SOP 1811	Copper	141	mg/kg	J	0.488	mg/kg	Metals	95	SERAS-146	1												
879	N/A		Soil		SERAS SOP 1811	Iron	58100	mg/kg		29.3	mg/kg	Metals	95	SERAS-146	1												
879	N/A		Soil		SERAS SOP 1811	Lead	1910	mg/kg		0.976	mg/kg	Metals	95	SERAS-146	1												
879	N/A		Soil		SERAS SOP 1811	Magnesium	7430	mg/kg		19.5	mg/kg	Metals	95	SERAS-146	1												
879	N/A		Soil		SERAS SOP 1811	Manganese	440	mg/kg		0.293	mg/kg	Metals	95	SERAS-146	1												
879	N/A		Soil		SERAS SOP 1811	Nickel	19.8	mg/kg		0.488	mg/kg	Metals	95	SERAS-146	1												
879	N/A		Soil		SERAS SOP 1811	Potassium	3230	mg/kg		48.8	mg/kg	Metals	95	SERAS-146	1												
879	N/A		Soil		SERAS SOP 1811	Selenium	13.2	mg/kg		1.76	mg/kg	Metals	95	SERAS-146	1												
879	N/A		Soil		SERAS SOP 1811	Silver	9.75	mg/kg		0.488	mg/kg	Metals	95	SERAS-146	1												
879	N/A		Soil		SERAS SOP 1811	Sodium	278	mg/kg		29.3	mg/kg	Metals	95	SERAS-146	1												
879	N/A		Soil		SERAS SOP 1811	Thallium	1.17	mg/kg	UJ	1.17	mg/kg	Metals	95	SERAS-146	1												
879	N/A		Soil		SERAS SOP 1811	Vanadium	64.8	mg/kg		0.391	mg/kg	Metals	95	SERAS-146	1												
879	N/A		Soil		SERAS SOP 1811	Zinc	1640	mg/kg		2.44	mg/kg	Metals	95	SERAS-146	1												