

metals
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MATRIX SPIKE SUMMARY

client: Union Paving & Construction Company **level:** low **sdg no.:** P4663
contract: UNIO02 **lab code:** CHEM **case no.:** P4663 **sas no.:** P4663
matrix: Solid **sample id:** P4663-02 **client id:** TENNANT-PAD-2-3-STOCKPILEMS
Percent Solids for Sample: 90.9 **Spiked ID:** P4663-02MS **Percent Solids for Spike Sample:** 90.9

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	mg/Kg	80 - 120	0.32		0.011	J	0.26	118		CV

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MATRIX SPIKE DUPLICATE SUMMARY

client:	<u>Union Paving & Construction Company</u>	level:	<u>low</u>	sdg no.:	<u>P4663</u>		
contract:	<u>UNIO02</u>	lab code:	<u>CHEM</u>	case no.:	<u>P4663</u>	sas no.:	<u>P4663</u>
matrix:	<u>Solid</u>	sample id:	<u>P4663-02</u>	client id:	<u>TENNANT-PAD-2-3-STOCKPILEMSD</u>		
Percent Solids for Sample:	90.9	Spiked ID:	<u>P4663-02MSD</u>	Percent Solids for Spike Sample:	90.9		

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	mg/Kg	80 - 120	0.33		0.011	J	0.28	114		CV

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MATRIX SPIKE SUMMARY

client: Union Paving & Construction Company **level:** low **sdg no.:** P4663
contract: UNIO02 **lab code:** CHEM **case no.:** P4663 **sas no.:** P4663
matrix: Solid **sample id:** P4680-05 **client id:** BP-F25MS
Percent Solids for Sample: 88.8 **Spiked ID:** P4680-05MS **Percent Solids for Spike Sample:** 88.8

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	mg/Kg	75 - 125	6560		6230		93.1	352		P
Antimony	mg/Kg	75 - 125	21.3		2.56	U	37.2	57	N	P
Arsenic	mg/Kg	75 - 125	35.4		2.33		37.2	89		P
Barium	mg/Kg	75 - 125	72.0		67.8		9.3	45		P
Beryllium	mg/Kg	75 - 125	8.85		0.71		9.3	88		P
Cadmium	mg/Kg	75 - 125	11.9		1.94		9.3	107		P
Calcium	mg/Kg	75 - 125	3920		7240		46.5	-7143		P
Chromium	mg/Kg	75 - 125	29.4		14.1		18.6	82		P
Cobalt	mg/Kg	75 - 125	18.9		8.56		9.3	111		P
Copper	mg/Kg	75 - 125	60.6		46.0		14.0	104		P
Iron	mg/Kg	75 - 125	13700		14400		140	-535		P
Lead	mg/Kg	75 - 125	57.4		9.57		46.5	103		P
Magnesium	mg/Kg	75 - 125	4060		3660		93.1	423		P
Manganese	mg/Kg	75 - 125	507		458		9.3	528		P
Nickel	mg/Kg	75 - 125	43.2		17.7		23.3	109		P
Potassium	mg/Kg	75 - 125	1740		1380		470	78		P
Selenium	mg/Kg	75 - 125	72.4		1.02	U	93.1	78		P
Silver	mg/Kg	75 - 125	3.36		0.31	J	3.5	87		P
Sodium	mg/Kg	75 - 125	574		420		140	110		P
Thallium	mg/Kg	75 - 125	95.1		2.05	U	93.1	102		P
Vanadium	mg/Kg	75 - 125	31.6		19.4		14.0	88		P
Zinc	mg/Kg	75 - 125	44.1		33.9		9.3	109		P

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MATRIX SPIKE DUPLICATE SUMMARY

client: Union Paving & Construction Company **level:** low **sdg no.:** P4663
contract: UNIO02 **lab code:** CHEM **case no.:** P4663 **sas no.:** P4663
matrix: Solid **sample id:** P4680-05 **client id:** BP-F25MSD
Percent Solids for Sample: 88.8 **Spiked ID:** P4680-05MSD **Percent Solids for Spike Sample:** 88.8

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	mg/Kg	75 - 125	7790		6230		110	1412		P
Antimony	mg/Kg	75 - 125	25.0		2.56	U	43.9	57	N	P
Arsenic	mg/Kg	75 - 125	41.5		2.33		43.9	89		P
Barium	mg/Kg	75 - 125	84.3		67.8		11.0	151		P
Beryllium	mg/Kg	75 - 125	10.6		0.71		11.0	90		P
Cadmium	mg/Kg	75 - 125	14.0		1.94		11.0	110		P
Calcium	mg/Kg	75 - 125	4650		7240		54.9	-4727		P
Chromium	mg/Kg	75 - 125	34.8		14.1		22.0	94		P
Cobalt	mg/Kg	75 - 125	22.2		8.56		11.0	124		P
Copper	mg/Kg	75 - 125	71.3		46.0		16.5	154	N	P
Iron	mg/Kg	75 - 125	15900		14400		160	925		P
Lead	mg/Kg	75 - 125	67.6		9.57		54.9	106		P
Magnesium	mg/Kg	75 - 125	4810		3660		110	1039		P
Manganese	mg/Kg	75 - 125	597		458		11.0	1258		P
Nickel	mg/Kg	75 - 125	51.0		17.7		27.5	121		P
Potassium	mg/Kg	75 - 125	2030		1380		550	119		P
Selenium	mg/Kg	75 - 125	84.4		1.02	U	110	77		P
Silver	mg/Kg	75 - 125	3.89		0.31	J	4.1	87		P
Sodium	mg/Kg	75 - 125	662		420		160	151	N	P
Thallium	mg/Kg	75 - 125	110		2.05	U	110	100		P
Vanadium	mg/Kg	75 - 125	37.3		19.4		16.5	109		P
Zinc	mg/Kg	75 - 125	52.1		33.9		11.0	166	N	P