

Monitoring well measurement data
Pueblo East Pit

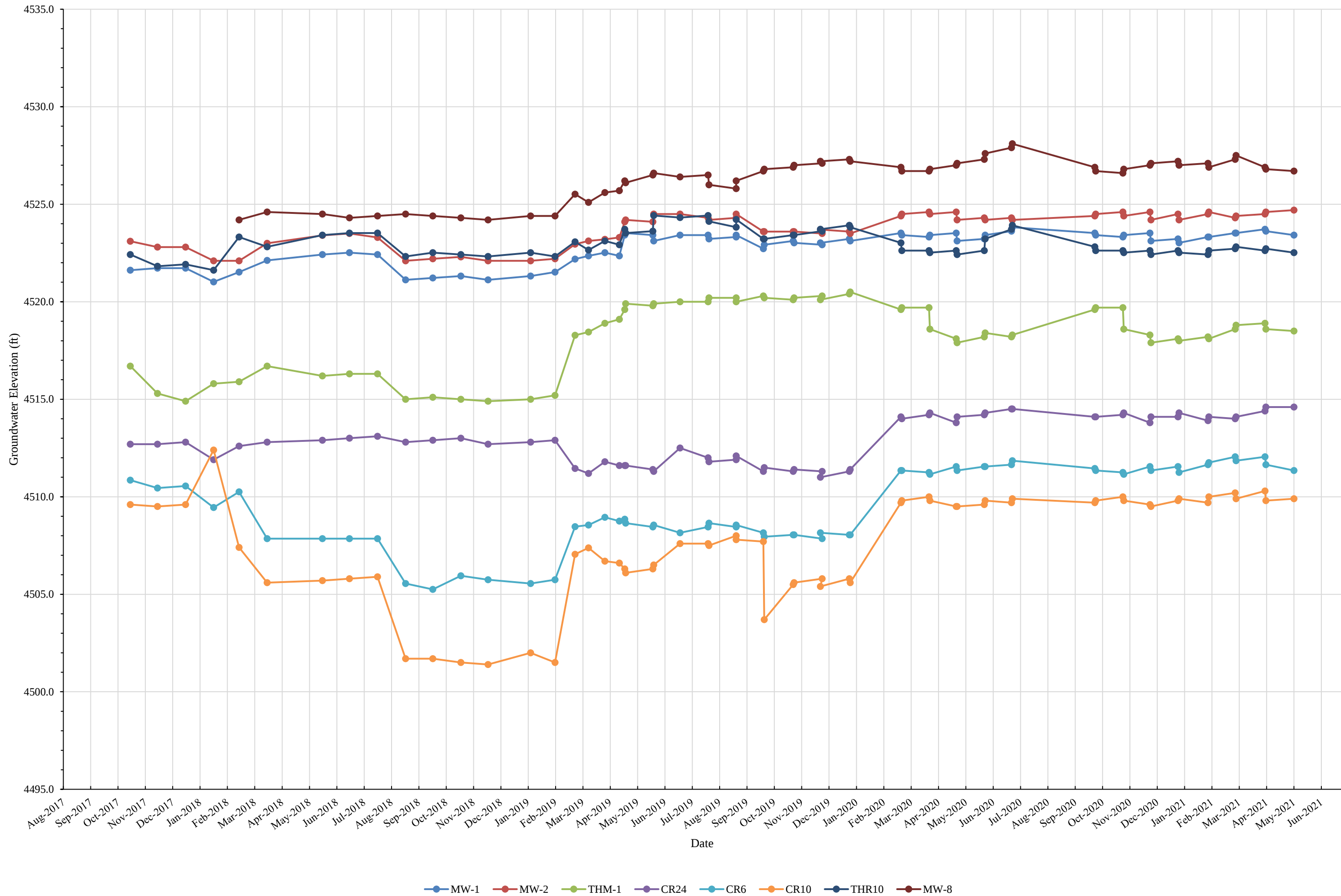
Monitoring Hole #		1			2			3			4			5			6			7			8		
Alternative Name		MW-1			MW-2			THM-1			CR24			CR6			CR10			THR10			MW-8		
Permit No.		279124			262268			277098			046817-MH, 277131			46206-MH, 277133			046814-MH, 277135			WDID: 1406466			57688-MH		
Surface Elevation (feet)		4532.0			4533.0			4536.7			4542.1			4525.3			4528.4			4535.6			4535.6		
Height of Stickup Casing (feet)		2.5			2.7			3.0			2.6			2.8			2.9			2.7			3.0		
Date (Month)	Date of Reading	DTW, toc (ft)	Difference	GW Elev. Ft	DTW, toc (ft)	Difference	GW Elev. Ft	DTW, toc (ft)	Difference	GW Elev. Ft	DTW, toc (ft)	Difference	GW Elev. Ft	DTW, toc (ft)	Difference	GW Elev. Ft	DTW, toc (ft)	Difference	GW Elev. Ft	DTW, toc (ft)	Difference	GW Elev. Ft	DTW, toc (ft)	Difference	GW Elev. Ft
Nov-2017	(NA) Mid Month	12.9		4521.6	12.6		4523.1	23.0		4516.7	32.0		4512.7	17.2		4510.9	21.7		4509.6	15.9		4522.4			
Dec-2017	(NA) Mid Month	12.8	0.1	4521.7	12.9	-0.3	4522.8	24.4	-1.4	4515.3	32.0	0.0	4512.7	17.6	-0.4	4510.5	21.8	-0.1	4509.5	16.5	-0.6	4521.8			
Jan-2018	(NA) Mid Month	12.8	0.0	4521.7	12.9	0.0	4522.8	24.8	-0.4	4514.9	31.9	0.1	4512.8	17.5	0.1	4510.6	21.7	0.1	4509.6	16.4	0.1	4521.9			
Feb-2018	(NA) Mid Month	13.5	-0.7	4521.0	13.6	-0.7	4522.1	23.9	0.9	4515.8	32.8	-0.9	4511.9	18.6	-1.1	4509.5	18.9	2.8	4512.4	16.7	-0.3	4521.6			
Mar-2018	(NA) Mid Month	13.0	0.5	4521.5	13.6	0.0	4522.1	23.8	0.1	4515.9	32.1	0.7	4512.6	17.8	0.8	4510.3	23.9	-5.0	4507.4	15.0	1.7	4523.3	14.4	NA	4524.2
Apr-2018	(NA) Mid Month	12.4	0.6	4522.1	12.7	0.9	4523.0	23.0	0.8	4516.7	31.9	0.2	4512.8	20.2	-2.4	4507.9	25.7	-1.8	4505.6	15.5	-0.5	4522.8	14.0	0.4	4524.6
Jun-2018	(NA) Mid Month	12.1	0.3	4522.4	12.3	0.4	4523.4	23.5	-0.5	4516.2	31.8	0.1	4512.9	20.2	0.0	4507.9	25.6	0.1	4505.7	14.9	0.6	4523.4	14.1	-0.1	4524.5
Jul-2018	(NA) Mid Month	12.0	0.1	4522.5	12.2	0.1	4523.5	23.4	0.1	4516.3	31.7	0.1	4513.0	20.2	0.0	4507.9	25.5	0.1	4505.8	14.8	0.1	4523.5	14.3	-0.2	4524.3
Aug-2018	(NA) Mid Month	12.1	-0.1	4522.4	12.4	-0.2	4523.3	23.4	0.0	4516.3	31.6	0.1	4513.1	20.2	0.0	4507.9	25.4	0.1	4505.9	14.8	0.0	4523.5	14.2	0.1	4524.4
Sep-2018	(NA) Mid Month	13.4	-1.3	4521.1	13.6	-1.2	4522.1	24.7	-1.3	4515.0	31.9	-0.3	4512.8	22.5	-2.3	4505.6	29.6	-4.2	4501.7	16.0	-1.2	4522.3	14.1	0.1	4524.5
Oct-2018	(NA) Mid Month	13.3	0.1	4521.2	13.5	0.1	4522.2	24.6	0.1	4515.1	31.8	0.1	4512.9	22.8	-0.3	4505.3	29.6	0.0	4501.7	15.8	0.2	4522.5	14.2	-0.1	4524.4
Nov-2018	(NA) Mid Month	13.2	0.1	4521.3	13.4	0.1	4522.3	24.7	-0.1	4515.0	31.7	0.1	4513.0	22.1	0.7	4506.0	29.8	-0.2	4501.5	15.9	-0.1	4522.4	14.3	-0.1	4524.3
Dec-2018	(NA) Mid Month	13.4	-0.2	4521.1	13.6	-0.2	4522.1	24.8	-0.1	4514.9	32.0	-0.3	4512.7	22.3	-0.2	4505.8	29.9	-0.1	4501.4	16.0	-0.1	4522.3	14.4	-0.1	4524.2
Jan-2019	1/17/2019	13.2	0.2	4521.3	13.6	0.0	4522.1	24.7	0.1	4515.0	31.9	0.1	4512.8	22.5	-0.2	4505.6	29.3	0.6	4502.0	15.8	0.2	4522.5	14.2	0.2	4524.4
Feb-2019	2/13/2019	13.0	0.2	4521.5	13.5	0.1	4522.2	24.5	0.2	4515.2	31.8	0.1	4512.9	22.3	0.2	4505.8	29.8	-0.5	4501.5	16.0	-0.2	4522.3	14.2	0.0	4524.4
Mar-2019	3/7/2019	12.3	0.7	4522.2	12.8	0.8	4523.0	21.4	3.1	4518.3	33.3	-1.5	4511.5	19.6	2.7	4508.5	24.3	5.6	4507.1	15.3	0.8	4523.1	13.1	1.1	4525.5
Mar-2019	3/22/2019	12.2	0.2	4522.4	12.6	0.2	4523.1	21.3	0.2	4518.5	33.5	-0.3	4511.2	19.5	0.1	4508.6	23.9	0.3	4507.4	15.7	-0.4	4522.7	13.5	-0.4	4525.1
Apr-2019	4/9/2019	12.0	0.2	4522.5	12.5	0.1	4523.2	20.8	0.4	4518.9	32.9	0.6	4511.8	19.1	0.4	4509.0	24.6	-0.7	4506.7	15.2	0.5	4523.1	13.0	0.5	4525.6
Apr-2019	4/25/2019	12.2	-0.2	4522.4	12.4	0.1	4523.3	20.6	0.2	4519.1	33.1	-0.2	4511.6	19.3	-0.2	4508.8	24.7	-0.1	4506.6	15.4	-0.2	4522.9	12.9	0.1	4525.7
May-2019	5/15/2019	11.1	1.1	4523.4	11.6	0.8	4524.1	20.1	0.5	4519.6	33.1	0.0	4511.6	19.2	0.1	4508.9	25.0	-0.3	4506.3	14.6	0.8	4523.7	12.4	0.5	4526.2
May-2019	5/30/2019	11.0	0.1	4523.5	11.5	0.1	4524.2	19.8	0.3	4519.9	33.1	0.0	4511.6	19.4	-0.2	4508.7	25.2	-0.2	4506.1	14.8	-0.2	4523.5	12.5	-0.1	4526.1
Jun-2019	6/5/2019	11.1	-0.1	4523.4	11.6	-0.1	4524.1	19.9	-0.1	4519.8	33.3	-0.2	4511.4	19.6	-0.2	4508.5	25.0	0.2	4506.3	14.7	0.1	4523.6	12.1	0.4	4526.5
Jun-2019	6/24/2019	11.4	-0.3	4523.1	11.2	0.4	4524.5	19.8	0.1	4519.9	33.4	-0.1	4511.3	19.5	0.1	4508.6	24.8	0.2	4506.5	13.9	0.8	4524.4	12.0	0.1	4526.6
Jul-2019	7/25/2019	11.1	0.3	4523.4	11.2	0.0	4524.5	19.7	0.1	4520.0	32.2	1.2	4512.5	19.9	-0.4	4508.2	23.7	1.1	4507.6	14.0	-0.1	4524.3	12.2	-0.2	4526.4
Aug-2019	8/7/2019	11.1	0.0	4523.4	11.4	-0.2	4524.3	19.7	0.0	4520.0	32.7	-0.5	4512.0	19.6	0.3	4508.5	23.7	0.0	4507.6	13.9	0.1	4524.4	12.1	0.1	4526.5
Aug-2019	8/27/2019	11.3	-0.2	4523.2	11.5	-0.1	4524.2	19.5	0.2	4520.2	32.9	-0.2	4511.8	19.4	0.2	4508.7	23.8	-0.1	4507.5	14.2	-0.3	4524.1	12.6	-0.5	4526.0
Sep-2019	9/10/2019	11.2	0.1	4523.3	11.4	0.1	4524.3	19.5	0.0	4520.2	32.8	0.1	4511.9	19.6	-0.2	4508.5	23.3	0.5	4508.0	14.5	-0.3	4523.8	12.8	-0.2	4525.8
Sep-2019	9/26/2019	11.1	0.1	4523.4	11.2	0.2	4524.5	19.7	-0.2	4520.0	32.6	0.2	4512.1	19.5	0.1	4508.6	23.5	-0.2	4507.8	14.1	0.4	4524.2	12.4	0.4	4526.2
Oct-2019	10/15/2019	11.8	-0.7	4522.7	12.1	-0.9	4523.6	19.4	0.3	4520.3	33.4	-0.8	4511.3	19.9	-0.4	4508.2	23.6	-0.1	4507.7	15.1	-1.0	4523.2	11.9	0.5	4526.7
Oct-2019	10/29/2019	11.6	0.2	4522.9	12.1	0.0	4523.6	19.5	-0.1	4520.2	33.2	0.2	4511.5	20.1	-0.2	4508.0	27.6	-4.0	4503.7	15.1	0.0	4523.2	11.8	0.1	4526.8
Nov-2019	11/11/2019	11.4	0.2	4523.1	12.1	0.0	4523.6	19.6	-0.1	4520.1	33.4	-0.2	4511.3	20.0	0.1	4508.1	25.8	1.8	4505.5	14.9	0.2	4523.4	11.7	0.1	4526.9
Nov-2019	11/19/2019	11.5	-0.1	4523.0	12.1	0.0	4523.6	19.5	0.1	4520.2	33.3	0.1	4511.4	20.0	0.0	4508.1	25.7	0.1	4505.6	14.9	0.0	4523.4	11.6	0.1	4527.0
Dec-2019	12/3/2019	11.6	-0.1	4522.9	12.2	-0.1	4523.5	19.4	0.1	4520.3	33.4	-0.1	4511.3	20.2	-0.2	4507.9	25.5	0.2	4505.8	14.7	0.2	4523.6	11.5	0.1	4527.1

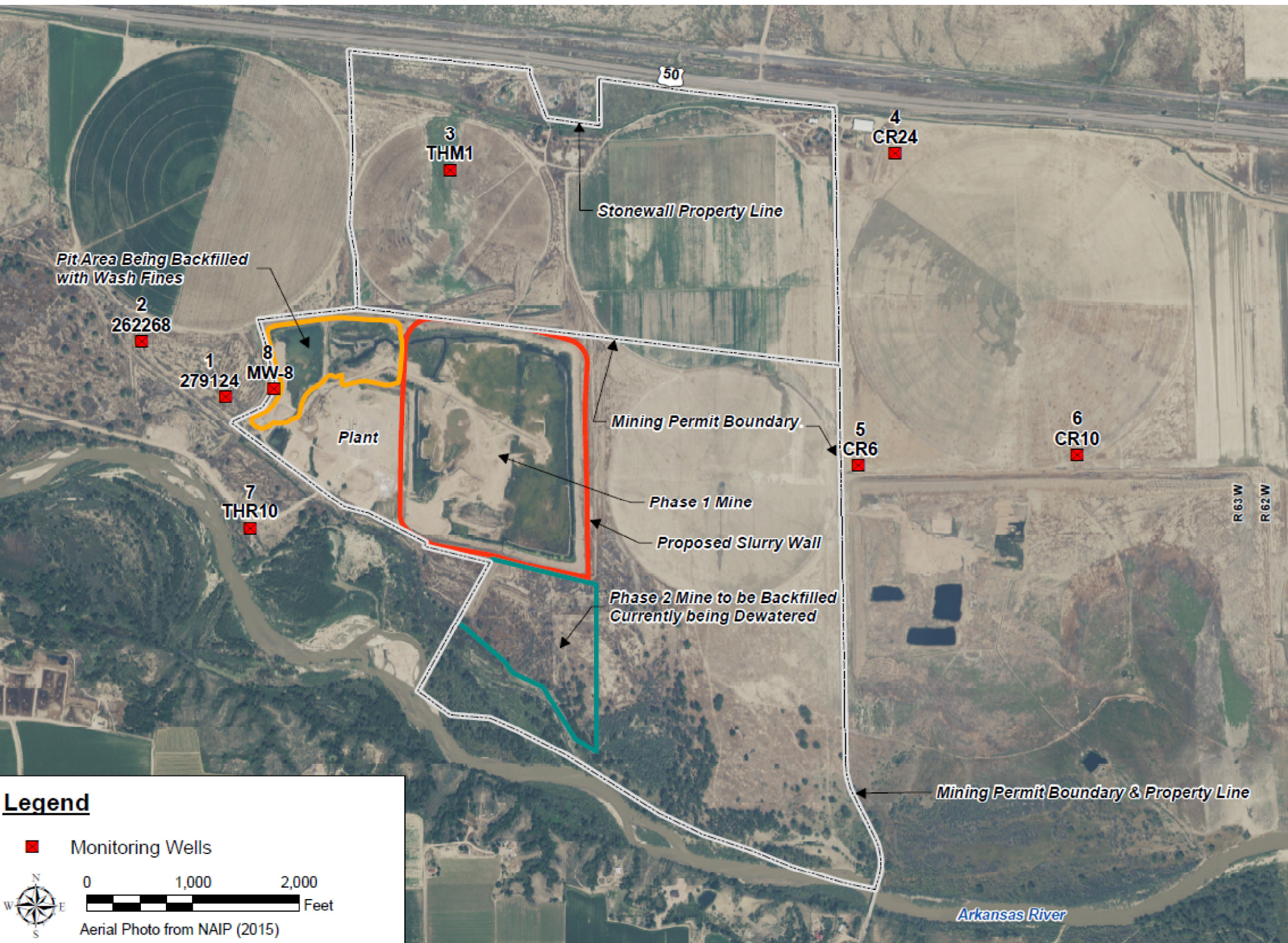
Monitoring well measurement data
Pueblo East Pit

Monitoring Hole #		1			2			3			4			5			6			7			8		
Alternative Name		MW-1			MW-2			THM-1			CR24			CR6			CR10			THR10			MW-8		
Permit No.		279124			262268			277098			046817-MH, 277131			46206-MH, 277133			046814-MH, 277135			WDID: 1406466			57688-MH		
Surface Elevation (feet)		4532.0			4533.0			4536.7			4542.1			4525.3			4528.4			4535.6			4535.6		
Height of Stickup Casing (feet)		2.5			2.7			3.0			2.6			2.8			2.9			2.7			3.0		
Date (Month)	Date of Reading	DTW, toc (ft)	Difference	GW Elev. Ft	DTW, toc (ft)	Difference	GW Elev. Ft	DTW, toc (ft)	Difference	GW Elev. Ft	DTW, toc (ft)	Difference	GW Elev. Ft	DTW, toc (ft)	Difference	GW Elev. Ft	DTW, toc (ft)	Difference	GW Elev. Ft	DTW, toc (ft)	Difference	GW Elev. Ft	DTW, toc (ft)	Difference	GW Elev. Ft
Dec-2019	12/30/2019	11.5	0.1	4523.0	12	0.2	4523.7	19.6	-0.2	4520.1	33.7	-0.3	4511.0	19.9	0.3	4508.2	25.9	-0.4	4505.4	14.6	0.1	4523.7	11.4	0.1	4527.2
Jan-2020	1/6/2020	11.3	0.2	4523.2	12.1	-0.1	4523.6	19.3	0.3	4520.4	33.4	0.3	4511.3	20.0	-0.1	4508.1	25.5	0.4	4505.8	14.4	0.2	4523.9	11.3	0.1	4527.3
Jan-2020	1/24/2020	11.4	-0.1	4523.1	12.2	-0.1	4523.5	19.2	0.1	4520.5	33.3	0.1	4511.4	20.0	0.0	4508.1	25.7	-0.2	4505.6	14.5	-0.1	4523.8	11.4	-0.1	4527.2
Mar-2020	3/10/2020	11.0	0.4	4523.5	11.3	0.9	4524.4	20.1	-0.9	4519.6	30.6	2.7	4514.1	16.7	3.3	4511.4	21.6	4.1	4509.7	15.3	-0.8	4523.0	11.7	-0.3	4526.9
Mar-2020	3/27/2020	11.1	-0.1	4523.4	11.2	0.1	4524.5	20	0.1	4519.7	30.7	-0.1	4514.0	16.7	0.0	4511.4	21.5	0.1	4509.8	15.7	-0.4	4522.6	11.9	-0.2	4526.7
Apr-2020	4/9/2020	11.2	-0.1	4523.3	11.1	0.1	4524.6	20	0.0	4519.7	30.5	0.2	4514.2	16.8	-0.1	4511.3	21.3	0.2	4510.0	15.7	0.0	4522.6	11.9	0.0	4526.7
Apr-2020	4/28/2020	11.1	0.1	4523.4	11.2	-0.1	4524.5	21.1	-1.1	4518.6	30.4	0.1	4514.3	16.9	-0.1	4511.2	21.5	-0.2	4509.8	15.8	-0.1	4522.5	11.8	0.1	4526.8
May-2020	5/6/2020	11.0	0.1	4523.5	11.1	0.1	4524.6	21.6	-0.5	4518.1	30.9	-0.5	4513.8	16.5	0.4	4511.6	21.8	-0.3	4509.5	15.7	0.1	4522.6	11.6	0.2	4527.0
May-2020	5/28/2020	11.4	-0.3	4523.1	11.5	-0.3	4524.2	21.8	-0.7	4517.9	30.6	-0.2	4514.1	16.7	0.2	4511.4	21.8	-0.3	4509.5	15.9	-0.1	4522.4	11.5	0.3	4527.1
Jun-2020	6/9/2020	11.3	0.1	4523.2	11.4	0.1	4524.3	21.5	0.3	4518.2	30.5	0.1	4514.2	16.5	0.2	4511.6	21.7	0.1	4509.6	15.7	0.2	4522.6	11.3	0.2	4527.3
Jun-2020	6/24/2020	11.1	0.2	4523.4	11.5	-0.1	4524.2	21.3	0.2	4518.4	30.4	0.1	4514.3	16.5	0.0	4511.6	21.5	0.2	4509.8	15.1	0.6	4523.2	11	0.3	4527.6
Jul-2020	7/7/2020	10.9	0.2	4523.6	11.4	0.0	4524.3	21.5	-0.2	4518.2	30.2	0.3	4514.5	16.4	0.1	4511.7	21.6	-0.1	4509.7	14.6	1.1	4523.7	10.7	0.3	4527.9
Jul-2020	7/20/2020	10.7	0.4	4523.8	11.5	-0.1	4524.2	21.4	0.1	4518.3	30.2	0.0	4514.5	16.2	0.2	4511.9	21.4	0.2	4509.9	14.4	0.2	4523.9	10.5	0.5	4528.1
Oct-2020	10/7/2020	11	-0.3	4523.5	11.3	0.2	4524.4	20.1	1.3	4519.6	30.6	-0.4	4514.1	16.6	-0.2	4511.5	21.6	-0.2	4509.7	15.5	-1.1	4522.8	11.7	-1.2	4526.9
Oct-2020	10/29/2020	11.1	-0.1	4523.4	11.2	0.3	4524.5	20	1.4	4519.7	30.6	-0.4	4514.1	16.7	-0.1	4511.4	21.5	-0.1	4509.8	15.7	-1.3	4522.6	11.9	-0.2	4526.7
Nov-2020	11/5/2020	11.2	-0.1	4523.3	11.1	0.1	4524.6	20	0.0	4519.7	30.5	0.1	4514.2	16.8	-0.1	4511.3	21.3	0.2	4510.0	15.7	0.0	4522.6	12	-0.1	4526.6
Nov-2020	11/21/2020	11.1	0.0	4523.4	11.3	-0.2	4524.4	21.1	-1.1	4518.6	30.4	0.1	4514.3	16.9	-0.1	4511.2	21.5	-0.2	4509.8	15.8	-0.1	4522.5	11.8	0.1	4526.8
Dec-2020	12/6/2020	11	0.1	4523.5	11.1	0.0	4524.6	21.4	-0.3	4518.3	30.9	-0.4	4513.8	16.5	0.4	4511.6	21.7	-0.2	4509.6	15.7	0.0	4522.6	11.6	0.2	4527.0
Dec-2020	12/23/2020	11.4	-0.4	4523.1	11.5	-0.4	4524.2	21.8	-0.4	4517.9	30.6	0.3	4514.1	16.7	0.2	4511.4	21.8	-0.1	4509.5	15.9	-0.2	4522.4	11.5	0.1	4527.1
Jan-2021	1/7/2021	11.3	0.1	4523.2	11.2	0.3	4524.5	21.6	0.2	4518.1	30.6	0.0	4514.1	16.5	0.2	4511.6	21.5	0.3	4509.8	15.7	0.2	4522.6	11.4	0.1	4527.2
Jan-2021	1/25/2021	11.5	-0.1	4523.0	11.5	0.0	4524.2	21.7	0.1	4518.0	30.4	0.2	4514.3	16.8	-0.3	4511.3	21.4	0.4	4509.9	15.8	0.1	4522.5	11.6	-0.1	4527.0
Feb-2021	2/5/2021	11.2	0.3	4523.3	11.2	0.3	4524.5	21.5	0.2	4518.2	30.8	-0.4	4513.9	16.4	0.4	4511.7	21.6	-0.2	4509.7	15.9	-0.1	4522.4	11.5	0.1	4527.1
Feb-2021	2/25/2021	11.2	0.0	4523.3	11.1	0.1	4524.6	21.6	-0.1	4518.1	30.6	0.2	4514.1	16.3	0.1	4511.8	21.3	0.3	4510.0	15.7	0.2	4522.6	11.7	-0.2	4526.9
Mar-2021	3/3/2021	11	0.2	4523.5	11.4	-0.2	4524.3	21.1	0.5	4518.6	30.7	0.1	4514.0	16	0.4	4512.1	21.1	0.2	4510.2	15.6	0.3	4522.7	11.3	0.4	4527.3
Mar-2021	3/24/2021	11	0.2	4523.5	11.3	0.1	4524.4	20.9	0.2	4518.8	30.6	0.1	4514.1	16.2	-0.2	4511.9	21.4	-0.3	4509.9	15.5	0.1	4522.8	11.1	0.6	4527.5
Apr-2021	4/6/2021	10.8	0.2	4523.7	11.2	0.1	4524.5	20.8	0.1	4518.9	30.3	0.3	4514.4	16	0.2	4512.1	21	0.4	4510.3	15.7	-0.2	4522.6	11.7	-0.6	4526.9
Apr-2021	4/28/2021	10.9	-0.1	4523.6	11.1	0.2	4524.6	21.1	-0.2	4518.6	30.1	0.5	4514.6	16.4	-0.4	4511.7	21.5	-0.1	4509.8	15.6	-0.1	4522.7	11.8	-0.1	4526.8
May-2021	5/4/2021	11.1	-0.3	4523.4	11	0.1	4524.7	21.2	-0.1	4518.5	30.1	0.0	4514.6	16.7	-0.3	4511.4	21.4	0.1	4509.9	15.8	-0.2	4522.5	11.9	-0.1	4526.7
Average		11.7		4522.9	11.9		4523.8	21.4	0.0	4518.3	31.8		4512.9	18.5		4509.5	23.7		4507.6	15.3		4523.0	12.3		4526.3

- Notes
1. All depth to water measurements are taken from the top of the stickup casing, ranging from 2.5'-3.0'.
 2. Monitoring Hole #8 (MH-8) was constructed on 3/2/2018.
 3. All groundwater readings from Nov. 2017 to Dec. 2018 were taken near the middle of every month.
 4. Groundwater Levels were monitored Bi-Monthly in January 2019 to July of 2020 after the completion of the Slurry Wall Construction to monitor groundwater mounding effects.
 5. Future groundwater monitoring frequencies may be switched to quarterly for the life of the mine, based on the groundwater monitoring plan.

Pueblo East: Groundwater Levels Elevation Data





Legend

