

metals
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MATRIX SPIKE SUMMARY

client: CDM Smith **level:** low **sdg no.:** Q2010
contract: CAMP02 **lab code:** CHEM **case no.:** Q2010 **sas no.:** Q2010
matrix: Solid **sample id:** Q2017-05 **client id:** MH-JMS
Percent Solids for Sample: 82.9 **Spiked ID:** Q2017-05MS **Percent Solids for Spike Sample:** 82.9

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	mg/Kg	75 - 125	3250		2930		110	292		P
Antimony	mg/Kg	75 - 125	21.0		2.73	U	45.7	46	N	P
Arsenic	mg/Kg	75 - 125	41.8		1.08	J	45.7	89		P
Barium	mg/Kg	75 - 125	31.9		23.2		11.4	76		P
Beryllium	mg/Kg	75 - 125	9.55		0.29	J	11.4	81		P
Cadmium	mg/Kg	75 - 125	10.9		0.33	U	11.4	96		P
Calcium	mg/Kg	75 - 125	1040		1040		57.2	-14		P
Chromium	mg/Kg	75 - 125	26.0		6.06		22.9	87		P
Cobalt	mg/Kg	75 - 125	14.6		3.76		11.4	95		P
Copper	mg/Kg	75 - 125	24.7		10.2		17.2	84		P
Iron	mg/Kg	75 - 125	7670		7750		170	-47		P
Lead	mg/Kg	75 - 125	59.0		4.01		57.2	96		P
Magnesium	mg/Kg	75 - 125	1500		1410		110	83		P
Manganese	mg/Kg	75 - 125	228		219		11.4	77		P
Mercury	mg/Kg	80 - 120	0.30		0.015	U	0.31	96		CV
Nickel	mg/Kg	75 - 125	34.4		6.66		28.6	97		P
Potassium	mg/Kg	75 - 125	991		431		570	98		P
Selenium	mg/Kg	75 - 125	98.0		0.56	J	110	89		P
Silver	mg/Kg	75 - 125	3.44		0.55	U	4.3	80		P
Sodium	mg/Kg	75 - 125	317		135		170	107		P
Thallium	mg/Kg	75 - 125	115		2.18	U	110	104		P
Vanadium	mg/Kg	75 - 125	23.8		9.39		17.2	84		P
Zinc	mg/Kg	75 - 125	25.3		15.9		11.4	83		P

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MATRIX SPIKE DUPLICATE SUMMARY

client: CDM Smith **level:** low **sdg no.:** Q2010
contract: CAMP02 **lab code:** CHEM **case no.:** Q2010 **sas no.:** Q2010
matrix: Solid **sample id:** Q2017-05 **client id:** MH-JMSD
Percent Solids for Sample: 82.9 **Spiked ID:** Q2017-05MSD **Percent Solids for Spike Sample:** 82.9

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	mg/Kg	75 - 125	3470		2930		110	494		P
Antimony	mg/Kg	75 - 125	19.8		2.73	U	44.9	44	N	P
Arsenic	mg/Kg	75 - 125	40.4		1.08	J	44.9	88		P
Barium	mg/Kg	75 - 125	32.6		23.2		11.2	84		P
Beryllium	mg/Kg	75 - 125	9.93		0.29	J	11.2	86		P
Cadmium	mg/Kg	75 - 125	10.6		0.33	U	11.2	94		P
Calcium	mg/Kg	75 - 125	1080		1040		56.1	64		P
Chromium	mg/Kg	75 - 125	26.1		6.06		22.4	89		P
Cobalt	mg/Kg	75 - 125	14.5		3.76		11.2	96		P
Copper	mg/Kg	75 - 125	25.4		10.2		16.8	90		P
Iron	mg/Kg	75 - 125	7770		7750		170	17		P
Lead	mg/Kg	75 - 125	57.2		4.01		56.1	95		P
Magnesium	mg/Kg	75 - 125	1710		1410		110	272		P
Manganese	mg/Kg	75 - 125	231		219		11.2	108		P
Mercury	mg/Kg	80 - 120	0.24		0.015	U	0.29	83		CV
Nickel	mg/Kg	75 - 125	34.0		6.66		28.1	97		P
Potassium	mg/Kg	75 - 125	987		431		560	99		P
Selenium	mg/Kg	75 - 125	94.7		0.56	J	110	86		P
Silver	mg/Kg	75 - 125	3.27		0.55	U	4.2	78		P
Sodium	mg/Kg	75 - 125	359		135		170	132	N	P
Thallium	mg/Kg	75 - 125	111		2.18	U	110	101		P
Vanadium	mg/Kg	75 - 125	23.8		9.39		16.8	86		P
Zinc	mg/Kg	75 - 125	26.6		15.9		11.2	96		P