

metals
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MATRIX SPIKE SUMMARY

client: Portal Partners Tri-Venture **level:** low **sdg no.:** Q1422
contract: PORT06 **lab code:** CHEM **case no.:** Q1422 **sas no.:** Q1422
matrix: Solid **sample id:** Q1421-01 **client id:** P001-CLAY-CF01-01MS
Percent Solids for Sample: 70.3 **Spiked ID:** Q1421-02 **Percent Solids for Spike Sample:** 70.3

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	mg/Kg	75 - 125	8730		6910		140	1300		P
Antimony	mg/Kg	75 - 125	13.5		3.23	U	55.8	24	N	P
Arsenic	mg/Kg	75 - 125	63.7		13.9		55.8	89		P
Barium	mg/Kg	75 - 125	67.9		53.2		13.9	106		P
Beryllium	mg/Kg	75 - 125	12.4		1.43		13.9	79		P
Cadmium	mg/Kg	75 - 125	12.0		0.39	U	13.9	86		P
Calcium	mg/Kg	75 - 125	4920		4470		69.7	644		P
Chromium	mg/Kg	75 - 125	41.9		15.4		27.9	95		P
Cobalt	mg/Kg	75 - 125	24.3		9.63		13.9	105		P
Copper	mg/Kg	75 - 125	37.9		17.4		20.9	98		P
Iron	mg/Kg	75 - 125	85600	D	70100	D	210	7399		P
Lead	mg/Kg	75 - 125	78.0		14.4		69.7	91		P
Magnesium	mg/Kg	75 - 125	3650		3020		140	449		P
Manganese	mg/Kg	75 - 125	569		492		13.9	560		P
Mercury	mg/Kg	80 - 120	0.52		0.030		0.4	122	N	CV
Nickel	mg/Kg	75 - 125	56.1		20.5		34.9	102		P
Potassium	mg/Kg	75 - 125	4140		3070		700	152		P
Selenium	mg/Kg	75 - 125	91.2		1.29	U	140	65	N	P
Silver	mg/Kg	75 - 125	2.78		0.65	U	5.2	54	N	P
Sodium	mg/Kg	75 - 125	293		102	J	210	91		P
Thallium	mg/Kg	75 - 125	120		5.31		140	82		P
Vanadium	mg/Kg	75 - 125	45.0		23.4		20.9	104		P
Zinc	mg/Kg	75 - 125	91.2		72.9		13.9	132		P

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MATRIX SPIKE DUPLICATE SUMMARY

client: Portal Partners Tri-Venture **level:** low **sdg no.:** Q1422
contract: PORT06 **lab code:** CHEM **case no.:** Q1422 **sas no.:** Q1422
matrix: Solid **sample id:** Q1421-01 **client id:** P001-CLAY-CF01-01MSD
Percent Solids for Sample: 70.3 **Spiked ID:** Q1421-03 **Percent Solids for Spike Sample:** 70.3

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	mg/Kg	75 - 125	7930		6910		130	789		P
Antimony	mg/Kg	75 - 125	12.6		3.23	U	50.4	25	N	P
Arsenic	mg/Kg	75 - 125	58.4		13.9		50.4	88		P
Barium	mg/Kg	75 - 125	61.9		53.2		12.6	69		P
Beryllium	mg/Kg	75 - 125	11.3		1.43		12.6	78		P
Cadmium	mg/Kg	75 - 125	10.8		0.39	U	12.6	86		P
Calcium	mg/Kg	75 - 125	4470		4470		62.9	-5		P
Chromium	mg/Kg	75 - 125	38.6		15.4		25.2	92		P
Cobalt	mg/Kg	75 - 125	22.2		9.63		12.6	100		P
Copper	mg/Kg	75 - 125	33.9		17.4		18.9	88		P
Iron	mg/Kg	75 - 125	79700	D	70100	D	190	5059		P
Lead	mg/Kg	75 - 125	71.5		14.4		62.9	91		P
Magnesium	mg/Kg	75 - 125	3320		3020		130	226		P
Manganese	mg/Kg	75 - 125	517		492		12.6	203		P
Mercury	mg/Kg	80 - 120	0.48		0.030		0.38	117		CV
Nickel	mg/Kg	75 - 125	51.2		20.5		31.5	98		P
Potassium	mg/Kg	75 - 125	3830		3070		630	120		P
Selenium	mg/Kg	75 - 125	84.2		1.29	U	130	65	N	P
Silver	mg/Kg	75 - 125	2.75		0.65	U	4.7	58	N	P
Sodium	mg/Kg	75 - 125	271		102	J	190	89		P
Thallium	mg/Kg	75 - 125	112		5.31		130	82		P
Vanadium	mg/Kg	75 - 125	40.9		23.4		18.9	93		P
Zinc	mg/Kg	75 - 125	84.0		72.9		12.6	88		P