

Attachment B

Correspondence with DRMS regarding MW-005 Monitoring



Mr. Tyler O'Donnell
Environmental Protection Specialist
Division of Reclamation and Mining Safety
1313 Sherman St. Room 215
Denver, CO 80203

Re: Pueblo Cement Plant and Limestone Quarry. DRMS Permit No. M-2002-004
Semi-Annual Groundwater Monitoring Report

Dear Mr. O'Donnell:

Pursuant to TR-03 of the referenced permit, GCC conducted water sampling on its groundwater monitoring well MW-005 on 04/23/2018 at approximately 2:30 PM.

Samples were not collected from MW-005 since the well was found to be dry at that time.

Should you have any questions/comments about this submission, please contact me at (719) 647-6861 or eolivares@gcc.com

Sincerely

A handwritten signature in black ink, appearing to be 'Edwin Olivares', written over a dotted line.

Edwin Olivares
Environmental Engineer

M2002004



Mr. Elliott Russell
Environmental Protection Specialist
Division of Reclamation and Mining Safety
1313 Sherman St. Room 215
Denver, CO 80203

RECEIVED

AUG 10 2018

DIVISION OF RECLAMATION,
MINING AND SAFETY

Re: Pueblo Cement Plant and Limestone Quarry. DRMS Permit No. M-2002-004
Semi-Annual Groundwater Monitoring Report

Dear Mr. Russell:

Pursuant to TR-03 of the referenced permit, GCC conducted water sampling on its groundwater monitoring well MW-005 on 08/07/2018 at approximately 02:45 PM.

Samples were not collected from MW-005 since the well was found to be dry at that time.

Should you have any questions/comments about this submission, please contact me at (719) 647-6861 or eolivares@gcc.com

Sincerely



Edwin Olivares
Environmental Engineer

Attachment C

Correspondence with DRMS regarding MW-6 and MW-7 Quarterly Monitoring



Pueblo Plant
May 7, 2018

Mr. Elliott Russell
Environmental Protection Specialist
Division of Reclamation and Mining Safety
1313 Sherman St. Room 215
Denver, CO 80203

Re: Pueblo Cement Plant and Limestone Quarry. DRMS Permit No. M-2002-004
Quarterly Groundwater Monitoring Report (MW006 and MW007)

Dear Mr. Russell:

Pursuant to TR-06 of the referenced permit, GCC conducted water sampling on its groundwater monitoring wells MW-006 and MW-007 on 04/27/2018.

Enclosed you will find copies of sampling record and laboratory analysis report.

Should you have any questions/comments about this submission, please contact me at (719) 647-6861 or eolivares@gcc.com

Sincerely

Edwin Olivares
Environmental Engineer



Mr. Elliott Russell
Environmental Protection Specialist
Division of Reclamation and Mining Safety
1313 Sherman St. Room 215
Denver, CO 80203

Re: Pueblo Cement Plant and Limestone Quarry. DRMS Permit No. M-2002-004
Quarterly Groundwater Monitoring Report (MW006 and MW007)

Dear Mr. Russell:

Pursuant to TR-06 of the referenced permit, GCC conducted water sampling on its groundwater monitoring wells MW-006 and MW-007 on 09/26/2018 and 09/27/2018.

Groundwater samples for well MW-006 could not be collected on 09/26/2018, as only 1.25 casing volumes were purged before bailing the well dry. Following our sampling protocol, well MW-006 was retested three (03) hours and twenty four (24) hours after initial attempt, at which point GCC determined there was not enough volume for a representative groundwater sample analysis.

Groundwater monitoring well MW-007 was also bailed dry after 2.0 casing volumes were purged. Additional attempts were made three (03), six (06) and twenty four hours (24) after initial attempt, after which GCC determined there was not enough volume for a representative groundwater sample analysis.

These results confirm low groundwater yield for groundwater wells "fed" by the unfractured Fort Hayes Limestone.

Following TR-06 guidelines, GCC will continue to monitor wells MW-006 and MW-007 during this present Quarter (4th Quarter 2018). GCC will conduct monitoring during the month of December 2018. Results will be submitted within the applicable timeline should representative groundwater samples be collected.

Should you have any questions/comments about this submission, please contact me at (719) 647-6861 or eolivares@gcc.com

Sincerely,


Edwin Olivares
Environmental Engineer

GCC Rio Grande, Inc. • Pueblo Plant
3372 Lime Road • Pueblo, CO 81004

Attachment D
Field Groundwater Sampling Records

GROUNDWATER SAMPLING RECORD						SAMPLE No. <i>MW-6</i>	
Project No: <i>06-001</i>			Location: <i>GCC Pueblo Plant</i>			Page <i>1</i> of <i>1</i>	
Date: <i>1/3/18</i>		Weather Conditions: <i>Clear/P. Cloudy ; 40° F</i>			Personnel: <i>B. Close / E. Olivares</i>		
Comments: <i>Initial sampling</i>							
INSTRUMENTS USED							
Instrument	Manufacturer/Model	Serial No.	Calibration				
Water Level Probe	<i>Geotech ET</i>	<i>5885/6187</i>					
pH Meter	<i>YSI Pro 1030</i>	<i>5697</i>	Std: 4 <u>⑦</u> 10 @ <u>17.8</u> °C Reading <u>7.0</u>				
pH Meter			Std: <u>④</u> 7 10 @ <u>17.8</u> °C Reading <u>4.0</u>				
Specific Conductance Meter	<i>YSI Pro 1030</i>	<i>5697</i>	Std: <u>1413</u> uS @ 25 °C Reading <u>1413</u>				
Specific Conductance Meter			Std: _____ uS @ 25 °C Reading _____				
Temperature	<i>YSI Pro 1030</i>	<i>5697</i>					
Other:							
Filtration <i>0.45 micron in-line high capacity disposable filter.</i>							
WELL PURGING INFORMATION							
Casing Diameter (inches): <i>2</i>		Borehole Diameter (inches): <i>6</i>		Screened Interval (ft. BGL): <i>31.1' - 56.1'</i>			
Depth to Water (ft below MP): <i>50.74</i>		Total Depth (ft): <i>59.55</i>		Casing Volume (gal): <i>1.4</i>		(gal/ft: 1.5" = 0.09; 2" = 0.16; 4" = 0.65)	
Purging Method: <i>Bailer, poly</i>							
Comments: <i>Monitoring point (MP) is the top of the PVC well casing. - black mark</i>							
Date/Time	Vol. Purged (gal)	Depth to Water (feet below MP)	pH	Specific Conductance (uS @ 25 deg C)	Temp (deg C)	Appearance (color, sediment, etc.)	Comments
<i>1/3 9:53</i>	<i>-</i>	<i>50.74</i>					
<i>10:18</i>	<i>1.4</i>	<i>54.15</i>	<i>6.62</i>	<i>4457</i>	<i>14.4</i>	<i>Cloudy</i>	
<i>10:30</i>	<i>1.5</i>	<i>57.33</i>	<i>6.78</i>	<i>4819</i>	<i>14.5</i>	<i>Cloudy, lt. tan</i>	
<i>10:42</i>	<i>0.75</i>	<i>59.02</i>	<i>6.94</i>	<i>5030</i>	<i>14.4</i>	<i>Cloudy, tan</i>	<i>~ Dry</i>
<i>12:24</i>	<i>-</i>	<i>58.55</i>					
<i>13:42</i>	<i>-</i>	<i>58.46</i>					
<i>14:00</i>	<i>-</i>	<i>58.45</i>					
Cumulative Volume Purged: <i>3.65</i> (gallons) <i>2.6</i> (casing vol)							
WELL SAMPLING INFORMATION							
Sampling Equipment: <i>Bailer, poly</i>							
Comments: <i>Bailed dry / Limited analysis suite</i>							
SAMPLING MEASUREMENTS:							
Date/Time	Depth to Water (feet below MP)	Depth Sampled (feet below MP)	pH	Specific Conductance (uS @ 25 deg C)	Temp (deg C)	Other	Other
<i>1/3 14:10</i>	<i>58.45</i>	<i>58</i>	<i>6.95</i>	<i>4720</i>	<i>14.0</i>		
SAMPLE HANDLING:							
Date/Time	Aliquots			Filtered (Y/N)	Preserved (type)	Comments	
	Volume (ml)	Bottle Composition	Quantity				
<i>14:10</i>	<i>500</i>	<i>LDPE</i>	<i>1</i>	<i>Y</i>	<i>HNO3</i>		
<i>14:10</i>	<i>250</i>	<i>LDPE</i>	<i>1</i>	<i>N</i>	<i>H2SO4</i>	<i>~ 95% filled before running out of sample water</i>	
Field QA/QC Samples Collected (type, Sample No.):							
Equipment Decontamination: <i>Alconox / DI water</i>							
Waste Disposal: <i>Water to ground surface</i>							
Signature of Field Personnel: <i>Bernie Close</i>				CLOSE CONSULTING GROUP LLC Windsor, CO (970) 290-6239			

GROUNDWATER SAMPLING RECORD						SAMPLE No. <u>MW-6</u>		
Project No: <u>06-001</u>			Location: <u>GCC Pueblo Plant</u>			Page <u>1</u> of <u>1</u>		
Date: <u>4/27/18</u>		Weather Conditions: <u>Clear 55°</u>			Personnel: <u>B. Close / D. Bemis</u>			
Comments: <u>2nd Quarter Sampling</u>								
INSTRUMENTS USED								
Instrument	Manufacturer/Model	Serial No.	Calibration					
Water Level Probe	<u>Gestech ET</u>	<u>5886</u>						
pH Meter	<u>YSI Pro 1030</u>	<u>5594</u>	Std: 4 ⑦ 10 @ <u>17.9</u> °C Reading <u>7.0</u> Slope:					
pH Meter			Std: ④ 7 10 @ <u>20.9</u> °C Reading <u>4.0</u>					
Specific Conductance Meter	<u>YSI Pro 1030</u>	<u>5594</u>	Std: <u>1413</u> uS @ 25°C Reading <u>1413</u> 21.3°					
Specific Conductance Meter			Std: _____ uS @ 25°C Reading _____					
Temperature	<u>YSI Pro 1030</u>	<u>5594</u>						
Other:								
Filtration <u>0.45 micron in-line high capacity disposable filter.</u>								
WELL PURGING INFORMATION								
Casing Diameter (inches): <u>2</u>		Borehole Diameter (inches): <u>6</u>		Screened Interval (ft. BGL): <u>31.1' - 56.1'</u>				
Depth to Water (ft below MP): <u>43.81</u>		Total Depth (ft): <u>59.55</u>		Casing Volume (gal): <u>2.5</u> (gal/ft: 1.5" = 0.09; 2" = 0.16; 4" = 0.65)				
Purging Method: <u>Bailer, poly</u>								
Comments: <u>Monitoring point (MP) is the top of the PVC well casing. black mark</u> <u>Steel csg stickup = 2.66' above pad</u> <u>PVC csg stickup = 2.50' above pad</u>								
Date/Time	Vol. Purged (gal)	Depth to Water (feet below MP)	pH	Specific Conductance (uS @ 25 deg C)	Temp (deg C)	Appearance (color, sediment, etc.)	Comments	
<u>10:25</u>	<u>2.5</u>	<u>50.38</u>	<u>6.84</u>	<u>5840</u>	<u>15.3</u>	<u>Sl. cloudy tan</u>		
<u>10:26</u>	<u>2.5</u>		<u>6.90</u>	<u>5872</u>	<u>15.0</u>	<u>cloudy tan</u>		
<u>10:25</u>	<u>1.25</u>	<u>DRY</u>	<u>7.07</u>	<u>6460</u>	<u>15.1</u>	<u>cloudy tan</u>		
<u>11:15</u>		<u>57.78</u>						
<u>12:15</u>		<u>57.48</u>						
Cumulative Volume Purged: <u>6.25</u> (gallons) <u>2.5</u> (casing vol)								
WELL SAMPLING INFORMATION								
Sampling Equipment: <u>Bailer, poly</u>								
Comments:								
SAMPLING MEASUREMENTS:								
Date/Time	Depth to Water (feet below MP)	Depth Sampled (feet below MP)	pH	Specific Conductance (uS @ 25 deg C)	Temp (deg C)	Other	Other	Comments
<u>12:40</u>	<u>57.40</u>	<u>58-59</u>	<u>7.2</u>	<u>6200</u>	<u>16.3</u>			
SAMPLE HANDLING:								
Date/Time	Aliquots			Filtered (Y/N)	Preserved (type)	Comments		
	Volume (ml)	Bottle Composition	Quantity					
<u>12:40</u>	<u>250</u>	<u>LDPE</u>	<u>1</u>	<u>N</u>	<u>H₂SO₄</u>			
<u>12:40</u>	<u>500</u>	<u>"</u>	<u>1</u>	<u>Y</u>	<u>HNO₃</u>			
<u>12:40</u>	<u>500</u>	<u>"</u>	<u>1</u>	<u>N</u>	<u>none</u>			
<u>12:40</u>	<u>500</u>	<u>"</u>	<u>1</u>	<u>N</u>	<u>none</u>			
Field QA/QC Samples Collected (type, Sample No.): <u>None</u>								
Equipment Decontamination: <u>D/E water</u>								
Waste Disposal: <u>Ground surface</u>								
Signature of Field Personnel: <u>Bernie Close</u>					GCC RIO GRANDE, INC. Pueblo, CO			

GROUNDWATER SAMPLING RECORD						SAMPLE No. <i>MW-6</i>		
Project No: <i>06-001</i>			Location: <i>GCC Pueblo</i>			Page <i>1</i> of <i>1</i>		
Date: <i>12/12/18</i>		Weather Conditions: <i>40's & sunny</i>			Personnel: <i>B. Close / D. Bemis</i>			
Comments: <i>4th Quarter Sampling</i>								
INSTRUMENTS USED								
Instrument	Manufacturer/Model		Serial No.		Calibration			
Water Level Probe	<i>Gostalk ET</i>		<i>5885</i>					
pH Meter	<i>YSI Pro 1030</i>		<i>6510</i>		Std: 4 @ 10 @ <i>24</i> °C Reading <i>7.0</i>		Slope:	
pH Meter					Std: <i>7</i> @ 10 @ <i>23.6</i> °C Reading <i>4.0</i>			
Specific Conductance Meter	<i>YSI Pro 1030</i>		<i>6510</i>		Std: <i>1413</i> uS @ 25°C Reading <i>1413</i>			
Specific Conductance Meter					Std: _____ uS @ 25°C Reading _____			
Temperature	<i>YSI Pro 1030</i>		<i>6510</i>					
Other:								
Filtration <i>0.45 micron in-line high capacity disposable filter.</i>								
WELL PURGING INFORMATION								
Casing Diameter (inches): <i>2</i>		Borehole Diameter (inches): <i>6</i>		Screened Interval (ft. BGL): <i>31.1' - 56.1'</i>				
Depth to Water (ft below MP): <i>45.41</i>		Total Depth (ft): <i>58.55</i>		Casing Volume (gal): <i>2.26</i>		(gal/ft: 1.5" = 0.09; 2" = 0.16; 4" = 0.65)		
Purging Method: <i>Bailer - poly</i>								
Comments: Monitoring point (MP) is the top of the PVC well casing. <i>- black mark</i> <i>Steel csg stickup = 2.66' above p.d</i> <i>PVC csg stickup = 2.50' above p.d</i>								
Date/Time	Vol. Purged (gal)	Depth to Water (feet below MP)	pH	Specific Conductance (uS @ 25 deg C)	Temp (deg C)	Appearance (color, sediment, etc.)	Comments	
<i>9:05</i>	<i>-</i>	<i>45.41</i>						
<i>9:16</i>	<i>2.3</i>		<i>7.00</i>	<i>5432</i>	<i>14.5</i>	<i>Sl. cloudy</i>		
<i>9:26</i>	<i>2.3</i>	<i>56.12</i>	<i>7.01</i>	<i>6059</i>	<i>13.9</i>	<i>Sl. cloudy</i>		
<i>9:42</i>	<i>2.0</i>	<i>~ Dry</i>	<i>7.18</i>	<i>6500</i>	<i>14.4</i>	<i>cloudy - tan</i>		
<i>11:05</i>	<i>-</i>	<i>58.48</i>						
<i>13:20</i>	<i>-</i>	<i>58.10</i>						
Cumulative Volume Purged: <i>6.6</i> (gallons) <i>2.9</i> (casing vol)								
WELL SAMPLING INFORMATION								
Sampling Equipment: <i>Bailer - poly</i>								
Comments:								
SAMPLING MEASUREMENTS:								
Date/Time	Depth to Water (feet below MP)	Depth Sampled (feet below MP)	pH	Specific Conductance (uS @ 25 deg C)	Temp (deg C)	Other	Other	Comments
<i>13:30</i>	<i>58.10</i>	<i>59</i>	<i>7.39</i>	<i>-</i>	<i>14.9</i>			<i>cloudy - lt. tan</i>
SAMPLE HANDLING:								
Date/Time	Aliquots			Filtered (Y/N)	Preserved (type)	Comments		
	Volume (ml)	Bottle Composition	Quantity					
<i>13:30</i>	<i>500</i>	<i>LDPE</i>	<i>1</i>	<i>N</i>	<i>N</i>	<i>Only one filled due to dry well</i>		
<i>13:30</i>	<i>250</i>	<i>LDPE</i>	<i>1</i>	<i>N</i>	<i>N</i>			
<i>13:30</i>	<i>250</i>	<i>LDPE</i>	<i>1</i>	<i>N</i>	<i>H₂SO₄</i>			
<i>13:30</i>	<i>250</i>	<i>LDPE</i>	<i>1</i>	<i>Y</i>	<i>HNO₃</i>			
Field QA/QC Samples Collected (type, Sample No.): <i>None</i>								
Equipment Decontamination: <i>DI water</i>								
Waste Disposal: <i>Ground surface</i>								
Signature of Field Personnel: <i>Bernie Close</i>					GCC RIO GRANDE, INC. Pueblo, CO			

GROUNDWATER SAMPLING RECORD						SAMPLE No. MW-7		
Project No: 06-001			Location: GCC Pueblo Plant			Page 1 of 1		
Date: 1/3/18		Weather Conditions: Clear / P. Cloudy 40°F			Personnel: B. Close / E. Olivares			
Comments: Initial sampling								
INSTRUMENTS USED								
Instrument	Manufacturer/Model	Serial No.	Calibration					
Water Level Probe	Geotech ET	5855/6187						
pH Meter	YSI Pro 1030	5697	Std: 4 @ 10 @ 17.8 °C Reading 7.0					
pH Meter			Std: 4 @ 7 @ 10 @ 17.8 °C Reading 4.0					
Specific Conductance Meter	YSI Pro 1030	5697	Std: 1413 uS @ 25 °C Reading 1413					
Specific Conductance Meter			Std: uS @ 25 °C Reading					
Temperature	YSI Pro 1030	5697						
Other:								
Filtration 0.45 micron in-line high capacity disposable filter.								
WELL PURGING INFORMATION								
Casing Diameter (inches): 2		Borehole Diameter (inches): 6		Screened Interval (ft. BGL): 30.4' - 55.4'				
Depth to Water (ft below MP): 40.29		Total Depth (ft): 59.37		Casing Volume (gal): 3.05		(gal/ft: 1.5" = 0.09; 2" = 0.16; 4" = 0.65)		
Purging Method: Bailor, poly								
Comments: Monitoring point (MP) is the top of the PVC well casing. - black mark								
Date/Time	Vol. Purged (gal)	Depth to Water (feet below MP)	pH	Specific Conductance (uS @ 25 deg C)	Temp (deg C)	Appearance (color, sediment, etc.)	Comments	
1/3 9:58	-	40.29						
11:10	3.1	41.22	6.85	4768	14.5	Cloudy, tan		
11:27	3.1	41.70	6.85	4625	14.6	Sl. Cloudy, tan		
11:42	3.2	41.72	6.83	4624	14.5	Sl. Cloudy, tan		
Cumulative Volume Purged: 9.4 (gallons) 3.1 (casing vol)								
WELL SAMPLING INFORMATION								
Sampling Equipment: Bailor, poly								
Comments:								
SAMPLING MEASUREMENTS:								
Date/Time	Depth to Water (feet below MP)	Depth Sampled (feet below MP)	pH	Specific Conductance (uS @ 25 deg C)	Temp (deg C)	Other	Other	Comments
1/3 12:00	41.72	54-58	6.86	4765	15.0			
SAMPLE HANDLING:								
Date/Time	Aliquots			Filtered (Y/N)	Preserved (type)	Comments		
	Volume (ml)	Bottle Composition	Quantity					
12:00	500	LDPE	1	Y	HNO3			
12:00	250	LDPE	1	N	H2SO4			
12:00	500	LDPE	1	N	None			
12:00	500	LDPE	1	N	None			
Field QA/QC Samples Collected (type, Sample No.): None								
Equipment Decontamination: Alconax / DI water								
Waste Disposal: water to ground surface								
Signature of Field Personnel: <i>Brian Close</i>					CLOSE CONSULTING GROUP LLC Windsor, CO (970) 290-6239			

GROUNDWATER SAMPLING RECORD						SAMPLE No. <u>MLW-7</u>	
Project No: <u>06-001</u>			Location: <u>GCC Pueblo Plant</u>			Page <u>1</u> of <u>1</u>	
Date: <u>4/27/18</u>		Weather Conditions: <u>Clear 55°</u>			Personnel: <u>B. Close / D. Bemis</u>		
Comments: <u>2nd Quarter sampling</u>							
INSTRUMENTS USED							
Instrument	Manufacturer/Model	Serial No.	Calibration				
Water Level Probe	<u>Geotech ET</u>	<u>5886</u>					
pH Meter	<u>YSI Pro 1030</u>	<u>5594</u>	Std: 4 <u>7</u> 10 @ <u>19.2</u> °C Reading <u>7.0</u>				Slope:
pH Meter			Std: <u>7</u> 10 @ <u>20.1</u> °C Reading <u>4.0</u>				
Specific Conductance Meter	<u>YSI Pro 1030</u>	<u>5594</u>	Std: <u>1413</u> uS @ 25°C Reading <u>1413</u>				
Specific Conductance Meter			Std: _____ uS @ 25°C Reading _____				
Temperature	<u>YSI Pro 1030</u>	<u>5594</u>					
Other: _____							
Filtration <u>0.45 micron in-line high capacity disposable filter.</u>							
WELL PURGING INFORMATION							
Casing Diameter (inches): <u>2</u>		Borehole Diameter (inches): <u>6</u>		Screened Interval (ft. BGL): <u>30.4' - 55.4'</u>			
Depth to Water (ft. below MP): <u>41.73</u>		Total Depth (ft): <u>59.4</u>		Casing Volume (gal): <u>2.8</u>		(gal/ft: 1.5" = 0.09; 2" = 0.16; 4" = 0.65)	
Purging Method: <u>Bailer, poly</u>							
Comments: <u>Monitoring point (MP) is the top of the PVC well casing. black mark</u> <u>Steel Csg Stickup = 2.84' above pad</u> <u>PVC Csg Stickup = 2.64' above pad</u>							
Date/Time	Vol. Purged (gal)	Depth to Water (feet below MP)	pH	Specific Conductance (uS @ 25 deg C)	Temp (deg C)	Appearance (color, sediment, etc.)	Comments
<u>4/27 10:40</u>	<u>2.8</u>	<u>43.55</u>	<u>6.89</u>	<u>5680</u>	<u>15.0</u>	<u>cloudy - tan</u>	
<u>10:48</u>	<u>2.8</u>	<u>44.07</u>	<u>6.85</u>	<u>5830</u>	<u>15.3</u>	<u>cloudy - tan</u>	
<u>11:00</u>	<u>2.9</u>	<u>44.70</u>	<u>6.86</u>	<u>5670</u>	<u>15.5</u>	<u>cloudy - tan</u>	
Cumulative Volume Purged: <u>8.5</u>		(gallons)		<u>3</u>		(casing vol)	
WELL SAMPLING INFORMATION							
Sampling Equipment: <u>Bailer, poly</u>							
Comments: _____							
SAMPLING MEASUREMENTS:							
Date/Time	Depth to Water (feet below MP)	Depth Sampled (feet below MP)	pH	Specific Conductance (uS @ 25 deg C)	Temp (deg C)	Other	Other
<u>4/27 11:05</u>	<u>44.70</u>	<u>58</u>	<u>6.85</u>	<u>5820</u>	<u>15.0</u>		
SAMPLE HANDLING:							
Date/Time	Aliquots			Filtered (Y/N)	Preserved (type)	Comments	
	Volume (ml)	Bottle Composition	Quantity				
<u>4/27 11:05</u>	<u>250</u>	<u>LDPE</u>	<u>1</u>	<u>N</u>	<u>H2SO4</u>		
<u>11:05</u>	<u>500</u>	<u>"</u>	<u>1</u>	<u>Y</u>	<u>HNO3</u>		
<u>11:05</u>	<u>500</u>	<u>"</u>	<u>1</u>	<u>N</u>	<u>none</u>		
<u>11:05</u>	<u>500</u>	<u>"</u>	<u>1</u>	<u>N</u>	<u>none</u>		
<u>11:05</u>	<u>500</u>	<u>"</u>	<u>1</u>	<u>N</u>	<u>none</u>		
Field QA/QC Samples Collected (type, Sample No.): <u>None</u>							
Equipment Decontamination: <u>DI water</u>							
Waste Disposal: <u>Ground surface</u>							
Signature of Field Personnel: <u>Bence Close</u>					GCC RIO GRANDE, INC. Pueblo, CO		

GROUNDWATER SAMPLING RECORD						SAMPLE No. <u>MW-7</u>		
Project No: <u>06-001</u>			Location: <u>GCC Pueblo Plant</u>			Page <u>1</u> of <u>1</u>		
Date: <u>12/12/18</u>		Weather Conditions: <u>40's + Sunny</u>			Personnel: <u>B. Close / D. Bemis</u>			
Comments: <u>4th Quarter Sampling</u>								
INSTRUMENTS USED								
Instrument	Manufacturer/Model		Serial No.		Calibration			
Water Level Probe	<u>Gestech ET</u>		<u>5885</u>					
pH Meter	<u>YSI Pro 1030</u>		<u>6510</u>		Std: 4 @ 10 @ <u>24</u> °C Reading <u>7.0</u> Slope:			
pH Meter					Std: 4 @ 10 @ <u>23.6</u> °C Reading <u>4.0</u>			
Specific Conductance Meter	<u>YSI Pro 1030</u>		<u>6510</u>		Std: <u>1413</u> uS @ 25 °C Reading <u>1413</u>			
Specific Conductance Meter					Std: _____ uS @ 25 °C Reading _____			
Temperature	<u>YSI Pro 1030</u>		<u>6510</u>					
Other: _____								
Filtration <u>0.45 micron in-line high capacity disposable filter.</u>								
WELL PURGING INFORMATION								
Casing Diameter (inches): <u>2</u>		Borehole Diameter (inches): <u>6</u>		Screened Interval (ft. BGL): <u>30.4' - 55.4'</u>				
Depth to Water (ft below MP): <u>40.48</u>		Total Depth (ft): <u>59.40</u>		Casing Volume (gal): <u>3.0</u>		(gal/ft: 1.5" = 0.09; 2" = 0.16; 4" = 0.65)		
Purging Method: <u>Bailer - poly</u>								
Comments: Monitoring point (MP) is the top of the PVC well casing. <u>black mark</u> <u>Steel csg stickup = 2.84' above pad</u> <u>PVC csg stickup = 2.64' above pad</u>								
Date/Time	Vol. Purged (gal)	Depth to Water (feet below MP)	pH	Specific Conductance (uS @ 25 deg C)	Temp (deg C)	Appearance (color, sediment, etc.)	Comments	
<u>10:10</u>	<u>-</u>	<u>40.48</u>						
<u>10:25</u>	<u>3</u>	<u>42.20</u>	<u>6.91</u>	<u>6339</u>	<u>14.4</u>	<u>sl. cloudy</u>		
<u>10:36</u>	<u>3</u>	<u>43.04</u>	<u>6.90</u>	<u>5954</u>	<u>14.2</u>	<u>sl. cloudy</u>		
<u>10:48</u>	<u>3.5</u>	<u>43.24</u>	<u>6.90</u>	<u>6093</u>	<u>14.0</u>	<u>sl. cloudy</u>		
Cumulative Volume Purged: <u>9.5</u> (gallons) <u>3.2</u> (casing vol)								
WELL SAMPLING INFORMATION								
Sampling Equipment: <u>Bailer - poly</u>								
Comments: _____								
SAMPLING MEASUREMENTS:								
Date/Time	Depth to Water (feet below MP)	Depth Sampled (feet below MP)	pH	Specific Conductance (uS @ 25 deg C)	Temp (deg C)	Other	Other	Comments
<u>11:00</u>	<u>43.24</u>	<u>55</u>	<u>6.90</u>	<u>6093</u>	<u>14.0</u>			<u>Sl. cloudy</u>
SAMPLE HANDLING:								
Date/Time	Aliquots			Filtered (Y/N)	Preserved (type)	Comments		
	Volume (ml)	Bottle Composition	Quantity					
<u>11:00</u>	<u>500</u>	<u>LDPE</u>	<u>1</u>	<u>N</u>	<u>N</u>			
<u>11:00</u>	<u>500</u>	<u>LDPE</u>	<u>1</u>	<u>N</u>	<u>N</u>			
<u>11:00</u>	<u>250</u>	<u>LDPE</u>	<u>1</u>	<u>N</u>	<u>N</u>			
<u>11:00</u>	<u>250</u>	<u>LDPE</u>	<u>1</u>	<u>N</u>	<u>H2SO4</u>			
<u>11:00</u>	<u>250</u>	<u>LDPE</u>	<u>1</u>	<u>Y</u>	<u>HNO3</u>			
Field QA/QC Samples Collected (type, Sample No.): <u>None</u>								
Equipment Decontamination: <u>DI water</u>								
Waste Disposal: <u>Ground surface</u>								
Signature of Field Personnel: <u>Bernie Close</u>					GCC RIO GRANDE, INC. Pueblo, CO			