

metals
- 5a -
MATRIX SPIKE SUMMARY

client: Nobis Group **level:** low **sdg no.:** Q1383
contract: NOBI03 **lab code:** CHEM **case no.:** Q1383 **sas no.:** Q1383
matrix: Solid **sample id:** Q1383-13 **client id:** OU4-PCS-TC-17-021725MS
Percent Solids for Sample: 91.4 **Spiked ID:** Q1383-13MS **Percent Solids for Spike Sample:** 91.4

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	mg/Kg	74 - 119	9990		7550		99.0	2462		P
Antimony	mg/Kg	79 - 114	11.1		2.29	U	39.6	28	N	P
Arsenic	mg/Kg	82 - 111	34.2		1.09		39.6	83		P
Barium	mg/Kg	83 - 113	23.3		12.7		9.9	107		P
Beryllium	mg/Kg	83 - 113	6.96		0.057	J	9.9	70	N	P
Cadmium	mg/Kg	82 - 113	10.4		0.77		9.9	97		P
Calcium	mg/Kg	81 - 116	8960		7220		49.5	3510		P
Chromium	mg/Kg	85 - 113	16.3		1.03		19.8	77	N	P
Cobalt	mg/Kg	85 - 112	30.0		15.9		9.9	142	N	P
Copper	mg/Kg	81 - 117	48.2		30.8		14.9	117		P
Iron	mg/Kg	81 - 118	32600		25800		150	4509		P
Lead	mg/Kg	81 - 112	48.1		2.43		49.5	92		P
Magnesium	mg/Kg	78 - 115	7350		5960		99.0	1404		P
Manganese	mg/Kg	84 - 114	252		194		9.9	589		P
Nickel	mg/Kg	83 - 113	31.9		7.55		24.8	98		P
Potassium	mg/Kg	81 - 116	579		114		500	93		P
Selenium	mg/Kg	78 - 111	66.9		0.92	U	99.0	68	N	P
Silver	mg/Kg	82 - 112	3.37		0.30	J	3.7	83		P
Sodium	mg/Kg	83 - 118	1970		1440		150	354		P
Thallium	mg/Kg	83 - 111	87.1		1.83	U	99.0	88		P
Vanadium	mg/Kg	82 - 114	93.7		60.6		14.9	222		P
Zinc	mg/Kg	82 - 113	42.4		28.6		9.9	139	N	P

metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: Nobis Group **level:** low **sdg no.:** Q1383
contract: NOBI03 **lab code:** CHEM **case no.:** Q1383 **sas no.:** Q1383
matrix: Solid **sample id:** Q1383-13 **client id:** OU4-PCS-TC-17-021725MSD
Percent Solids for Sample: 91.4 **Spiked ID:** Q1383-13MSD **Percent Solids for Spike Sample:** 91.4

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	mg/Kg	74 - 119	9710		7550		94.3	2286		P
Antimony	mg/Kg	79 - 114	10.5		2.29	U	37.7	28	N	P
Arsenic	mg/Kg	82 - 111	32.8		1.09		37.7	84		P
Barium	mg/Kg	83 - 113	22.2		12.7		9.4	102		P
Beryllium	mg/Kg	83 - 113	6.58		0.057	J	9.4	69	N	P
Cadmium	mg/Kg	82 - 113	10.1		0.77		9.4	99		P
Calcium	mg/Kg	81 - 116	8560		7220		47.2	2825		P
Chromium	mg/Kg	85 - 113	15.5		1.03		18.9	77	N	P
Cobalt	mg/Kg	85 - 112	28.7		15.9		9.4	136	N	P
Copper	mg/Kg	81 - 117	46.2		30.8		14.1	109		P
Iron	mg/Kg	81 - 118	30900		25800		140	3664		P
Lead	mg/Kg	81 - 112	45.9		2.43		47.2	92		P
Magnesium	mg/Kg	78 - 115	6950		5960		94.3	1047		P
Manganese	mg/Kg	84 - 114	238		194		9.4	472		P
Nickel	mg/Kg	83 - 113	30.6		7.55		23.6	98		P
Potassium	mg/Kg	81 - 116	552		114		470	93		P
Selenium	mg/Kg	78 - 111	65.1		0.92	U	94.3	69	N	P
Silver	mg/Kg	82 - 112	3.22		0.30	J	3.5	83		P
Sodium	mg/Kg	83 - 118	1910		1440		140	337		P
Thallium	mg/Kg	83 - 111	83.3		1.83	U	94.3	88		P
Vanadium	mg/Kg	82 - 114	89.4		60.6		14.1	204		P
Zinc	mg/Kg	82 - 113	40.3		28.6		9.4	124	N	P

metals
- 5a -
MATRIX SPIKE SUMMARY

client: Nobis Group **level:** low **sdg no.:** Q1383
contract: NOBI03 **lab code:** CHEM **case no.:** Q1383 **sas no.:** Q1383
matrix: Solid **sample id:** Q1397-05 **client id:** TP8MS
Percent Solids for Sample: 89.9 **Spiked ID:** Q1397-05MS **Percent Solids for Spike Sample:** 89.9

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	mg/Kg	80 - 124	0.33		0.072		0.28	91		CV

metals

- 5a -

MATRIX SPIKE DUPLICATE SUMMARY

client: Nobis Group **level:** low **sdg no.:** Q1383
contract: NOBI03 **lab code:** CHEM **case no.:** Q1383 **sas no.:** Q1383
matrix: Solid **sample id:** Q1397-05 **client id:** TP8MSD
Percent Solids for Sample: 89.9 **Spiked ID:** Q1397-05MSD **Percent Solids for Spike Sample:** 89.9

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	mg/Kg	80 - 124	0.32		0.072		0.28	90		CV