



November 16, 2022

Attn: Patrick Lennberg
Environmental Protection Specialist
Department of Natural Resources
Division of Reclamation, Mining and Safety
Room 215
1313 Sherman Street
Denver, CO 80203

Via Email

RE: Additional Information Request
Lyons Quarry, Permit No. M-1977-208
Y22Q3 Groundwater Monitoring Report, C-Pit

Dear Patrick Lennberg:

On November 7, 2022, CEMEX received a letter from Division of Reclamation, Mining and Safety (DRMS) titled "AdditionalInfoNeeded_M1977208_3Q2022.pdf" related to our 2022 3rd Quarter Groundwater Monitoring Report. Below are CEMEX's response in *italic font* to items #1-3 in that letter:

1. During review of the table for the 2Q2022 groundwater monitoring report the Operator committed to clearly stating or noting in the future reports whether the constituents being were reported are total or dissolved. The table does not state or note whether the values being reported are total of (or) dissolved results.

CEMEX Response:

Dissolved Selenium and Thallium are noted on the enclosed C-pit Sampling Results table.

2. In the Operator's response to the Division's request for additional information no.4, dated August 22, 2022, the Operator committed to meet the Division's request to submit the field sheets for water sampling at the site. Field sheets shall include, but not limited to, date, time, field parameters collected during purging and at the time of sample collection, and initial and post sample collection water levels. In the case of CEM-005 the Operator needs to demonstrate that there is not sufficient water volume in the well to collect a sample. Provide the missing field sheets for water sampling at the site.

CEMEX Response:

Field Notes are attached here.

3. In the Operator's response to the Division's request for additional information, dated October 4, 2022, the Operator committed to providing graphs for analyte concentrations for each location that depict trends over the last eight (8) quarters. Provide graphs for analyte concentrations for each location that depict trends over the last eight (8) quarters.



CEMEX Response:

Previous 8 quarters of analyte concentrations have been compiled and attached.

If there are any questions regarding this Response Letter, please feel free to contact me at scotta.harcus@cemex.com or via phone at 303-823-2124.

Best Regards,

Scott A. Harcus
Lyons Plant Environmental Manager

ENCLOSURES:

- Item 1 – 2022 Q3 C-pit Sampling Results_Rev1
- Item 2 – 2022 Q3 Field Notes
- Item 3 – 2022 Q3 CEMEX plots

Table 1
Summary of Analytical Results

Parameter	Units	C-Pit				CEM-001				CEM-004				CEM-005				CEM-004, CEM-005 Triggers (TR-12)
		2021 Q4	2022 Q1	2022 Q2	2022 Q3	2021 Q4	2022 Q1	2022 Q2	2022 Q3	2021 Q4	2022 Q1	2022 Q2	2022 Q3	2021 Q4	2022 Q1	2022 Q2	2022 Q3	
		11/10/2021	3/15/2022	5/18/2022	9/6/2022	11/10/2021	3/15/2022	5/18/2022	9/6/2022	11/10/2021	3/15/2022	5/18/2022	9/6/2022	a See dates below	a See dates below	a See dates below	^a See dates below	
		value	value	value	value	value	value	value	value	value	value	value	value	value	value	value	value	
pH (On-site)	su	12.4	11.41	11.81	11	8.24	8.24	7.85	7.86	8.8	7.48	7.72	6.97	insufficient water to sample	insufficient water to sample	insufficient water to sample	insufficient water to sample	6.5-8.5
Chloride	mg/L	2440	1580	2270	2660	1610	1610	1580	1700	58.1	129	5.6	234					1,053
Sulfate	mg/L	2030	1550	1910	3060	7	7	3.2	18.5	428	880	12.4	744					2,641
Total Dissolved Solids	mg/L	8550	8360	11100	11000	4460	4460	3930	3730	776	1800	66	1560					501-10,000 or 1.25 times background
Dissolved Selenium	mg/L	0.787	0.475	0.688	0.793	<0.005	<0.005	<0.0008	<0.004	0.0020	<0.005	<0.0008	<0.0008					0.05
Dissolved Thallium	mg/L	0.0025	<0.004	0.0020	0.0048	<0.004	<0.004	<0.0004	<0.002	<0.0004	<0.004	<0.0004	<0.0004					0.002

Notes and Qualifiers:

H

U

UJ

X

NA

value

Sample analyzed beyond recommended hold time

Detection limit is estimated

Estimated low

Data may not be representative due to nonstandard field sampling protocol

Not analyzed.

Exceeds trigger

aCEM 005 Y21 Q4Well Sounding: 11/10/2021
a CEM 005 Y22 Q1 Well Sounding: 3/15/2022
a CEM 005 Y22 Q2Well Sounding: 5/18/2022
^a CEM 005 Y22 Q3Well Sounding: 9/6/2022

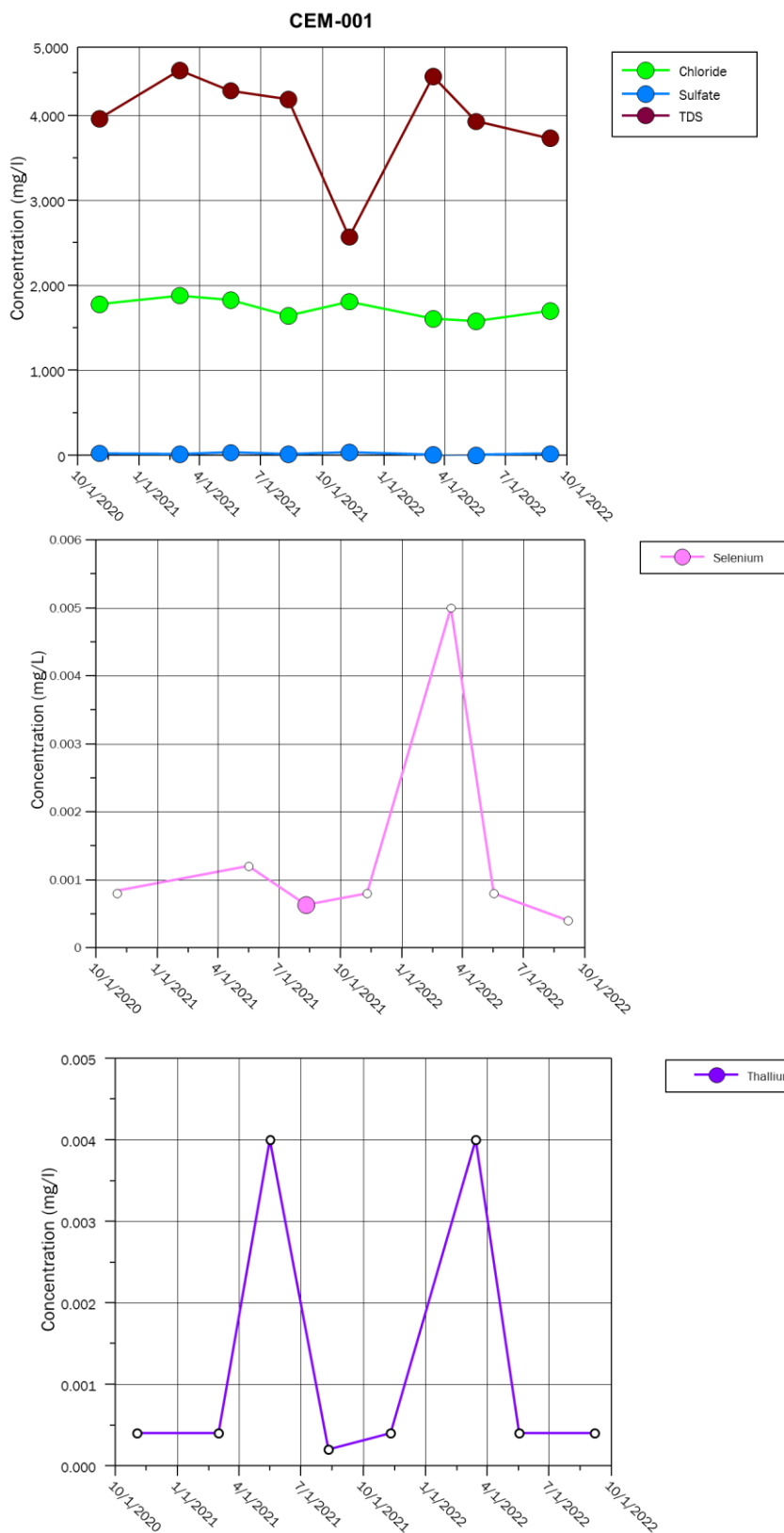
**CEMEX Lyons Quarterly Groundwater Monitoring
Field Data Sheet**

Date: 9/6/2022
 Personnel: Savannah Miller, Jesse Tatum

Project Number: 158078

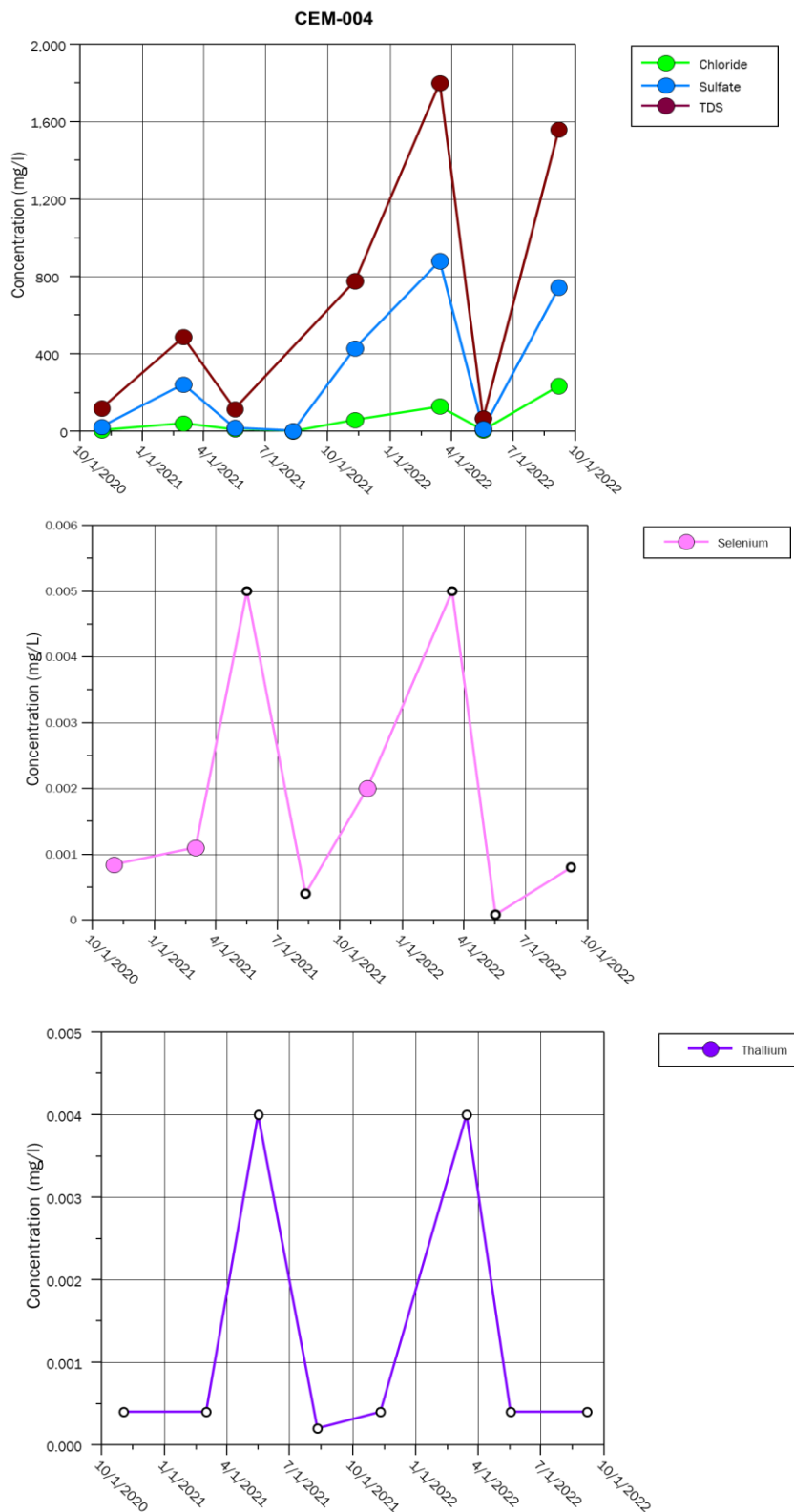
Location	Time	pH	Temp (°C)	Cond. (µS/cm) (mS/cm)	DO (mg/L)	Total Depth (ft below top of casing)	Depth to Water (ft)	Notes
CEM-001	13:00	7.92	-	7.03	-	143	0.0	← Sample
	13:45	7.86	-	7.18	-	(3.5' from top of casing to ground)	0.0	
CEM-004	14:20	7.04	-	3.42	-	23.5	13.3	← Sample
	14:30	6.97	-	2.61	-		15.2	
CEM-005 9/7/22	10:15	7.12	-	8.45	-	400 (2.62' from top of casing to ground)	398.66 (398.64)	
	11:00	7.30	-	10.02	-		—	
	12:00	7.44	-	10.50	-		400.80 (398.18)	
							400.75 (398.18)	
	12:00	-	-	-	-		400.75 (398.13)	
A-Pit	12:30	8.19	-	1.95	-	N/A	-	Sample
C-Pit	13:30	11.0	-	19.41	-	N/A	-	Sample

* recovered 0.05',
Not enough to sample



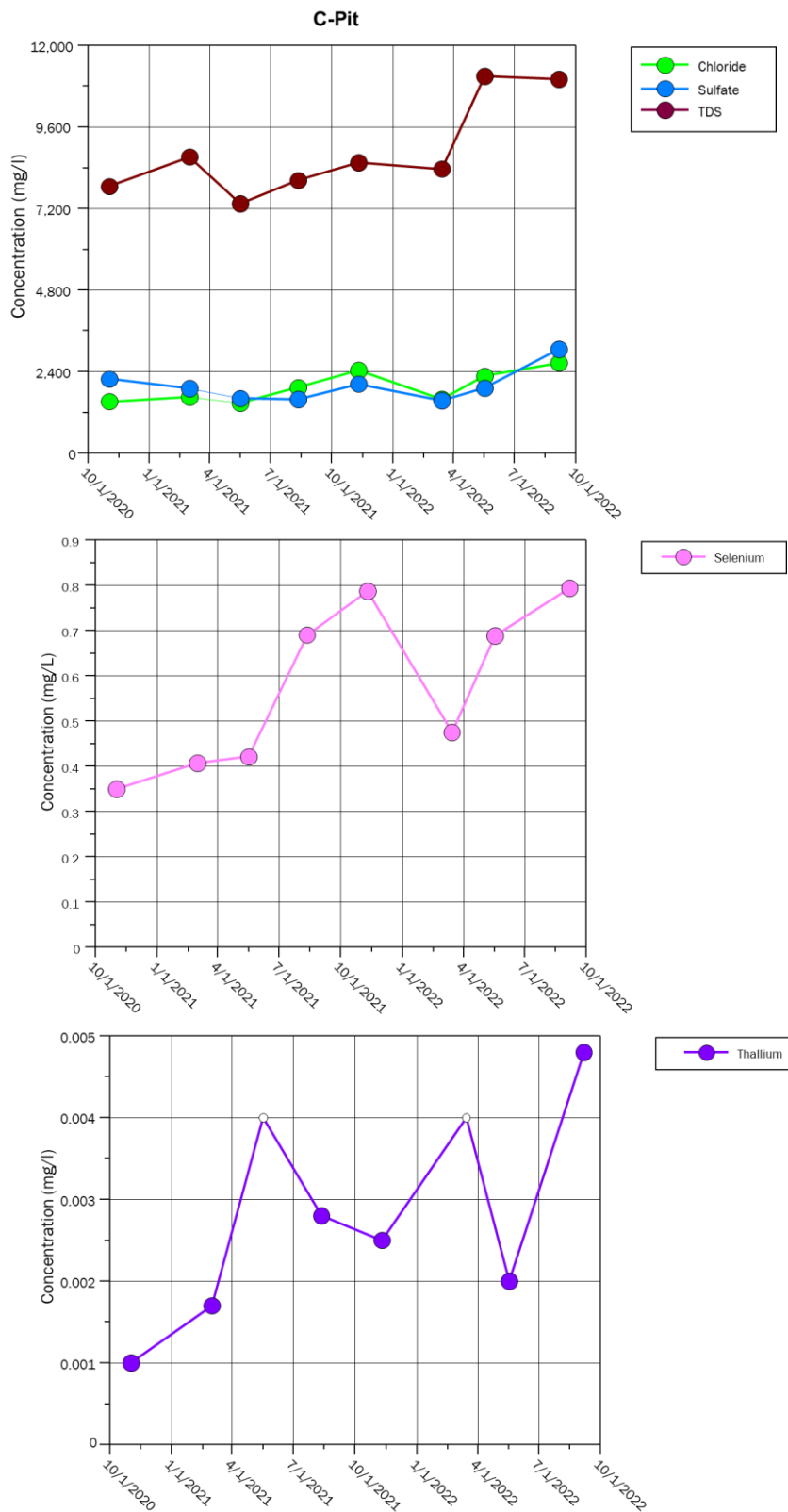
Note: Concentrations reported below the detection limit are plotted as open symbols

Figure A Time trend plots for CEM-001



Note: Concentrations reported below the detection limit are plotted as open symbols

Figure B Time trend plots for CEM-004



Note: Concentrations reported below the detection limit are plotted as open symbols

Figure C Time trend plots for C-Pit