



January 16, 2019

Johnny Pappas
Arizona Minerals Inc.
2210 E. Fort Lowell Rd
Tucson, AZ 85719

TEL (802) 235-5563
FAX

Work Order No.: 19A0116

RE: Storm Water

Dear Johnny Pappas,

Turner Laboratories, Inc. received 2 sample(s) on 01/07/2019 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Elizabeth Kasik
Laboratory Director

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 19A0116
Date Received: 01/07/2019

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
19A0116-01	Outfall #1	Storm Water	01/07/2019 0900
19A0116-02	Outfall #2	Storm Water	01/07/2019 0840

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 19A0116
Date Received: 01/07/2019

Case Narrative

M3 The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS/LCSD recovery was acceptable.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND Not Detected at or above the PQL

PQL Practical Quantitation Limit

DF Dilution Factor

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 19A0116
Lab Sample ID: 19A0116-01

Client Sample ID: Outfall #1
Collection Date/Time: 01/07/2019 0900
Matrix: Storm Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness, Dissolved-[CALC]									
Hardness, Calcium/Magnesium (As CaCO3) Dissolved	59		22		mg/L	1	01/10/2019 0940	01/10/2019 1521	MH
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	70				mg/L	1	01/10/2019 1120	01/11/2019 1311	MH
ICP Dissolved Metals-E 200.7 (4.4)									
Calcium	17		4.0		mg/L	1	01/10/2019 0940	01/10/2019 1521	MH
Magnesium	4.2		3.0		mg/L	1	01/10/2019 0940	01/10/2019 1521	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Arsenic	0.0049		0.00050		mg/L	1	01/10/2019 0940	01/11/2019 1526	MH
Cadmium	ND		0.00025		mg/L	1	01/10/2019 0940	01/11/2019 1526	MH
Copper	0.0066		0.00050		mg/L	1	01/10/2019 0940	01/11/2019 1526	MH
Lead	0.00085		0.00050		mg/L	1	01/10/2019 0940	01/11/2019 1526	MH
Zinc	ND		0.040		mg/L	1	01/10/2019 0940	01/11/2019 1526	MH
ICP Total Metals-E200.7 (4.4)									
Calcium	19		4.0		mg/L	1	01/10/2019 1120	01/11/2019 1311	MH
Magnesium	5.2		3.0		mg/L	1	01/10/2019 1120	01/11/2019 1311	MH
ICP/MS Total Metals-E200.8 (5.4)									
Arsenic	0.0056		0.00050		mg/L	1	01/09/2019 1045	01/10/2019 1142	MH
Cadmium	ND		0.00025		mg/L	1	01/09/2019 1045	01/10/2019 1142	MH
Copper	0.0095		0.00050		mg/L	1	01/09/2019 1045	01/10/2019 1142	MH
Lead	0.0087		0.00050		mg/L	1	01/09/2019 1045	01/10/2019 1142	MH
Zinc	0.076		0.040		mg/L	1	01/09/2019 1045	01/10/2019 1142	MH

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 19A0116
Lab Sample ID: 19A0116-02

Client Sample ID: Outfall #2
Collection Date/Time: 01/07/2019 0840
Matrix: Storm Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness, Dissolved-[CALC]									
Hardness, Calcium/Magnesium (As CaCO3) Dissolved	2800		220		mg/L	10	01/10/2019 0940	01/10/2019 1541	MH
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	2800				mg/L	10	01/09/2019 0920	01/11/2019 1624	MH
ICP Dissolved Metals-E 200.7 (4.4)									
Calcium	400		40		mg/L	10	01/10/2019 0940	01/10/2019 1541	MH
Magnesium	440		30		mg/L	10	01/10/2019 0940	01/10/2019 1541	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Copper	0.0059		0.0025		mg/L	5	01/10/2019 0940	01/11/2019 1559	MH
ICP Total Metals-E200.7 (4.4)									
Calcium	390		4.0		mg/L	1	01/09/2019 0920	01/11/2019 1624	MH
Copper	ND		0.020		mg/L	1	01/09/2019 0920	01/11/2019 1624	MH
Magnesium	450		30	M3	mg/L	10	01/09/2019 0920	01/11/2019 1616	MH

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 19A0116
Date Received: 01/07/2019

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Qual
Batch 1901102 - E200.7 (4.4)										
Blank (1901102-BLK1) Prepared: 01/09/2019 Analyzed: 01/11/2019										
Calcium	ND	4.0	mg/L							
Copper	ND	0.020	mg/L							
Magnesium	ND	3.0	mg/L							
LCS (1901102-BS1) Prepared: 01/09/2019 Analyzed: 01/11/2019										
Calcium	10	4.0	mg/L	10.00		102	85-115			
Copper	0.24	0.020	mg/L	0.2500		96	85-115			
Magnesium	10	3.0	mg/L	10.00		103	85-115			
LCS Dup (1901102-BSD1) Prepared: 01/09/2019 Analyzed: 01/11/2019										
Calcium	10	4.0	mg/L	10.00		103	85-115	1	20	
Copper	0.24	0.020	mg/L	0.2500		97	85-115	1	20	
Magnesium	10	3.0	mg/L	10.00		103	85-115	0.2	20	
Matrix Spike (1901102-MS1) Source: 19A0094-02 Prepared: 01/09/2019 Analyzed: 01/11/2019										
Calcium	160	4.0	mg/L	10.00	160	58	70-130			M3
Copper	0.39	0.020	mg/L	0.2500	0.12	109	70-130			
Magnesium	41	3.0	mg/L	10.00	31	99	70-130			
Matrix Spike (1901102-MS2) Source: 19A0116-02 Prepared: 01/09/2019 Analyzed: 01/11/2019										
Calcium	400	4.0	mg/L	10.00	390	74	70-130			
Copper	0.29	0.020	mg/L	0.2500	0.011	110	70-130			
Magnesium	450	30	mg/L	10.00	450	NR	70-130			M3
Batch 1901103 - E200.8 (5.4)										
Blank (1901103-BLK1) Prepared: 01/09/2019 Analyzed: 01/10/2019										
Arsenic	ND	0.00050	mg/L							
Cadmium	ND	0.00025	mg/L							
Copper	ND	0.00050	mg/L							
Lead	ND	0.00050	mg/L							
Zinc	ND	0.040	mg/L							
LCS (1901103-BS1) Prepared: 01/09/2019 Analyzed: 01/10/2019										
Arsenic	0.049	0.00050	mg/L	0.05000		98	85-115			
Cadmium	0.050	0.00025	mg/L	0.05000		99	85-115			
Copper	0.050	0.00050	mg/L	0.05000		100	85-115			
Lead	0.049	0.00050	mg/L	0.05000		98	85-115			
Zinc	0.10	0.040	mg/L	0.1000		100	85-115			
LCS Dup (1901103-BSD1) Prepared: 01/09/2019 Analyzed: 01/10/2019										
Arsenic	0.048	0.00050	mg/L	0.05000		97	85-115	1	20	
Cadmium	0.049	0.00025	mg/L	0.05000		99	85-115	0.5	20	
Copper	0.049	0.00050	mg/L	0.05000		98	85-115	1	20	
Lead	0.048	0.00050	mg/L	0.05000		96	85-115	2	20	
Zinc	0.098	0.040	mg/L	0.1000		98	85-115	2	20	

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 19A0116
Date Received: 01/07/2019

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1901103 - E200.8 (5.4)										
Matrix Spike (1901103-MS1)		Source: 19A0116-01			Prepared: 01/09/2019 Analyzed: 01/10/2019					
Arsenic	0.055	0.00050	mg/L	0.05000	0.0056	99	70-130			
Cadmium	0.050	0.00025	mg/L	0.05000	0.00015	99	70-130			
Copper	0.058	0.00050	mg/L	0.05000	0.0095	96	70-130			
Lead	0.057	0.00050	mg/L	0.05000	0.0087	97	70-130			
Zinc	0.17	0.040	mg/L	0.1000	0.076	94	70-130			
Batch 1901104 - E 200.7 (4.4)										
Blank (1901104-BLK1)		Prepared & Analyzed: 01/10/2019								
Calcium	ND	4.0	mg/L							
Magnesium	ND	3.0	mg/L							
LCS (1901104-BS1)		Prepared & Analyzed: 01/10/2019								
Calcium	10	4.0	mg/L	10.00		102	85-115			
Magnesium	10	3.0	mg/L	10.00		100	85-115			
LCS Dup (1901104-BSD1)		Prepared & Analyzed: 01/10/2019								
Calcium	10	4.0	mg/L	10.00		102	85-115	0.08	20	
Magnesium	10	3.0	mg/L	10.00		103	85-115	2	20	
Matrix Spike (1901104-MS1)		Source: 19A0260-01			Prepared & Analyzed: 01/10/2019					
Calcium	62	4.0	mg/L	10.00	53	90	70-130			
Magnesium	21	3.0	mg/L	10.00	11	98	70-130			
Batch 1901108 - E 200.8 (5.4)										
Blank (1901108-BLK1)		Prepared & Analyzed: 01/11/2019								
Arsenic	ND	0.00050	mg/L							
Cadmium	ND	0.00025	mg/L							
Copper	ND	0.00050	mg/L							
Lead	ND	0.00050	mg/L							
Zinc	ND	0.040	mg/L							
LCS (1901108-BS1)		Prepared & Analyzed: 01/11/2019								
Arsenic	0.049	0.00050	mg/L	0.05000		98	85-115			
Cadmium	0.048	0.00025	mg/L	0.05000		96	85-115			
Copper	0.049	0.00050	mg/L	0.05000		99	85-115			
Lead	0.047	0.00050	mg/L	0.05000		95	85-115			
Zinc	0.098	0.040	mg/L	0.1000		98	85-115			
LCS Dup (1901108-BSD1)		Prepared & Analyzed: 01/11/2019								
Arsenic	0.049	0.00050	mg/L	0.05000		98	85-115	0.5	20	
Cadmium	0.049	0.00025	mg/L	0.05000		97	85-115	0.8	20	
Copper	0.049	0.00050	mg/L	0.05000		98	85-115	1	20	
Lead	0.048	0.00050	mg/L	0.05000		96	85-115	1	20	
Zinc	0.097	0.040	mg/L	0.1000		97	85-115	1	20	

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 19A0116
Date Received: 01/07/2019

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1901108 - E 200.8 (5.4)										
Matrix Spike (1901108-MS1)		Source: 19A0117-02			Prepared & Analyzed: 01/11/2019					
Arsenic	0.050	0.00050	mg/L	0.05000	ND	101	70-130			
Cadmium	0.051	0.00025	mg/L	0.05000	0.00012	101	70-130			
Copper	0.050	0.00050	mg/L	0.05000	0.00057	98	70-130			
Lead	0.049	0.00050	mg/L	0.05000	0.00047	98	70-130			
Zinc	0.12	0.040	mg/L	0.1000	0.0090	108	70-130			
Batch 1901120 - E200.7 (4.4)										
Blank (1901120-BLK1)		Prepared: 01/10/2019 Analyzed: 01/11/2019								
Calcium	ND	4.0	mg/L							
Magnesium	ND	3.0	mg/L							
LCS (1901120-BS1)		Prepared: 01/10/2019 Analyzed: 01/11/2019								
Calcium	10	4.0	mg/L	10.00		101	85-115			
Magnesium	10	3.0	mg/L	10.00		102	85-115			
LCS Dup (1901120-BSD1)		Prepared: 01/10/2019 Analyzed: 01/11/2019								
Calcium	9.9	4.0	mg/L	10.00		99	85-115	2	20	
Magnesium	10	3.0	mg/L	10.00		101	85-115	2	20	
Matrix Spike (1901120-MS1)		Source: 19A0212-01			Prepared: 01/10/2019 Analyzed: 01/11/2019					
Calcium	310	4.0	mg/L	10.00	310	69	70-130			M3
Magnesium	46	3.0	mg/L	10.00	36	103	70-130			
Matrix Spike (1901120-MS2)		Source: 19A0239-01			Prepared: 01/10/2019 Analyzed: 01/11/2019					
Calcium	87	4.0	mg/L	10.00	82	50	70-130			M3
Magnesium	19	3.0	mg/L	10.00	9.5	94	70-130			
Matrix Spike Dup (1901120-MSD1)		Source: 19A0212-01			Prepared: 01/10/2019 Analyzed: 01/11/2019					
Calcium	310	4.0	mg/L	10.00	310	62	70-130	0.2	200	M3
Magnesium	47	3.0	mg/L	10.00	36	105	70-130	0.4	200	

Outfall 1 (Trench) Stormwater

LABORATORY			
Analyte	Total	Dissolved	Other
Metals			
Arsenic	X	X	
Cadmium	X	X	
Copper	X	X	
Lead	X	X	
Zinc	X	X	
Major Cations			
Hardness	X	X	

FIELD MEASUREMENTS	
pH	
Specific conductance	
Temperature	
Turbidity	
Flow	
Appearance	

Outfall 2 (Trench) and Outfall 3 (Alta) Stormwater

LABORATORY			
Analyte	Total	Dissolved	Other
Metals			
Copper	X	X	
Major Cations			
Hardness	X	X	

FIELD MEASUREMENTS	
pH	
Specific conductance	
Temperature	
Turbidity	
Flow	
Appearance	



March 20, 2019

Johnny Pappas
Arizona Minerals Inc.
2210 E. Fort Lowell Rd
Tucson, AZ 85719

TEL (802) 235-5563
FAX

Work Order No.: 19C0390

RE: Storm Water

Dear Johnny Pappas,

Turner Laboratories, Inc. received 2 sample(s) on 03/14/2019 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

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Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Elizabeth Kasik
Laboratory Director

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 19C0390
Date Received: 03/14/2019

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
19C0390-01	Outfall#2-031219-8:30	Storm Water	03/12/2019 0830
19C0390-02	Outfall#1-031319-9:00	Storm Water	03/13/2019 0900

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 19C0390
Date Received: 03/14/2019

Case Narrative

Q9 Insufficient sample received to meet method QC requirements.

R12 RPD/RSD exceeded the method acceptance limit. Result less than 5 times the PQL.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND Not Detected at or above the PQL

PQL Practical Quantitation Limit

DF Dilution Factor

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 19C0390
Lab Sample ID: 19C0390-01

Client Sample ID: Outfall#2-031219-8:30
Collection Date/Time: 03/12/2019 0830
Matrix: Storm Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Total Suspended Solids (Residue, Non-Filterable)-SM2540 D									
Total Suspended Solids	13000		10		mg/L	1	03/15/2019 0843	03/18/2019 1535	EJ

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 19C0390
Lab Sample ID: 19C0390-02

Client Sample ID: Outfall#1-031319-9:00
Collection Date/Time: 03/13/2019 0900
Matrix: Storm Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
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Total Suspended Solids (Residue, Non-Filterable)-SM2540 D

Total Suspended Solids	270		10		mg/L	1	03/15/2019 0843	03/18/2019 1535	EJ
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Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 19C0390
Date Received: 03/14/2019

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1903174 - SM2540 D										
Duplicate (1903174-DUP1)		Source: 19C0231-01			Prepared: 03/15/2019 Analyzed: 03/18/2019					
Total Suspended Solids	7.0	10	mg/L		8.0			13	5	Q9, R12
Duplicate (1903174-DUP2)		Source: 19C0391-02			Prepared: 03/15/2019 Analyzed: 03/19/2019					
Total Suspended Solids	100	10	mg/L		97			4	5	



July 26, 2018

Johnny Pappas
Arizona Minerals Inc.
3845 North Business Center Drive, Suite 115
Tucson, AZ 85705

TEL (802) 235-5563
FAX

Work Order No.: 18G0398

RE: Storm Water

Dear Johnny Pappas,

Turner Laboratories, Inc. received 1 sample(s) on 07/12/2018 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Elizabeth Kasik
Business Development

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18G0398
Date Received: 07/12/2018

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
18G0398-01	Outfall #2	Storm Water	07/11/2018 1130

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18G0398
Date Received: 07/12/2018

Case Narrative

M3 The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS/LCSD recovery was acceptable.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND Not Detected at or above the PQL

PQL Practical Quantitation Limit

DF Dilution Factor

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18G0398
Lab Sample ID: 18G0398-01

Client Sample ID: Outfall #2
Collection Date/Time: 07/11/2018 1130
Matrix: Storm Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness, Dissolved-[CALC]									
Hardness, Calcium/Magnesium (As CaCO3) Dissolved	330		22		mg/L	1	07/17/2018 1440	07/19/2018 1519	MH
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	370				mg/L	1	07/19/2018 1020	07/20/2018 1317	MH
ICP Dissolved Metals-E 200.7 (4.4)									
Calcium	75		4.0		mg/L	1	07/17/2018 1440	07/19/2018 1519	MH
Magnesium	34		3.0		mg/L	1	07/17/2018 1440	07/19/2018 1519	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Copper	0.0038		0.00050		mg/L	1	07/19/2018 1300	07/20/2018 1346	MH
ICP Total Metals-E200.7 (4.4)									
Calcium	80		4.0		mg/L	1	07/19/2018 1020	07/20/2018 1317	MH
Copper	0.046		0.020		mg/L	1	07/19/2018 1020	07/20/2018 1317	MH
Magnesium	41		3.0		mg/L	1	07/19/2018 1020	07/20/2018 1317	MH

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18G0398
Date Received: 07/12/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limit	RPD	RPD Limit	Qual
Batch 1807203 - E 200.7 (4.4)										
Blank (1807203-BLK1) Prepared & Analyzed: 07/19/2018										
Calcium	ND	4.0	mg/L							
Magnesium	ND	3.0	mg/L							
LCS (1807203-BS1) Prepared & Analyzed: 07/19/2018										
Calcium	10	4.0	mg/L	10.00		100	85-115			
Magnesium	10	3.0	mg/L	10.00		101	85-115			
LCS Dup (1807203-BSD1) Prepared & Analyzed: 07/19/2018										
Calcium	9.5	4.0	mg/L	10.00		95	85-115	5	20	
Magnesium	9.8	3.0	mg/L	10.00		98	85-115	3	20	
Matrix Spike (1807203-MS1) Source: 18G0286-01 Prepared & Analyzed: 07/19/2018										
Calcium	25	4.0	mg/L	10.00	16	90	70-130			
Magnesium	13	3.0	mg/L	10.00	3.0	96	70-130			
Matrix Spike (1807203-MS2) Source: 18G0340-01 Prepared & Analyzed: 07/19/2018										
Calcium	48	4.0	mg/L	10.00	36	114	70-130			
Magnesium	16	3.0	mg/L	10.00	5.6	100	70-130			
Batch 1807206 - E200.7 (4.4)										
Blank (1807206-BLK1) Prepared: 07/19/2018 Analyzed: 07/20/2018										
Calcium	ND	4.0	mg/L							
Copper	ND	0.020	mg/L							
Magnesium	ND	3.0	mg/L							
LCS (1807206-BS1) Prepared: 07/19/2018 Analyzed: 07/20/2018										
Calcium	9.6	4.0	mg/L	10.00		96	85-115			
Copper	0.24	0.020	mg/L	0.2500		96	85-115			
Magnesium	9.8	3.0	mg/L	10.00		98	85-115			
LCS Dup (1807206-BSD1) Prepared: 07/19/2018 Analyzed: 07/20/2018										
Calcium	9.7	4.0	mg/L	10.00		97	85-115	2	20	
Copper	0.24	0.020	mg/L	0.2500		96	85-115	0.5	20	
Magnesium	9.9	3.0	mg/L	10.00		99	85-115	0.6	20	
Matrix Spike (1807206-MS1) Source: 18G0299-01 Prepared: 07/19/2018 Analyzed: 07/20/2018										
Calcium	50	4.0	mg/L	10.00	41	88	70-130			
Copper	0.28	0.020	mg/L	0.2500	0.0091	110	70-130			
Magnesium	770	30	mg/L	10.00	790	NR	70-130			M3
Matrix Spike (1807206-MS2) Source: 18G0325-01 Prepared: 07/19/2018 Analyzed: 07/20/2018										
Calcium	400	4.0	mg/L	10.00	400	NR	70-130			M3
Copper	0.27	0.020	mg/L	0.2500	0.016	103	70-130			
Magnesium	110	3.0	mg/L	10.00	98	82	70-130			
Batch 1807208 - E 200.8 (5.4)										
Blank (1807208-BLK1) Prepared & Analyzed: 07/20/2018										
Copper	ND	0.00050	mg/L							

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18G0398
Date Received: 07/12/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1807208 - E 200.8 (5.4)										
LCS (1807208-BS1)				Prepared & Analyzed: 07/20/2018						
Copper	0.051	0.00050	mg/L	0.05000		103	85-115			
LCS Dup (1807208-BSD1)				Prepared & Analyzed: 07/20/2018						
Copper	0.051	0.00050	mg/L	0.05000		102	85-115	0.4	20	
Matrix Spike (1807208-MS1)		Source: 18G0398-01		Prepared & Analyzed: 07/20/2018						
Copper	0.049	0.00050	mg/L	0.05000	0.0038	90	70-130			

Outfall 2 (Trench) and Outfall 3 (Alta) Stormwater

LABORATORY			
Analyte	Total	Dissolved	Other
Metals			
Copper	X	X	
Major Cations			
Hardness	X	X	

FIELD MEASUREMENTS	
pH	
Specific conductance	
Temperature	
Turbidity	
Flow	
Appearance	



July 26, 2018

Johnny Pappas
Arizona Minerals Inc.
3845 North Business Center Drive, Suite 115
Tucson, AZ 85705

TEL (802) 235-5563
FAX

Work Order No.: 18G0425

RE: Storm Water

Dear Johnny Pappas,

Turner Laboratories, Inc. received 2 sample(s) on 07/13/2018 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Elizabeth Kasik
Business Development

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18G0425
Date Received: 07/13/2018

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
18G0425-01	Outfall 1	Storm Water	07/13/2018 0810
18G0425-02	Outfall 3	Storm Water	07/13/2018 0810

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18G0425
Date Received: 07/13/2018

Case Narrative

M3 The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS/LCSD recovery was acceptable.

M7 Matrix spike recovery was low. Data reported per ADEQ policy 0154.000. Matrix interference was confirmed.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND Not Detected at or above the PQL

PQL Practical Quantitation Limit

DF Dilution Factor

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18G0425
Lab Sample ID: 18G0425-01

Client Sample ID: Outfall 1
Collection Date/Time: 07/13/2018 0810
Matrix: Storm Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness, Dissolved-[CALC]									
Hardness, Calcium/Magnesium (As CaCO3) Dissolved	110		22		mg/L	1	07/17/2018 1440	07/19/2018 1523	MH
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	210				mg/L	1	07/19/2018 1020	07/20/2018 1329	MH
ICP Dissolved Metals-E 200.7 (4.4)									
Calcium	21		4.0		mg/L	1	07/17/2018 1440	07/19/2018 1523	MH
Magnesium	14		3.0		mg/L	1	07/17/2018 1440	07/19/2018 1523	MH
Zinc	ND		0.040		mg/L	1	07/17/2018 1440	07/19/2018 1524	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Arsenic	0.0044		0.00050		mg/L	1	07/17/2018 1440	07/20/2018 1423	MH
Cadmium	ND		0.00025		mg/L	1	07/17/2018 1440	07/20/2018 1423	MH
Copper	0.0045		0.00050		mg/L	1	07/17/2018 1440	07/20/2018 1423	MH
Lead	0.00061		0.00050		mg/L	1	07/17/2018 1440	07/20/2018 1423	MH
ICP Total Metals-E200.7 (4.4)									
Arsenic	0.11		0.040		mg/L	1	07/19/2018 1020	07/20/2018 1330	MH
Cadmium	0.0039		0.0020		mg/L	1	07/19/2018 1020	07/20/2018 1330	MH
Calcium	30		4.0		mg/L	1	07/19/2018 1020	07/20/2018 1329	MH
Copper	0.14		0.020		mg/L	1	07/19/2018 1020	07/20/2018 1330	MH
Lead	0.96		0.040		mg/L	1	07/19/2018 1020	07/20/2018 1330	MH
Magnesium	33		3.0		mg/L	1	07/19/2018 1020	07/20/2018 1329	MH
Zinc	2.1		0.040		mg/L	1	07/19/2018 1020	07/20/2018 1330	MH

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18G0425
Lab Sample ID: 18G0425-02

Client Sample ID: Outfall 3
Collection Date/Time: 07/13/2018 0810
Matrix: Storm Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness, Dissolved-[CALC]									
Hardness, Calcium/Magnesium (As CaCO3) Dissolved	40		22		mg/L	1	07/19/2018 1300	07/24/2018 1421	MH
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	170				mg/L	1	07/19/2018 1020	07/20/2018 1333	MH
ICP Dissolved Metals-E 200.7 (4.4)									
Calcium	9.6		4.0		mg/L	1	07/19/2018 1300	07/24/2018 1421	MH
Magnesium	4.0		3.0		mg/L	1	07/19/2018 1300	07/24/2018 1421	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Copper	0.046		0.00050		mg/L	1	07/19/2018 1300	07/20/2018 1439	MH
ICP Total Metals-E200.7 (4.4)									
Calcium	24		4.0		mg/L	1	07/19/2018 1020	07/20/2018 1333	MH
Copper	0.20		0.020		mg/L	1	07/19/2018 1020	07/20/2018 1334	MH
Magnesium	28		3.0		mg/L	1	07/19/2018 1020	07/20/2018 1333	MH

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18G0425
Date Received: 07/13/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1807203 - E 200.7 (4.4)										
Blank (1807203-BLK1) Prepared & Analyzed: 07/19/2018										
Calcium	ND	4.0	mg/L							
Magnesium	ND	3.0	mg/L							
Zinc	ND	0.040	mg/L							
LCS (1807203-BS1) Prepared & Analyzed: 07/19/2018										
Calcium	10	4.0	mg/L	10.00		100	85-115			
Magnesium	10	3.0	mg/L	10.00		101	85-115			
Zinc	0.50	0.040	mg/L	0.5000		101	85-115			
LCS Dup (1807203-BSD1) Prepared & Analyzed: 07/19/2018										
Calcium	9.5	4.0	mg/L	10.00		95	85-115	5	20	
Magnesium	9.8	3.0	mg/L	10.00		98	85-115	3	20	
Zinc	0.50	0.040	mg/L	0.5000		101	85-115	0.07	20	
Matrix Spike (1807203-MS1) Source: 18G0286-01 Prepared & Analyzed: 07/19/2018										
Calcium	25	4.0	mg/L	10.00	16	90	70-130			
Magnesium	13	3.0	mg/L	10.00	3.0	96	70-130			
Zinc	0.50	0.040	mg/L	0.5000	ND	100	70-130			
Matrix Spike (1807203-MS2) Source: 18G0340-01 Prepared & Analyzed: 07/19/2018										
Calcium	48	4.0	mg/L	10.00	36	114	70-130			
Magnesium	16	3.0	mg/L	10.00	5.6	100	70-130			
Zinc	0.50	0.040	mg/L	0.5000	0.0072	100	70-130			
Batch 1807206 - E200.7 (4.4)										
Blank (1807206-BLK1) Prepared: 07/19/2018 Analyzed: 07/20/2018										
Arsenic	ND	0.040	mg/L							
Cadmium	ND	0.0020	mg/L							
Calcium	ND	4.0	mg/L							
Copper	ND	0.020	mg/L							
Lead	ND	0.040	mg/L							
Magnesium	ND	3.0	mg/L							
Zinc	ND	0.040	mg/L							
LCS (1807206-BS1) Prepared: 07/19/2018 Analyzed: 07/20/2018										
Arsenic	1.94	0.040	mg/L	2.000		97	85-115			
Cadmium	0.049	0.0020	mg/L	0.05000		98	85-115			
Calcium	9.6	4.0	mg/L	10.00		96	85-115			
Copper	0.24	0.020	mg/L	0.2500		96	85-115			
Lead	0.50	0.040	mg/L	0.5000		100	85-115			
Magnesium	9.8	3.0	mg/L	10.00		98	85-115			
Zinc	0.48	0.040	mg/L	0.5000		95	85-115			

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18G0425
Date Received: 07/13/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1807206 - E200.7 (4.4)										
LCS Dup (1807206-BSD1)				Prepared: 07/19/2018 Analyzed: 07/20/2018						
Arsenic	1.96	0.040	mg/L	2.000		98	85-115	0.9	20	
Cadmium	0.049	0.0020	mg/L	0.05000		98	85-115	0.6	20	
Calcium	9.7	4.0	mg/L	10.00		97	85-115	2	20	
Copper	0.24	0.020	mg/L	0.2500		96	85-115	0.5	20	
Lead	0.50	0.040	mg/L	0.5000		101	85-115	0.4	20	
Magnesium	9.9	3.0	mg/L	10.00		99	85-115	0.6	20	
Zinc	0.49	0.040	mg/L	0.5000		97	85-115	2	20	
Matrix Spike (1807206-MS1)				Source: 18G0299-01		Prepared: 07/19/2018 Analyzed: 07/20/2018				
Arsenic	2.05	0.040	mg/L	2.000	0.0345	101	70-130			
Cadmium	0.045	0.0020	mg/L	0.05000	ND	91	70-130			
Calcium	50	4.0	mg/L	10.00	41	88	70-130			
Copper	0.28	0.020	mg/L	0.2500	0.0091	110	70-130			
Lead	0.24	0.040	mg/L	0.5000	ND	48	70-130			M7
Magnesium	770	30	mg/L	10.00	790	NR	70-130			M3
Zinc	0.46	0.040	mg/L	0.5000	ND	92	70-130			
Matrix Spike (1807206-MS2)				Source: 18G0325-01		Prepared: 07/19/2018 Analyzed: 07/20/2018				
Arsenic	2.05	0.040	mg/L	2.000	0.0206	101	70-130			
Cadmium	0.042	0.0020	mg/L	0.05000	ND	85	70-130			
Calcium	400	4.0	mg/L	10.00	400	NR	70-130			M3
Copper	0.27	0.020	mg/L	0.2500	0.016	103	70-130			
Lead	0.43	0.040	mg/L	0.5000	ND	87	70-130			
Magnesium	110	3.0	mg/L	10.00	98	82	70-130			
Zinc	0.51	0.040	mg/L	0.5000	0.045	92	70-130			
Batch 1807208 - E 200.8 (5.4)										
Blank (1807208-BLK1)				Prepared & Analyzed: 07/20/2018						
Arsenic	ND	0.00050	mg/L							
Cadmium	ND	0.00025	mg/L							
Copper	ND	0.00050	mg/L							
Lead	ND	0.00050	mg/L							
LCS (1807208-BS1)				Prepared & Analyzed: 07/20/2018						
Arsenic	0.051	0.00050	mg/L	0.05000		102	85-115			
Cadmium	0.052	0.00025	mg/L	0.05000		104	85-115			
Copper	0.051	0.00050	mg/L	0.05000		103	85-115			
Lead	0.050	0.00050	mg/L	0.05000		100	85-115			
LCS Dup (1807208-BSD1)				Prepared & Analyzed: 07/20/2018						
Arsenic	0.050	0.00050	mg/L	0.05000		101	85-115	0.8	20	
Cadmium	0.051	0.00025	mg/L	0.05000		102	85-115	2	20	
Copper	0.051	0.00050	mg/L	0.05000		102	85-115	0.4	20	
Lead	0.049	0.00050	mg/L	0.05000		99	85-115	1	20	

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18G0425
Date Received: 07/13/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1807208 - E 200.8 (5.4)										
Matrix Spike (1807208-MS1)		Source: 18G0398-01			Prepared & Analyzed: 07/20/2018					
Arsenic	0.061	0.00050	mg/L	0.05000	0.0084	105	70-130			
Cadmium	0.049	0.00025	mg/L	0.05000	0.00013	98	70-130			
Copper	0.049	0.00050	mg/L	0.05000	0.0038	90	70-130			
Lead	0.050	0.00050	mg/L	0.05000	0.00012	100	70-130			
Batch 1807247 - E 200.7 (4.4)										
Blank (1807247-BLK1)		Prepared & Analyzed: 07/24/2018								
Calcium	ND	4.0	mg/L							
Magnesium	ND	3.0	mg/L							
LCS (1807247-BS1)		Prepared & Analyzed: 07/24/2018								
Calcium	9.4	4.0	mg/L	10.00		94	85-115			
Magnesium	9.5	3.0	mg/L	10.00		95	85-115			
LCS Dup (1807247-BSD1)		Prepared & Analyzed: 07/24/2018								
Calcium	9.4	4.0	mg/L	10.00		94	85-115	0.09	20	
Magnesium	9.5	3.0	mg/L	10.00		95	85-115	0.5	20	
Matrix Spike (1807247-MS1)		Source: 18G0424-01			Prepared & Analyzed: 07/24/2018					
Calcium	89	4.0	mg/L	10.00	81	80	70-130			
Magnesium	20	3.0	mg/L	10.00	11	93	70-130			
Matrix Spike (1807247-MS2)		Source: 18G0425-02			Prepared & Analyzed: 07/24/2018					
Calcium	19	4.0	mg/L	10.00	9.6	91	70-130			
Magnesium	13	3.0	mg/L	10.00	4.0	95	70-130			

STORMWATER SAMPLE FORM

Field Staff Robert Dodson

Company AMI

Weather Cloudy

Notes _____

Rainfall (inches) 1.74"

Sample Location	Sample ID	Flow (gpm)	Sample Date	Time Sampled	Temp °C	pH	Specific Conductivity (µs/cm)	Turbidity (NTU)	Appearance of Water: (color, odor, etc) or other notes
Outfall 1	Outfall 7-13-18		7-13-18	8:10 AM	21°C	6.75	396	1100	Murky, brown, no odor
Outfall 3	7-13-18		7-13-18	8:10 AM	20.2°C	7.29	161.2	1060	Murky, brown, no odor

Sample Laboratory Information

Water Quality Meter

Container Volume	No of Containers	Filtered Y/N	Preservative	Lab Analysis	Meter:
500	2	NO	No	DIS + TSS	pH: YSI Professional Plus Turbidity: ● Geotech Portable Turbidity Meter
250	2	NO	Yes	Total	
					Calibration Date: <u>7-13-18</u>

Dissolved Metals - Filter (0.45 micron filter) prior to placing into 250 ml container with nitric acid preservative.

Total Metals - 250 ml container with nitric acid preservative.

TSS, Hardness (Calcium, Magnesium) - 250 ml container with NO preservative.



August 20, 2018

Johnny Pappas
Arizona Minerals Inc.
3845 North Business Center Drive, Suite 115
Tucson, AZ 85705

TEL (802) 235-5563
FAX

Work Order No.: 18H0223

RE: Storm Water

Dear Johnny Pappas,

Turner Laboratories, Inc. received 2 sample(s) on 08/07/2018 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Elizabeth Kasik
Laboratory Director

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18H0223
Date Received: 08/07/2018

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
18H0223-01	Outfall 1	Storm Water	08/06/2018 1030
18H0223-02	Outfall 3	Storm Water	08/06/2018 1230

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18H0223
Date Received: 08/07/2018

Case Narrative

M3 The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS/LCSD recovery was acceptable.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND Not Detected at or above the PQL

PQL Practical Quantitation Limit

DF Dilution Factor

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18H0223
Lab Sample ID: 18H0223-01

Client Sample ID: Outfall 1
Collection Date/Time: 08/06/2018 1030
Matrix: Storm Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness, Dissolved-[CALC]									
Hardness, Calcium/Magnesium (As CaCO3) Dissolved	960		22		mg/L	1	08/08/2018 1600	08/14/2018 1409	MH
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	4500				mg/L	20	08/09/2018 1200	08/13/2018 1222	MH
ICP Dissolved Metals-E 200.7 (4.4)									
Calcium	220		4.0		mg/L	1	08/08/2018 1600	08/14/2018 1409	MH
Magnesium	100		3.0		mg/L	1	08/08/2018 1600	08/14/2018 1409	MH
Zinc	ND		0.040		mg/L	1	08/08/2018 1600	08/14/2018 1409	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Arsenic	0.0037		0.00050		mg/L	1	08/08/2018 1600	08/15/2018 1600	MH
Cadmium	0.00034		0.00025		mg/L	1	08/08/2018 1600	08/15/2018 1600	MH
Copper	0.0013		0.00050		mg/L	1	08/08/2018 1600	08/15/2018 1600	MH
Lead	ND		0.00050		mg/L	1	08/08/2018 1600	08/15/2018 1600	MH
ICP Total Metals-E200.7 (4.4)									
Arsenic	0.35		0.040		mg/L	1	08/09/2018 1200	08/10/2018 1315	MH
Cadmium	0.12		0.0020		mg/L	1	08/09/2018 1200	08/10/2018 1315	MH
Calcium	630		80		mg/L	20	08/09/2018 1200	08/13/2018 1222	MH
Copper	2.5		0.020		mg/L	1	08/09/2018 1200	08/10/2018 1315	MH
Lead	3.5		0.040		mg/L	1	08/09/2018 1200	08/10/2018 1315	MH
Magnesium	700		60		mg/L	20	08/09/2018 1200	08/13/2018 1222	MH
Zinc	31		0.80		mg/L	20	08/09/2018 1200	08/13/2018 1222	MH

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18H0223
Lab Sample ID: 18H0223-02

Client Sample ID: Outfall 3
Collection Date/Time: 08/06/2018 1230
Matrix: Storm Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness, Dissolved-[CALC]									
Hardness, Calcium/Magnesium (As CaCO3) Dissolved	ND		22		mg/L	1	08/08/2018 1600	08/14/2018 1413	MH
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	45				mg/L	1	08/09/2018 1200	08/10/2018 1319	MH
ICP Dissolved Metals-E 200.7 (4.4)									
Calcium	5.9		4.0		mg/L	1	08/08/2018 1600	08/14/2018 1413	MH
Magnesium	ND		3.0		mg/L	1	08/08/2018 1600	08/14/2018 1413	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Copper	0.0049		0.00050		mg/L	1	08/08/2018 1600	08/15/2018 1610	MH
ICP Total Metals-E200.7 (4.4)									
Calcium	9.2		4.0		mg/L	1	08/09/2018 1200	08/10/2018 1319	MH
Copper	0.030		0.020		mg/L	1	08/09/2018 1200	08/10/2018 1319	MH
Magnesium	5.3		3.0		mg/L	1	08/09/2018 1200	08/10/2018 1319	MH

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18H0223
Date Received: 08/07/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Qual
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Batch 1808132 - E200.7 (4.4)

Blank (1808132-BLK1)

Prepared: 08/09/2018 Analyzed: 08/10/2018

Arsenic	ND	0.040	mg/L
Cadmium	ND	0.0020	mg/L
Calcium	ND	4.0	mg/L
Copper	ND	0.020	mg/L
Lead	ND	0.040	mg/L
Magnesium	ND	3.0	mg/L
Zinc	ND	0.040	mg/L

LCS (1808132-BS1)

Prepared: 08/09/2018 Analyzed: 08/10/2018

Arsenic	1.96	0.040	mg/L	2.000		98	85-115
Cadmium	0.047	0.0020	mg/L	0.05000		95	85-115
Calcium	9.9	4.0	mg/L	10.00		99	85-115
Copper	0.23	0.020	mg/L	0.2500		92	85-115
Lead	0.47	0.040	mg/L	0.5000		94	85-115
Magnesium	10	3.0	mg/L	10.00		100	85-115
Zinc	0.46	0.040	mg/L	0.5000		92	85-115

LCS Dup (1808132-BSD1)

Prepared: 08/09/2018 Analyzed: 08/10/2018

Arsenic	1.96	0.040	mg/L	2.000		98	85-115	0.3	20
Cadmium	0.047	0.0020	mg/L	0.05000		95	85-115	0.1	20
Calcium	9.8	4.0	mg/L	10.00		98	85-115	0.9	20
Copper	0.23	0.020	mg/L	0.2500		93	85-115	0.9	20
Lead	0.47	0.040	mg/L	0.5000		94	85-115	0.2	20
Magnesium	10	3.0	mg/L	10.00		100	85-115	0.3	20
Zinc	0.46	0.040	mg/L	0.5000		92	85-115	0.8	20

Matrix Spike (1808132-MS1)

Source: 18H0051-02

Prepared: 08/09/2018 Analyzed: 08/10/2018

Arsenic	2.10	0.040	mg/L	2.000	0.0328	103	70-130		
Cadmium	0.044	0.0020	mg/L	0.05000	ND	89	70-130		
Calcium	240	4.0	mg/L	10.00	240	13	70-130		M3
Copper	0.37	0.020	mg/L	0.2500	0.11	104	70-130		
Lead	0.45	0.040	mg/L	0.5000	ND	89	70-130		
Magnesium	60	3.0	mg/L	10.00	51	86	70-130		
Zinc	0.65	0.040	mg/L	0.5000	0.18	94	70-130		

Batch 1808173 - E 200.7 (4.4)

Blank (1808173-BLK1)

Prepared & Analyzed: 08/14/2018

Calcium	ND	4.0	mg/L
Magnesium	ND	3.0	mg/L
Zinc	ND	0.040	mg/L

LCS (1808173-BS1)

Prepared & Analyzed: 08/14/2018

Calcium	9.4	4.0	mg/L	10.00		94	85-115
Magnesium	9.5	3.0	mg/L	10.00		95	85-115
Zinc	0.47	0.040	mg/L	0.5000		93	85-115

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18H0223
Date Received: 08/07/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1808173 - E 200.7 (4.4)										
LCS Dup (1808173-BSD1)				Prepared & Analyzed: 08/14/2018						
Calcium	9.3	4.0	mg/L	10.00		93	85-115	0.8	20	
Magnesium	9.4	3.0	mg/L	10.00		94	85-115	0.1	20	
Zinc	0.47	0.040	mg/L	0.5000		94	85-115	0.6	20	
Matrix Spike (1808173-MS1)				Source: 18H0223-02		Prepared & Analyzed: 08/14/2018				
Calcium	15	4.0	mg/L	10.00	5.9	91	70-130			
Magnesium	12	3.0	mg/L	10.00	2.2	94	70-130			
Zinc	0.51	0.040	mg/L	0.5000	0.035	95	70-130			
Batch 1808193 - E 200.8 (5.4)										
Blank (1808193-BLK1)				Prepared & Analyzed: 08/15/2018						
Arsenic	ND	0.00050	mg/L							
Cadmium	ND	0.00025	mg/L							
Copper	ND	0.00050	mg/L							
Lead	ND	0.00050	mg/L							
LCS (1808193-BS1)				Prepared & Analyzed: 08/15/2018						
Arsenic	0.050	0.00050	mg/L	0.05000		100	85-115			
Cadmium	0.049	0.00025	mg/L	0.05000		98	85-115			
Copper	0.049	0.00050	mg/L	0.05000		99	85-115			
Lead	0.051	0.00050	mg/L	0.05000		102	85-115			
LCS Dup (1808193-BSD1)				Prepared & Analyzed: 08/15/2018						
Arsenic	0.050	0.00050	mg/L	0.05000		99	85-115	0.4	20	
Cadmium	0.049	0.00025	mg/L	0.05000		98	85-115	0.03	20	
Copper	0.049	0.00050	mg/L	0.05000		99	85-115	0.1	20	
Lead	0.051	0.00050	mg/L	0.05000		101	85-115	0.5	20	
Matrix Spike (1808193-MS1)				Source: 18H0223-01		Prepared & Analyzed: 08/15/2018				
Arsenic	0.058	0.00050	mg/L	0.05000	0.0037	108	70-130			
Cadmium	0.048	0.00025	mg/L	0.05000	0.00034	96	70-130			
Copper	0.046	0.00050	mg/L	0.05000	0.0013	90	70-130			
Lead	0.052	0.00050	mg/L	0.05000	0.000099	103	70-130			

Outfall 1 (Trench) Stormwater

Analyte	LABORATORY		
	Total	Dissolved	Other
Metals			
Arsenic	X	X	
Cadmium	X	X	
Copper	X	X	
Lead	X	X	
Zinc	X	X	
Major Cations			
Hardness	X		X

FIELD MEASUREMENTS
pH
Specific conductance
Temperature
Turbidity
Flow
Appearance

Outfall 2 (Trench) and Outfall 3 (Alta) Stormwater

Analyte	LABORATORY		
	Total	Dissolved	Other
Metals			
Copper	X	X	
Major Cations			
Hardness	X	X	

FIELD MEASUREMENTS
pH
Specific conductance
Temperature
Turbidity
Flow
Appearance



October 24, 2018

Johnny Pappas
Arizona Minerals Inc.
2210 E. Fort Lowell Rd
Tucson, AZ 85719

TEL (802) 235-5563
FAX

Work Order No.: 18J0427
Order Name: South 32

RE: Storm Water

Dear Johnny Pappas,

Turner Laboratories, Inc. received 2 sample(s) on 10/12/2018 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Elizabeth Kasik
Laboratory Director

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18J0427
Date Received: 10/12/2018

Order: South 32

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
18J0427-01	Outfall #1	Storm Water	10/12/2018 0830
18J0427-02	Outfall #2	Storm Water	10/12/2018 0846

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18J0427
Date Received: 10/12/2018

Case Narrative

- B1 Target analyte detected in the method blank at or above the method reporting limit.
- B7 Target analyte detected in method blank at or above the method reporting limit. Concentration found in the sample was 10 times above the concentration found in the method blank.
- M3 The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS/LCSD recovery was acceptable.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

- ND Not Detected at or above the PQL
- PQL Practical Quantitation Limit
- DF Dilution Factor

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18J0427
Lab Sample ID: 18J0427-01

Client Sample ID: Outfall #1
Collection Date/Time: 10/12/2018 0830
Matrix: Storm Water
Order Name: South 32

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness, Dissolved-[CALC]									
Hardness, Calcium/Magnesium (As CaCO3) Dissolved	1300		110		mg/L	5	10/22/2018 1135	10/23/2018 1654	MH
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	1900				mg/L	1	10/18/2018 1215	10/23/2018 1142	MH
ICP Dissolved Metals-E 200.7 (4.4)									
Calcium	310		20		mg/L	5	10/22/2018 1135	10/23/2018 1654	MH
Magnesium	140		15		mg/L	5	10/22/2018 1135	10/23/2018 1654	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Arsenic	0.0027		0.00050		mg/L	1	10/22/2018 1135	10/23/2018 1443	MH
Cadmium	0.00045		0.00025		mg/L	1	10/22/2018 1135	10/23/2018 1443	MH
Copper	0.0013		0.00050		mg/L	1	10/22/2018 1135	10/23/2018 1443	MH
Lead	0.0012		0.00050		mg/L	1	10/22/2018 1135	10/23/2018 1443	MH
Zinc	ND		0.040		mg/L	1	10/22/2018 1135	10/23/2018 1443	MH
ICP Total Metals-E200.7 (4.4)									
Calcium	350		4.0		mg/L	1	10/18/2018 1215	10/23/2018 1142	MH
Copper	0.71		0.020		mg/L	1	10/18/2018 1215	10/23/2018 1142	MH
Magnesium	240		3.0		mg/L	1	10/18/2018 1215	10/23/2018 1142	MH
ICP/MS Total Metals-E200.8 (5.4)									
Arsenic	0.17		0.00050		mg/L	1	10/18/2018 1000	10/19/2018 1257	MH
Cadmium	0.022		0.00025		mg/L	1	10/18/2018 1000	10/19/2018 1257	MH
Lead	2.5		0.010	B7	mg/L	20	10/18/2018 1000	10/19/2018 1508	MH
Zinc	9.4		0.80		mg/L	20	10/18/2018 1000	10/19/2018 1508	MH

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18J0427
Lab Sample ID: 18J0427-02

Client Sample ID: Outfall #2
Collection Date/Time: 10/12/2018 0846
Matrix: Storm Water
Order Name: South 32

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness, Dissolved-[CALC]									
Hardness, Calcium/Magnesium (As CaCO3) Dissolved	1800		110		mg/L	5	10/22/2018 1135	10/23/2018 1658	MH
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	1600				mg/L	10	10/18/2018 1215	10/23/2018 1154	MH
ICP Dissolved Metals-E 200.7 (4.4)									
Calcium	490		20		mg/L	5	10/22/2018 1135	10/23/2018 1658	MH
Magnesium	140		15		mg/L	5	10/22/2018 1135	10/23/2018 1658	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Copper	0.0020		0.00050		mg/L	1	10/22/2018 1135	10/23/2018 1421	MH
ICP Total Metals-E200.7 (4.4)									
Calcium	420		40		mg/L	10	10/18/2018 1215	10/23/2018 1154	MH
Copper	0.12		0.020		mg/L	1	10/18/2018 1215	10/23/2018 1146	MH
Magnesium	140		3.0		mg/L	1	10/18/2018 1215	10/23/2018 1146	MH

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18J0427
Date Received: 10/12/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Qual
Batch 1810222 - E200.8 (5.4)										
Blank (1810222-BLK1)				Prepared: 10/18/2018 Analyzed: 10/19/2018						
Arsenic	ND	0.00050	mg/L							
Cadmium	ND	0.00025	mg/L							
Lead	0.0025	0.00050	mg/L							B1
Zinc	ND	0.040	mg/L							
LCS (1810222-BS1)				Prepared: 10/18/2018 Analyzed: 10/19/2018						
Arsenic	0.051	0.00050	mg/L	0.05000		101	85-115			
Cadmium	0.050	0.00025	mg/L	0.05000		100	85-115			
Lead	0.057	0.00050	mg/L	0.05000		115	85-115			
Zinc	0.10	0.040	mg/L	0.1000		102	85-115			
LCS Dup (1810222-BSD1)				Prepared: 10/18/2018 Analyzed: 10/19/2018						
Arsenic	0.049	0.00050	mg/L	0.05000		97	85-115	4	20	
Cadmium	0.048	0.00025	mg/L	0.05000		96	85-115	5	20	
Lead	0.051	0.00050	mg/L	0.05000		103	85-115	11	20	
Zinc	0.097	0.040	mg/L	0.1000		97	85-115	5	20	
Matrix Spike (1810222-MS1)		Source: 18J0486-04		Prepared: 10/18/2018 Analyzed: 10/19/2018						
Arsenic	0.050	0.00050	mg/L	0.05000	ND	100	70-130			
Cadmium	0.048	0.00025	mg/L	0.05000	ND	96	70-130			
Lead	0.054	0.00050	mg/L	0.05000	0.0014	105	70-130			
Zinc	0.096	0.040	mg/L	0.1000	ND	96	70-130			
Matrix Spike (1810222-MS2)		Source: 18J0486-06		Prepared: 10/18/2018 Analyzed: 10/19/2018						
Arsenic	0.047	0.00050	mg/L	0.05000	0.00016	94	70-130			
Cadmium	0.047	0.00025	mg/L	0.05000	0.000076	94	70-130			
Lead	0.052	0.00050	mg/L	0.05000	0.0014	101	70-130			
Zinc	0.094	0.040	mg/L	0.1000	ND	94	70-130			
Batch 1810224 - E200.7 (4.4)										
Blank (1810224-BLK1)				Prepared: 10/18/2018 Analyzed: 10/22/2018						
Calcium	ND	4.0	mg/L							
Copper	ND	0.020	mg/L							
Magnesium	ND	3.0	mg/L							
LCS (1810224-BS1)				Prepared: 10/18/2018 Analyzed: 10/22/2018						
Calcium	10	4.0	mg/L	10.00		101	85-115			
Copper	0.24	0.020	mg/L	0.2500		95	85-115			
Magnesium	10	3.0	mg/L	10.00		102	85-115			
LCS Dup (1810224-BSD1)				Prepared: 10/18/2018 Analyzed: 10/22/2018						
Calcium	10	4.0	mg/L	10.00		101	85-115	0.2	20	
Copper	0.24	0.020	mg/L	0.2500		96	85-115	0.5	20	
Magnesium	10	3.0	mg/L	10.00		102	85-115	0.1	20	
Matrix Spike (1810224-MS1)		Source: 18J0154-01		Prepared: 10/18/2018 Analyzed: 10/23/2018						
Calcium	17000		mg/L	10.00	17000	NR	70-130			M3
Copper	0.38		mg/L	0.2500	0.19	75	70-130			
Magnesium	6000		mg/L	10.00	6100	NR	70-130			M3

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18J0427
Date Received: 10/12/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1810224 - E200.7 (4.4)										
Matrix Spike (1810224-MS2)		Source: 18J0415-01			Prepared: 10/18/2018 Analyzed: 10/22/2018					
Calcium	67	4.0	mg/L	10.00	60	65	70-130			M3
Copper	0.26	0.020	mg/L	0.2500	0.023	97	70-130			
Magnesium	15	3.0	mg/L	10.00	6.4	89	70-130			

Batch 1810242 - E 200.8 (5.4)										
Blank (1810242-BLK1)										
Prepared & Analyzed: 10/23/2018										
Arsenic	ND	0.00050	mg/L							
Cadmium	ND	0.00025	mg/L							
Copper	ND	0.00050	mg/L							
Lead	ND	0.00050	mg/L							
Zinc	ND	0.040	mg/L							

LCS (1810242-BS1)										
Prepared & Analyzed: 10/23/2018										
Arsenic	0.050	0.00050	mg/L	0.05000		99	85-115			
Cadmium	0.050	0.00025	mg/L	0.05000		100	85-115			
Copper	0.049	0.00050	mg/L	0.05000		98	85-115			
Lead	0.048	0.00050	mg/L	0.05000		96	85-115			
Zinc	0.10	0.040	mg/L	0.1000		101	85-115			

LCS Dup (1810242-BSD1)										
Prepared & Analyzed: 10/23/2018										
Arsenic	0.050	0.00050	mg/L	0.05000		101	85-115	1	20	
Cadmium	0.050	0.00025	mg/L	0.05000		101	85-115	0.8	20	
Copper	0.050	0.00050	mg/L	0.05000		99	85-115	1	20	
Lead	0.049	0.00050	mg/L	0.05000		99	85-115	2	20	
Zinc	0.10	0.040	mg/L	0.1000		100	85-115	0.7	20	

Matrix Spike (1810242-MS1)										
Source: 18J0429-02			Prepared & Analyzed: 10/23/2018							
Arsenic	0.056	0.00050	mg/L	0.05000	0.0025	107	70-130			
Cadmium	0.049	0.00025	mg/L	0.05000	ND	99	70-130			
Copper	0.046	0.00050	mg/L	0.05000	0.0017	89	70-130			
Lead	0.054	0.00050	mg/L	0.05000	0.0054	97	70-130			
Zinc	0.12	0.040	mg/L	0.1000	0.024	96	70-130			

Batch 1810260 - E 200.7 (4.4)										
Blank (1810260-BLK1)										
Prepared & Analyzed: 10/23/2018										
Calcium	ND	4.0	mg/L							
Magnesium	ND	3.0	mg/L							

LCS (1810260-BS1)										
Prepared & Analyzed: 10/23/2018										
Calcium	11	4.0	mg/L	10.00		109	85-115			
Magnesium	11	3.0	mg/L	10.00		108	85-115			

LCS Dup (1810260-BSD1)										
Prepared & Analyzed: 10/23/2018										
Calcium	9.9	4.0	mg/L	10.00		99	85-115	10	20	
Magnesium	10	3.0	mg/L	10.00		100	85-115	7	20	

Matrix Spike (1810260-MS1)										
Source: 18J0476-01			Prepared & Analyzed: 10/23/2018							
Calcium	36	4.0	mg/L	10.00	30	59	70-130			M3
Magnesium	20	3.0	mg/L	10.00	11	88	70-130			



October 26, 2018

Johnny Pappas
Arizona Minerals Inc.
2210 E. Fort Lowell Rd
Tucson, AZ 85719

TEL (802) 235-5563
FAX

Work Order No.: 18J0476

RE: Storm Water

Dear Johnny Pappas,

Turner Laboratories, Inc. received 2 sample(s) on 10/16/2018 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Elizabeth Kasik
Laboratory Director

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18J0476
Date Received: 10/16/2018

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
18J0476-01	Outfall #1	Storm Water	10/16/2018 0830
18J0476-02	Outfall #3	Storm Water	10/16/2018 0845

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18J0476
Date Received: 10/16/2018

Case Narrative

- B1 Target analyte detected in the method blank at or above the method reporting limit.
 - B7 Target analyte detected in method blank at or above the method reporting limit. Concentration found in the sample was 10 times above the concentration found in the method blank.
 - M3 The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS/LCSD recovery was acceptable.
- All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.
- ND Not Detected at or above the PQL
 - PQL Practical Quantitation Limit
 - DF Dilution Factor

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18J0476
Lab Sample ID: 18J0476-01

Client Sample ID: Outfall #1
Collection Date/Time: 10/16/2018 0830
Matrix: Storm Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness, Dissolved-[CALC]									
Hardness, Calcium/Magnesium (As CaCO3) Dissolved	120		22		mg/L	1	10/22/2018 1135	10/23/2018 1618	MH
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	130				mg/L	1	10/19/2018 1035	10/25/2018 1855	MH
ICP Dissolved Metals-E 200.7 (4.4)									
Calcium	30		4.0	M3	mg/L	1	10/22/2018 1135	10/23/2018 1618	MH
Magnesium	11		3.0		mg/L	1	10/22/2018 1135	10/23/2018 1618	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Arsenic	0.0055		0.00050		mg/L	1	10/22/2018 1135	10/23/2018 1448	MH
Cadmium	ND		0.00025		mg/L	1	10/22/2018 1135	10/23/2018 1448	MH
Copper	0.0029		0.00050		mg/L	1	10/22/2018 1135	10/23/2018 1448	MH
Lead	0.00057		0.00050		mg/L	1	10/22/2018 1135	10/23/2018 1448	MH
Zinc	ND		0.040		mg/L	1	10/22/2018 1135	10/23/2018 1448	MH
ICP Total Metals-E200.7 (4.4)									
Calcium	32		4.0		mg/L	1	10/19/2018 1035	10/25/2018 1855	MH
Magnesium	12		3.0		mg/L	1	10/19/2018 1035	10/25/2018 1855	MH
ICP/MS Total Metals-E200.8 (5.4)									
Arsenic	0.0061		0.00050		mg/L	1	10/18/2018 1000	10/19/2018 1313	MH
Cadmium	0.00035		0.00025		mg/L	1	10/18/2018 1000	10/19/2018 1313	MH
Copper	0.012		0.00050		mg/L	1	10/18/2018 1000	10/19/2018 1313	MH
Lead	0.19		0.00050	B7	mg/L	1	10/18/2018 1000	10/19/2018 1313	MH
Zinc	0.11		0.040		mg/L	1	10/18/2018 1000	10/19/2018 1313	MH

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18J0476
Lab Sample ID: 18J0476-02

Client Sample ID: Outfall #3
Collection Date/Time: 10/16/2018 0845
Matrix: Storm Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness, Dissolved-[CALC]									
Hardness, Calcium/Magnesium (As CaCO3) Dissolved	ND		22		mg/L	1	10/22/2018 1135	10/23/2018 1702	MH
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	31				mg/L	1	10/19/2018 1035	10/25/2018 1900	MH
ICP Dissolved Metals-E 200.7 (4.4)									
Calcium	ND		4.0		mg/L	1	10/22/2018 1135	10/23/2018 1702	MH
Magnesium	ND		3.0		mg/L	1	10/22/2018 1135	10/23/2018 1702	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Copper	0.0032		0.00050		mg/L	1	10/22/2018 1135	10/23/2018 1427	MH
ICP Total Metals-E200.7 (4.4)									
Calcium	5.5		4.0		mg/L	1	10/19/2018 1035	10/25/2018 1900	MH
Magnesium	4.1		3.0		mg/L	1	10/19/2018 1035	10/25/2018 1900	MH
ICP/MS Total Metals-E200.8 (5.4)									
Copper	0.023		0.00050		mg/L	1	10/18/2018 1000	10/19/2018 1318	MH

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18J0476
Date Received: 10/16/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1810222 - E200.8 (5.4)										
Blank (1810222-BLK1) Prepared: 10/18/2018 Analyzed: 10/19/2018										
Arsenic	ND	0.00050	mg/L							
Cadmium	ND	0.00025	mg/L							
Copper	ND	0.00050	mg/L							
Lead	0.0025	0.00050	mg/L							B1
Zinc	ND	0.040	mg/L							
LCS (1810222-BS1) Prepared: 10/18/2018 Analyzed: 10/19/2018										
Arsenic	0.051	0.00050	mg/L	0.05000		101	85-115			
Cadmium	0.050	0.00025	mg/L	0.05000		100	85-115			
Copper	0.051	0.00050	mg/L	0.05000		103	85-115			
Lead	0.057	0.00050	mg/L	0.05000		115	85-115			
Zinc	0.10	0.040	mg/L	0.1000		102	85-115			
LCS Dup (1810222-BSD1) Prepared: 10/18/2018 Analyzed: 10/19/2018										
Arsenic	0.049	0.00050	mg/L	0.05000		97	85-115	4	20	
Cadmium	0.048	0.00025	mg/L	0.05000		96	85-115	5	20	
Copper	0.049	0.00050	mg/L	0.05000		97	85-115	6	20	
Lead	0.051	0.00050	mg/L	0.05000		103	85-115	11	20	
Zinc	0.097	0.040	mg/L	0.1000		97	85-115	5	20	
Matrix Spike (1810222-MS1) Source: 18J0486-04 Prepared: 10/18/2018 Analyzed: 10/19/2018										
Arsenic	0.050	0.00050	mg/L	0.05000	ND	100	70-130			
Cadmium	0.048	0.00025	mg/L	0.05000	ND	96	70-130			
Copper	0.050	0.00050	mg/L	0.05000	0.00019	100	70-130			
Lead	0.054	0.00050	mg/L	0.05000	0.0014	105	70-130			
Zinc	0.096	0.040	mg/L	0.1000	ND	96	70-130			
Matrix Spike (1810222-MS2) Source: 18J0486-06 Prepared: 10/18/2018 Analyzed: 10/19/2018										
Arsenic	0.047	0.00050	mg/L	0.05000	0.00016	94	70-130			
Cadmium	0.047	0.00025	mg/L	0.05000	0.000076	94	70-130			
Copper	0.049	0.00050	mg/L	0.05000	ND	98	70-130			
Lead	0.052	0.00050	mg/L	0.05000	0.0014	101	70-130			
Zinc	0.094	0.040	mg/L	0.1000	ND	94	70-130			
Batch 1810239 - E200.7 (4.4)										
Blank (1810239-BLK1) Prepared: 10/19/2018 Analyzed: 10/25/2018										
Calcium	ND	4.0	mg/L							
Magnesium	ND	3.0	mg/L							
LCS (1810239-BS1) Prepared: 10/19/2018 Analyzed: 10/25/2018										
Calcium	10	4.0	mg/L	10.00		103	85-115			
Magnesium	10	3.0	mg/L	10.00		105	85-115			
LCS Dup (1810239-BSD1) Prepared: 10/19/2018 Analyzed: 10/25/2018										
Calcium	10	4.0	mg/L	10.00		103	85-115	0.3	20	
Magnesium	11	3.0	mg/L	10.00		107	85-115	2	20	
Matrix Spike (1810239-MS1) Source: 18J0407-01 Prepared: 10/19/2018 Analyzed: 10/25/2018										
Calcium	88	4.0	mg/L	10.00	76	115	70-130			
Magnesium	28	3.0	mg/L	10.00	17	109	70-130			

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18J0476
Date Received: 10/16/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limit	RPD	RPD Limit	Qual
Batch 1810239 - E200.7 (4.4)										
Matrix Spike (1810239-MS2)		Source: 18J0420-02			Prepared: 10/19/2018 Analyzed: 10/25/2018					
Calcium	210	4.0	mg/L	10.00	210	3	70-130			M3
Magnesium	49	3.0	mg/L	10.00	40	89	70-130			
Batch 1810242 - E 200.8 (5.4)										
Blank (1810242-BLK1)				Prepared & Analyzed: 10/23/2018						
Arsenic	ND	0.00050	mg/L							
Cadmium	ND	0.00025	mg/L							
Copper	ND	0.00050	mg/L							
Lead	ND	0.00050	mg/L							
Zinc	ND	0.040	mg/L							
LCS (1810242-BS1)				Prepared & Analyzed: 10/23/2018						
Arsenic	0.050	0.00050	mg/L	0.05000		99	85-115			
Cadmium	0.050	0.00025	mg/L	0.05000		100	85-115			
Copper	0.049	0.00050	mg/L	0.05000		98	85-115			
Lead	0.048	0.00050	mg/L	0.05000		96	85-115			
Zinc	0.10	0.040	mg/L	0.1000		101	85-115			
LCS Dup (1810242-BSD1)				Prepared & Analyzed: 10/23/2018						
Arsenic	0.050	0.00050	mg/L	0.05000		101	85-115	1	20	
Cadmium	0.050	0.00025	mg/L	0.05000		101	85-115	0.8	20	
Copper	0.050	0.00050	mg/L	0.05000		99	85-115	1	20	
Lead	0.049	0.00050	mg/L	0.05000		99	85-115	2	20	
Zinc	0.10	0.040	mg/L	0.1000		100	85-115	0.7	20	
Matrix Spike (1810242-MS1)		Source: 18J0429-02			Prepared & Analyzed: 10/23/2018					
Arsenic	0.056	0.00050	mg/L	0.05000	0.0025	107	70-130			
Cadmium	0.049	0.00025	mg/L	0.05000	ND	99	70-130			
Copper	0.046	0.00050	mg/L	0.05000	0.0017	89	70-130			
Lead	0.054	0.00050	mg/L	0.05000	0.0054	97	70-130			
Zinc	0.12	0.040	mg/L	0.1000	0.024	96	70-130			
Batch 1810260 - E 200.7 (4.4)										
Blank (1810260-BLK1)				Prepared & Analyzed: 10/23/2018						
Calcium	ND	4.0	mg/L							
Magnesium	ND	3.0	mg/L							
LCS (1810260-BS1)				Prepared & Analyzed: 10/23/2018						
Calcium	11	4.0	mg/L	10.00		109	85-115			
Magnesium	11	3.0	mg/L	10.00		108	85-115			
LCS Dup (1810260-BSD1)				Prepared & Analyzed: 10/23/2018						
Calcium	9.9	4.0	mg/L	10.00		99	85-115	10	20	
Magnesium	10	3.0	mg/L	10.00		100	85-115	7	20	
Matrix Spike (1810260-MS1)		Source: 18J0476-01			Prepared & Analyzed: 10/23/2018					
Calcium	36	4.0	mg/L	10.00	30	59	70-130			M3
Magnesium	20	3.0	mg/L	10.00	11	88	70-130			

Outfall 1 (Trench) Stormwater

LABORATORY			
Analyte	Total	Dissolved	Other
Metals			
Arsenic ✓	X	X	
Cadmium ✓	X	X	
Copper ✓	X	X	
Lead ✓	X	X	
Zinc ✓	X	X	
Major Cations			
Hardness ✓	X	X	

FIELD MEASUREMENTS	
pH	
Specific conductance	
Temperature	
Turbidity	
Flow	
Appearance	

Outfall 2 (Trench) and Outfall 3 (Alta) Stormwater

LABORATORY			
Analyte	Total	Dissolved	Other
Metals			
Copper ✓	X	X	
Major Cations			
Hardness ✓	X	X	

FIELD MEASUREMENTS	
	pH
	Specific conductance
	Temperature
	Turbidity
	Flow
	Appearance



June 17, 2019

Sarah Richman
Arizona Minerals Inc.
2210 E. Fort Lowell Rd
Tucson, AZ 85719

TEL (805) 617-9300
FAX

Work Order No.: 19E0392

RE: Storm Water

Dear Sarah Richman,

Turner Laboratories, Inc. received 1 sample(s) on 05/15/2019 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Kevin Brim
Project Manager

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 19E0392
Date Received: 05/15/2019

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
19E0392-01	Outfall#2-051319-07:50	Storm Water	05/13/2019 0750

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 19E0392
Date Received: 05/15/2019

Case Narrative

M3 The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS/LCSD recovery was acceptable.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND Not Detected at or above the PQL

PQL Practical Quantitation Limit

DF Dilution Factor

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 19E0392
Lab Sample ID: 19E0392-01

Client Sample ID: Outfall#2-051319-07:50
Collection Date/Time: 05/13/2019 0750
Matrix: Storm Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness, Dissolved-[CALC]									
Hardness, Calcium/Magnesium (As CaCO3) Dissolved	2600		22		mg/L	1	05/16/2019 0850	05/16/2019 1748	MH
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	3800				mg/L	1	05/16/2019 1115	05/20/2019 1232	MH
ICP Dissolved Metals-E 200.7 (4.4)									
Calcium	470		4.0		mg/L	1	05/16/2019 0850	05/16/2019 1748	MH
Magnesium	350		3.0		mg/L	1	05/16/2019 0850	05/16/2019 1748	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Copper	0.025		0.0050		mg/L	10	05/16/2019 0850	05/20/2019 1114	MH
ICP Total Metals-E200.7 (4.4)									
Calcium	660		4.0		mg/L	1	05/16/2019 1115	05/20/2019 1232	MH
Magnesium	510		3.0		mg/L	1	05/16/2019 1115	05/20/2019 1232	MH
ICP/MS Total Metals-E200.8 (5.4)									
Copper	1.1		0.0050	M3	mg/L	10	05/24/2019 0900	05/28/2019 1229	MH
Copper	0.51		0.0050		mg/L	10	05/16/2019 1030	05/17/2019 1431	MH

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 19E0392
Date Received: 05/15/2019

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Qual
Batch 1905170 - E 200.7 (4.4)										
Blank (1905170-BLK1)				Prepared & Analyzed: 05/16/2019						
Calcium	ND	4.0	mg/L							
Magnesium	ND	3.0	mg/L							
LCS (1905170-BS1)				Prepared & Analyzed: 05/16/2019						
Calcium	10	4.0	mg/L	10.00		102	85-115			
Magnesium	9.9	3.0	mg/L	10.00		99	85-115			
LCS Dup (1905170-BSD1)				Prepared & Analyzed: 05/16/2019						
Calcium	10	4.0	mg/L	10.00		102	85-115	0.8	20	
Magnesium	9.7	3.0	mg/L	10.00		97	85-115	1	20	
Matrix Spike (1905170-MS1)				Source: 19E0355-01		Prepared & Analyzed: 05/16/2019				
Calcium	63	4.0	mg/L	10.00	55	84	70-130			
Magnesium	37	3.0	mg/L	10.00	27	100	70-130			
Batch 1905172 - E 200.8 (5.4)										
Blank (1905172-BLK1)				Prepared & Analyzed: 05/20/2019						
Copper	ND	0.00050	mg/L							
LCS (1905172-BS1)				Prepared & Analyzed: 05/20/2019						
Copper	0.045	0.00050	mg/L	0.05000		90	85-115			
LCS Dup (1905172-BSD1)				Prepared & Analyzed: 05/20/2019						
Copper	0.046	0.00050	mg/L	0.05000		91	85-115	1	20	
Matrix Spike (1905172-MS1)				Source: 19E0355-01		Prepared & Analyzed: 05/20/2019				
Copper	0.052	0.00050	mg/L	0.05000	0.0091	85	70-130			
Batch 1905194 - E200.8 (5.4)										
Blank (1905194-BLK1)				Prepared: 05/16/2019 Analyzed: 05/17/2019						
Copper	ND	0.00050	mg/L							
LCS (1905194-BS1)				Prepared: 05/16/2019 Analyzed: 05/17/2019						
Copper	0.051	0.00050	mg/L	0.05000		103	85-115			
LCS Dup (1905194-BSD1)				Prepared: 05/16/2019 Analyzed: 05/17/2019						
Copper	0.053	0.00050	mg/L	0.05000		105	85-115	2	20	
Matrix Spike (1905194-MS1)				Source: 19E0374-01		Prepared: 05/16/2019 Analyzed: 05/17/2019				
Copper	0.17	0.00050	mg/L	0.05000	0.12	89	70-130			
Matrix Spike (1905194-MS2)				Source: 19E0374-02		Prepared: 05/16/2019 Analyzed: 05/17/2019				
Copper	0.16	0.00050	mg/L	0.05000	0.11	99	70-130			
Batch 1905198 - E200.7 (4.4)										
Blank (1905198-BLK1)				Prepared: 05/16/2019 Analyzed: 05/20/2019						
Calcium	ND	4.0	mg/L							
Magnesium	ND	3.0	mg/L							

Client: Arizona Minerals Inc.
 Project: Storm Water
 Work Order: 19E0392
 Date Received: 05/15/2019

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Qual
Batch 1905198 - E200.7 (4.4)										
LCS (1905198-BS1)				Prepared: 05/16/2019 Analyzed: 05/20/2019						
Calcium	9.2	4.0	mg/L	10.00		92	85-115			
Magnesium	9.3	3.0	mg/L	10.00		93	85-115			
LCS Dup (1905198-BSD1)				Prepared: 05/16/2019 Analyzed: 05/20/2019						
Calcium	9.1	4.0	mg/L	10.00		91	85-115	1	20	
Magnesium	9.2	3.0	mg/L	10.00		92	85-115	2	20	
Matrix Spike (1905198-MS1)		Source: 19E0234-02		Prepared: 05/16/2019 Analyzed: 05/20/2019						
Calcium	180	4.0	mg/L	10.00	180	NR	70-130			M3
Magnesium	43	3.0	mg/L	10.00	37	68	70-130			M3
Batch 1905299 - E200.8 (5.4)										
Blank (1905299-BLK1)				Prepared: 05/24/2019 Analyzed: 05/28/2019						
Copper	ND	0.00050	mg/L							
LCS (1905299-BS1)				Prepared: 05/24/2019 Analyzed: 05/28/2019						
Copper	0.050	0.00050	mg/L	0.05000		99	85-115			
LCS Dup (1905299-BSD1)				Prepared: 05/24/2019 Analyzed: 05/28/2019						
Copper	0.050	0.00050	mg/L	0.05000		99	85-115	0.2	20	
Matrix Spike (1905299-MS1)		Source: 19E0485-01		Prepared: 05/24/2019 Analyzed: 05/28/2019						
Copper	0.046	0.00050	mg/L	0.05000	0.0031	86	70-130			
Matrix Spike (1905299-MS2)		Source: 19E0392-01RE1		Prepared: 05/24/2019 Analyzed: 05/28/2019						
Copper	1.1	0.0050	mg/L	0.05000	1.1	24	70-130			M3

Outfall 2 (Trench) and Outfall 3 (Alta) Stormwater

LABORATORY			
Analyte	Total	Dissolved	Other
Metals			
Copper	X	X	
Major Cations			
Hardness	X	X	

FIELD MEASUREMENTS	
	pH
	Specific conductance
	Temperature
	Turbidity
	Flow
	Appearance



July 26, 2018

Johnny Pappas
Arizona Minerals Inc.
3845 North Business Center Drive, Suite 115
Tucson, AZ 85705

TEL (802) 235-5563
FAX

Work Order No.: 18G0398

RE: Storm Water

Dear Johnny Pappas,

Turner Laboratories, Inc. received 1 sample(s) on 07/12/2018 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

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Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Elizabeth Kasik
Business Development

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18G0398
Date Received: 07/12/2018

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
18G0398-01	Outfall #2	Storm Water	07/11/2018 1130

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18G0398
Date Received: 07/12/2018

Case Narrative

M3 The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS/LCSD recovery was acceptable.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND Not Detected at or above the PQL

PQL Practical Quantitation Limit

DF Dilution Factor

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18G0398
Lab Sample ID: 18G0398-01

Client Sample ID: Outfall #2
Collection Date/Time: 07/11/2018 1130
Matrix: Storm Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness, Dissolved-[CALC]									
Hardness, Calcium/Magnesium (As CaCO3) Dissolved	330		22		mg/L	1	07/17/2018 1440	07/19/2018 1519	MH
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	370				mg/L	1	07/19/2018 1020	07/20/2018 1317	MH
ICP Dissolved Metals-E 200.7 (4.4)									
Calcium	75		4.0		mg/L	1	07/17/2018 1440	07/19/2018 1519	MH
Magnesium	34		3.0		mg/L	1	07/17/2018 1440	07/19/2018 1519	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Copper	0.0038		0.00050		mg/L	1	07/19/2018 1300	07/20/2018 1346	MH
ICP Total Metals-E200.7 (4.4)									
Calcium	80		4.0		mg/L	1	07/19/2018 1020	07/20/2018 1317	MH
Copper	0.046		0.020		mg/L	1	07/19/2018 1020	07/20/2018 1317	MH
Magnesium	41		3.0		mg/L	1	07/19/2018 1020	07/20/2018 1317	MH

Client: Arizona Minerals Inc.
 Project: Storm Water
 Work Order: 18G0398
 Date Received: 07/12/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limit	RPD	RPD Limit	Qual
Batch 1807203 - E 200.7 (4.4)										
Blank (1807203-BLK1) Prepared & Analyzed: 07/19/2018										
Calcium	ND	4.0	mg/L							
Magnesium	ND	3.0	mg/L							
LCS (1807203-BS1) Prepared & Analyzed: 07/19/2018										
Calcium	10	4.0	mg/L	10.00		100	85-115			
Magnesium	10	3.0	mg/L	10.00		101	85-115			
LCS Dup (1807203-BSD1) Prepared & Analyzed: 07/19/2018										
Calcium	9.5	4.0	mg/L	10.00		95	85-115	5	20	
Magnesium	9.8	3.0	mg/L	10.00		98	85-115	3	20	
Matrix Spike (1807203-MS1) Source: 18G0286-01 Prepared & Analyzed: 07/19/2018										
Calcium	25	4.0	mg/L	10.00	16	90	70-130			
Magnesium	13	3.0	mg/L	10.00	3.0	96	70-130			
Matrix Spike (1807203-MS2) Source: 18G0340-01 Prepared & Analyzed: 07/19/2018										
Calcium	48	4.0	mg/L	10.00	36	114	70-130			
Magnesium	16	3.0	mg/L	10.00	5.6	100	70-130			
Batch 1807206 - E200.7 (4.4)										
Blank (1807206-BLK1) Prepared: 07/19/2018 Analyzed: 07/20/2018										
Calcium	ND	4.0	mg/L							
Copper	ND	0.020	mg/L							
Magnesium	ND	3.0	mg/L							
LCS (1807206-BS1) Prepared: 07/19/2018 Analyzed: 07/20/2018										
Calcium	9.6	4.0	mg/L	10.00		96	85-115			
Copper	0.24	0.020	mg/L	0.2500		96	85-115			
Magnesium	9.8	3.0	mg/L	10.00		98	85-115			
LCS Dup (1807206-BSD1) Prepared: 07/19/2018 Analyzed: 07/20/2018										
Calcium	9.7	4.0	mg/L	10.00		97	85-115	2	20	
Copper	0.24	0.020	mg/L	0.2500		96	85-115	0.5	20	
Magnesium	9.9	3.0	mg/L	10.00		99	85-115	0.6	20	
Matrix Spike (1807206-MS1) Source: 18G0299-01 Prepared: 07/19/2018 Analyzed: 07/20/2018										
Calcium	50	4.0	mg/L	10.00	41	88	70-130			
Copper	0.28	0.020	mg/L	0.2500	0.0091	110	70-130			
Magnesium	770	30	mg/L	10.00	790	NR	70-130			M3
Matrix Spike (1807206-MS2) Source: 18G0325-01 Prepared: 07/19/2018 Analyzed: 07/20/2018										
Calcium	400	4.0	mg/L	10.00	400	NR	70-130			M3
Copper	0.27	0.020	mg/L	0.2500	0.016	103	70-130			
Magnesium	110	3.0	mg/L	10.00	98	82	70-130			
Batch 1807208 - E 200.8 (5.4)										
Blank (1807208-BLK1) Prepared & Analyzed: 07/20/2018										
Copper	ND	0.00050	mg/L							

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18G0398
Date Received: 07/12/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1807208 - E 200.8 (5.4)										
LCS (1807208-BS1)				Prepared & Analyzed: 07/20/2018						
Copper	0.051	0.00050	mg/L	0.05000		103	85-115			
LCS Dup (1807208-BSD1)				Prepared & Analyzed: 07/20/2018						
Copper	0.051	0.00050	mg/L	0.05000		102	85-115	0.4	20	
Matrix Spike (1807208-MS1)		Source: 18G0398-01		Prepared & Analyzed: 07/20/2018						
Copper	0.049	0.00050	mg/L	0.05000	0.0038	90	70-130			

Outfall 2 (Trench) and Outfall 3 (Alta) Stormwater

LABORATORY			
Analyte	Total	Dissolved	Other
Metals			
Copper	X	X	
Major Cations			
Hardness	X	X	

FIELD MEASUREMENTS	
	pH
	Specific conductance
	Temperature
	Turbidity
	Flow
	Appearance



July 26, 2018

Johnny Pappas
Arizona Minerals Inc.
3845 North Business Center Drive, Suite 115
Tucson, AZ 85705

TEL (802) 235-5563
FAX

Work Order No.: 18G0425

RE: Storm Water

Dear Johnny Pappas,

Turner Laboratories, Inc. received 2 sample(s) on 07/13/2018 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Elizabeth Kasik
Business Development

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18G0425
Date Received: 07/13/2018

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
18G0425-01	Outfall 1	Storm Water	07/13/2018 0810
18G0425-02	Outfall 3	Storm Water	07/13/2018 0810

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18G0425
Date Received: 07/13/2018

Case Narrative

M3 The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS/LCSD recovery was acceptable.

M7 Matrix spike recovery was low. Data reported per ADEQ policy 0154.000. Matrix interference was confirmed.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND Not Detected at or above the PQL

PQL Practical Quantitation Limit

DF Dilution Factor

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18G0425
Lab Sample ID: 18G0425-01

Client Sample ID: Outfall 1
Collection Date/Time: 07/13/2018 0810
Matrix: Storm Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness, Dissolved-[CALC]									
Hardness, Calcium/Magnesium (As CaCO3) Dissolved	110		22		mg/L	1	07/17/2018 1440	07/19/2018 1523	MH
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	210				mg/L	1	07/19/2018 1020	07/20/2018 1329	MH
ICP Dissolved Metals-E 200.7 (4.4)									
Calcium	21		4.0		mg/L	1	07/17/2018 1440	07/19/2018 1523	MH
Magnesium	14		3.0		mg/L	1	07/17/2018 1440	07/19/2018 1523	MH
Zinc	ND		0.040		mg/L	1	07/17/2018 1440	07/19/2018 1524	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Arsenic	0.0044		0.00050		mg/L	1	07/17/2018 1440	07/20/2018 1423	MH
Cadmium	ND		0.00025		mg/L	1	07/17/2018 1440	07/20/2018 1423	MH
Copper	0.0045		0.00050		mg/L	1	07/17/2018 1440	07/20/2018 1423	MH
Lead	0.00061		0.00050		mg/L	1	07/17/2018 1440	07/20/2018 1423	MH
ICP Total Metals-E200.7 (4.4)									
Arsenic	0.11		0.040		mg/L	1	07/19/2018 1020	07/20/2018 1330	MH
Cadmium	0.0039		0.0020		mg/L	1	07/19/2018 1020	07/20/2018 1330	MH
Calcium	30		4.0		mg/L	1	07/19/2018 1020	07/20/2018 1329	MH
Copper	0.14		0.020		mg/L	1	07/19/2018 1020	07/20/2018 1330	MH
Lead	0.96		0.040		mg/L	1	07/19/2018 1020	07/20/2018 1330	MH
Magnesium	33		3.0		mg/L	1	07/19/2018 1020	07/20/2018 1329	MH
Zinc	2.1		0.040		mg/L	1	07/19/2018 1020	07/20/2018 1330	MH

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18G0425
Lab Sample ID: 18G0425-02

Client Sample ID: Outfall 3
Collection Date/Time: 07/13/2018 0810
Matrix: Storm Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness, Dissolved-[CALC]									
Hardness, Calcium/Magnesium (As CaCO3) Dissolved	40		22		mg/L	1	07/19/2018 1300	07/24/2018 1421	MH
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	170				mg/L	1	07/19/2018 1020	07/20/2018 1333	MH
ICP Dissolved Metals-E 200.7 (4.4)									
Calcium	9.6		4.0		mg/L	1	07/19/2018 1300	07/24/2018 1421	MH
Magnesium	4.0		3.0		mg/L	1	07/19/2018 1300	07/24/2018 1421	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Copper	0.046		0.00050		mg/L	1	07/19/2018 1300	07/20/2018 1439	MH
ICP Total Metals-E200.7 (4.4)									
Calcium	24		4.0		mg/L	1	07/19/2018 1020	07/20/2018 1333	MH
Copper	0.20		0.020		mg/L	1	07/19/2018 1020	07/20/2018 1334	MH
Magnesium	28		3.0		mg/L	1	07/19/2018 1020	07/20/2018 1333	MH

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18G0425
Date Received: 07/13/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1807203 - E 200.7 (4.4)										
Blank (1807203-BLK1) Prepared & Analyzed: 07/19/2018										
Calcium	ND	4.0	mg/L							
Magnesium	ND	3.0	mg/L							
Zinc	ND	0.040	mg/L							
LCS (1807203-BS1) Prepared & Analyzed: 07/19/2018										
Calcium	10	4.0	mg/L	10.00		100	85-115			
Magnesium	10	3.0	mg/L	10.00		101	85-115			
Zinc	0.50	0.040	mg/L	0.5000		101	85-115			
LCS Dup (1807203-BSD1) Prepared & Analyzed: 07/19/2018										
Calcium	9.5	4.0	mg/L	10.00		95	85-115	5	20	
Magnesium	9.8	3.0	mg/L	10.00		98	85-115	3	20	
Zinc	0.50	0.040	mg/L	0.5000		101	85-115	0.07	20	
Matrix Spike (1807203-MS1) Source: 18G0286-01 Prepared & Analyzed: 07/19/2018										
Calcium	25	4.0	mg/L	10.00	16	90	70-130			
Magnesium	13	3.0	mg/L	10.00	3.0	96	70-130			
Zinc	0.50	0.040	mg/L	0.5000	ND	100	70-130			
Matrix Spike (1807203-MS2) Source: 18G0340-01 Prepared & Analyzed: 07/19/2018										
Calcium	48	4.0	mg/L	10.00	36	114	70-130			
Magnesium	16	3.0	mg/L	10.00	5.6	100	70-130			
Zinc	0.50	0.040	mg/L	0.5000	0.0072	100	70-130			
Batch 1807206 - E200.7 (4.4)										
Blank (1807206-BLK1) Prepared: 07/19/2018 Analyzed: 07/20/2018										
Arsenic	ND	0.040	mg/L							
Cadmium	ND	0.0020	mg/L							
Calcium	ND	4.0	mg/L							
Copper	ND	0.020	mg/L							
Lead	ND	0.040	mg/L							
Magnesium	ND	3.0	mg/L							
Zinc	ND	0.040	mg/L							
LCS (1807206-BS1) Prepared: 07/19/2018 Analyzed: 07/20/2018										
Arsenic	1.94	0.040	mg/L	2.000		97	85-115			
Cadmium	0.049	0.0020	mg/L	0.05000		98	85-115			
Calcium	9.6	4.0	mg/L	10.00		96	85-115			
Copper	0.24	0.020	mg/L	0.2500		96	85-115			
Lead	0.50	0.040	mg/L	0.5000		100	85-115			
Magnesium	9.8	3.0	mg/L	10.00		98	85-115			
Zinc	0.48	0.040	mg/L	0.5000		95	85-115			

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18G0425
Date Received: 07/13/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1807206 - E200.7 (4.4)										
LCS Dup (1807206-BSD1)				Prepared: 07/19/2018 Analyzed: 07/20/2018						
Arsenic	1.96	0.040	mg/L	2.000		98	85-115	0.9	20	
Cadmium	0.049	0.0020	mg/L	0.05000		98	85-115	0.6	20	
Calcium	9.7	4.0	mg/L	10.00		97	85-115	2	20	
Copper	0.24	0.020	mg/L	0.2500		96	85-115	0.5	20	
Lead	0.50	0.040	mg/L	0.5000		101	85-115	0.4	20	
Magnesium	9.9	3.0	mg/L	10.00		99	85-115	0.6	20	
Zinc	0.49	0.040	mg/L	0.5000		97	85-115	2	20	
Matrix Spike (1807206-MS1)				Source: 18G0299-01		Prepared: 07/19/2018 Analyzed: 07/20/2018				
Arsenic	2.05	0.040	mg/L	2.000	0.0345	101	70-130			
Cadmium	0.045	0.0020	mg/L	0.05000	ND	91	70-130			
Calcium	50	4.0	mg/L	10.00	41	88	70-130			
Copper	0.28	0.020	mg/L	0.2500	0.0091	110	70-130			
Lead	0.24	0.040	mg/L	0.5000	ND	48	70-130			M7
Magnesium	770	30	mg/L	10.00	790	NR	70-130			M3
Zinc	0.46	0.040	mg/L	0.5000	ND	92	70-130			
Matrix Spike (1807206-MS2)				Source: 18G0325-01		Prepared: 07/19/2018 Analyzed: 07/20/2018				
Arsenic	2.05	0.040	mg/L	2.000	0.0206	101	70-130			
Cadmium	0.042	0.0020	mg/L	0.05000	ND	85	70-130			
Calcium	400	4.0	mg/L	10.00	400	NR	70-130			M3
Copper	0.27	0.020	mg/L	0.2500	0.016	103	70-130			
Lead	0.43	0.040	mg/L	0.5000	ND	87	70-130			
Magnesium	110	3.0	mg/L	10.00	98	82	70-130			
Zinc	0.51	0.040	mg/L	0.5000	0.045	92	70-130			
Batch 1807208 - E 200.8 (5.4)										
Blank (1807208-BLK1)				Prepared & Analyzed: 07/20/2018						
Arsenic	ND	0.00050	mg/L							
Cadmium	ND	0.00025	mg/L							
Copper	ND	0.00050	mg/L							
Lead	ND	0.00050	mg/L							
LCS (1807208-BS1)				Prepared & Analyzed: 07/20/2018						
Arsenic	0.051	0.00050	mg/L	0.05000		102	85-115			
Cadmium	0.052	0.00025	mg/L	0.05000		104	85-115			
Copper	0.051	0.00050	mg/L	0.05000		103	85-115			
Lead	0.050	0.00050	mg/L	0.05000		100	85-115			
LCS Dup (1807208-BSD1)				Prepared & Analyzed: 07/20/2018						
Arsenic	0.050	0.00050	mg/L	0.05000		101	85-115	0.8	20	
Cadmium	0.051	0.00025	mg/L	0.05000		102	85-115	2	20	
Copper	0.051	0.00050	mg/L	0.05000		102	85-115	0.4	20	
Lead	0.049	0.00050	mg/L	0.05000		99	85-115	1	20	

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18G0425
Date Received: 07/13/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1807208 - E 200.8 (5.4)										
Matrix Spike (1807208-MS1)		Source: 18G0398-01			Prepared & Analyzed: 07/20/2018					
Arsenic	0.061	0.00050	mg/L	0.05000	0.0084	105	70-130			
Cadmium	0.049	0.00025	mg/L	0.05000	0.00013	98	70-130			
Copper	0.049	0.00050	mg/L	0.05000	0.0038	90	70-130			
Lead	0.050	0.00050	mg/L	0.05000	0.00012	100	70-130			
Batch 1807247 - E 200.7 (4.4)										
Blank (1807247-BLK1)		Prepared & Analyzed: 07/24/2018								
Calcium	ND	4.0	mg/L							
Magnesium	ND	3.0	mg/L							
LCS (1807247-BS1)		Prepared & Analyzed: 07/24/2018								
Calcium	9.4	4.0	mg/L	10.00		94	85-115			
Magnesium	9.5	3.0	mg/L	10.00		95	85-115			
LCS Dup (1807247-BSD1)		Prepared & Analyzed: 07/24/2018								
Calcium	9.4	4.0	mg/L	10.00		94	85-115	0.09	20	
Magnesium	9.5	3.0	mg/L	10.00		95	85-115	0.5	20	
Matrix Spike (1807247-MS1)		Source: 18G0424-01			Prepared & Analyzed: 07/24/2018					
Calcium	89	4.0	mg/L	10.00	81	80	70-130			
Magnesium	20	3.0	mg/L	10.00	11	93	70-130			
Matrix Spike (1807247-MS2)		Source: 18G0425-02			Prepared & Analyzed: 07/24/2018					
Calcium	19	4.0	mg/L	10.00	9.6	91	70-130			
Magnesium	13	3.0	mg/L	10.00	4.0	95	70-130			

STORMWATER SAMPLE FORM

Field Staff Robert Dodson

Company AMI

Weather Cloudy

Notes _____

Rainfall (inches) 1.74"

Sample Location	Sample ID	Flow (gpm)	Sample Date	Time Sampled	Temp °C	pH	Specific Conductivity (µs/cm)	Turbidity (NTU)	Appearance of Water: (color, odor, etc) or other notes
Outfall 1	Outfall 7-13-18		7-13-18	8:10 AM	21°C	6.75	396	1100	Murky, brown, no odor
Outfall 3	7-13-18		7-13-18	8:10 AM	20.2°C	7.29	161.2	1060	Murky, brown, no odor

Sample Laboratory Information

Water Quality Meter

Container Volume	No of Containers	Filtered Y/N	Preservative	Lab Analysis	Meter:
500	2	NO	No	DIS + TSS	pH: YSI Professional Plus Turbidity: ● Geotech Portable Turbidity Meter
250	2	NO	Yes	Total	
					Calibration Date: <u>7-13-18</u>

Dissolved Metals - Filter (0.45 micron filter) prior to placing into 250 ml container with nitric acid preservative.

Total Metals - 250 ml container with nitric acid preservative.

TSS, Hardness (Calcium, Magnesium) - 250 ml container with NO preservative.



August 20, 2018

Johnny Pappas
Arizona Minerals Inc.
3845 North Business Center Drive, Suite 115
Tucson, AZ 85705

TEL (802) 235-5563
FAX

Work Order No.: 18H0223

RE: Storm Water

Dear Johnny Pappas,

Turner Laboratories, Inc. received 2 sample(s) on 08/07/2018 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Elizabeth Kasik
Laboratory Director

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18H0223
Date Received: 08/07/2018

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
18H0223-01	Outfall 1	Storm Water	08/06/2018 1030
18H0223-02	Outfall 3	Storm Water	08/06/2018 1230

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18H0223
Date Received: 08/07/2018

Case Narrative

M3 The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS/LCSD recovery was acceptable.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

ND Not Detected at or above the PQL

PQL Practical Quantitation Limit

DF Dilution Factor

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18H0223
Lab Sample ID: 18H0223-01

Client Sample ID: Outfall 1
Collection Date/Time: 08/06/2018 1030
Matrix: Storm Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness, Dissolved-[CALC]									
Hardness, Calcium/Magnesium (As CaCO3) Dissolved	960		22		mg/L	1	08/08/2018 1600	08/14/2018 1409	MH
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	4500				mg/L	20	08/09/2018 1200	08/13/2018 1222	MH
ICP Dissolved Metals-E 200.7 (4.4)									
Calcium	220		4.0		mg/L	1	08/08/2018 1600	08/14/2018 1409	MH
Magnesium	100		3.0		mg/L	1	08/08/2018 1600	08/14/2018 1409	MH
Zinc	ND		0.040		mg/L	1	08/08/2018 1600	08/14/2018 1409	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Arsenic	0.0037		0.00050		mg/L	1	08/08/2018 1600	08/15/2018 1600	MH
Cadmium	0.00034		0.00025		mg/L	1	08/08/2018 1600	08/15/2018 1600	MH
Copper	0.0013		0.00050		mg/L	1	08/08/2018 1600	08/15/2018 1600	MH
Lead	ND		0.00050		mg/L	1	08/08/2018 1600	08/15/2018 1600	MH
ICP Total Metals-E200.7 (4.4)									
Arsenic	0.35		0.040		mg/L	1	08/09/2018 1200	08/10/2018 1315	MH
Cadmium	0.12		0.0020		mg/L	1	08/09/2018 1200	08/10/2018 1315	MH
Calcium	630		80		mg/L	20	08/09/2018 1200	08/13/2018 1222	MH
Copper	2.5		0.020		mg/L	1	08/09/2018 1200	08/10/2018 1315	MH
Lead	3.5		0.040		mg/L	1	08/09/2018 1200	08/10/2018 1315	MH
Magnesium	700		60		mg/L	20	08/09/2018 1200	08/13/2018 1222	MH
Zinc	31		0.80		mg/L	20	08/09/2018 1200	08/13/2018 1222	MH

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18H0223
Lab Sample ID: 18H0223-02

Client Sample ID: Outfall 3
Collection Date/Time: 08/06/2018 1230
Matrix: Storm Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness, Dissolved-[CALC]									
Hardness, Calcium/Magnesium (As CaCO3) Dissolved	ND		22		mg/L	1	08/08/2018 1600	08/14/2018 1413	MH
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	45				mg/L	1	08/09/2018 1200	08/10/2018 1319	MH
ICP Dissolved Metals-E 200.7 (4.4)									
Calcium	5.9		4.0		mg/L	1	08/08/2018 1600	08/14/2018 1413	MH
Magnesium	ND		3.0		mg/L	1	08/08/2018 1600	08/14/2018 1413	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Copper	0.0049		0.00050		mg/L	1	08/08/2018 1600	08/15/2018 1610	MH
ICP Total Metals-E200.7 (4.4)									
Calcium	9.2		4.0		mg/L	1	08/09/2018 1200	08/10/2018 1319	MH
Copper	0.030		0.020		mg/L	1	08/09/2018 1200	08/10/2018 1319	MH
Magnesium	5.3		3.0		mg/L	1	08/09/2018 1200	08/10/2018 1319	MH

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18H0223
Date Received: 08/07/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Qual
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Batch 1808132 - E200.7 (4.4)

Blank (1808132-BLK1)

Prepared: 08/09/2018 Analyzed: 08/10/2018

Arsenic	ND	0.040	mg/L
Cadmium	ND	0.0020	mg/L
Calcium	ND	4.0	mg/L
Copper	ND	0.020	mg/L
Lead	ND	0.040	mg/L
Magnesium	ND	3.0	mg/L
Zinc	ND	0.040	mg/L

LCS (1808132-BS1)

Prepared: 08/09/2018 Analyzed: 08/10/2018

Arsenic	1.96	0.040	mg/L	2.000		98	85-115
Cadmium	0.047	0.0020	mg/L	0.05000		95	85-115
Calcium	9.9	4.0	mg/L	10.00		99	85-115
Copper	0.23	0.020	mg/L	0.2500		92	85-115
Lead	0.47	0.040	mg/L	0.5000		94	85-115
Magnesium	10	3.0	mg/L	10.00		100	85-115
Zinc	0.46	0.040	mg/L	0.5000		92	85-115

LCS Dup (1808132-BSD1)

Prepared: 08/09/2018 Analyzed: 08/10/2018

Arsenic	1.96	0.040	mg/L	2.000		98	85-115	0.3	20
Cadmium	0.047	0.0020	mg/L	0.05000		95	85-115	0.1	20
Calcium	9.8	4.0	mg/L	10.00		98	85-115	0.9	20
Copper	0.23	0.020	mg/L	0.2500		93	85-115	0.9	20
Lead	0.47	0.040	mg/L	0.5000		94	85-115	0.2	20
Magnesium	10	3.0	mg/L	10.00		100	85-115	0.3	20
Zinc	0.46	0.040	mg/L	0.5000		92	85-115	0.8	20

Matrix Spike (1808132-MS1)

Source: 18H0051-02

Prepared: 08/09/2018 Analyzed: 08/10/2018

Arsenic	2.10	0.040	mg/L	2.000	0.0328	103	70-130		
Cadmium	0.044	0.0020	mg/L	0.05000	ND	89	70-130		
Calcium	240	4.0	mg/L	10.00	240	13	70-130		M3
Copper	0.37	0.020	mg/L	0.2500	0.11	104	70-130		
Lead	0.45	0.040	mg/L	0.5000	ND	89	70-130		
Magnesium	60	3.0	mg/L	10.00	51	86	70-130		
Zinc	0.65	0.040	mg/L	0.5000	0.18	94	70-130		

Batch 1808173 - E 200.7 (4.4)

Blank (1808173-BLK1)

Prepared & Analyzed: 08/14/2018

Calcium	ND	4.0	mg/L
Magnesium	ND	3.0	mg/L
Zinc	ND	0.040	mg/L

LCS (1808173-BS1)

Prepared & Analyzed: 08/14/2018

Calcium	9.4	4.0	mg/L	10.00		94	85-115
Magnesium	9.5	3.0	mg/L	10.00		95	85-115
Zinc	0.47	0.040	mg/L	0.5000		93	85-115

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18H0223
Date Received: 08/07/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 1808173 - E 200.7 (4.4)										
LCS Dup (1808173-BSD1)				Prepared & Analyzed: 08/14/2018						
Calcium	9.3	4.0	mg/L	10.00		93	85-115	0.8	20	
Magnesium	9.4	3.0	mg/L	10.00		94	85-115	0.1	20	
Zinc	0.47	0.040	mg/L	0.5000		94	85-115	0.6	20	
Matrix Spike (1808173-MS1)				Source: 18H0223-02		Prepared & Analyzed: 08/14/2018				
Calcium	15	4.0	mg/L	10.00	5.9	91	70-130			
Magnesium	12	3.0	mg/L	10.00	2.2	94	70-130			
Zinc	0.51	0.040	mg/L	0.5000	0.035	95	70-130			
Batch 1808193 - E 200.8 (5.4)										
Blank (1808193-BLK1)				Prepared & Analyzed: 08/15/2018						
Arsenic	ND	0.00050	mg/L							
Cadmium	ND	0.00025	mg/L							
Copper	ND	0.00050	mg/L							
Lead	ND	0.00050	mg/L							
LCS (1808193-BS1)				Prepared & Analyzed: 08/15/2018						
Arsenic	0.050	0.00050	mg/L	0.05000		100	85-115			
Cadmium	0.049	0.00025	mg/L	0.05000		98	85-115			
Copper	0.049	0.00050	mg/L	0.05000		99	85-115			
Lead	0.051	0.00050	mg/L	0.05000		102	85-115			
LCS Dup (1808193-BSD1)				Prepared & Analyzed: 08/15/2018						
Arsenic	0.050	0.00050	mg/L	0.05000		99	85-115	0.4	20	
Cadmium	0.049	0.00025	mg/L	0.05000		98	85-115	0.03	20	
Copper	0.049	0.00050	mg/L	0.05000		99	85-115	0.1	20	
Lead	0.051	0.00050	mg/L	0.05000		101	85-115	0.5	20	
Matrix Spike (1808193-MS1)				Source: 18H0223-01		Prepared & Analyzed: 08/15/2018				
Arsenic	0.058	0.00050	mg/L	0.05000	0.0037	108	70-130			
Cadmium	0.048	0.00025	mg/L	0.05000	0.00034	96	70-130			
Copper	0.046	0.00050	mg/L	0.05000	0.0013	90	70-130			
Lead	0.052	0.00050	mg/L	0.05000	0.000099	103	70-130			

Outfall 1 (Trench) Stormwater

Analyte	LABORATORY		
	Total	Dissolved	Other
Metals			
Arsenic	X	X	
Cadmium	X	X	
Copper	X	X	
Lead	X	X	
Zinc	X	X	
Major Cations			
Hardness	X		X

FIELD MEASUREMENTS
pH
Specific conductance
Temperature
Turbidity
Flow
Appearance

Outfall 2 (Trench) and Outfall 3 (Alta) Stormwater

Analyte	LABORATORY		
	Total	Dissolved	Other
Metals			
Copper	X	X	
Major Cations			
Hardness	X	X	

FIELD MEASUREMENTS
pH
Specific conductance
Temperature
Turbidity
Flow
Appearance



October 24, 2018

Johnny Pappas
Arizona Minerals Inc.
2210 E. Fort Lowell Rd
Tucson, AZ 85719

TEL (802) 235-5563
FAX

Work Order No.: 18J0427
Order Name: South 32

RE: Storm Water

Dear Johnny Pappas,

Turner Laboratories, Inc. received 2 sample(s) on 10/12/2018 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Elizabeth Kasik
Laboratory Director

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18J0427
Date Received: 10/12/2018

Order: South 32

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
18J0427-01	Outfall #1	Storm Water	10/12/2018 0830
18J0427-02	Outfall #2	Storm Water	10/12/2018 0846

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18J0427
Date Received: 10/12/2018

Case Narrative

- B1 Target analyte detected in the method blank at or above the method reporting limit.
- B7 Target analyte detected in method blank at or above the method reporting limit. Concentration found in the sample was 10 times above the concentration found in the method blank.
- M3 The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS/LCSD recovery was acceptable.

All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.

- ND Not Detected at or above the PQL
- PQL Practical Quantitation Limit
- DF Dilution Factor

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18J0427
Lab Sample ID: 18J0427-01

Client Sample ID: Outfall #1
Collection Date/Time: 10/12/2018 0830
Matrix: Storm Water
Order Name: South 32

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness, Dissolved-[CALC]									
Hardness, Calcium/Magnesium (As CaCO3) Dissolved	1300		110		mg/L	5	10/22/2018 1135	10/23/2018 1654	MH
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	1900				mg/L	1	10/18/2018 1215	10/23/2018 1142	MH
ICP Dissolved Metals-E 200.7 (4.4)									
Calcium	310		20		mg/L	5	10/22/2018 1135	10/23/2018 1654	MH
Magnesium	140		15		mg/L	5	10/22/2018 1135	10/23/2018 1654	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Arsenic	0.0027		0.00050		mg/L	1	10/22/2018 1135	10/23/2018 1443	MH
Cadmium	0.00045		0.00025		mg/L	1	10/22/2018 1135	10/23/2018 1443	MH
Copper	0.0013		0.00050		mg/L	1	10/22/2018 1135	10/23/2018 1443	MH
Lead	0.0012		0.00050		mg/L	1	10/22/2018 1135	10/23/2018 1443	MH
Zinc	ND		0.040		mg/L	1	10/22/2018 1135	10/23/2018 1443	MH
ICP Total Metals-E200.7 (4.4)									
Calcium	350		4.0		mg/L	1	10/18/2018 1215	10/23/2018 1142	MH
Copper	0.71		0.020		mg/L	1	10/18/2018 1215	10/23/2018 1142	MH
Magnesium	240		3.0		mg/L	1	10/18/2018 1215	10/23/2018 1142	MH
ICP/MS Total Metals-E200.8 (5.4)									
Arsenic	0.17		0.00050		mg/L	1	10/18/2018 1000	10/19/2018 1257	MH
Cadmium	0.022		0.00025		mg/L	1	10/18/2018 1000	10/19/2018 1257	MH
Lead	2.5		0.010	B7	mg/L	20	10/18/2018 1000	10/19/2018 1508	MH
Zinc	9.4		0.80		mg/L	20	10/18/2018 1000	10/19/2018 1508	MH

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18J0427
Lab Sample ID: 18J0427-02

Client Sample ID: Outfall #2
Collection Date/Time: 10/12/2018 0846
Matrix: Storm Water
Order Name: South 32

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness, Dissolved-[CALC]									
Hardness, Calcium/Magnesium (As CaCO3) Dissolved	1800		110		mg/L	5	10/22/2018 1135	10/23/2018 1658	MH
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	1600				mg/L	10	10/18/2018 1215	10/23/2018 1154	MH
ICP Dissolved Metals-E 200.7 (4.4)									
Calcium	490		20		mg/L	5	10/22/2018 1135	10/23/2018 1658	MH
Magnesium	140		15		mg/L	5	10/22/2018 1135	10/23/2018 1658	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Copper	0.0020		0.00050		mg/L	1	10/22/2018 1135	10/23/2018 1421	MH
ICP Total Metals-E200.7 (4.4)									
Calcium	420		40		mg/L	10	10/18/2018 1215	10/23/2018 1154	MH
Copper	0.12		0.020		mg/L	1	10/18/2018 1215	10/23/2018 1146	MH
Magnesium	140		3.0		mg/L	1	10/18/2018 1215	10/23/2018 1146	MH

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18J0427
Date Received: 10/12/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Qual
Batch 1810222 - E200.8 (5.4)										
Blank (1810222-BLK1)				Prepared: 10/18/2018 Analyzed: 10/19/2018						
Arsenic	ND	0.00050	mg/L							
Cadmium	ND	0.00025	mg/L							
Lead	0.0025	0.00050	mg/L							B1
Zinc	ND	0.040	mg/L							
LCS (1810222-BS1)				Prepared: 10/18/2018 Analyzed: 10/19/2018						
Arsenic	0.051	0.00050	mg/L	0.05000		101	85-115			
Cadmium	0.050	0.00025	mg/L	0.05000		100	85-115			
Lead	0.057	0.00050	mg/L	0.05000		115	85-115			
Zinc	0.10	0.040	mg/L	0.1000		102	85-115			
LCS Dup (1810222-BSD1)				Prepared: 10/18/2018 Analyzed: 10/19/2018						
Arsenic	0.049	0.00050	mg/L	0.05000		97	85-115	4	20	
Cadmium	0.048	0.00025	mg/L	0.05000		96	85-115	5	20	
Lead	0.051	0.00050	mg/L	0.05000		103	85-115	11	20	
Zinc	0.097	0.040	mg/L	0.1000		97	85-115	5	20	
Matrix Spike (1810222-MS1)		Source: 18J0486-04		Prepared: 10/18/2018 Analyzed: 10/19/2018						
Arsenic	0.050	0.00050	mg/L	0.05000	ND	100	70-130			
Cadmium	0.048	0.00025	mg/L	0.05000	ND	96	70-130			
Lead	0.054	0.00050	mg/L	0.05000	0.0014	105	70-130			
Zinc	0.096	0.040	mg/L	0.1000	ND	96	70-130			
Matrix Spike (1810222-MS2)		Source: 18J0486-06		Prepared: 10/18/2018 Analyzed: 10/19/2018						
Arsenic	0.047	0.00050	mg/L	0.05000	0.00016	94	70-130			
Cadmium	0.047	0.00025	mg/L	0.05000	0.000076	94	70-130			
Lead	0.052	0.00050	mg/L	0.05000	0.0014	101	70-130			
Zinc	0.094	0.040	mg/L	0.1000	ND	94	70-130			
Batch 1810224 - E200.7 (4.4)										
Blank (1810224-BLK1)				Prepared: 10/18/2018 Analyzed: 10/22/2018						
Calcium	ND	4.0	mg/L							
Copper	ND	0.020	mg/L							
Magnesium	ND	3.0	mg/L							
LCS (1810224-BS1)				Prepared: 10/18/2018 Analyzed: 10/22/2018						
Calcium	10	4.0	mg/L	10.00		101	85-115			
Copper	0.24	0.020	mg/L	0.2500		95	85-115			
Magnesium	10	3.0	mg/L	10.00		102	85-115			
LCS Dup (1810224-BSD1)				Prepared: 10/18/2018 Analyzed: 10/22/2018						
Calcium	10	4.0	mg/L	10.00		101	85-115	0.2	20	
Copper	0.24	0.020	mg/L	0.2500		96	85-115	0.5	20	
Magnesium	10	3.0	mg/L	10.00		102	85-115	0.1	20	
Matrix Spike (1810224-MS1)		Source: 18J0154-01		Prepared: 10/18/2018 Analyzed: 10/23/2018						
Calcium	17000		mg/L	10.00	17000	NR	70-130			M3
Copper	0.38		mg/L	0.2500	0.19	75	70-130			
Magnesium	6000		mg/L	10.00	6100	NR	70-130			M3

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18J0427
Date Received: 10/12/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Qual
Batch 1810224 - E200.7 (4.4)										
Matrix Spike (1810224-MS2)		Source: 18J0415-01			Prepared: 10/18/2018 Analyzed: 10/22/2018					
Calcium	67	4.0	mg/L	10.00	60	65	70-130			M3
Copper	0.26	0.020	mg/L	0.2500	0.023	97	70-130			
Magnesium	15	3.0	mg/L	10.00	6.4	89	70-130			
Batch 1810242 - E 200.8 (5.4)										
Blank (1810242-BLK1)				Prepared & Analyzed: 10/23/2018						
Arsenic	ND	0.00050	mg/L							
Cadmium	ND	0.00025	mg/L							
Copper	ND	0.00050	mg/L							
Lead	ND	0.00050	mg/L							
Zinc	ND	0.040	mg/L							
LCS (1810242-BS1)				Prepared & Analyzed: 10/23/2018						
Arsenic	0.050	0.00050	mg/L	0.05000		99	85-115			
Cadmium	0.050	0.00025	mg/L	0.05000		100	85-115			
Copper	0.049	0.00050	mg/L	0.05000		98	85-115			
Lead	0.048	0.00050	mg/L	0.05000		96	85-115			
Zinc	0.10	0.040	mg/L	0.1000		101	85-115			
LCS Dup (1810242-BSD1)				Prepared & Analyzed: 10/23/2018						
Arsenic	0.050	0.00050	mg/L	0.05000		101	85-115	1	20	
Cadmium	0.050	0.00025	mg/L	0.05000		101	85-115	0.8	20	
Copper	0.050	0.00050	mg/L	0.05000		99	85-115	1	20	
Lead	0.049	0.00050	mg/L	0.05000		99	85-115	2	20	
Zinc	0.10	0.040	mg/L	0.1000		100	85-115	0.7	20	
Matrix Spike (1810242-MS1)		Source: 18J0429-02			Prepared & Analyzed: 10/23/2018					
Arsenic	0.056	0.00050	mg/L	0.05000	0.0025	107	70-130			
Cadmium	0.049	0.00025	mg/L	0.05000	ND	99	70-130			
Copper	0.046	0.00050	mg/L	0.05000	0.0017	89	70-130			
Lead	0.054	0.00050	mg/L	0.05000	0.0054	97	70-130			
Zinc	0.12	0.040	mg/L	0.1000	0.024	96	70-130			
Batch 1810260 - E 200.7 (4.4)										
Blank (1810260-BLK1)				Prepared & Analyzed: 10/23/2018						
Calcium	ND	4.0	mg/L							
Magnesium	ND	3.0	mg/L							
LCS (1810260-BS1)				Prepared & Analyzed: 10/23/2018						
Calcium	11	4.0	mg/L	10.00		109	85-115			
Magnesium	11	3.0	mg/L	10.00		108	85-115			
LCS Dup (1810260-BSD1)				Prepared & Analyzed: 10/23/2018						
Calcium	9.9	4.0	mg/L	10.00		99	85-115	10	20	
Magnesium	10	3.0	mg/L	10.00		100	85-115	7	20	
Matrix Spike (1810260-MS1)		Source: 18J0476-01			Prepared & Analyzed: 10/23/2018					
Calcium	36	4.0	mg/L	10.00	30	59	70-130			M3
Magnesium	20	3.0	mg/L	10.00	11	88	70-130			



October 26, 2018

Johnny Pappas
Arizona Minerals Inc.
2210 E. Fort Lowell Rd
Tucson, AZ 85719

TEL (802) 235-5563
FAX

Work Order No.: 18J0476

RE: Storm Water

Dear Johnny Pappas,

Turner Laboratories, Inc. received 2 sample(s) on 10/16/2018 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Elizabeth Kasik
Laboratory Director

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18J0476
Date Received: 10/16/2018

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
18J0476-01	Outfall #1	Storm Water	10/16/2018 0830
18J0476-02	Outfall #3	Storm Water	10/16/2018 0845

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18J0476
Date Received: 10/16/2018

Case Narrative

- B1 Target analyte detected in the method blank at or above the method reporting limit.
 - B7 Target analyte detected in method blank at or above the method reporting limit. Concentration found in the sample was 10 times above the concentration found in the method blank.
 - M3 The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS/LCSD recovery was acceptable.
- All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.
- ND Not Detected at or above the PQL
 - PQL Practical Quantitation Limit
 - DF Dilution Factor

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18J0476
Lab Sample ID: 18J0476-01

Client Sample ID: Outfall #1
Collection Date/Time: 10/16/2018 0830
Matrix: Storm Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness, Dissolved-[CALC]									
Hardness, Calcium/Magnesium (As CaCO3) Dissolved	120		22		mg/L	1	10/22/2018 1135	10/23/2018 1618	MH
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	130				mg/L	1	10/19/2018 1035	10/25/2018 1855	MH
ICP Dissolved Metals-E 200.7 (4.4)									
Calcium	30		4.0	M3	mg/L	1	10/22/2018 1135	10/23/2018 1618	MH
Magnesium	11		3.0		mg/L	1	10/22/2018 1135	10/23/2018 1618	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Arsenic	0.0055		0.00050		mg/L	1	10/22/2018 1135	10/23/2018 1448	MH
Cadmium	ND		0.00025		mg/L	1	10/22/2018 1135	10/23/2018 1448	MH
Copper	0.0029		0.00050		mg/L	1	10/22/2018 1135	10/23/2018 1448	MH
Lead	0.00057		0.00050		mg/L	1	10/22/2018 1135	10/23/2018 1448	MH
Zinc	ND		0.040		mg/L	1	10/22/2018 1135	10/23/2018 1448	MH
ICP Total Metals-E200.7 (4.4)									
Calcium	32		4.0		mg/L	1	10/19/2018 1035	10/25/2018 1855	MH
Magnesium	12		3.0		mg/L	1	10/19/2018 1035	10/25/2018 1855	MH
ICP/MS Total Metals-E200.8 (5.4)									
Arsenic	0.0061		0.00050		mg/L	1	10/18/2018 1000	10/19/2018 1313	MH
Cadmium	0.00035		0.00025		mg/L	1	10/18/2018 1000	10/19/2018 1313	MH
Copper	0.012		0.00050		mg/L	1	10/18/2018 1000	10/19/2018 1313	MH
Lead	0.19		0.00050	B7	mg/L	1	10/18/2018 1000	10/19/2018 1313	MH
Zinc	0.11		0.040		mg/L	1	10/18/2018 1000	10/19/2018 1313	MH

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18J0476
Lab Sample ID: 18J0476-02

Client Sample ID: Outfall #3
Collection Date/Time: 10/16/2018 0845
Matrix: Storm Water

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness, Dissolved-[CALC]									
Hardness, Calcium/Magnesium (As CaCO3) Dissolved	ND		22		mg/L	1	10/22/2018 1135	10/23/2018 1702	MH
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	31				mg/L	1	10/19/2018 1035	10/25/2018 1900	MH
ICP Dissolved Metals-E 200.7 (4.4)									
Calcium	ND		4.0		mg/L	1	10/22/2018 1135	10/23/2018 1702	MH
Magnesium	ND		3.0		mg/L	1	10/22/2018 1135	10/23/2018 1702	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Copper	0.0032		0.00050		mg/L	1	10/22/2018 1135	10/23/2018 1427	MH
ICP Total Metals-E200.7 (4.4)									
Calcium	5.5		4.0		mg/L	1	10/19/2018 1035	10/25/2018 1900	MH
Magnesium	4.1		3.0		mg/L	1	10/19/2018 1035	10/25/2018 1900	MH
ICP/MS Total Metals-E200.8 (5.4)									
Copper	0.023		0.00050		mg/L	1	10/18/2018 1000	10/19/2018 1318	MH

Client: Arizona Minerals Inc.
Project: Storm Water
Work Order: 18J0476
Date Received: 10/16/2018

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Qual
Batch 1810222 - E200.8 (5.4)										
Blank (1810222-BLK1) Prepared: 10/18/2018 Analyzed: 10/19/2018										
Arsenic	ND	0.00050	mg/L							
Cadmium	ND	0.00025	mg/L							
Copper	ND	0.00050	mg/L							
Lead	0.0025	0.00050	mg/L							B1
Zinc	ND	0.040	mg/L							
LCS (1810222-BS1) Prepared: 10/18/2018 Analyzed: 10/19/2018										
Arsenic	0.051	0.00050	mg/L	0.05000		101	85-115			
Cadmium	0.050	0.00025	mg/L	0.05000		100	85-115			
Copper	0.051	0.00050	mg/L	0.05000		103	85-115			
Lead	0.057	0.00050	mg/L	0.05000		115	85-115			
Zinc	0.10	0.040	mg/L	0.1000		102	85-115			
LCS Dup (1810222-BSD1) Prepared: 10/18/2018 Analyzed: 10/19/2018										
Arsenic	0.049	0.00050	mg/L	0.05000		97	85-115	4	20	
Cadmium	0.048	0.00025	mg/L	0.05000		96	85-115	5	20	
Copper	0.049	0.00050	mg/L	0.05000		97	85-115	6	20	
Lead	0.051	0.00050	mg/L	0.05000		103	85-115	11	20	
Zinc	0.097	0.040	mg/L	0.1000		97	85-115	5	20	
Matrix Spike (1810222-MS1) Source: 18J0486-04 Prepared: 10/18/2018 Analyzed: 10/19/2018										
Arsenic	0.050	0.00050	mg/L	0.05000	ND	100	70-130			
Cadmium	0.048	0.00025	mg/L	0.05000	ND	96	70-130			
Copper	0.050	0.00050	mg/L	0.05000	0.00019	100	70-130			
Lead	0.054	0.00050	mg/L	0.05000	0.0014	105	70-130			
Zinc	0.096	0.040	mg/L	0.1000	ND	96	70-130			
Matrix Spike (1810222-MS2) Source: 18J0486-06 Prepared: 10/18/2018 Analyzed: 10/19/2018										
Arsenic	0.047	0.00050	mg/L	0.05000	0.00016	94	70-130			
Cadmium	0.047	0.00025	mg/L	0.05000	0.000076	94	70-130			
Copper	0.049	0.00050	mg/L	0.05000	ND	98	70-130			
Lead	0.052	0.00050	mg/L	0.05000	0.0014	101	70-130			
Zinc	0.094	0.040	mg/L	0.1000	ND	94	70-130			
Batch 1810239 - E200.7 (4.4)										
Blank (1810239-BLK1) Prepared: 10/19/2018 Analyzed: 10/25/2018										
Calcium	ND	4.0	mg/L							
Magnesium	ND	3.0	mg/L							
LCS (1810239-BS1) Prepared: 10/19/2018 Analyzed: 10/25/2018										
Calcium	10	4.0	mg/L	10.00		103	85-115			
Magnesium	10	3.0	mg/L	10.00		105	85-115			
LCS Dup (1810239-BSD1) Prepared: 10/19/2018 Analyzed: 10/25/2018										
Calcium	10	4.0	mg/L	10.00		103	85-115	0.3	20	
Magnesium	11	3.0	mg/L	10.00		107	85-115	2	20	
Matrix Spike (1810239-MS1) Source: 18J0407-01 Prepared: 10/19/2018 Analyzed: 10/25/2018										
Calcium	88	4.0	mg/L	10.00	76	115	70-130			
Magnesium	28	3.0	mg/L	10.00	17	109	70-130			

Client: Arizona Minerals Inc.
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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limit	RPD	RPD Limit	Qual
Batch 1810239 - E200.7 (4.4)										
Matrix Spike (1810239-MS2)		Source: 18J0420-02			Prepared: 10/19/2018 Analyzed: 10/25/2018					
Calcium	210	4.0	mg/L	10.00	210	3	70-130			M3
Magnesium	49	3.0	mg/L	10.00	40	89	70-130			
Batch 1810242 - E 200.8 (5.4)										
Blank (1810242-BLK1)				Prepared & Analyzed: 10/23/2018						
Arsenic	ND	0.00050	mg/L							
Cadmium	ND	0.00025	mg/L							
Copper	ND	0.00050	mg/L							
Lead	ND	0.00050	mg/L							
Zinc	ND	0.040	mg/L							
LCS (1810242-BS1)				Prepared & Analyzed: 10/23/2018						
Arsenic	0.050	0.00050	mg/L	0.05000		99	85-115			
Cadmium	0.050	0.00025	mg/L	0.05000		100	85-115			
Copper	0.049	0.00050	mg/L	0.05000		98	85-115			
Lead	0.048	0.00050	mg/L	0.05000		96	85-115			
Zinc	0.10	0.040	mg/L	0.1000		101	85-115			
LCS Dup (1810242-BSD1)				Prepared & Analyzed: 10/23/2018						
Arsenic	0.050	0.00050	mg/L	0.05000		101	85-115	1	20	
Cadmium	0.050	0.00025	mg/L	0.05000		101	85-115	0.8	20	
Copper	0.050	0.00050	mg/L	0.05000		99	85-115	1	20	
Lead	0.049	0.00050	mg/L	0.05000		99	85-115	2	20	
Zinc	0.10	0.040	mg/L	0.1000		100	85-115	0.7	20	
Matrix Spike (1810242-MS1)		Source: 18J0429-02			Prepared & Analyzed: 10/23/2018					
Arsenic	0.056	0.00050	mg/L	0.05000	0.0025	107	70-130			
Cadmium	0.049	0.00025	mg/L	0.05000	ND	99	70-130			
Copper	0.046	0.00050	mg/L	0.05000	0.0017	89	70-130			
Lead	0.054	0.00050	mg/L	0.05000	0.0054	97	70-130			
Zinc	0.12	0.040	mg/L	0.1000	0.024	96	70-130			
Batch 1810260 - E 200.7 (4.4)										
Blank (1810260-BLK1)				Prepared & Analyzed: 10/23/2018						
Calcium	ND	4.0	mg/L							
Magnesium	ND	3.0	mg/L							
LCS (1810260-BS1)				Prepared & Analyzed: 10/23/2018						
Calcium	11	4.0	mg/L	10.00		109	85-115			
Magnesium	11	3.0	mg/L	10.00		108	85-115			
LCS Dup (1810260-BSD1)				Prepared & Analyzed: 10/23/2018						
Calcium	9.9	4.0	mg/L	10.00		99	85-115	10	20	
Magnesium	10	3.0	mg/L	10.00		100	85-115	7	20	
Matrix Spike (1810260-MS1)		Source: 18J0476-01			Prepared & Analyzed: 10/23/2018					
Calcium	36	4.0	mg/L	10.00	30	59	70-130			M3
Magnesium	20	3.0	mg/L	10.00	11	88	70-130			



2445 N. Coyote Drive, Suite 104
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 www.turnerlabs.com

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

TURNER WORK ORDER # 18J0476 DATE 10/16/18 PAGE 2 OF 2

PROJECT NAME _____ # _____

CONTACT NAME Johnny Pappas, Sarah Richman

COMPANY NAME South 32

ADDRESS 2210 East Fort Lowell Road

CITY Tucson STATE AZ ZIP CODE _____

PHONE _____ FAX _____

SAMPLER'S SIGNATURE [Signature]

NUMBER OF CONTAINERS

See attached

CIRCLE ANALYSIS REQUESTED AND/OR CHECK THE APPROPRIATE BOX

SAMPLE I.D.	DATE	TIME	LAB I.D.	SAMPLE MATRIX*	NUMBER OF CONTAINERS															
<u>Outfall #1-10/16/18</u>	<u>10/16/18</u>	<u>8:30</u>			<u>2</u>	<input checked="" type="checkbox"/>														
<u>Outfall #3-10/16/18</u>	<u>10/16/18</u>	<u>8:45</u>			<u>2</u>	<input checked="" type="checkbox"/>														

1. RELINQUISHED BY: <u>[Signature]</u> Signature <u>Luis Loguano</u> Printed Name <u>South 32</u> Firm <u>10/16/18 8:54</u> Date/Time	2. RECEIVED BY: <u>[Signature]</u> Signature <u>Juda Villa</u> Printed Name <u>323</u> Firm <u>10/16/18 9x</u> Date/Time	TURNAROUND REQUIREMENTS: <input type="checkbox"/> Standard (approx. 10 days)* <input type="checkbox"/> Next day <input type="checkbox"/> 2 Day <input type="checkbox"/> 5 Day* <input type="checkbox"/> Email Preliminary Results To: _____ <small>* Working Days</small>	REPORT REQUIREMENTS: <input type="checkbox"/> I. Routine Report <input type="checkbox"/> II. Report (includes DUP, MS, MSD, as required, may be charged as samples) <input type="checkbox"/> III. Date Validation Report (Includes All Raw Data) Add 10% to invoice	INVOICE INFORMATION: Account <input type="checkbox"/> Y <input type="checkbox"/> N P.O. # _____ Bill to: _____	SAMPLE RECEIPT: Total Containers <u>4+2=6</u> Temperature <u>8.8</u> <input checked="" type="checkbox"/> Wet Ice <input type="checkbox"/> Blue Ice

Outfall 1 (Trench) Stormwater

LABORATORY			
Analyte	Total	Dissolved	Other
Metals			
Arsenic ✓	X	X	
Cadmium ✓	X	X	
Copper ✓	X	X	
Lead ✓	X	X	
Zinc ✓	X	X	
Major Cations			
Hardness ✓	X	X	

FIELD MEASUREMENTS	
pH	
Specific conductance	
Temperature	
Turbidity	
Flow	
Appearance	

Outfall 2 (Trench) and Outfall 3 (Alta) Stormwater

LABORATORY			
Analyte	Total	Dissolved	Other
Metals			
Copper ✓	X	X	
Major Cations			
Hardness ✓	X	X	

FIELD MEASUREMENTS	
	pH
	Specific conductance
	Temperature
	Turbidity
	Flow
	Appearance