

metals
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MATRIX SPIKE SUMMARY

client: Weston Solutions, Inc. **level:** low **sdg no.:** Q3178
contract: ROYF02 **lab code:** ACE
matrix: Solid **sample id:** Q3178-01 **client id:** EME-TS14-01MS

Percent Solids for Sample: 71.4 **Spiked ID:** Q3178-02 **Percent Solids for Spike Sample:** 71.4

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	mg/Kg	75 - 125	16600		16000		120	519		P
Antimony	mg/Kg	75 - 125	24.0		3.37	U	48.7	49	N	P
Arsenic	mg/Kg	75 - 125	52.2		6.34		48.7	94		P
Barium	mg/Kg	75 - 125	48.8		38.1		12.2	88		P
Beryllium	mg/Kg	75 - 125	11.0		0.48		12.2	87		P
Cadmium	mg/Kg	75 - 125	12.0		0.19	J	12.2	97		P
Calcium	mg/Kg	75 - 125	4960		5350		60.9	-627		P
Chromium	mg/Kg	75 - 125	36.1		12.0		24.4	99		P
Cobalt	mg/Kg	75 - 125	15.5		3.44		12.2	99		P
Copper	mg/Kg	75 - 125	34.0		19.4		18.3	80		P
Iron	mg/Kg	75 - 125	15300		15500		180	-103		P
Lead	mg/Kg	75 - 125	70.7		13.3		60.9	94		P
Magnesium	mg/Kg	75 - 125	1430		1390		120	30		P
Manganese	mg/Kg	75 - 125	755		715		12.2	321		P
Mercury	mg/Kg	80 - 120	0.38		0.020	U	0.33	114		CV
Nickel	mg/Kg	75 - 125	37.8		7.35		30.4	100		P
Potassium	mg/Kg	75 - 125	1580		938		610	105		P
Selenium	mg/Kg	75 - 125	114		1.14	J	120	94		P
Silver	mg/Kg	75 - 125	7.32		0.67	U	4.6	159	N	P
Sodium	mg/Kg	75 - 125	317		149		180	93		P
Thallium	mg/Kg	75 - 125	121		2.69	U	120	101		P
Vanadium	mg/Kg	75 - 125	36.9		20.3		18.3	91		P
Zinc	mg/Kg	75 - 125	59.6		48.4		12.2	92		P

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MATRIX SPIKE DUPLICATE SUMMARY

client: Weston Solutions, Inc. **level:** low **sdg no.:** Q3178
contract: ROYF02 **lab code:** ACE
matrix: Solid **sample id:** Q3178-01 **client id:** EME-TS14-01MSD

Percent Solids for Sample: 71.4 **Spiked ID:** Q3178-03 **Percent Solids for Spike Sample:** 71.4

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	mg/Kg	75 - 125	15700		16000		130	-264		P
Antimony	mg/Kg	75 - 125	25.5		3.37	U	50.9	50	N	P
Arsenic	mg/Kg	75 - 125	53.9		6.34		50.9	93		P
Barium	mg/Kg	75 - 125	51.6		38.1		12.7	106		P
Beryllium	mg/Kg	75 - 125	11.9		0.48		12.7	90		P
Cadmium	mg/Kg	75 - 125	12.7		0.19	J	12.7	98		P
Calcium	mg/Kg	75 - 125	5590		5350		63.7	384		P
Chromium	mg/Kg	75 - 125	37.8		12.0		25.5	101		P
Cobalt	mg/Kg	75 - 125	16.3		3.44		12.7	101		P
Copper	mg/Kg	75 - 125	35.9		19.4		19.1	87		P
Iron	mg/Kg	75 - 125	15600		15500		190	48		P
Lead	mg/Kg	75 - 125	74.4		13.3		63.7	96		P
Magnesium	mg/Kg	75 - 125	1590		1390		130	154		P
Manganese	mg/Kg	75 - 125	775		715		12.7	471		P
Mercury	mg/Kg	80 - 120	0.40		0.020	U	0.36	111		CV
Nickel	mg/Kg	75 - 125	39.8		7.35		31.8	102		P
Potassium	mg/Kg	75 - 125	1680		938		640	116		P
Selenium	mg/Kg	75 - 125	121		1.14	J	130	92		P
Silver	mg/Kg	75 - 125	7.74		0.67	U	4.8	161	N	P
Sodium	mg/Kg	75 - 125	348		149		190	105		P
Thallium	mg/Kg	75 - 125	127		2.69	U	130	98		P
Vanadium	mg/Kg	75 - 125	38.4		20.3		19.1	95		P
Zinc	mg/Kg	75 - 125	62.6		48.4		12.7	112		P