

metals
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MATRIX SPIKE SUMMARY

client: Portal Partners Tri-Venture **level:** low **sdg no.:** Q2177
contract: PORT06 **lab code:** CHEM **case no.:** Q2177 **sas no.:** Q2177
matrix: Water **sample id:** Q2155-04 **client id:** 444MS
Percent Solids for Sample: NA **Spiked ID:** Q2155-04MS **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75 - 125	3.24		0.29		4.0	74	N	CV

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MATRIX SPIKE DUPLICATE SUMMARY

client: <u>Portal Partners Tri-Venture</u>	level: <u>low</u>	sdg no.: <u>Q2177</u>
contract: <u>PORT06</u>	lab code: <u>CHEM</u>	case no.: <u>Q2177</u> sas no.: <u>Q2177</u>
matrix: <u>Water</u>	sample id: <u>Q2155-04</u>	client id: <u>444MSD</u>
Percent Solids for Sample: <u>NA</u>	Spiked ID: <u>Q2155-04MSD</u>	Percent Solids for Spike Sample: <u>NA</u>

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75 - 125	3.37		0.29		4.0	77		CV

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MATRIX SPIKE SUMMARY

client: Portal Partners Tri-Venture **level:** low **sdg no.:** Q2177
contract: PORT06 **lab code:** CHEM **case no.:** Q2177 **sas no.:** Q2177
matrix: Water **sample id:** Q2169-03 **client id:** 303-PPR-2MS
Percent Solids for Sample: NA **Spiked ID:** Q2169-03MS **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75 - 125	23000		21900		1000	114		P
Antimony	ug/L	75 - 125	220		25.0	U	400	55	N	P
Arsenic	ug/L	75 - 125	349		12.7		400	84		P
Barium	ug/L	75 - 125	224		143		100	81		P
Beryllium	ug/L	75 - 125	83.7		0.90	J	100	83		P
Cadmium	ug/L	75 - 125	95.2		0.74	J	100	94		P
Calcium	ug/L	75 - 125	39000		36900		500	419		P
Chromium	ug/L	75 - 125	255		86.8		200	84		P
Cobalt	ug/L	75 - 125	106		11.6	J	100	95		P
Copper	ug/L	75 - 125	206		94.4		150	74	N	P
Iron	ug/L	75 - 125	20500		21500		1500	-71		P
Lead	ug/L	75 - 125	542		102		500	88		P
Magnesium	ug/L	75 - 125	11100		9650		1000	149		P
Manganese	ug/L	75 - 125	1070		952		100	118		P
Nickel	ug/L	75 - 125	265		30.1		250	94		P
Potassium	ug/L	75 - 125	10400		6440		5000	79		P
Selenium	ug/L	75 - 125	776		10.0	U	1000	78		P
Silver	ug/L	75 - 125	20.0		1.04	J	37.5	51	N	P
Sodium	ug/L	75 - 125	89200		94200		1500	-330		P
Thallium	ug/L	75 - 125	878		20.0	U	1000	88		P
Vanadium	ug/L	75 - 125	163		37.3		150	84		P
Zinc	ug/L	75 - 125	278		216		100	62	N	P

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MATRIX SPIKE DUPLICATE SUMMARY

client: Portal Partners Tri-Venture **level:** low **sdg no.:** Q2177
contract: PORT06 **lab code:** CHEM **case no.:** Q2177 **sas no.:** Q2177
matrix: Water **sample id:** Q2169-03 **client id:** 303-PPR-2MSD
Percent Solids for Sample: NA **Spiked ID:** Q2169-03MSD **Percent Solids for Spike Sample:** NA

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75 - 125	23800		21900		1000	193		P
Antimony	ug/L	75 - 125	232		25.0	U	400	58	N	P
Arsenic	ug/L	75 - 125	367		12.7		400	89		P
Barium	ug/L	75 - 125	222		143		100	79		P
Beryllium	ug/L	75 - 125	92.7		0.90	J	100	92		P
Cadmium	ug/L	75 - 125	101		0.74	J	100	100		P
Calcium	ug/L	75 - 125	38700		36900		500	347		P
Chromium	ug/L	75 - 125	268		86.8		200	91		P
Cobalt	ug/L	75 - 125	112		11.6	J	100	100		P
Copper	ug/L	75 - 125	216		94.4		150	81		P
Iron	ug/L	75 - 125	20500		21500		1500	-66		P
Lead	ug/L	75 - 125	570		102		500	94		P
Magnesium	ug/L	75 - 125	11300		9650		1000	168		P
Manganese	ug/L	75 - 125	1080		952		100	125		P
Nickel	ug/L	75 - 125	279		30.1		250	99		P
Potassium	ug/L	75 - 125	10600		6440		5000	84		P
Selenium	ug/L	75 - 125	825		10.0	U	1000	82		P
Silver	ug/L	75 - 125	21.8		1.04	J	37.5	55	N	P
Sodium	ug/L	75 - 125	87300		94200		1500	-456		P
Thallium	ug/L	75 - 125	915		20.0	U	1000	92		P
Vanadium	ug/L	75 - 125	166		37.3		150	86		P
Zinc	ug/L	75 - 125	290		216		100	74	N	P

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MATRIX SPIKE SUMMARY

client: Portal Partners Tri-Venture **level:** low **sdg no.:** Q2177
contract: PORT06 **lab code:** CHEM **case no.:** Q2177 **sas no.:** Q2177
matrix: Solid **sample id:** Q2176-08 **client id:** TP-65MS
Percent Solids for Sample: 87.3 **Spiked ID:** Q2176-08MS **Percent Solids for Spike Sample:** 87.3

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	mg/Kg	80 - 120	0.27		0.011	J	0.3	87		CV

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MATRIX SPIKE DUPLICATE SUMMARY

client:	<u>Portal Partners Tri-Venture</u>	level:	<u>low</u>	sdg no.:	<u>Q2177</u>	
contract:	<u>PORT06</u>	lab code:	<u>CHEM</u>	case no.:	<u>Q2177</u>	sas no.: <u>Q2177</u>
matrix:	<u>Solid</u>	sample id:	<u>Q2176-08</u>	client id:	<u>TP-65MSD</u>	
Percent Solids for Sample:	87.3	Spiked ID:	Q2176-08MSD	Percent Solids for Spike Sample:	87.3	

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	mg/Kg	80 - 120	0.29		0.011	J	0.29	95		CV

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MATRIX SPIKE SUMMARY

client: Portal Partners Tri-Venture **level:** low **sdg no.:** Q2177
contract: PORT06 **lab code:** CHEM **case no.:** Q2177 **sas no.:** Q2177
matrix: Solid **sample id:** Q2177-04 **client id:** B-187-SB02MS
Percent Solids for Sample: 62.8 **Spiked ID:** Q2177-04MS **Percent Solids for Spike Sample:** 62.8

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	mg/Kg	75 - 125	7400		5970		140	1023		P
Antimony	mg/Kg	75 - 125	22.4		3.76	U	54.4	41	N	P
Arsenic	mg/Kg	75 - 125	53.0		1.00	J	54.4	96		P
Barium	mg/Kg	75 - 125	19.0		5.38	J	13.6	100		P
Beryllium	mg/Kg	75 - 125	13.9		0.29	J	13.6	100		P
Cadmium	mg/Kg	75 - 125	13.9		0.19	J	13.6	101		P
Calcium	mg/Kg	75 - 125	586		427		68.0	234		P
Chromium	mg/Kg	75 - 125	36.3		8.68		27.2	102		P
Cobalt	mg/Kg	75 - 125	17.8		3.45		13.6	105		P
Copper	mg/Kg	75 - 125	27.0		6.86		20.4	99		P
Iron	mg/Kg	75 - 125	10500		9960		200	266		P
Lead	mg/Kg	75 - 125	69.1		4.48		68.0	95		P
Magnesium	mg/Kg	75 - 125	1940		1580		140	254		P
Manganese	mg/Kg	75 - 125	82.6		65.9		13.6	123		P
Nickel	mg/Kg	75 - 125	43.6		8.35		34.0	104		P
Potassium	mg/Kg	75 - 125	979		356		680	92		P
Selenium	mg/Kg	75 - 125	125		1.50	U	140	89		P
Silver	mg/Kg	75 - 125	4.82		0.75	U	5.1	94		P
Sodium	mg/Kg	75 - 125	572		357		200	108		P
Thallium	mg/Kg	75 - 125	125		3.00	U	140	89		P
Vanadium	mg/Kg	75 - 125	30.8		9.88		20.4	103		P
Zinc	mg/Kg	75 - 125	35.5		19.9		13.6	115		P

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MATRIX SPIKE DUPLICATE SUMMARY

client: Portal Partners Tri-Venture **level:** low **sdg no.:** Q2177
contract: PORT06 **lab code:** CHEM **case no.:** Q2177 **sas no.:** Q2177
matrix: Solid **sample id:** Q2177-04 **client id:** B-187-SB02MSD
Percent Solids for Sample: 62.8 **Spiked ID:** Q2177-04MSD **Percent Solids for Spike Sample:** 62.8

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	mg/Kg	75 - 125	9640		5970		150	2448		P
Antimony	mg/Kg	75 - 125	21.9		3.76	U	58.4	38	N	P
Arsenic	mg/Kg	75 - 125	57.8		1.00	J	58.4	97		P
Barium	mg/Kg	75 - 125	23.7		5.38	J	14.6	126	N	P
Beryllium	mg/Kg	75 - 125	14.3		0.29	J	14.6	96		P
Cadmium	mg/Kg	75 - 125	15.0		0.19	J	14.6	102		P
Calcium	mg/Kg	75 - 125	868		427		73.0	604		P
Chromium	mg/Kg	75 - 125	41.4		8.68		29.2	112		P
Cobalt	mg/Kg	75 - 125	20.1		3.45		14.6	114		P
Copper	mg/Kg	75 - 125	31.2		6.86		21.9	111		P
Iron	mg/Kg	75 - 125	13600		9960		220	1676		P
Lead	mg/Kg	75 - 125	77.2		4.48		73.0	100		P
Magnesium	mg/Kg	75 - 125	2430		1580		150	565		P
Manganese	mg/Kg	75 - 125	98.2		65.9		14.6	221		P
Nickel	mg/Kg	75 - 125	49.4		8.35		36.5	113		P
Potassium	mg/Kg	75 - 125	1250		356		730	123		P
Selenium	mg/Kg	75 - 125	136		1.50	U	150	91		P
Silver	mg/Kg	75 - 125	5.46		0.75	U	5.5	99		P
Sodium	mg/Kg	75 - 125	789		357		220	196	N	P
Thallium	mg/Kg	75 - 125	136		3.00	U	150	91		P
Vanadium	mg/Kg	75 - 125	37.2		9.88		21.9	125		P
Zinc	mg/Kg	75 - 125	43.4		19.9		14.6	161	N	P