



January 31, 2022

Mr. Adam Sullivan, P.E., (State Engineer)
Division of Water Resources
901 S. Stewart Street Suite 2002
Carson City, Nevada 89701

Re: **2021 Annual Report - Round Mountain Gold Corporation**

Dear Mr. Sullivan,

Please find the enclosed 2020 Annual Report for Round Mountain Gold Corporation (RMGC). This report describes groundwater conditions and overall water management associated with mining, milling and ancillary activities in Nye County, Nevada as required by the terms of our current water rights permits and our approved Monitoring Plan. RMGC operates in the Big Smoky Valley-North hydrographic basin (Basin No. 137b).

On December 20, 2013 Order No. 1233 RMGC was issued by the State Engineer, which adopted rules allowing for multiple points of diversion for water use at the Round Mountain and Gold Hill operations. This order was followed by the issuance of Permit No. 83333 on March 5, 2014. RMGC permit terms require specific monitoring and reporting including the submission of an Annual Report each year as described herein.

Please do not hesitate to contact us should you have any questions.

Sincerely,
Round Mountain Gold Corporation

Jay Dixon, P.E., WRS
Chief Hydrologist

Cc:
Perry Wickham, Field Office Manager – Tonopah FO (BLM Battle Mountain District)

Round Mountain Gold Corporation
2021 Annual Report
January 31, 2022

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[Appendix A: Select Groundwater Hydrographs](#)

Drawing A-1: Report Hydrograph Locations

[Appendix B: 2021 Points of Diversion Accounting / Status](#)

Drawing B-1: Existing PODs in 2021

Drawing B-2: New & Abandoned PODs in 2021

[Appendix C: 2021 Hydrology/Dewatering Drain and MO Waiver Status](#)[Report Plates](#)

Plate 1: Vicinity Map

Plate 2: Round Mountain Facility Map

Plate 3: Monitoring Site Locations Reported to NDWR

Plate 4: Big Smoky Valley Alluvial Wells and Water Level (Contour Map)

1.0 Background

Pursuant to requirements in the approved Monitoring Plan for Round Mountain Gold Corporation (RMGC) / KG Mining (Round Mountain) Inc., Water Right Permit No. [83333](#) and [Order 1233](#) we are pleased to present the 2021 Annual Report. This report describes dewatering activities, groundwater conditions and overall water management associated with the Round Mountain and Gold Hill mining projects in the Big Smoky Valley hydrographic basin (Basin No. 137b).

1.1 Dewatering System Overview

RMGC operates two large-scale open-pit mining operations and associated ancillary facilities in the Big Smoky Valley, Hydrographic Basin 137b. RMGC / KGM, Inc. (hereafter referred to as 'RMGC') maintains water rights associated with these activities. The Round Mountain mine has been in continuous operation since 1976. In order to ensure safe mining activities and highwall stability within the mine, the Round Mountain facility began dewatering in 1990, which has created drawdown surrounding the pit area. Starting in late 2011 groundwater production began for the Gold Hill open pit operation and has been in full production ever since. The Gold Hill mine is located approximately 3 miles north of the Round Mountain operation (see Plate 3). As shown in Figure 1 below, since the early 1990s, average groundwater pumping from dewatering systems at Round Mountain and Gold Hill (combined) had gradually increased to just over 5,000 gpm by 2017. However, as of 2021, the combined (average annual) pumping has increased 70% since 2017 (pre-Phase W expansion) and 43% since 2018. This marked increase in dewatering production is a direct result of the Phase W expansion initiated in 2018, which includes a push back into the west alluvial highwall supported by a corresponding increase in alluvial pumping as described throughout this report. The majority of RMGC's permitted beneficial use of water includes groundwater diversions for mining and milling as part of active dewatering systems in and around the Round Mountain and Gold Hill open pit mines.

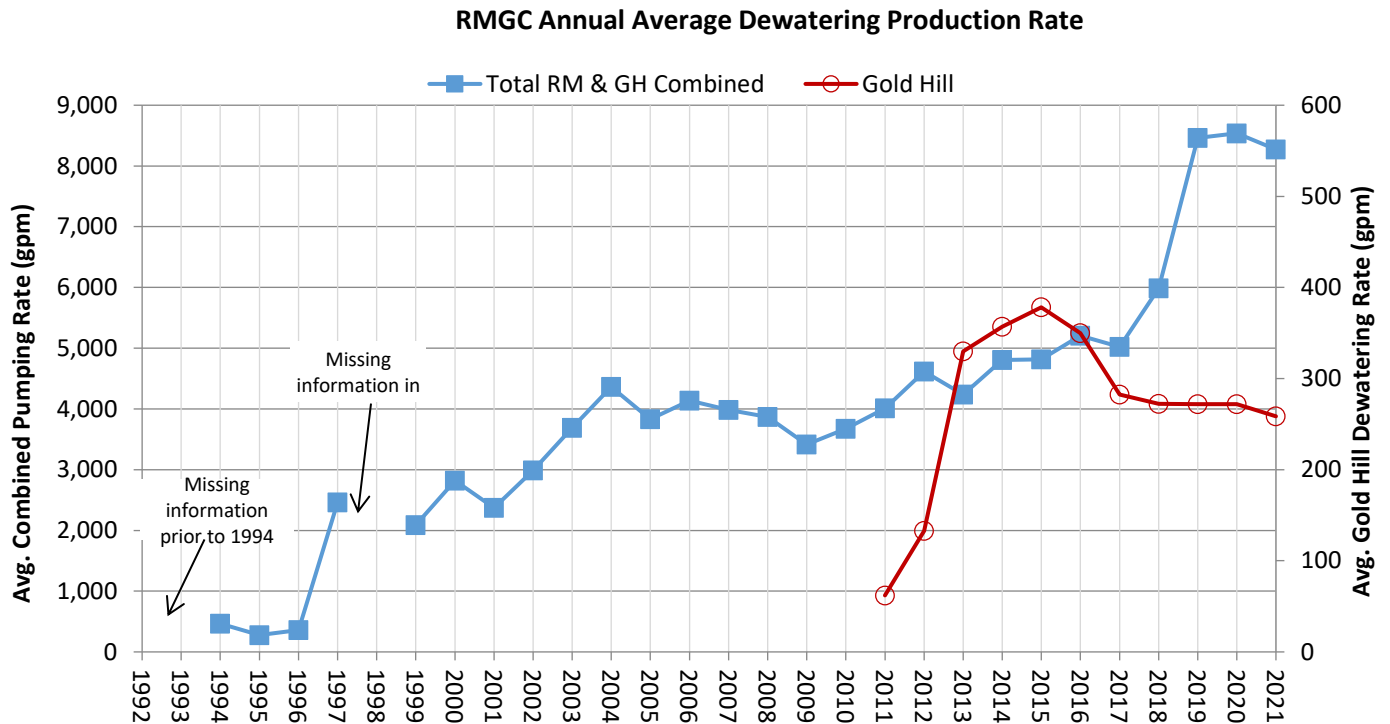


Figure 1. Average annual dewatering pumping rates from the Round Mountain and Gold Hill open pit mines. Note that Round Mountain dewatering began in 1990 (data only available after 1994) and Gold Hill pumping began in 2011.

1.2 Ancillary Wells Overview

RMGC maintains four (4) active ancillary wells that are off site and west of the Round Mountain Mine. Three of the ancillary wells are located along the Jett Canyon Road about 2.5 miles west of the Mine and are known collectively as the ‘Valley Wells’ (East Well 1, East Well 2 and West Well). Groundwater from the Valley Wells is conveyed via pipeline to the Round Mountain site and used to support, 1) potable water supply tanks; or 2) directly to the Lower Fire Pond where the water can be commingled with water from the dewatering system (for process make up water). The existing water rights for these three (Valley) wells are included in the mine’s base rights because their historical (primary) use was for mining, milling and domestic purposes. As the pit dewatering system expanded, the primary use for the Valley Wells shifted to nearly exclusive domestic (potable) purposes at the mine. The Valley Wells are still used for mining and milling (make-up water), but on a very limited basis during the rare occasions when process and/or construction demands are high and dewatering supply is low due to temporary maintenance or mining activities.

The fourth ancillary well is used by RMGC to operate a golf course located in the Town of Round Mountain – Hadley Subdivision (see Plate 2). The golf course is watered using irrigation water rights owned by the RMGC that were originally appropriated for agricultural purposes on the ranch that existed prior to its acquisition (by the Mine), which resulted in the creation of Hadley.

2.0 Super Permit Summary

In 2014, RMGC began operating under a consolidated water rights permitting framework known as a Block Well Spacing Permit, or ‘Super Permit.’ The terms and statutory guidelines of this Super Permit addressed by State Engineer in Order 1233. The amount of water permitted for mining (including reclamation), milling and domestic purposes under permit 83333 is 53 cubic feet per second (cfs) not to exceed a total combined duty of 14,767.5 acre-feet per year for consumptive purposes. No additional diversion or duty was requested or provided by Permit #83333. Under this permit and as required by Order 1233, RMGC operated multiple points of diversion in 2021 under a single temporary permit (90436T) with a diversion rate of up to 30 cfs and 15,000 acre-ft of pumping for mining and milling purposes and a total combined duty (for consumptive use) not to exceed 14,767.5 acre-ft for the year.

3.0 Groundwater Diversion Summary

A summary of groundwater diverted in 2021 for each manner of use by operation is included in Table 1 below. Tables 2 through 4 include a detailed month-by-month breakdown of observed dewatering and ancillary pumping with corresponding permits for each point of diversion in the Round Mountain and Gold Hill operations for 2021. Average and maximum monthly diversion rates from each point of diversion are included in Tables 5 through 8.

Table 1 – 2021 RMGC Groundwater Pumping Summary

Pumping Type	Operation	Total Acre-Ft	Max. Diversion Rate (cfs)
Mining and Milling & Domestic	Round Mountain	12,972	18.54
Mining and Milling & Domestic	Gold Hill	417	0.95
Total Combined M&M&D Pumping:		13,389	19.48
Irrigation	Golf Course	442	1.17

3.1 2021 Mining and Milling Production

In 2021 RMGC pumped 12,972 acre-ft of underground water for mining, milling and domestic purposes at Round Mountain and 417 acre-ft of water at Gold Hill, for a combined total of 13,389 acre-ft of groundwater pumped. The Round Mountain mine pumped 12,914 acre-ft of groundwater for dewatering with 11,370 acre-ft produced from the alluvial well field just west of the main pit, and 1,544 acre-ft pumped from the in-pit dewatering wells, sumps and gravity drains. During the year there were 71 active points of diversion in the alluvial well field (69 wells and 2 sumps in the west alluvial highwall) and 31 active points of diversion included within the in-pit dewatering system, which included 28 dewatering wells and 3 sumps. The Round Mountain operation also includes 3 additional points of diversion (Valley Wells) that are not associated with the dewatering system and used exclusively for limited mine make up water and potable water supply. At Gold Hill there were 3 active points of diversion in 2021. The two principal-producing wells at Gold Hill were constructed west of the pit prior to 2012 (with one remaining active currently) and two wells (constructed in 2015) along the southeastern (external) edge of the pit. In

all, for 2021, there were 108 active points of diversion (at various times) used for mining, milling and domestic purposes at the (combined) operation.

3.2 2021 Ancillary Production

In 2021 RMGC pumped 58 acre-ft of groundwater from the 3 Valley Wells (at Round Mountain) with approximately 26 acre-feet used for domestic (potable) supply and 31 acre-ft used for mining and milling (make-up) water. Groundwater production from the 'ICT Ranch Well' totaled 441.5 acre-ft for 2021. The ICT Ranch Well is used exclusively for recreational purposes in support of golf course irrigation in the Hadley Subdivision.

Table 2 – 2021 Round Mountain Dewatering Annual Pumping Volumes

Source Name	Base Permit Number	2021 Round Mountain Monthly Pumping (acre-feet)												
		ALLUVIAL (EX-PIT) WELL FIELD												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
Alluvial Well Field (acre-ft)														
DW-39	53365	6.9	7.6	14.5	6.8	6.8	7.7	6.4	5.0	2.4	2.5	3.0	6.0	75.7
DW-51	76600	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DW-52	76601	0.0	0.0	0.0	2.7	6.6	11.7	6.3	7.2	5.3	4.4	4.7	4.5	53.3
DW-53	76602	9.2	15.3	18.5	14.9	14.7	16.7	12.6	17.5	12.9	15.1	17.8	14.8	180.2
DW-61	44297	19.4	22.4	22.5	1.4	19.7	26.0	20.4	25.5	23.3	20.3	22.8	19.4	243.0
DW-70	82949	25.7	20.0	22.5	17.5	18.2	21.9	15.1	1.8	16.3	17.9	21.9	17.5	216.4
DW-72	83333	81.4	83.1	104.7	83.1	83.8	101.0	79.0	106.8	81.7	86.4	102.0	87.5	1,080.4
DW-83	83333	30.4	32.8	36.7	28.6	29.6	35.4	30.6	35.4	27.8	30.9	28.1	31.1	377.2
DW-86	83333	0.0	0.0	2.5	7.6	7.4	8.2	6.1	7.7	4.7	5.3	5.2	5.0	59.7
DW-87	83333	60.9	70.6	76.2	63.8	62.3	76.8	63.9	77.9	64.1	78.0	82.1	73.8	850.4
DW-88	83333	102.3	83.5	102.3	86.7	87.8	102.3	90.3	106.8	78.8	94.5	106.2	92.7	1,134.3
DWCA-1	83333	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.0	0.0	2.2
DWCA-2	83333	0.7	0.6	0.8	0.7	1.3	0.5	0.4	0.3	0.4	0.1	0.0	0.0	5.8
DWCA-3	83333	1.2	3.1	3.8	2.0	0.7	0.6	0.2	0.4	0.3	0.1	0.0	0.0	12.5
DWCB-1	83333	0.0	0.0	0.0	3.2	2.1	2.4	1.6	1.5	1.3	3.8	4.2	2.7	22.8
DWCB-2	83333	0.0	0.0	0.0	0.4	0.5	0.4	0.3	0.3	0.1	0.0	0.0	0.1	2.0
DWNW-21-01	83333	0.0	0.7	4.1	6.9	6.7	6.5	6.3	7.3	5.7	5.4	7.2	4.9	61.6
DWW-1	83333	27.2	26.8	34.6	23.3	22.7	24.4	20.2	29.5	22.8	22.2	26.0	7.1	286.6
DWW-2	83333	7.9	8.6	9.9	11.1	6.3	12.3	9.6	14.3	13.9	12.3	17.8	16.7	140.7
DWW-3	83333	53.2	59.6	65.3	54.0	53.6	62.6	55.3	64.1	47.0	18.5	59.7	50.9	643.8
DWW-4	83333	93.5	81.7	111.6	92.5	85.9	108.1	86.8	112.5	87.4	86.4	109.2	93.7	1,149.3
DWW-5	83333	68.3	74.2	83.6	65.7	68.5	82.2	71.4	80.9	65.7	61.7	79.2	70.3	871.6
DWW-6	83333	14.2	16.5	20.7	18.0	16.7	21.4	16.2	21.9	17.5	17.8	21.5	18.0	220.4
DWW-7	83333	74.4	80.6	91.4	71.6	74.2	88.7	75.6	91.8	71.4	62.0	84.7	74.3	940.7
DWW-8	83333	78.4	85.0	96.5	75.6	78.6	94.2	78.9	97.4	75.2	71.9	93.5	81.8	1,007.1
DWW-9	83333	2.3	2.1	2.7	2.0	2.0	2.3	1.5	1.7	1.4	1.5	1.7	1.5	22.7
DWW-10	83333	2.3	2.6	3.1	2.2	2.1	2.0	0.0	1.2	1.3	1.6	1.7	1.4	21.6
DWW-11	83333	1.5	2.2	2.3	2.1	1.9	1.8	0.5	2.3	1.3	1.0	0.5	0.6	18.0
DWW-12	83333	0.0	0.0	0.0	2.1	2.4	2.8	1.7	1.4	1.8	2.0	2.3	1.9	18.5

Source Name	Base Permit Number	2021 Round Mountain Monthly Pumping (acre-feet) ALLUVIAL (EX-PIT) WELL FIELD												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
DWW-13	83333	0.0	0.0	6.4	6.5	12.0	4.7	6.1	6.9	5.4	6.5	7.1	3.7	65.5
DWW-14	83333	0.0	0.0	0.0	0.0	4.8	6.9	5.2	6.0	4.5	5.8	6.2	5.4	44.7
DWW-15	83333	36.7	38.8	47.1	37.2	37.5	45.5	36.8	46.8	36.4	37.4	44.7	38.5	483.3
DWW-16	83333	23.5	28.8	32.4	25.0	12.6	33.5	27.6	31.0	24.4	26.5	29.6	24.1	319.2
DWW-17	83333	25.5	29.1	31.7	23.8	25.2	30.3	26.0	30.7	23.4	24.3	29.5	23.1	322.4
DWW-18	83333	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DWW-19	83333	21.3	21.1	25.1	19.1	16.7	24.0	17.5	21.7	32.2	31.6	42.5	28.3	300.8
DWW-20	83333	0.0	0.0	0.0	0.0	0.0	4.3	0.7	4.1	1.4	3.9	4.1	4.1	22.8
DWW-21	83333	0.0	1.9	0.9	2.5	4.5	4.1	3.4	2.0	2.6	2.0	4.1	2.9	30.7
DWW-22	83333	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.3	0.3	0.3	0.2	1.6
DWW-23	83333	0.0	0.0	0.0	0.0	0.0	2.6	2.8	3.0	2.0	4.8	2.2	1.9	19.3
DWW-24	83333	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	4.0	4.3	3.8	16.5
SDWA-20-01	83333	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
SDWA-20-02	83333	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
SDWA-20-03	83333	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
SDWA-20-04	83333	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
SDWA-20-05	83333	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SDWA-20-06	83333	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
SDWA-20-07	83333	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SDWA-20-08	83333	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.5
SDWA-20-09	83333	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	1.0
SDWA-20-11	83333	0.5	0.4	0.4	0.6	0.5	0.6	0.4	0.4	0.4	0.4	0.7	0.6	5.8
SDWA-20-12	83333	0.0	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
SDWA-20-13	83333	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.9
SDWA-20-14	83333	0.1	0.1	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
SDWA-20-15	83333	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
SDWA-20-16	83333	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.7
SDWA-20-17	83333	0.2	0.5	0.5	0.4	0.4	0.4	0.2	0.3	0.3	0.3	0.5	0.5	4.5
SDWA-20-18	83333	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.3
SDWA-20-19	83333	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.6
SDWA-20-20	83333	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	1.0
SDWA-20-21	83333	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	1.8

Source Name	Base Permit Number	2021 Round Mountain Monthly Pumping (acre-feet)												
		ALLUVIAL (EX-PIT) WELL FIELD												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
SDWA-20-22	83333	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
SDWNW-21-01	83333	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SDWNW-21-02	83333	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	0.0	0.0	0.0	0.0	0.4
SDWNW-21-03	83333	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.3	0.3	0.3	0.2	1.6
SDWNW-21-04	83333	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.6
SDWNW-21-05	83333	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SDWNW-21-06	83333	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SDWNW-21-07	83333	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
North Wall Sump (5525)	83333	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
North Wall Sump (5790)	83333	0.0	0.3	0.0	0.2	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1.2
Alluvial (Ex-Pit) Total =													11,369.9	

Table 2 (continued) – 2021 Round Mountain Dewatering Annual Pumping Volumes

Source Name	Base Permit Number	2021 Round Mountain Monthly Pumping (acre-feet)												
		IN-PIT WELL FIELD												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
In-Pit Well Field (acre-ft)														
DW-34	44297	2.0	0.9	3.1	2.1	1.8	1.6	2.1	2.4	2.7	2.0	1.5	0.0	22.2
DW-36R	12442	6.8	5.7	7.4	6.1	5.8	7.0	4.9	6.1	6.2	6.1	6.5	6.1	74.7
DW-49R	53365	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DW-55R	55503	11.4	10.5	13.5	11.1	10.2	9.5	9.8	11.7	11.1	10.7	13.0	10.6	133.0
DW-57	82950	35.5	29.0	36.3	30.6	28.0	33.6	24.3	29.1	36.5	27.8	35.3	28.2	374.0
DW-62	83333	2.8	2.6	3.9	4.7	4.7	7.2	6.9	9.4	10.9	2.9	2.7	2.0	60.7
DW-65	83333	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DW-68	55501	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DW-71	60875	12.6	11.5	12.7	12.3	11.7	14.3	10.4	12.7	12.0	11.6	14.8	12.2	148.7
DW-75	83333	13.5	5.5	15.1	13.4	11.6	13.6	0.0	6.3	14.4	12.7	13.1	0.0	119.1
DW-76	83333	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.3
DW-79	83333	3.6	3.3	4.3	3.5	3.4	4.1	3.3	4.0	3.6	3.4	4.7	3.7	44.9
DW-80	83333	8.8	8.1	10.0	8.7	3.1	6.4	7.3	9.0	8.7	7.8	9.6	8.9	96.5
DW-81	83333	0.0	0.0	0.0	0.0	0.5	0.6	0.4	0.5	0.4	0.5	0.7	0.5	4.2
DW-84	83333	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DW-85	83333	10.2	6.7	10.6	10.2	9.4	9.8	5.2	9.8	8.7	8.4	9.0	7.3	105.5
DW-90	83333	4.1	3.9	4.7	4.2	4.1	4.9	2.9	4.1	3.9	3.9	5.0	4.1	49.9
DW-91	83333	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DW-92	83333	8.0	5.5	0.0	6.7	5.9	8.2	6.3	7.7	7.3	6.8	8.2	6.5	77.0
DW-93	83333	6.4	6.4	7.1	3.7	5.5	7.1	3.4	6.4	6.4	6.3	8.0	6.5	73.3
DW-94	83333	0.4	0.1	0.3	0.1	1.0	0.9	0.8	1.1	1.1	1.1	1.7	1.1	9.6
DW-94a	83333	2.6	3.0	3.8	3.4	3.4	4.2	2.3	3.6	3.4	3.6	4.1	3.5	41.1
DW-95	83333	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DW-96	83333	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DW-97	83333	0.0	3.9	1.9	1.3	1.2	1.4	1.2	1.5	1.6	1.9	2.5	1.3	19.8
FV-DW-3	55502	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source Name	Base Permit Number	2021 Round Mountain Monthly Pumping (acre-feet)												
		<u>IN-PIT WELL FIELD</u>												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
DD-1	83333	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DD-2	83333	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4995 Phase F Sump to Booster	83333	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.7	1.2	4.6	1.1	9.7
5170 Phase F Sump to Booster	83333	3.3	3.2	1.3	2.6	3.4	7.0	2.8	6.9	3.9	0.8	0.8	0.0	35.9
4747 Phase G Sump	83333	5.3	2.1	7.8	3.1	5.8	0.6	0.0	2.1	3.6	2.3	3.2	8.0	43.9
In-Pit Total =													1,544.2	
Alluvial and In-Pit Total =													12,914.1	

Table 3 – 2021 Gold Hill Dewatering Pumping Volumes

Source Name	Base Permit Number	2021 Gold Hill Monthly Pumping (acre-feet)												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
GHB-11-1	70170	22.0	23.3	26.4	36.9	26.2	50.8	25.9	41.5	48.8	29.0	30.6	19.8	381.2
	70169													
GHDW-3	83333	0.0	0.0	0.0	0.0	1.0	0.0	8.8	7.1	3.3	5.5	5.8	2.3	33.9
GHDW-4	83333	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	1.8
													Total Gold Hill Dewatering (MM&D) =	416.8 ac-ft

Table 4 – 2021 Ancillary Pumping Volumes (Round Mountain)

Source Name	Base Permit #	2021 Monthly Ancillary Pumping (acre-feet)												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
East Well 1	14119	2.4	2.6	3.2	1.9	8.9	1.8	3.9	3.2	3.3	4.2	6.6	5.0	47.0
	26652													
	60875													
East Well 2	51577	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	51578													
	60876													
West Well	12445	0.0	0.0	0.9	2.2	2.3	1.3	0.3	0.8	0.1	1.3	0.4	1.1	10.7
	12768													
	26650													
	60874													
										Total Ancillary (MM&D) Pumping =				57.7
ICT Ranch Well (Golf Course)	54911	6.1	10.8	18.1	41.9	59.8	81.0	61.3	59.6	53.9	30.4	10.5	8.0	441.5
	54912													
	64181													

Table 5 – 2021 Round Mountain Dewatering Pumping Rates

Source Name	Base Permit Number	2021 Round Mountain Monthly Pumping Rates (gpm) ALLUVIAL (Ex-Pit) WELL FIELD												Max. Div. Rate (cfs)
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Alluvial Well Field (gpm)														
DW-39	55500	58	56	96	57	54	52	48	34	20	20	20	45	0.21
DW-51	76599	0	0	0	0	0	0	0	0	0	0	0	0	0.00
DW-52	76600	0	0	0	22	53	76	48	51	43	33	32	35	0.17
DW-53	76601	76	121	119	121	119	111	103	112	104	118	118	115	0.27
DW-61	59217	161	165	150	11	172	173	159	169	190	158	152	151	0.42
DW-70	55501	215	148	149	147	147	146	111	12	136	139	146	129	0.48
DW-72	44297	676	653	673	677	676	671	642	685	666	673	679	678	1.53
DW-83	83333	248	247	243	241	238	237	234	233	231	240	188	235	0.55
DW-86	83333	0	0	17	64	59	53	47	54	38	40	36	39	0.14
DW-87	83333	506	520	517	521	503	510	497	518	522	608	546	573	1.35
DW-88	83333	755	674	694	709	708	679	703	710	644	719	719	720	1.68
DWCA-1	83333	1	2	2	2	2	2	1	1	2	1	0	0	0.00
DWCA-2	83333	5	5	5	5	11	4	3	2	3	1	0	0	0.02
DWCA-3	83333	9	26	25	16	6	4	2	3	3	1	0	0	0.06
DWCB-1	83333	0	0	0	26	17	16	12	10	11	29	29	21	0.50
DWCB-2	83333	0	0	0	3	4	3	2	2	1	0	0	1	0.29
DWNW-21-01	83333	0	6	33	56	54	42	47	51	46	42	48	38	0.99
DWW-1	83333	225	211	223	189	183	162	164	189	186	173	175	51	0.50
DWW-2	83333	66	64	67	90	50	82	75	95	113	96	118	129	0.29
DWW-3	83333	442	439	443	441	433	416	430	426	384	144	397	396	0.99
DWW-4	83333	707	709	718	752	692	721	701	721	713	674	727	726	1.68
DWW-5	83333	556	559	553	554	551	549	536	542	552	469	534	531	1.25
DWW-6	83333	118	122	140	147	134	142	126	145	143	138	143	140	0.33
DWW-7	83333	606	608	605	603	597	593	587	596	594	482	566	561	1.35
DWW-8	83333	639	641	639	637	633	630	613	633	625	560	624	618	1.43
DWW-9	83333	18	18	17	16	16	15	11	12	12	11	11	11	0.04
DWW-10	83333	19	19	21	18	17	13	0	9	11	12	11	11	0.05
DWW-11	83333	13	16	16	17	15	11	4	16	11	8	4	5	0.04
DWW-12	83333	0	0	0	17	19	18	13	10	15	16	16	15	0.04

Source Name	Base Permit Number	2021 Round Mountain Monthly Pumping Rates (gpm) ALLUVIAL (Ex-Pit) WELL FIELD												Max. Div. Rate (cfs)
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Alluvial Well Field (gpm)														
DWW-13	83333	0	0	44	53	97	31	46	48	44	51	47	27	0.22
DWW-14	83333	0	0	0	0	41	45	39	42	37	44	42	42	0.10
DWW-15	83333	304	305	303	303	302	301	300	300	297	302	288	300	0.68
DWW-16	83333	196	212	215	210	87	260	207	207	203	206	198	182	0.58
DWW-17	83333	213	214	210	200	202	202	195	206	194	189	197	175	0.48
DWW-18	83333	0	0	0	0	0	0	0	0	0	0	0	0	0.00
DWW-19	83333	177	166	161	155	134	159	142	139	262	246	283	219	0.63
DWW-20	83333	0	0	0	0	0	28	6	29	12	30	28	32	0.07
DWW-21	83333	0	16	6	20	36	28	26	13	22	15	27	22	0.08
DWW-22	83333	0	0	0	0	0	0	1	3	2	2	2	2	0.01
DWW-23	83333	0	0	0	0	0	17	21	21	17	36	15	14	0.08
DWW-24	83333	0	0	0	0	0	0	0	0	32	30	29	30	0.07
SDWA-20-01	83333	0	1	1	0	0	0	0	0	0	0	0	0	0.00
SDWA-20-02	83333	0	0	0	0	0	0	0	0	0	0	0	0	0.00
SDWA-20-03	83333	0	0	0	0	0	0	0	0	0	0	0	0	0.00
SDWA-20-04	83333	0	0	0	0	0	0	0	0	0	0	0	0	0.00
SDWA-20-05	83333	0	0	0	0	0	0	0	0	0	0	0	0	0.00
SDWA-20-06	83333	0	0	0	0	0	0	0	0	0	0	0	0	0.00
SDWA-20-07	83333	0	0	0	0	0	0	0	0	0	0	0	0	0.00
SDWA-20-08	83333	0	1	0	0	1	1	0	0	0	0	0	0	0.00
SDWA-20-09	83333	2	1	1	1	1	1	0	0	0	0	0	1	0.00
SDWA-20-11	83333	4	3	3	5	4	4	3	3	3	3	5	4	0.01
SDWA-20-12	83333	0	1	1	1	0	0	0	0	0	0	0	0	0.00
SDWA-20-13	83333	0	0	1	1	1	1	1	0	1	1	0	0	0.00
SDWA-20-14	83333	0	1	2	1	0	0	0	0	0	0	0	0	0.00
SDWA-20-15	83333	1	0	0	0	0	0	0	0	0	0	0	0	0.00
SDWA-20-16	83333	1	1	1	0	1	0	0	0	0	0	0	0	0.00
SDWA-20-17	83333	2	4	3	3	3	3	2	2	2	2	4	4	0.01
SDWA-20-18	83333	1	1	1	1	1	1	1	1	1	1	1	0	0.00
SDWA-20-19	83333	0	0	0	0	0	0	0	1	1	0	0	0	0.00
SDWA-20-20	83333	1	1	1	1	1	1	1	1	0	0	0	0	0.00

Source Name	Base Permit Number	2021 Round Mountain Monthly Pumping Rates (gpm) ALLUVIAL (Ex-Pit) WELL FIELD												Max. Div. Rate (cfs)
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Alluvial Well Field (gpm)														
SDWA-20-21	83333	1	2	2	2	1	1	1	1	1	1	1	0	0.00
SDWA-20-22	83333	0	0	0	0	0	0	0	0	0	0	0	0	0.00
SDWNW-21-01	83333	0	0	0	0	0	0	0	0	0	0	0	0	0.00
SDWNW-21-02	83333	0	0	0	0	0	0	2	0	0	0	0	0	0.01
SDWNW-21-03	83333	0	0	0	0	0	0	1	3	2	2	2	2	0.01
SDWNW-21-04	83333	0	0	0	0	0	0	0	1	1	1	1	0	0.00
SDWNW-21-05	83333	0	0	0	0	0	0	0	0	0	0	0	0	0.00
SDWNW-21-06	83333	0	0	0	0	0	0	0	0	0	0	0	0	0.00
SDWNW-21-07	83333	0	0	0	0	0	0	0	0	0	0	0	0	0.00
North Wall Sump (5525)	83333	0	0	0	0	0	0	0	0	0	0	0	0	0.00
North Wall Sump (5790)	83333	0	3	0	2	2	2	0	0	0	0	0	0	0.01
Monthly Alluvial Rates =		7022	6961	7121	7120	7080	7218	6912	7062	7153	6768	7208	7033	

Table 5 (continued) – 2021 Round Mountain Dewatering Pumping Rates

Source Name	Base Permit Number	2021 Round Mountain Monthly Pumping Rates (gpm)												Max. Div. Rate (cfs)
		IN-PIT WELL FIELD												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
In-Pit Well Field (gpm)														
DW-34	44297	16	8	20	17	15	11	17	15	22	16	10	0	0.05
DW-36R	12442	54	47	48	48	48	47	40	39	46	46	47	47	0.12
DW-49R	53365	0	0	0	0	0	0	0	0	0	0	0	0	0.00
DW-55R	55503	88	88	88	87	86	63	79	75	89	83	84	83	0.20
DW-57	82950	275	243	234	240	233	225	195	213	257	216	228	220	0.61
DW-62	83333	22	22	25	37	39	48	57	60	88	23	18	16	0.20
DW-65	83333	0	0	0	0	0	0	0	0	0	0	0	0	0.00
DW-68	55501	0	0	0	0	0	0	0	0	0	0	0	0	0.00
DW-71	60875	97	96	82	97	97	96	84	82	97	90	96	95	0.22
DW-75	83333	105	43	102	105	97	91	0	44	116	99	85	0	0.26
DW-76	83333	0	0	0	0	1	1	1	0	0	0	0	0	0.00
DW-79	83333	28	27	28	28	28	27	26	26	29	27	31	28	0.07
DW-80	83333	67	68	65	68	25	43	58	58	70	60	64	70	0.16
DW-81	83333	0	0	0	0	4	4	3	3	3	4	4	4	0.01
DW-84	83333	0	0	0	0	0	0	0	0	0	0	0	0	0.00
DW-85	83333	82	53	72	80	79	66	41	64	70	65	58	57	0.18
DW-90	83333	31	34	30	33	34	33	23	27	32	30	33	32	0.08
DW-91	83333	0	0	0	0	0	0	0	0	0	0	0	0	0.00
DW-92	83333	62	43	0	53	50	55	50	50	59	52	53	51	0.14
DW-93	83333	51	53	46	29	46	48	26	44	52	49	51	51	0.12
DW-94	83333	3	1	2	0	8	6	6	7	9	9	11	9	0.02
DW-94a	83333	21	25	25	27	28	28	19	23	28	28	26	27	0.06
DW-95	83333	0	0	0	0	0	0	0	0	0	0	0	0	0.00
DW-96	83333	0	0	0	0	0	0	0	0	0	0	0	0	0.00
DW-97	83333	0	34	12	10	10	10	10	11	11	15	16	10	0.07
FV-DW-3	55502	0	0	0	0	0	0	0	0	0	0	0	0	0.00
DD-1	83333	0	0	0	0	0	0	0	0	0	0	0	0	0.00
DD-2	83333	0	0	0	0	0	0	0	0	0	0	0	0	0.00

Source Name	Base Permit Number	2021 Round Mountain Monthly Pumping Rates (gpm) IN-PIT WELL FIELD												Max. Div. Rate (cfs)
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
In-Pit Well Field (gpm)														
4995 Phase F Sump to Booster	83333	0	0	0	0	0	0	0	14	5	9	30	8	0.07
5170 Phase F Sump to Booster	83333	25	27	9	20	28	47	22	45	29	7	5	0	0.10
4747 Phase G Sump	83333	42	17	53	24	49	4	0	15	29	18	20	63	0.14
Monthly In-Pit Rates =		1070	929	942	1002	1007	952	757	918	1141	945	970	871	
Total Monthly Dewatering Rate =		8092	7889	8063	8123	8086	8170	7670	7980	8294	7713	8177	7903	

Table 6 – 2021 Gold Hill Dewatering Pumping Rates

Source Name	Base Permit Number	2021 Gold Hill Monthly Pumping Rates (gpm)												Max. Div. Rate (cfs)
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
GHB-11-1	70170	177.6	171.7	179.1	301.3	211.6	337.6	209.5	266.7	397.6	225.8	204.0	153.2	0.89
	70169													
GHDW-3	83333	0.0	0.0	0.0	0.0	8.2	0.0	68.2	47.5	27.2	42.9	38.7	18.1	0.15
GHDW-4	83333	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.6	0.0	0.0	0.03
Monthly Pumping Rates =		177.6	171.7	179.1	301.3	219.7	337.6	277.7	314.2	424.9	283.3	242.7	171.2	0.95

Table 7 – 2021 Ancillary Pumping Rates

Source Name	Base Permit Nos.	2021 Ancillary Monthly Pumping Rates (gpm)												Max. Div. Rate (cfs)
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
East Well 1	14119, 26652, 60875	17.8	22.6	21.0	13.5	71.4	13.0	30.4	21.3	25.1	35.0	43.8	39.8	0.16
East Well 2	51577, 51578, 60876	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
West Well	12445, 12768, 26650, 60874	0.0	0.0	5.6	15.7	18.1	9.3	2.6	5.3	1.0	10.9	2.8	9.0	0.04
ICT Ranch Well	54911, 54912, 64181	49.5	87.5	172.4	338.3	482.9	523.8	495.5	474.7	435.8	246.0	88.0	50.3	1.17

Table 8 – 2021 Average Round Mountain & Gold Hill Combined Pumping Rates

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	<u>Avg. Rate</u>
Total (RM & GH) Dewatering Pumping (gpm)	8,269	8,061	8,242	8,424	8,306	8,507	7,947	8,294	8,719	7,997	8,420	8,075	8,272
Total Site-Wide (RM & GH) M&M Pumping* (gpm)	8,287	8,084	8,268	8,453	8,396	8,530	7,980	8,321	8,745	8,042	8,467	8,124	<u>8,308</u>

*Note: Site-Wide pumping includes all dewatering (Round Mountain and Gold Hill) and ancillary pumping, but does not include ICT Ranch Well pumping for the golf course

3.3 2021 Drilling Program and Waiver Status

During 2021 RMGC added 11 new dewatering wells all at Round Mountain. The drilling program also included horizontal drains, instrumentation boreholes and pilot hole completions accounting for approximately 33,424 feet of drilling for the year. It should be noted that all pilot holes were either left open and mined through, abandoned in place or converted to instrumentation boreholes in accordance with Nevada Administrative Code (NAC) 534. Table 9 includes a more detailed summary of the completed 2021 drilling program. At Round Mountain 1 alluvial, 2 in-pit horizontal drain (sets), and 1 sump were abandoned in 2021. All wells and drains were abandoned in accordance with NAC 534 or mined out. Appendix B includes a current list of active, new and abandoned points of diversion for 2021 along with a location map (Drawings B-1 and B-2).

Table 9 – 2021 Drilling Program Summary

Drilling / Completion Type	Completion ID	Permit / Waivers	General Location(s)*	Number of Completions	Total Footage
Dewatering Wells	DW(NW)-21-01; DWC(B)-01, 02; DWW-22,23,24; SDW(NW)-21-01,02,03,04,05	83333	In-Pit Alluvial, RM	11	5,292
Instrumentation Boreholes	MO(G)-21-01; MO(NW)-21-BR4; MOH(G)-21-01,02	N/A	In-Pit Alluvium / Bedrock, RM	4	2,498
Instrumentation Boreholes	FV-21-1	N/A	Ex-Pit Alluvium / Bedrock, RM	1	560
Inclinometer	INC-21-01,02,03	M/O 2351	In-Pit Alluvial, RM	3	740
Angled / Horizontal Drains	DA(NW)-21-15,16,18,19; DV(NS)-21-01,02; DV(NW)-01,02,03,04,05,06,07,08,09,10,11,12,13,14,17; HD-21-01; HD-21-02a,02b; HD-21-03a,03b,03c; HD-21-04a,04b,04c	DR-0001; DR-0003; DR-0004	In-Pit Bedrock, RM	30	15,472
Pilot Hole	PH(G)-21-05,06; PH(NW)-21-02,03,BR3,BR41; PH(WA)-21-01,02,03,04	N/A	In-Pit Alluvium / Bedrock, RM	10	8,862
*Note: RM = Round Mountain; GH = Gold Hill			Total Drilled Footage =	33,424 ft	

For several years, RMGC has been maintaining an accounting of drains, certain types of boreholes, and monitoring wells in coordination with the Drilling Regulations Section of the Nevada Division of Water Resources (NDWR). Starting in 2020, as part of this annual report, RMGC began including a detailed status summary of all drains and monitoring wells associated with the dewatering and related hydrologic monitoring programs at the Round Mountain and Gold Hill mines. This information is intended to be provided in accordance with NAC 534 in support of the required annual extensions of time for each type of waiver with completions that are needed to remain active for longer than 1 year. These details are included in Appendix C by location and type based on the following definitions:

1. Monitoring & Observation (MO) Waivers: Includes wells and certain instrumentation and/or geotechnical boreholes equipped with vibrating wire piezometers that were completed

under a MO Waivers. Appendix C only includes MO Waivers associated with dewatering and hydrologic monitoring programs.

2. Drain (DR) Waivers – Type 1: Includes drains that are completed in areas that require temporary short term groundwater depressurization in advance of mining where the groundwater captured by the drains cannot be directly accounted for within the dewatering system. A common example of this type of drain at Round Mountain is a vertical drain that is used to gravity drain groundwater to another hydrogeologic unit that is already depressurized by existing dewatering components such that the drained groundwater is assumed to be accounted for passively and elsewhere in the system.
3. Drain (DR) Waivers – Type 2: Includes drains that are completed in areas that require temporary groundwater depressurization over longer periods of time. A common example of this type of drain at Round Mountain is a horizontal drain used to gravity drain groundwater in areas where the captured water can be or must be conveyed directly to an actively operated dewatering well or sump where the diversion of groundwater is directly accounted for within existing infrastructure.

It should be noted that the MO waivers included in this report (Appendix C) do not include monitoring wells completed for environmental compliance purposes and regulated through the Nevada Division of Environmental Protection, even though the wells were all completed under NDWR waivers.

4.0 2021 Site Water Balance Summary

At the Round Mountain mine, water produced by the dewatering system is managed in a series of storage ponds known as the ‘Upper’ and ‘Lower’ Fire and Process Ponds, respectively. Process demands are met from these ponds with any excess water from the dewatering system (not used for dust control and process) being conveyed to Rapid Infiltration Basins (RIBs). As shown in Drawing A-1 and Plates 2 and 3, the Valley RIB consists of two cells, or basins, and is located approximately 2.5 miles downstream of the Lower Fire Pond. Excess water not used on site is conveyed down a natural channel to the Valley RIBs. The Valley RIBs began operation in the early 1990s with the North Cell. The South cell of the Valley RIBs began operation in January 2011. Both (Valley RIB) cells operated continuously until December 2012, when most excess water was diverted to the South RIB Complex shown in Drawing B-1 and Plate 2. Beginning in late 2012 RMGC began using the South RIB Complex as the primary source for recharge of excess water at the Round Mountain operation as it is a more effective means of infiltrating unused groundwater back into the alluvial aquifer system in the Big Smoky Valley. The Valley RIBs, which are less effective due to lower infiltration rates, are only used intermittently as a secondary facility during South RIB Complex maintenance, pumping station or site power failures and for dust control (at the Valley RIBs).

The site-wide water balance for RMGC is based on a number of direct measurements and a series of internal calculations within a numerical water balance model. RMGC constantly monitors and reviews the site water balance as part of a comprehensive plan designed to allow the mine to operate without

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significant risk of harmful or illegal discharges, with optimum fresh water consumption and in a manner that will position the operation for efficient closure or expansion in the future.

For purposes of this monitoring report, the calibrated water balance model provides a means to use direct measurements of specific water inputs and outputs to quantify changes in storage and related parameters that affect the overall beneficial and consumptive uses of water at the Round Mountain and Gold Hill sites. It should be noted that the model includes more detailed simulations within specific process components, such as the heap leach (pads), tailings storage facility (Round Mountain only) and process ponds. These processes are not discussed in detail as the focus of this report is to describe overall consumptive use values from these facilities in the context of the site-wide water balance.

Water balance inputs include groundwater pumping (dewatering and valley production wells) and precipitation. Outputs include on-site dust suppression, ore processing (evaporation from ponds and heap leach pads), infiltration (RIBs) and potable water consumption. The following sections provide a high level overview of the major processes within the water balance model. Figure 2 includes a graphical presentation of these same processes.

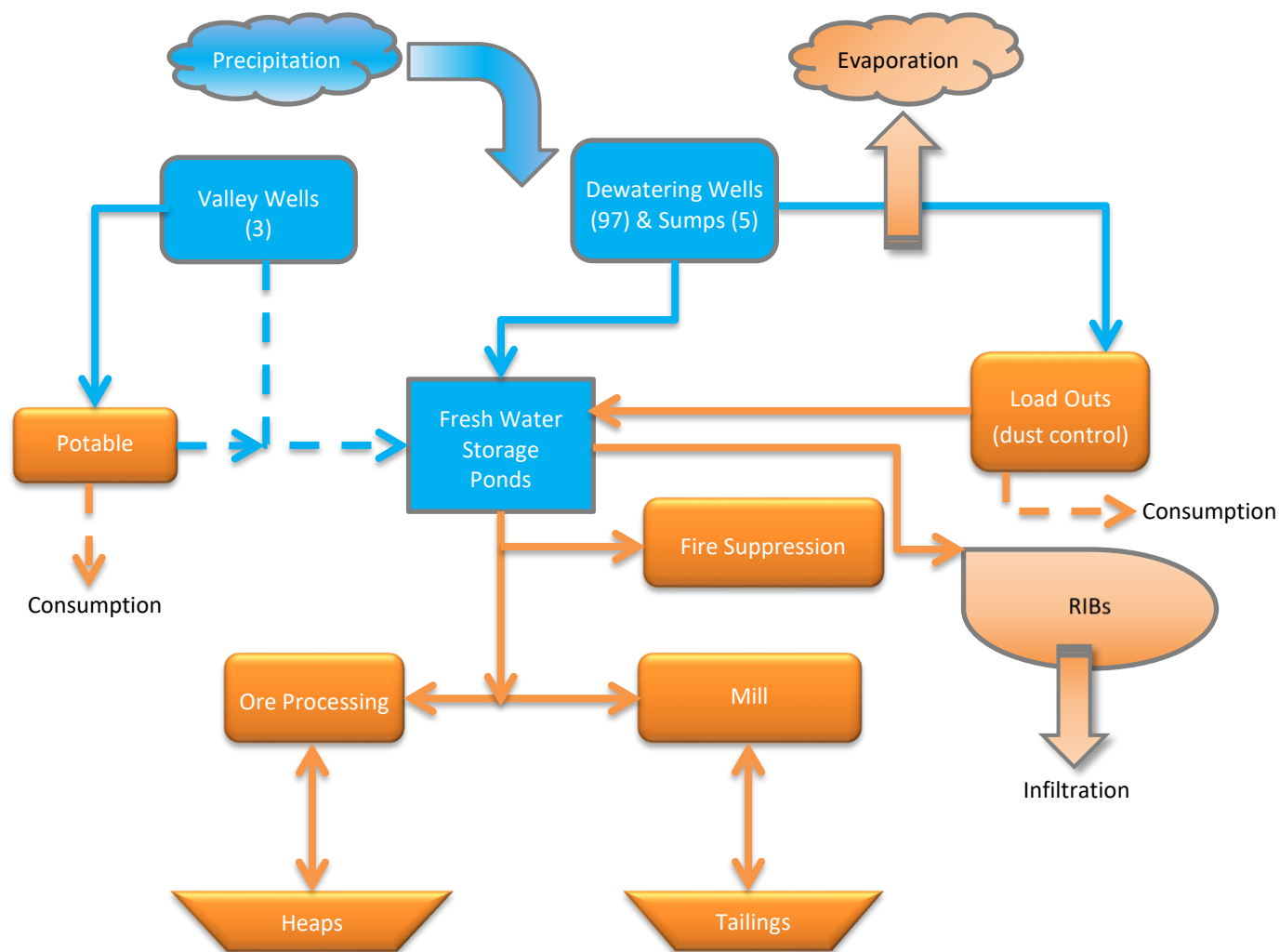


Figure 2. Flow diagram depicting major processes within the site-wide Round Mountain water balance model.

4.1 Groundwater Pumping

Groundwater pumping is the most significant input to the water balance model and is dominated by the dewatering system within the active mining areas of the Round Mountain and Gold Hill pits. A small amount of additional groundwater is pumped from the valley alluvial wells located west of the Round Mountain mine. Nearly all of the water used in the various mining processes is derived from the dewatering system. Over the last several years the primary purpose of the ‘Valley Wells’ has shifted from makeup to potable supply for the mine.

As of 2021, the Round Mountain in-pit dewatering system consisted of 102 points of diversion, which includes 28 wells and 3 active sumps yielding water from within volcanic, granite and metasedimentary rock hydrogeologic compartments within the main pit. The alluvial well field is generally west of the main pit and consists of 69 wells and 2 sumps producing groundwater from unconsolidated granite and placer-derived alluvial sediments above the Stebbins Hill formation. These wells and sumps report to the Lower Fire (Process) Ponds (two ponds in series). The process ponds described in this section are large (lined)

storage reservoirs that play significant roles in RMGC's ability to effectively manage dewatering and process water on site.

4.2 Surface Water Flows

At the Round Mountain Mine, surface water flow from upslope drainage areas is diverted away from the ponds and pads by engineered structures. Therefore, surface water inflow other than direct facility precipitation is not a component of the model.

4.3 Precipitation

Direct precipitation falls onto the heap leach pads, ponds and Tails Storage Facility (TSF). The water balance model incorporates this process explicitly for each facility based on the current facility layouts.

The water balance model includes site specific precipitation data from the Met 1 station near the administrative building. The data provide a nearly continuous record of precipitation from December 1, 1993 to present. The average annual precipitation at the site has varied between 3 and 8 inches per year but generally averages 5 to 6 inches.

4.4 Evaporation

Evaporation from ponds, pads and the TSF is a part of the overall mine water consumption. Monthly evaporation data were obtained from the NCDC Historical Listing for the "Central Nevada Field" meteorological station, located 52 miles north-northwest of the mine, on the east flank of the Toiyabe Range. The total average annual pan evaporation is approximately 66.7 inches, with average monthly values ranging from 0 inches (December) to 10.7 inches (July). These data are used for evaporation calculations prior to May 2008, and for synthetic evaporation values supporting predictive simulations. Site-specific evaporation data are available from May 2008 onward, and these data are used in the model from that time through the date of the most recent available data.

Open ponds (mill and fresh water fire/process) generally lose water to evaporation at approximately 70% of the pan evaporation rates. Ponds in the Ore Processing circuit contain protective measures (netting and bird balls) to keep wildlife away from solution, which also minimizes evaporative losses. Therefore, a coefficient of 15% of the pan evaporation rates is used for process ponds.

Leach pad evaporation rates have varied over the life of the leach pads as operation methods have changed. Evaporative losses from the leach pads decreased starting in 2006 as the mine implemented a program to bury the emitters placed on the tops of the pads to reduce cyanide volatilization. Estimating an evaporation coefficient from leach pads and TSF is variable and complex based on moisture retention, drainage and loading parameters. Therefore, this parameter is estimated within the water balance model as part of the calibration process. Calibration is achieved through dynamic simulation of combined pond levels to within 15% of actual measurements.

4.5 Dust Suppression

Water from the dewatering system is used to control dust throughout the site. The mine relies on dedicated water trucks that are loaded from water loadouts. The Round Mountain mine has two main dedicated loadouts at the top of the pit and loadouts that are used occasionally within the pit, as needed. All loadouts are equipped with flow meters and it is assumed that 100% of water sent to these loadouts is lost to evaporation. The South Loadout (dedicated) is fed directly from the Upper Fire Pond, which receives water from the in-pit dewatering system. Select alluvial wells with elevated arsenic and fluoride concentrations are piped directly into the North Loadout to maximize the consumption of this water and to help minimize the arsenic and fluoride concentrations in the Lower Fire/Process Pond where it is blended with water containing lower levels of arsenic and fluoride. All excess water not used in process is pumped directly to the South RIB facility (primary) or conveyed by gravity to the Valley RIB facility (secondary).

4.6 Groundwater Discharge

As previously described, excess water not pumped out of the Lower Fire/Process Ponds for process is pumped approximately 4 miles via pipeline to the South RIB facility at the south end of the property where water is infiltrated back into the groundwater system. When the South RIBs are not in service, water is conveyed through a natural channel to the Valley RIB facility, where approximately 50% of all discharged water is infiltrated back to the aquifer as open channel transmission losses from the site to the RIBs. The South RIBs cells are constructed in highly permeable alluvial sediments within an approximately 400 ft thick vadose zone and have proven to be very efficient in maximizing the amount of artificial recharge (from excess dewatering groundwater) going back to the aquifer. Evaporation is considered to be an insignificant component in the water balance model from the South RIB facility. However, evaporation was a more significant consideration in the Valley RIBs (when used), as the Valley RIB infiltration rates are significantly lower than the South RIB infiltration rates with more than 50% of the total infiltration occurring as transmission losses in the unlined natural channel between the mine and the Valley RIBs, some of which is captured (recycled) within the dewatering system.

4.7 Potable Water Consumption

Consumption of groundwater for domestic purposes at the mine sites is a minor component in the overall water balance, but is directly measured from each potable water tank and is therefore included in the model. At Round Mountain, potable water is consumed from groundwater conveyed to the site from the Valley Wells.

4.8 Round Mountain Water Balance Model Output

A monthly summary of the 2021 water balance for the Round Mountain Mine is included in Table 10 and the annual water distribution is shown in Figure 3. Not reflected in the water balance information below, but worth noting, is the fact that RMGC recirculated 71,332 ac-feet of water in (heap leach and mill/tailings) processing at Round Mountain for 2021.

Table 10 – 2021 Round Mountain Monthly Water Balance Summary

	Precipitation Captured Onsite	Groundwater Pumpage	Discharge To Groundwater (RIBS)	All Evaporation Losses (ponds and pads)	All Loadouts for Dust Control	Valley Wells Pumping for Potable	Change In Storage
	Input (ac-ft)		Output (ac-ft)				Δ Storage (ac-ft)
2021 Jan	6.9	1010	787	60	25	2.9	136
2021 Feb	74.3	1016	716	45	28	2.2	295
2021 Mar	26.4	1225	1119	57	29	1.2	297
2021 Apr	8.2	995	681	95	36	1.2	184
2021 May	36.1	1010	654	124	46	2.9	212
2021 Jun	48.8	1225	654	121	83	3.9	449
2021 Jul	132.4	984	596	117	49	1.9	349
2021 Aug	109.9	1216	687	130	71	2.5	427
2021 Sep	0.3	1022	602	131	58	1.4	223
2021 Oct	12.5	1000	514	85	62	1.9	344
2021 Nov	57.7	1236	839	65	29	2.6	349
2021 Dec	0.0	1034	685	61	8	1.7	269
Totals =	514	12,972	8,235	1,092	525	26	3,533

2021 Distribution of Water - Round Mountain Mine

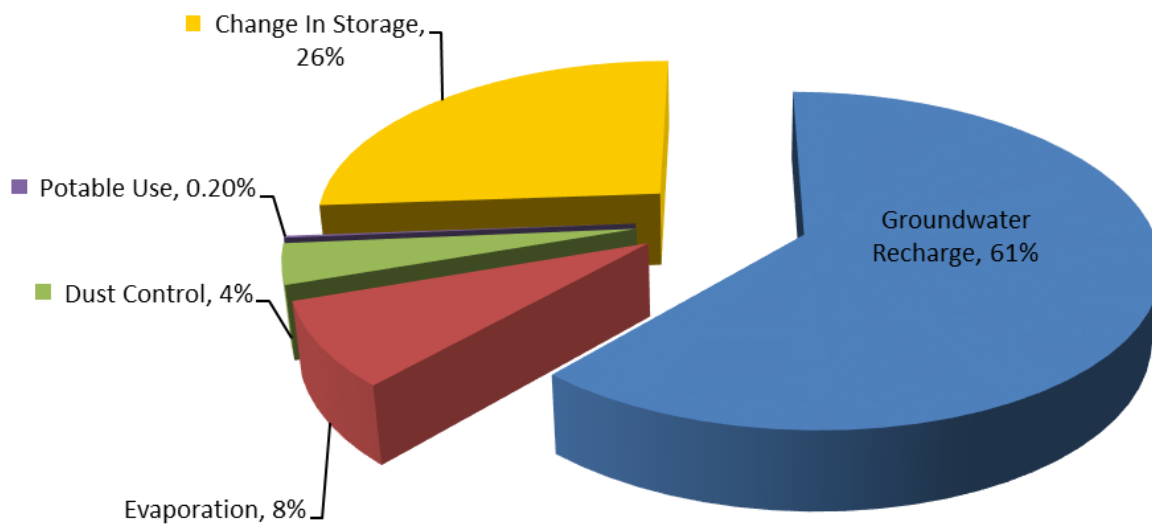


Figure 3. 2021 distribution of water at the Round Mountain site.

4.9 Gold Hill Water Balance Model Output

All groundwater pumped at Gold Hill is derived from wells GHB-BPW and GHB-11-1 completed in the 'sinter' geologic unit and GHDW-3, GHDW-4, which were constructed in 2015 in the Jefferson Canyon Tuff geologic unit. As of 2021, 100% of the water pumped at Gold Hill is used consumptively for mining and processing, dust control and potable use. There are currently no plans to construct RIBs at Gold Hill. A monthly summary of the 2021 water balance for the Gold Hill Mine is included in Table 11 and the annual water distribution is shown in Figure 4. Not reflected in the water balance information below, but worth noting, is the fact that RMGC recirculated 4,871 ac-feet of water in processing at Gold Hill for 2021.

Table 11 – 2021 Gold Hill Monthly Water Balance Summary

	Precipitation Captured Onsite	Groundwater Pumpage	Ground-water Discharged	All Evaporation Losses (ponds and pads)	All Loadouts for Dust Control	Sinter Wells to Potable	Change In Storage
	Input (ac-ft)		Output (ac-ft)				Δ Storage (ac-ft)
2021 Jan	0.9	22	0	0.00	5.0	0.067	18
2021 Feb	2.0	23	0	0.00	3.8	0.044	21
2021 Mar	1.7	15	0	0.38	2.7	0.055	13
2021 Apr	2.2	37	0	0.77	3.7	0.070	35
2021 May	3.7	26	0	1.19	8.7	0.134	20
2021 Jun	2.6	52	0	1.33	4.6	0.122	48
2021 Jul	2.1	26	0	1.54	22.1	0.069	4
2021 Aug	2.6	50	0	1.59	16.6	0.059	35
2021 Sep	0.8	56	0	1.45	18.4	0.047	37
2021 Oct	1.2	32	0	0.57	14.8	0.050	18
2021 Nov	3.2	38	0	0.22	12.6	0.037	28
2021 Dec	2.6	29	0	0.01	25.3	0.015	6
Totals =	26	406	0	9.03	138.3	0.768	283

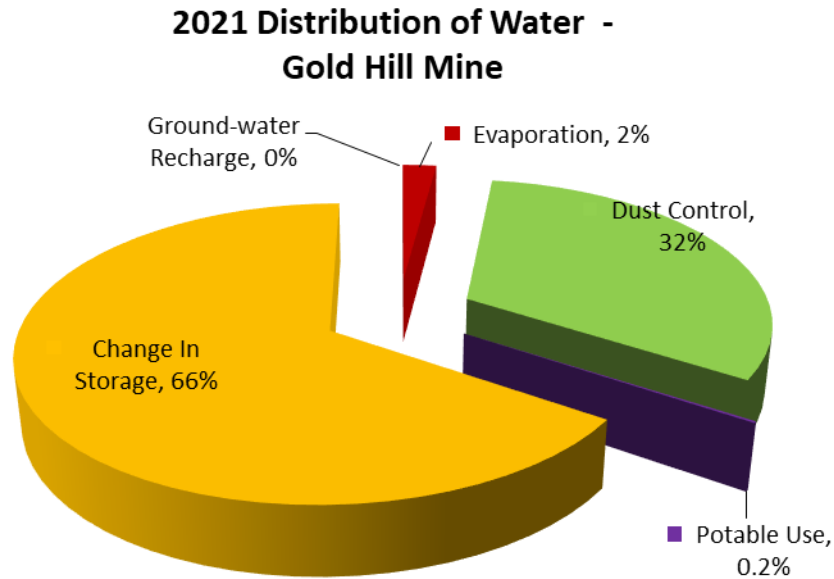


Figure 4. 2021 distribution of water at the Gold Hill site.

4.10 Overall Water Rights Permit – Water Distribution

As required in the terms of RMGC’s current water rights permits the overall distribution of groundwater diverted for mining, milling and domestic purposes is summarized in Table 12 below. Based on 13,389 acre-feet of diverted groundwater for 2021, approximately 36% was used consumptively, which is accounted for by total estimated evaporative losses, dust control, processing, potable uses and changes in storage. Approximately 64% of the pumped groundwater was discharged to permitted RIBs and returned to the Big Smoky Valley (Basin 137b) groundwater source as recharge.

Table 12 – 2021 Round Mountain & Gold Hill Diverted Groundwater Distribution

	Acre-ft	%
Total Combined Pumping (MM&D):	13,389	-
Total Consumptive Use:	5,153	38%
Total Discharged Infiltration:	8,235	62%

With the start of the Phase W expansion in 2018 at Round Mountain, pumping associated with dewatering in 2021 increased by 70% over the 2013-2017 average rate prior to the Phase W expansion. As shown in Figure 5, the increased pumping resulted in a corresponding increase in amount and percentage of groundwater that was recharged back into the basin from infiltration at the Round Mountain RIBs. It is expected that dewatering will remain steady or slightly increase over the next 1 to 2 years as the Round Mountain pit continues to expand as part of the Phase W mine plan. As dewatering increases, recharge by infiltration as a percentage of groundwater pumped will continue to increase due to fact that consumptive uses will remain relatively constant.

RMGC Pumped Water Balance [Acre-ft, MM&D]

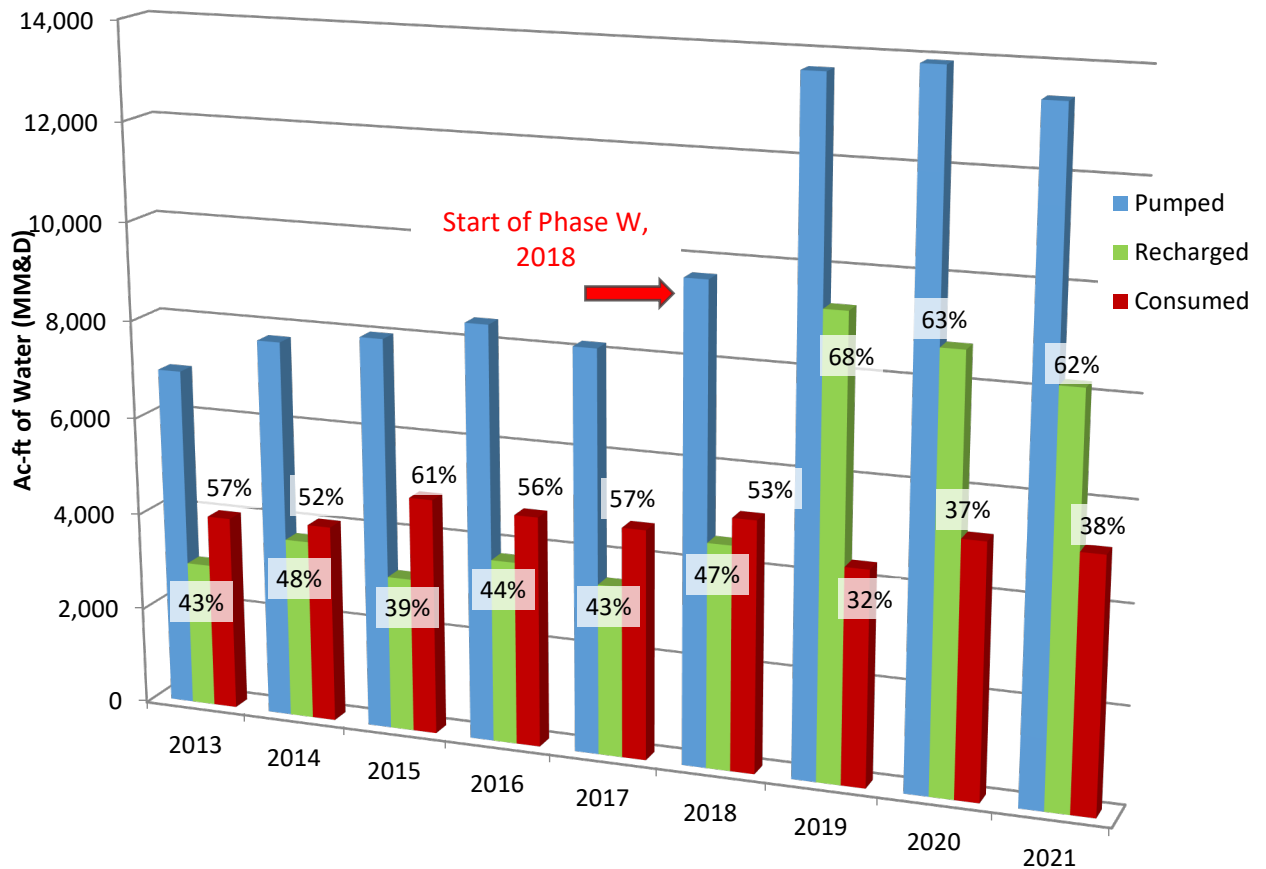


Figure 5. Pumped groundwater distribution (Round Mountain and Gold Hill)

5.0 Review of Groundwater Conditions

Dewatering at the Round Mountain and Gold Hill pits began in 1990 and (late) 2011, respectively. With the approval of the Phase W expansion in late 2017, the authorized pit bottom elevation at Round Mountain is approximately 4,120 ft-above mean seal level (amsl), which is approximately 1,500 to 1,600 feet below the pre-mining groundwater table at approximately 5,700 ft-amsl. Figure 6 includes a plot showing the pit bottom elevation over time versus observed composite groundwater elevations in the alluvial aquifer (outside of the pit) and pit bedrock compartments (inside the pit).

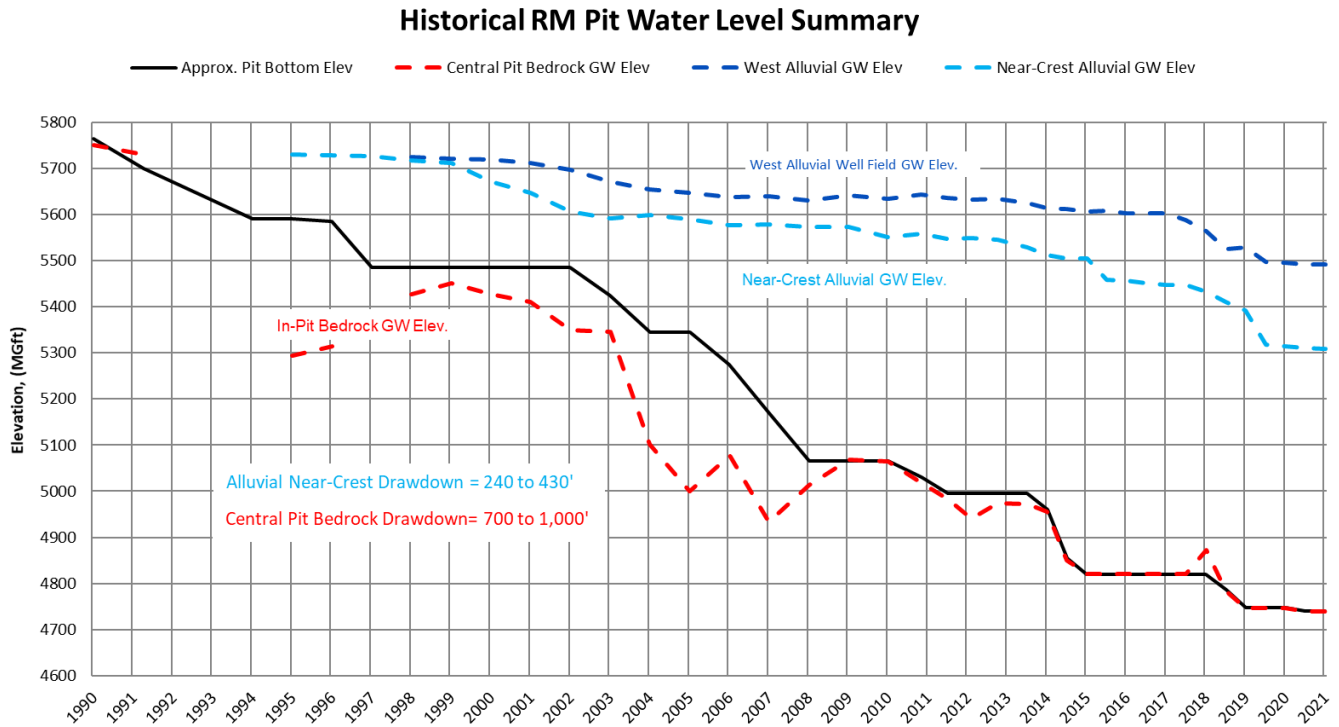


Figure 6. Historical changes in water levels in relation to the deepest pit elevation over time.

5.1 Summary of Regional Groundwater Levels

As shown in Plates 3 and 4, RMGC’s groundwater monitoring network spans a substantial area at the southern end of Big Smoky Valley–North (Basin 137b) and the northern end of Big Smoky Valley-South (Basin 137a). The RMGC Hydrology and Environmental Departments regularly monitor groundwater levels within the pits and regionally (outside of the pits). These data are submitted to NDWR on a quarterly basis throughout the year. Select hydrographs, representing overall groundwater response from pit dewatering and regional (non-mining) background influences, are included in Appendix A. The hydrographs are arranged from north to south and represent the period of record at each site. Monitoring locations are shown in Appendix A (Drawing A-1) and Plate 3.

5.1.1 Groundwater Elevation Contours

Groundwater elevation contours for Big Smoky Valley-Northern Part (Basin 137B) and the northern portion of Basin 137A (Big Smoky Valley- Tonopah Flat) are shown on Plate 4. These groundwater contours reflect current water levels in ft-AMSL within the basin-fill groundwater system with 20 foot contour intervals. General observations from overall groundwater level monitoring was interpreted from hydrographs and Plate 4 are summarized as follows:

- The basin scale groundwater levels for end of year 2021 reflect little overall change since 2013 (the start of the annual reporting) at distances beyond 2.5 miles from the center of the dewatering well fields at both Round Mountain and Gold Hill open pits.

- The basin-fill groundwater system contours are typical of the basin and range setting, with the lowest levels in the center of the valley, and highest levels on the valley margins.
- A saddle point exists at the basin divide between Basins 137a and 137b. Groundwater north of the divide flows to the north towards a playa, while water to the south of the divide flows to the south towards Tonopah Flat.
- The extended area of similar groundwater elevations ranging between 5,630 and 5,650 ft AMSL in the central part of the valley from south of the basin divide north to Carvers is attributed to the high transmissivity of the valley fill alluvial groundwater system in this area.
- The cone of depression to the west of the Round Mountain pit indicates groundwater flow towards the alluvial dewatering system near the west pit wall with the area of the most significant drawdown concentrated near the pit crest.
- The closely spaced contours to the west of the Gold Hill pit are attributed to the very low transmissivity of the basin-fill groundwater system in this area. No dewatering is occurring in alluvium at Gold Hill and water levels in alluvial monitoring points in the west pit wall reflect minor declines in elevation.

5.1.2 Groundwater Hydrographs

Groundwater hydrographs are grouped geographically into three areas:

1. Gold Hill area: Crowell Ranch Well (CRW), Wells GHA-03-6, GHB-03-4, GHB-BPW and GH-RW-1 (Figures A1 through A5)
 2. West and Northwest of the Round Mountain Pit and Near-Pit areas: Wells MW-112, MO 2013-4-450, BMW-3, MW-109R & 110R, 96-1, MO 2013-3-670, MO 2000-3, and MO 2000-9 (Figures A6 through A12)
 3. South of the Round Mountain area: Wells MW-105, MW-106A, MW-113, RMW-2, MW-114, MW-117, and MW-118 (Figures A13 through A19)
- Gold Hill Area:
 - Alluvial wells GHA-03-6 (Figure A2) and GH-RW-1 (Figure A5) have steady water levels through time. This supports the data from baseline characterizations studies prior to 2013 that demonstrate a limited hydraulic connection between the alluvium and the underlying bedrock sinter unit which is being pumped for mine dewatering at Gold Hill.
 - Groundwater levels immediately west of the Gold Hill pit continued to decline in 2021 in response to mine dewatering. The greatest declines have occurred in the area of pumping well GHB-BPW (Figure A4), with a decline of approximately 425 feet (in the Sinter Unit) by the end of 2021 (~389 ft lower than the end of 2018). As noted in Figure A4, the GHB-PBW well was plugged and abandoned in early 2020. As a result, starting in 2020, this hydrograph (Figure A-4) will be a composite with GHB-BPW (historical) and GHB-11-1 (going forward)

- since these wells were screened in the same formation and reflect similar levels. Potentiometric head in the confined Sinter Unit began recovering (see Figure A4) in 2015 in response to pumping from wells GHDW-3 and GHDW-4 that were brought online in 2014, which were completed in the Jefferson Canyon (volcanic) Tuff Unit. These two wells have helped offset production from the Sinter Unit. Water-level declines have been more subdued in the eastern part of the pit. For example, in bedrock well GHB-03-4/4R (Figure A3) water levels have declined approximately 40 feet since 2013 but have been relatively stable over the last three years reflecting a slight increase since 2019.
- Referring to the alluvial groundwater contours depicted in Plate 4, changes in the 5,620 (ft-AMSL) elevation contour are considered an overall indication of the alluvial aquifer response west of and in the vicinity of the Gold Hill pit. The interpreted 5,620-ft contour west of the Gold Pit reflects little change since 2013 with less than 5-ft of observed drawdown in the alluvial aquifer within 1 mile west of the center of the Gold Hill Pit. Specifically, there has been little, if any, additional drawdown since 2018 indicating steady state conditions in the alluvial aquifer near the pit.
 - West and Northwest of the Round Mountain Pit and Near-Pit Areas:
 - Alluvial wells MW-112 (Figure A6), MO 2013-4-450 (Figure A7), 96-1 (Figure A10) and MO 2013-3-670' (Figure A11) reflected continued declines in water levels in response to the increased focus on alluvial dewatering, as required for the authorized Phase W expansion. Well 96-1 (Figure A10) and MO 2013-3-670' (Figure A11) exhibit the greatest response to pumping as they are closest to the dewatering wells west of the pit crest. Note that in 2016, the hydrograph for MO 2013-3-670' replaced MO 2007-1, which experienced an instrumentation failure in 2015. MO 2013-3 is an instrumentation borehole (piezometer) with multiple lithologic-specific transducers; the data reported here is from the transducer set at 670 ft-bgs, which is at the bottom of the alluvial aquifer. Alluvial wells MW-112 (Figure A6) and BMW-3 (Figure A8) and MW-109R / MW-110R (Figure A9) all located toward the center of Big Smoky Valley, reflect varied responses from increased alluvial dewatering, continued regional drought and a sharp reduction in Valley RIB use at the end of 2012. Note that between 2010 and 2012 water levels in MW-112 and BMW-3 were steady due to the expansion and increased use of the Valley RIB system, followed by a declining trend that began in early 2013 in response to a significant decrease in discharge to the Valley RIBs when the primary discharge destination was directed to the South RIB system.
 - Near-pit bedrock well MO 2000-3 (Figure A12) exhibits a response to bedrock dewatering pumping that fluctuates due to dynamic mining and dewatering conditions in the southeastern pit sector. MO 2000-9 (Figure A12), located in the Kelsey Canyon drainage southeast of the pit, indicates that water levels have risen ~135 ft since limited (active) dewatering ceased in that area in 2010.
 - Referring to the alluvial groundwater contours depicted in Plate 4, changes in the 5,620 (ft-AMSL) elevation contour are considered an overall indication of the alluvial aquifer response

west of and in the vicinity of the Round Mountain pit. Since 2016 the 5,620-ft contour is projected to have propagated approximately 4,900 feet to the west (further from the pit) along the drainage / conveyance channel to the Valley RIBs, which indicates approximately 10-ft of drawdown within 1.5 miles west of pit, or halfway between the pit and Valley RIBs. The extent of drawdown west of the Round Mountain pit is consistent with predictions from groundwater modeling that supported the RMX (2010) and Phase W (2017) expansions (WSP-PB, 2017). Also, as noted above, drawdown west of the Round Mountain pit is also variable in response to discharge to the Valley RIBs due to significant transmission losses within the unlined channel and recycling of pumped groundwater that occurs when the Valley RIBs are in use.

- South of the Round Mountain Site:

- Alluvial wells MW-105, MW-106a, MW-113, and MW-114 (Figures A13, A14, A15 and A17, respectively) are located southwest of the Round Mountain pit and west, or downgradient, of the South Rapid Infiltration Basin (RIB) Complex. Water has been infiltrated in the South RIB Complex since December 15, 2012. Prior to Fall 2013, wells MW-106a and MW-113 exhibited a generally declining trend in water levels due to influence from alluvial dewatering. However, since late 2013, water levels in these two wells have rebounded from infiltration into the South RIB Complex. Water levels in well RMW-2 (Figure A16), located closest to and downgradient from the South RIB Complex, exhibited an increase in water level starting in March 2013, which continued into early 2015, followed by a continued increase in 2021 in direct response to increased recharge from a corresponding increase in dewatering. As of the end of 2021 groundwater levels immediately downgradient of the South RIBs reflect with a maximum rise of nearly 44 feet since RIB discharge began in late 2012. These downgradient water level increases were predicted by groundwater modeling in support of the permitting associated with the RIBs. Any further expansion in pit dewatering will result in a corresponding increase in discharge to the South RIBs; thus providing more recharge to the alluvial aquifer south of the mine.
- Alluvial wells MW-114 and MW-117 (Figures A17 and A18), located southwest of the South RIB Complex, exhibit a slight but steady decline in groundwater levels over time as an apparent response to regional drought conditions and influence from nearby irrigation pumping, although slight increases were observed between 2019 and 2020.

6.0 Subsidence Monitoring

The potential for subsidence was evaluated at the screening level for the 2010 Round Mountain Expansion (also known as RMX) Environmental Impact Statement (EIS), which supported a mine expansion authorized in 2010 at Round Mountain (including Gold Hill). This assessment determined that conditions are not favorable for subsidence. Because much of the water is returned to the basin via the RIBs, the observed drawdown is small over the area to the west of the mine. To date, there has been no evidence of dewatering-induced settlement such as tension cracks, fissure gullies, or differential movement of infrastructure in the mine area or elsewhere in the Hydrologic Study Area defined in the 2015 to 2017

updated Baseline Studies in support of the currently authorized 2017 Phase W expansion at Round Mountain (WSP-PB, 2017).

Currently there are two key factors which limit the potential for subsidence from mine dewatering. These include (i) the incompressibility of the groundwater system matrix and (ii) the limited magnitude of projected drawdown based on the following observations:

- The alluvium west of the mine is composed mostly of Type 51 (T51) alluvium. The T51 is characterized as poorly-cemented pediment gravels containing rounded cobble to boulder-sized clasts in a sandy matrix with minor clay horizons. This basin-fill unit is well characterized at Round Mountain, in the several-hundred foot alluvial exposure in the western pit wall, in dewatering and monitoring wells west of the pit, in the seven deep piezometers drilled west of the mine for Phase W (in 2013), and in water-supply and monitoring wells in Big Smoky Valley. These types of materials have limited compressibility. Because there are relatively few fines (less than 1% clay) overall, the matrix of the material is self-supporting and does not rely on pore water pressure to maintain its structure. In addition, since the groundwater system is highly permeable and well connected, the potential for leakage from the minor low-permeability clay interbeds is also low.
- Outside the project area, 10 ft or less of drawdown has occurred since the increase in open-pit dewatering between about January 2000 and January 2004. In the intervening 15 years, the pumping rates at Round Mountain have been relatively stable, with the exception of 2019. A maximum of about 15 ft of additional drawdown is predicted by the time of maximum drawdown extent after the end of the current project mine life. The limit of the 10 ft cumulative drawdown contour is shown in WSP-PB (2017). The maximum cumulative drawdown inside the project area is only about 25 ft. Even if there were to be some small-scale settlement of the upper levels of the alluvium associated with this, the loss of groundwater storage capacity would be no more than 0.004% over the vertical section of alluvium where drawdown is occurring. Basin-wide, the impact to the groundwater storage capacity would be negligible.

It should be noted that most of the incremental increase in pumped water associated with the future dewatering of Phase W will also be returned to the basin via the RIBs. Therefore, the magnitude and distribution of drawdown for Phase W is predicted to be similar to RMX. Consequently, it was also concluded that the conditions are unfavorable for subsidence from continued Phase W dewatering. For this reason, subsidence was not considered a reasonably foreseeable potential impact to the hydrologic system.

However, beginning in late 2017, RMGC proactively implemented a subsidence monitoring program as a means to confirm and demonstrate the lack of subsidence signals over a wide area in the near surface beyond the pit dewatering well fields.

6.1 InSAR Program Summary

In late 2017 RMGC began using a remote sensing technique for monitoring ground and slope displacements over a wide area in the vicinity of the Round Mountain Pit and beyond. This technique is based on radar images of the Earth's surface obtained from Synthetic Aperture Radar (SAR) for analysis of surface deformations. InSAR, as it is commonly known, has been deployed to supplement RMGC's

existing network of ground based survey prisms and state-of-the-art slope stability radar systems. The specific InSAR method deployed at Round Mountain is based on radar satellites that allow for the measurement of ground displacements to millimeter accuracy using a technique that relies on a ‘multi interferogram’ approach. The latest development of this technique is SqueeSAR™, which allows the identification of discrete ground points and their displacement in time (Giannico, et. al., 2012).

6.2 2D SqueeSAR Results

The baseline historical 2D movement decomposition used the temporally overlapping portions (November 15, 2014 to November 23, 2017) of the Line-of-Sight (LOS) results (ascending and descending data archives) to obtain true vertical and east-west horizontal movements with millimeter precision.

The vertical and horizontal deformation rates over the Round Mountain and Gold Hill mines as measured from the Sentinel data in inches per year and millimeters per year are shown in Figures 7 and Figure 8. Average deformation rates are calculated from a linear regression of the ground movement measured over the entire period covered by the satellite images, and relative to a reference point selected based on location and radiometric characteristics. Each measurement point is color-coded according to its annual rate of movement.

Figure 7 shows the horizontal (east-west) deformation rates with negative (brown) values indicating westward movement and positive values (blue) indicating eastward movement. The Round Mountain pit (northeast facing pit wall) contained the highest eastern movement with up to +13.06 in/yr (+331.6 mm/yr), while the Round Mountain old pit (northwest facing pit wall) recorded the highest western movement with up to -6.56 in/yr (-166.5 mm/yr).

Figure 8 shows the vertical component of deformation with negative (red) values indicating downward movement and positive (blue) values indicating uplift. The South Dump had the highest observed vertical (downward) rates with up to -15.67 in/yr (-398.1 mm/yr), while the Round Mountain pit had the highest uplift rates with up to +1.80 in/yr (+45.6 mm/yr), TRE Altamira (2019).

The deformation data as described in the TRE Altamira (2019) Technical Report indicates that no significant ground movement is occurring west of the Round Mountain and Gold Hill pits that would be indicative of subsidence due to groundwater depletion.

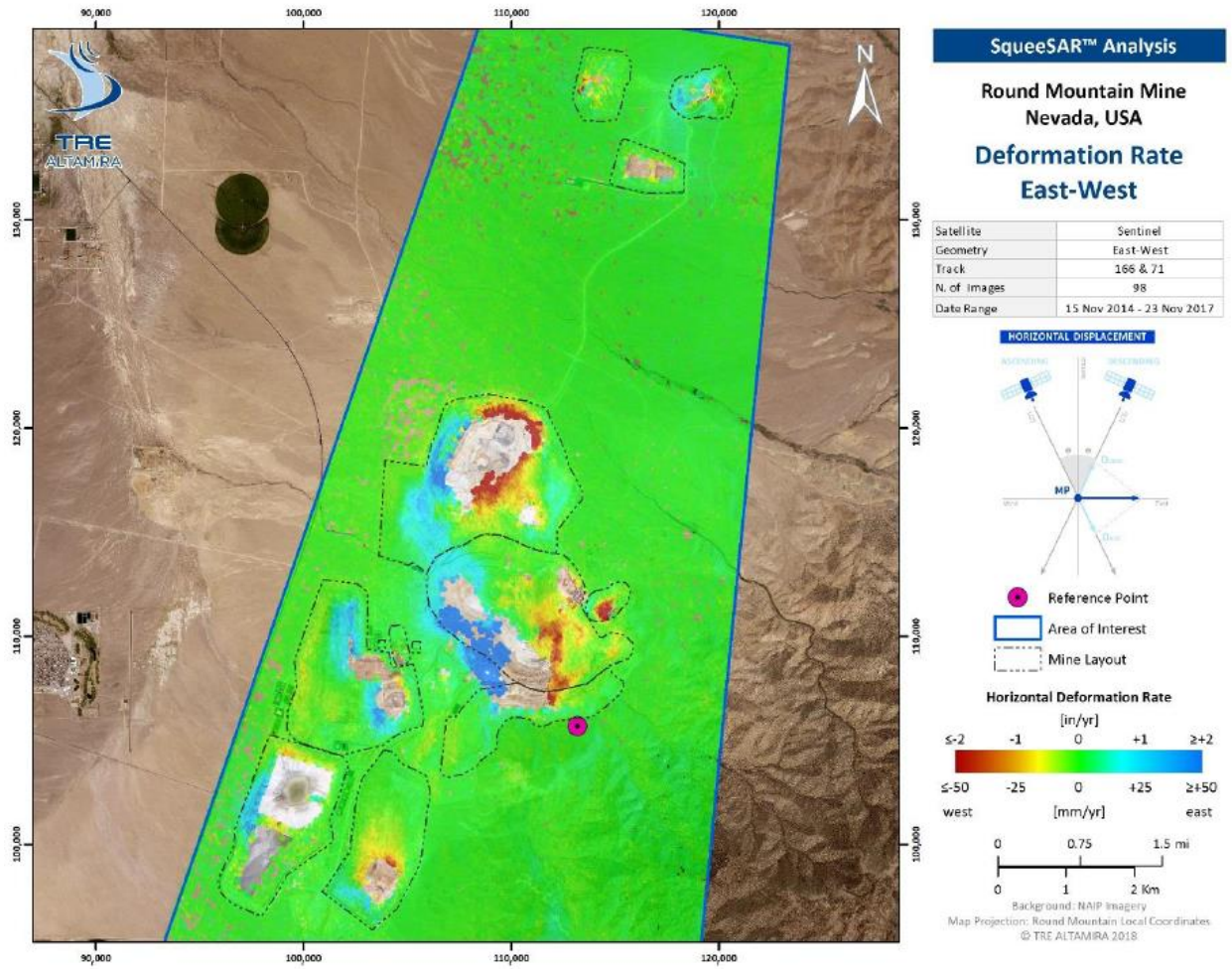


Figure 7. Horizontal deformation rates (2014-2017).

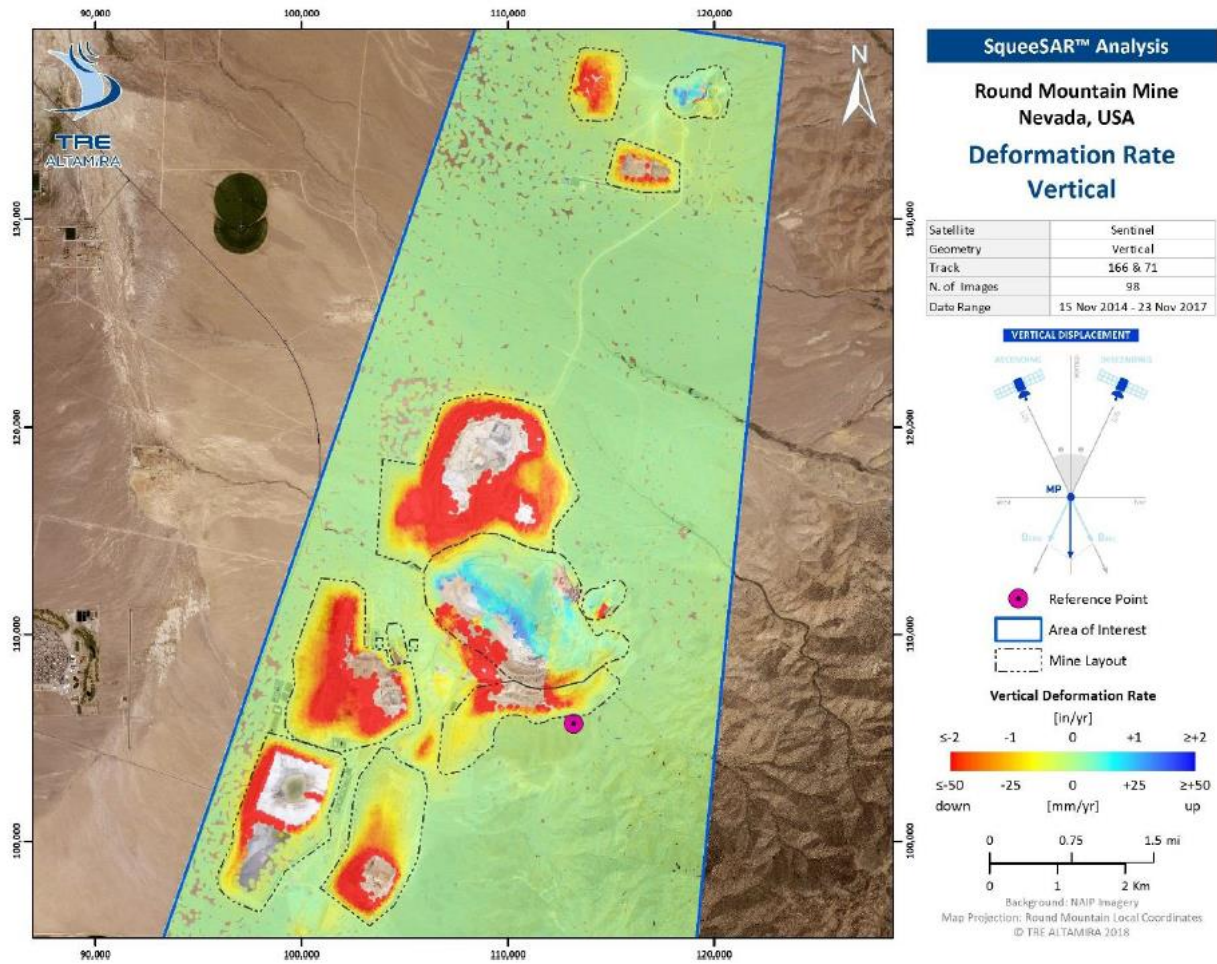


Figure 8. Vertical deformation rates (2014-2017).

Deformation data over the same time period (2014-2017) was analyzed as individual points and throughout a defined area directly west of the Round Mountain where mining-related disturbance did not occur. If subsidence-related movements as result of groundwater depletion were present, this area, as shown in Figure 9, is where surface deformation measurements would be expected to be most prominent. As shown in Figures 10 and 11, individual and average (cumulative) time series displacement data west of the pit indicate no significant surface deformation.

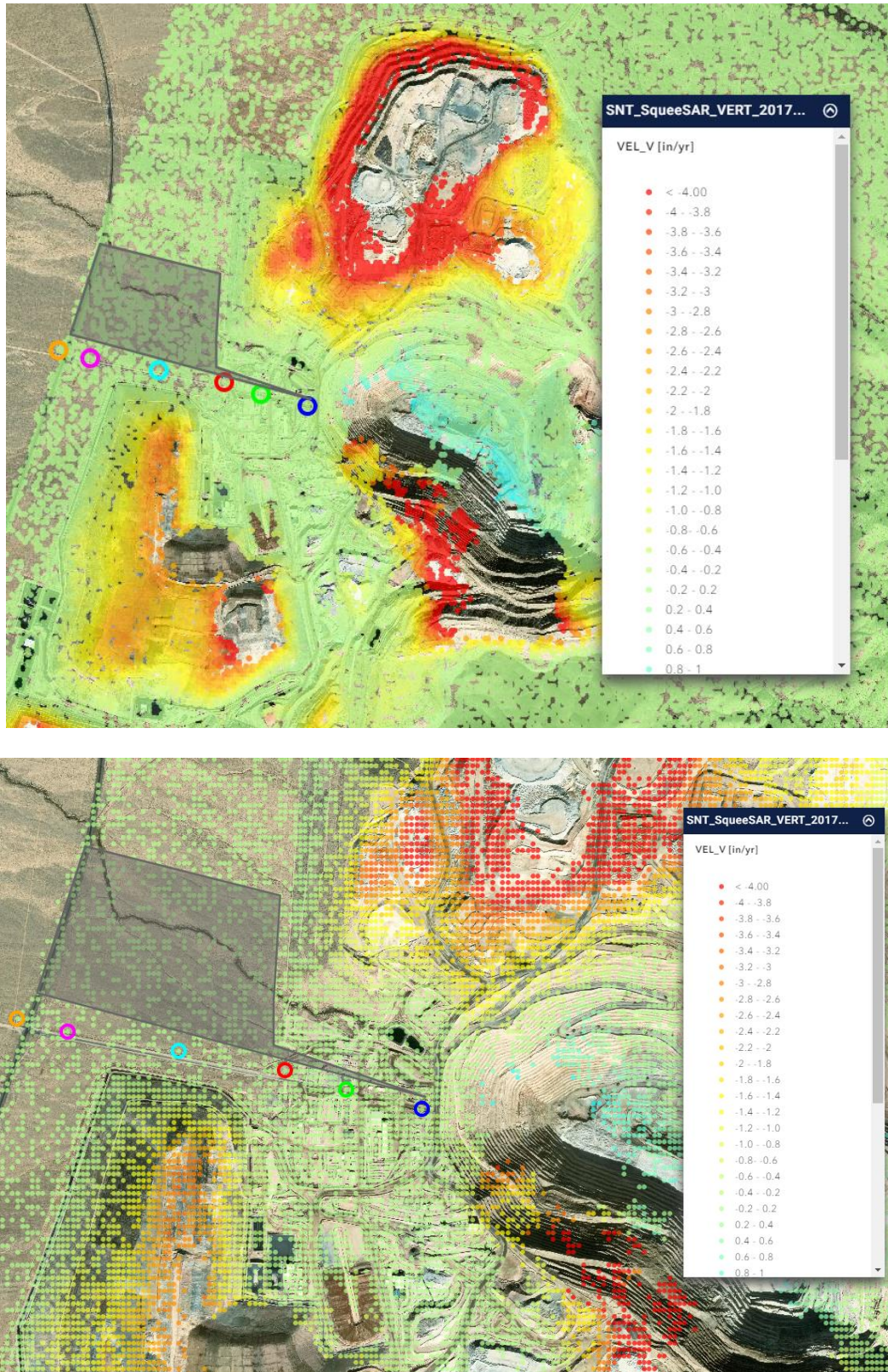


Figure 9. Time series line of points and (polygon) area west of Round Mountain well field; deformation data depicted in the following Figures. Deformation rates (2014-2017).

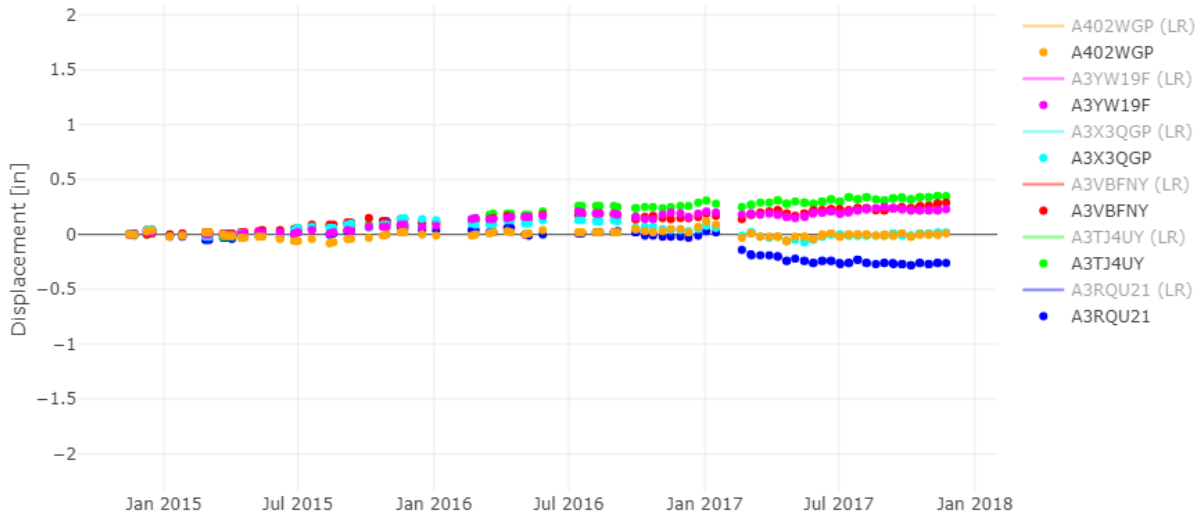


Figure 10. Cumulative displacement time series points west of Round Mountain well field. Deformation rates (2014-2017).

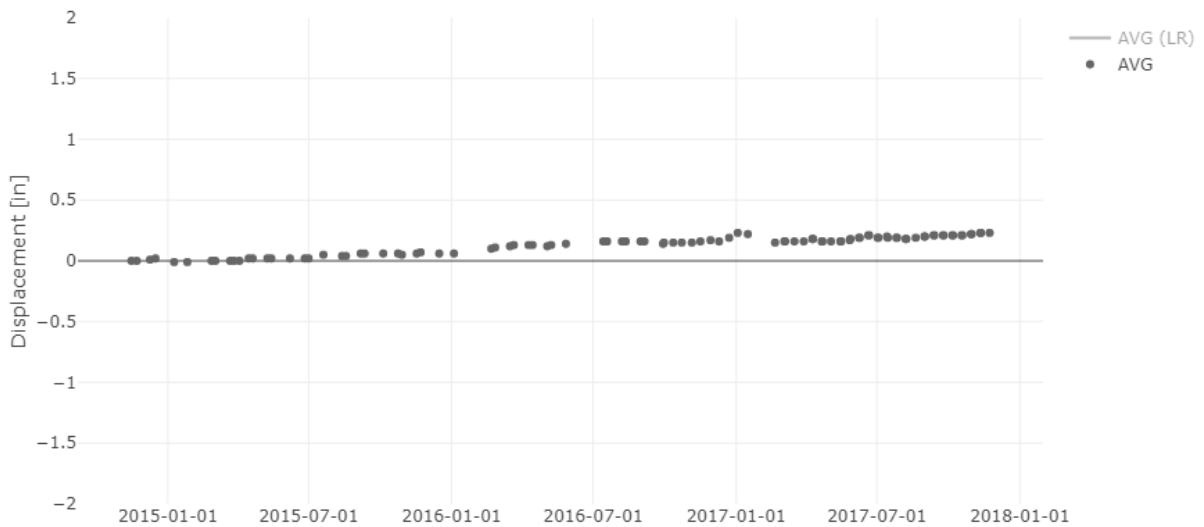


Figure 11. Cumulative displacement time series average over (polygon) area shown in Figure 10; area west of Round Mountain well field. Deformation rates (2014-2017).

6.2.1 SqueeSAR Monitoring Results for 2021

InSAR monitoring continued throughout 2021 with data reporting available through December 2021 as of the date of this report. Deformation data from November 2020 – December 2021 was analyzed spatially as individual (time-series) points defined along a line of points on the main Round Mountain mine entrance road, extending directly west where mining-related disturbance did not occur and continuing

along the Jett Canyon (County) Road toward the center of the Big Smoky Valley basin. If subsidence-related movements as result of groundwater depletion were present, this area, as shown in Figure 12, is where surface deformation measurements are expected to be most prominent. As shown in Figures 12 and 13, the (blue) data point closest to the pit shows the greatest vertical deformation with approximately 0.4 inches positive (downward) deformation, while all points further to the west reflect little or negative deformation (upward) with greater distance from the pit. Overall, individual and average (cumulative) time series data west of the pits indicate no significant surface deformation, which is consistent with the lack of on-the-ground evidence of subsidence.

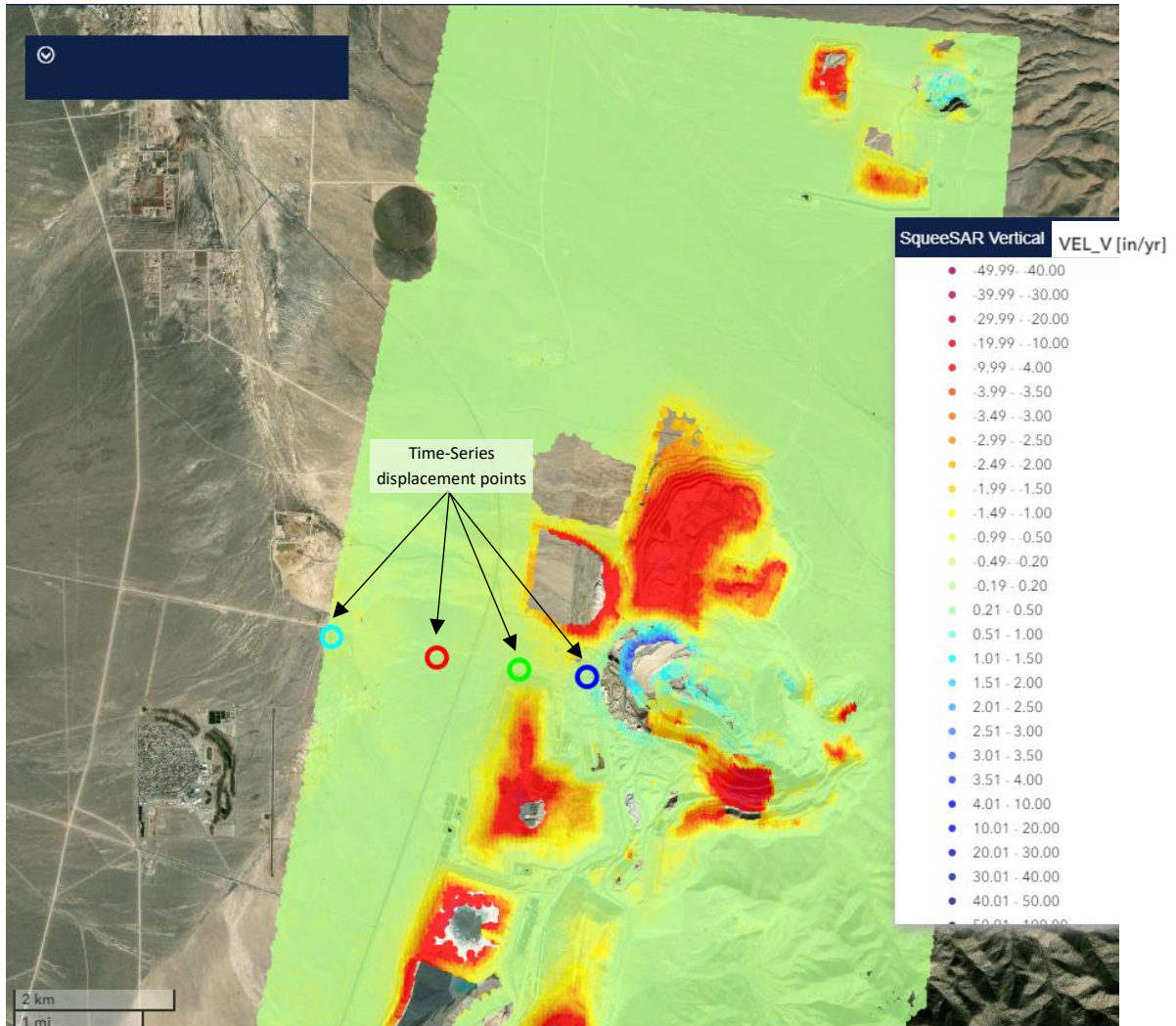


Figure 12. Overview from 2021 InSAR monitoring with time series line of points west of Round Mountain well field; deformation data depicted in the following Figure. Spatial deformation rates displayed are based on monitoring from November 2019 through December 2021.

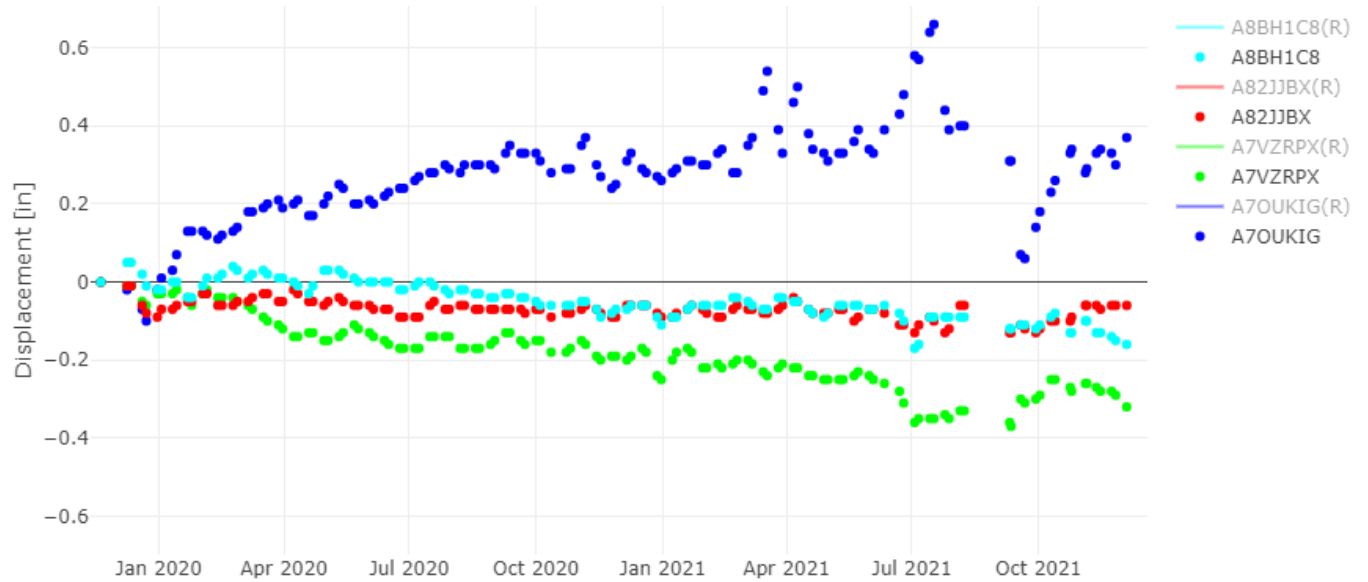


Figure 13. Cumulative displacement time series displacement points west of Round Mountain well field based on spatial deformation rates displayed in Figure 12 from November 2020 through December 2021.

7.0 References

- Giannico C., A. Ferretti, S. Alberti, L. Jurina, M. Ricci, A. Sciotti, I. D. Tecnica, and U. O. Gallerie. 2013. "Application of Satellite Radar Interferometry for Structural Damage Assessment and Monitoring." Life-Cycle and Sustainability of Civil Infrastructure Systems, edited by A. Strauss, D. Frangopol, and K. Bergmeiste, 2012: 2094-2101.
- TRE Altamira, 2019. InSAR Analysis of Historical Ground Deformation Over Round Mountain, Nevada. REF: J017-414-CA REP 1.0. January 10, 2019.
- WSP Parsons Brinkerhoff (WSP-PB), 2017. Phase W Hydrogeologic Baseline and Impacts Assessment Report, Round Mountain Gold Corporation. Revision 2. August 28, 2017.

8.0 Closing

This report has been prepared by RMGC to meet requirements specified in our approved Monitoring Plan and existing water rights permits issued by the Nevada State Engineer. This report provides a summary of observations and measurements related to the Mine's diversions for beneficial use of water resources in the Big Smoky Valley hydrographic basin.

Please contact the undersigned should you have any questions.

Sincerely,

Kinross- Round Mountain Gold Corporation



Jay Dixon, P.E., WRS
Chief Hydrologist

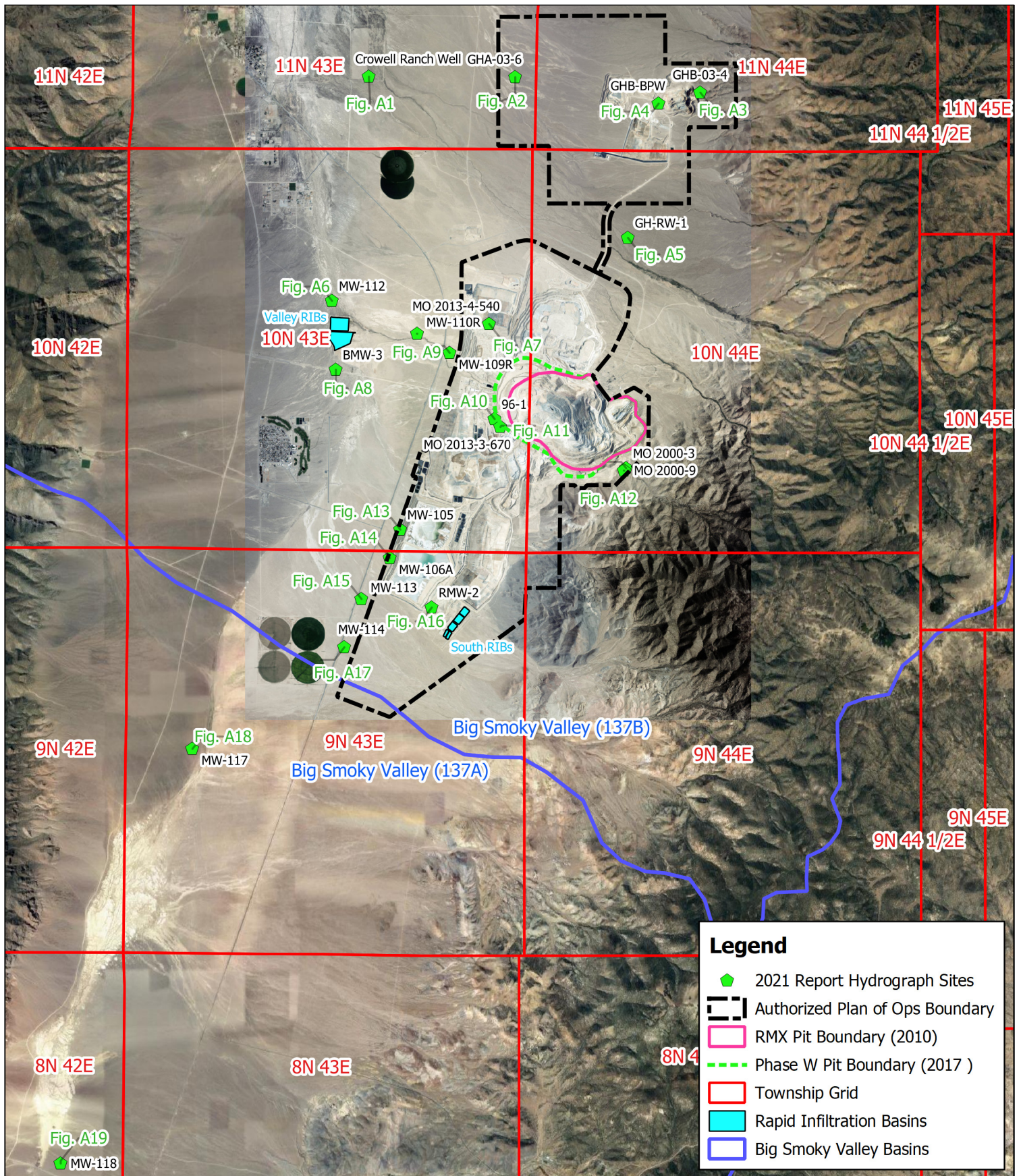




Kevin Howerton
Principal Hydrologist

Attachments:

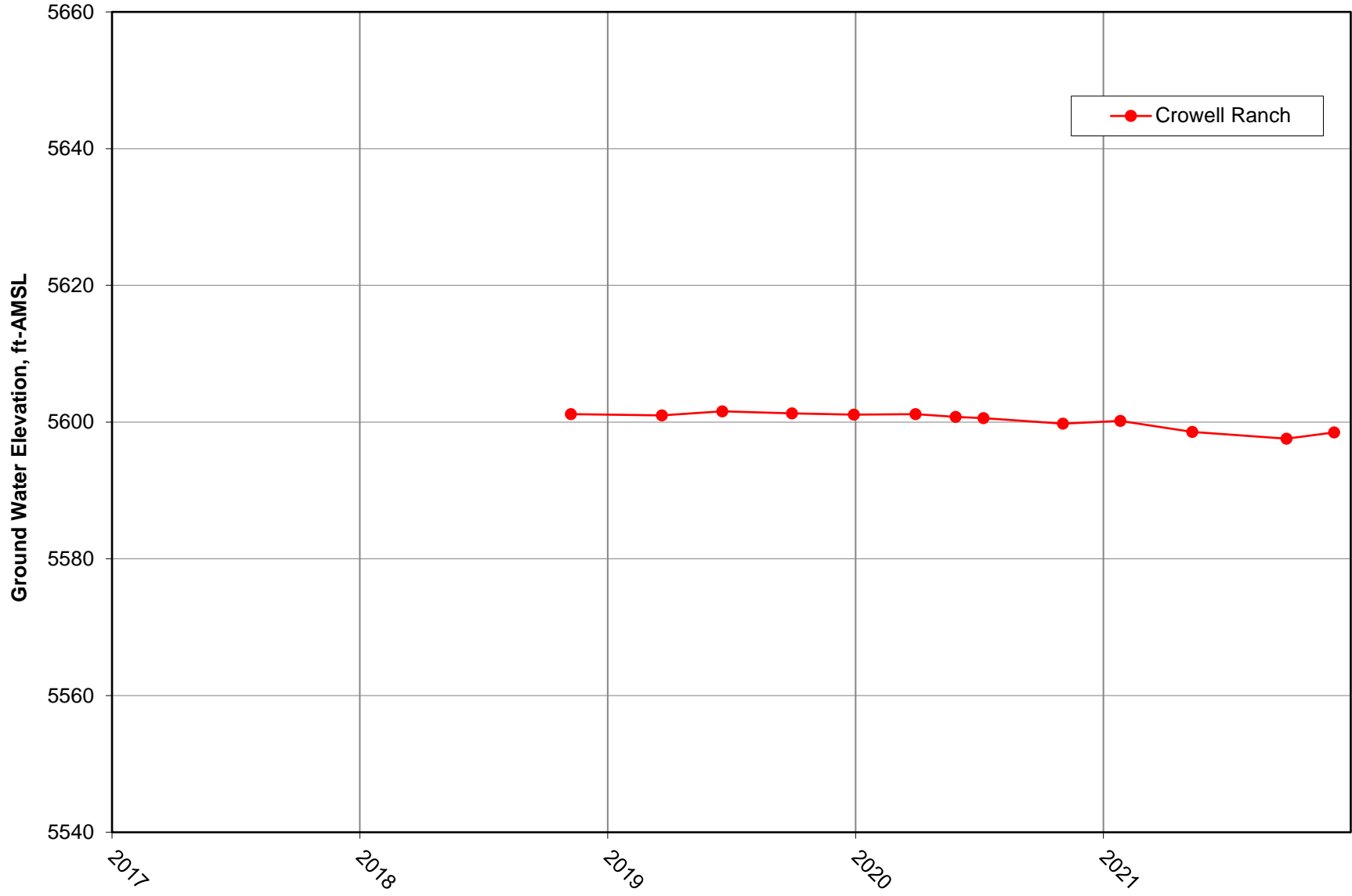
Appendices A - C
Plates 1 – 4

APPENDIX A
Select Groundwater Hydrographs

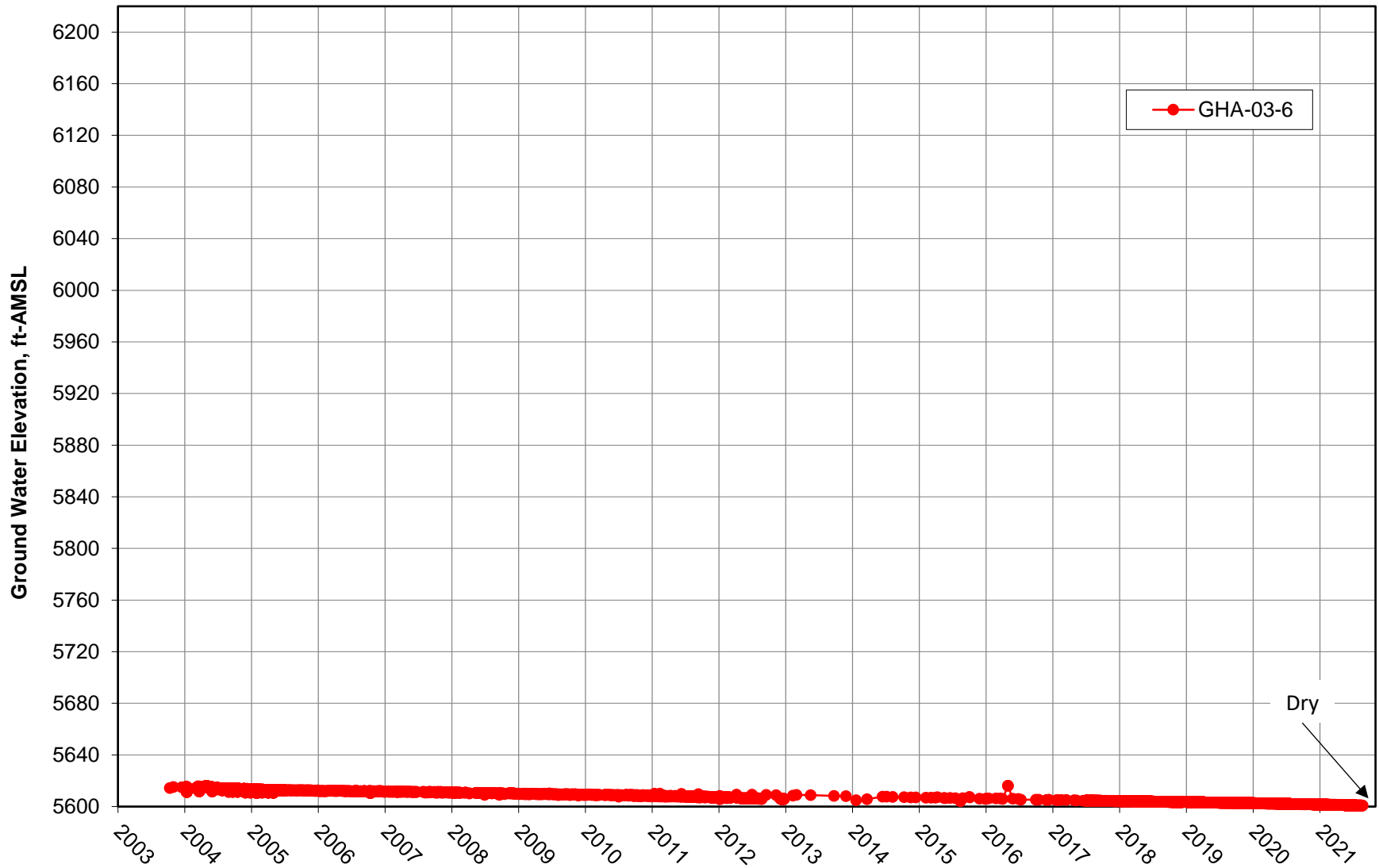


<p>RMGC 2021 ANNUAL REPORT</p>	<p>KINROSS Round Mountain</p>	<p>REPORT HYDROGRAPH SITES</p>	
	<p>GRAPHIC SCALE</p> <p>0 1 2 3 4 mi</p> 	<p>DRAWN BY: J. DIXON, P.E.</p>	<p>DRAWING NO.</p>
		<p>DATE: 1/27/2022</p>	<p>A-1</p>

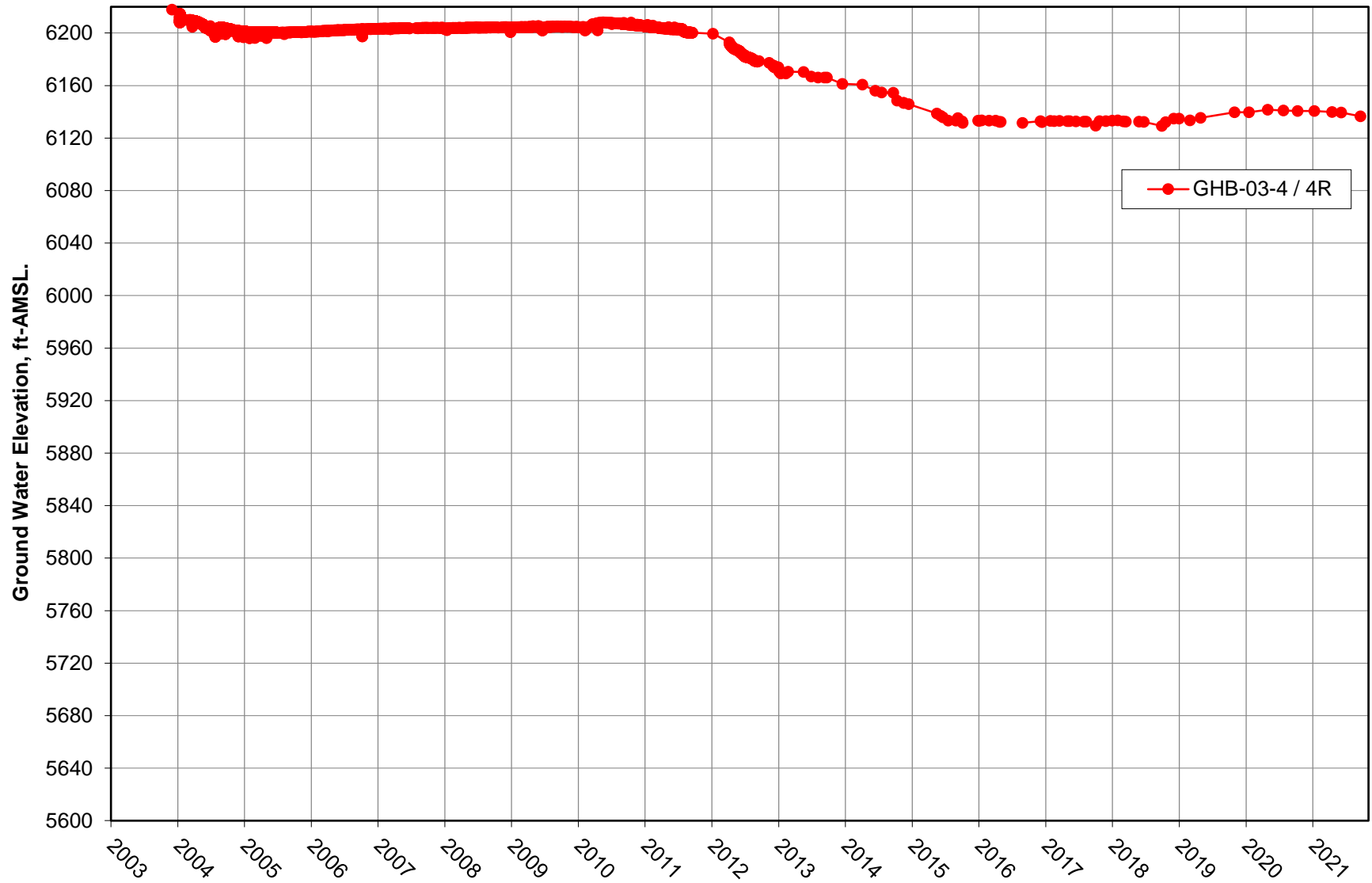
RMGC-Monitoring Well Crowell Ranch
Figure A1



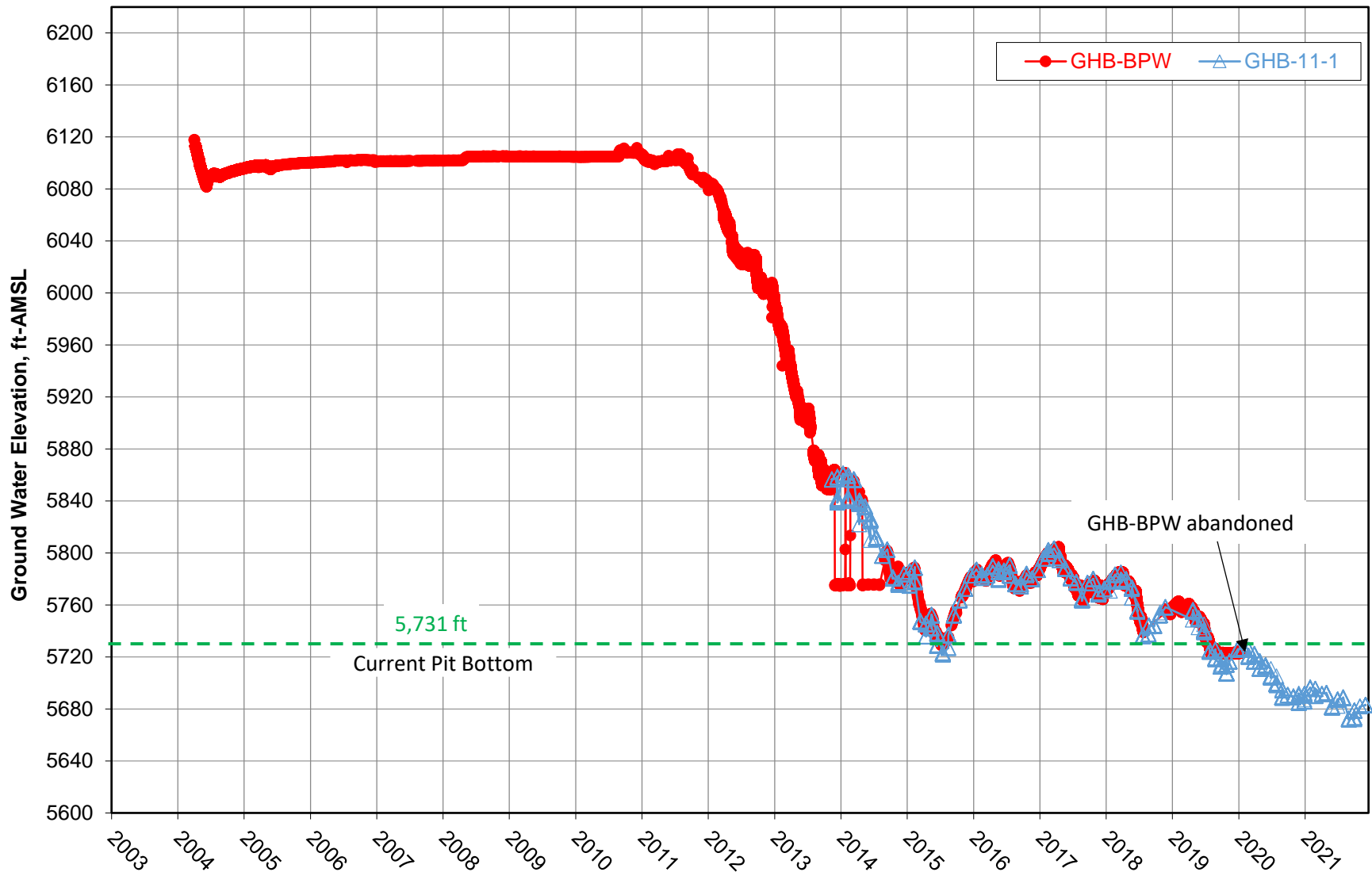
RMGC-Monitoring Well GHA-03-6
Figure A2



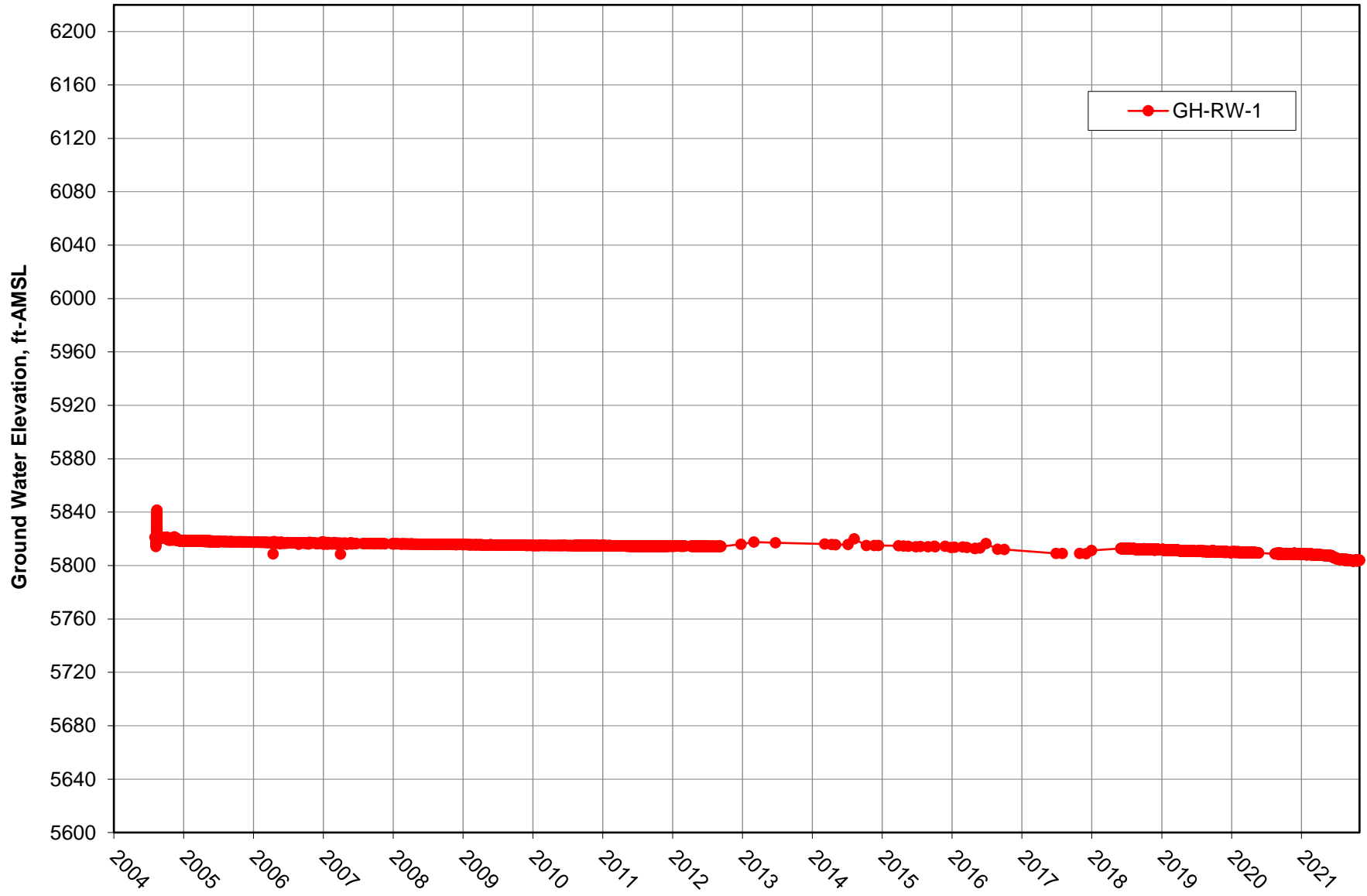
RMGC-Monitoring Well GHB-03-4 / 4R
Figure A3



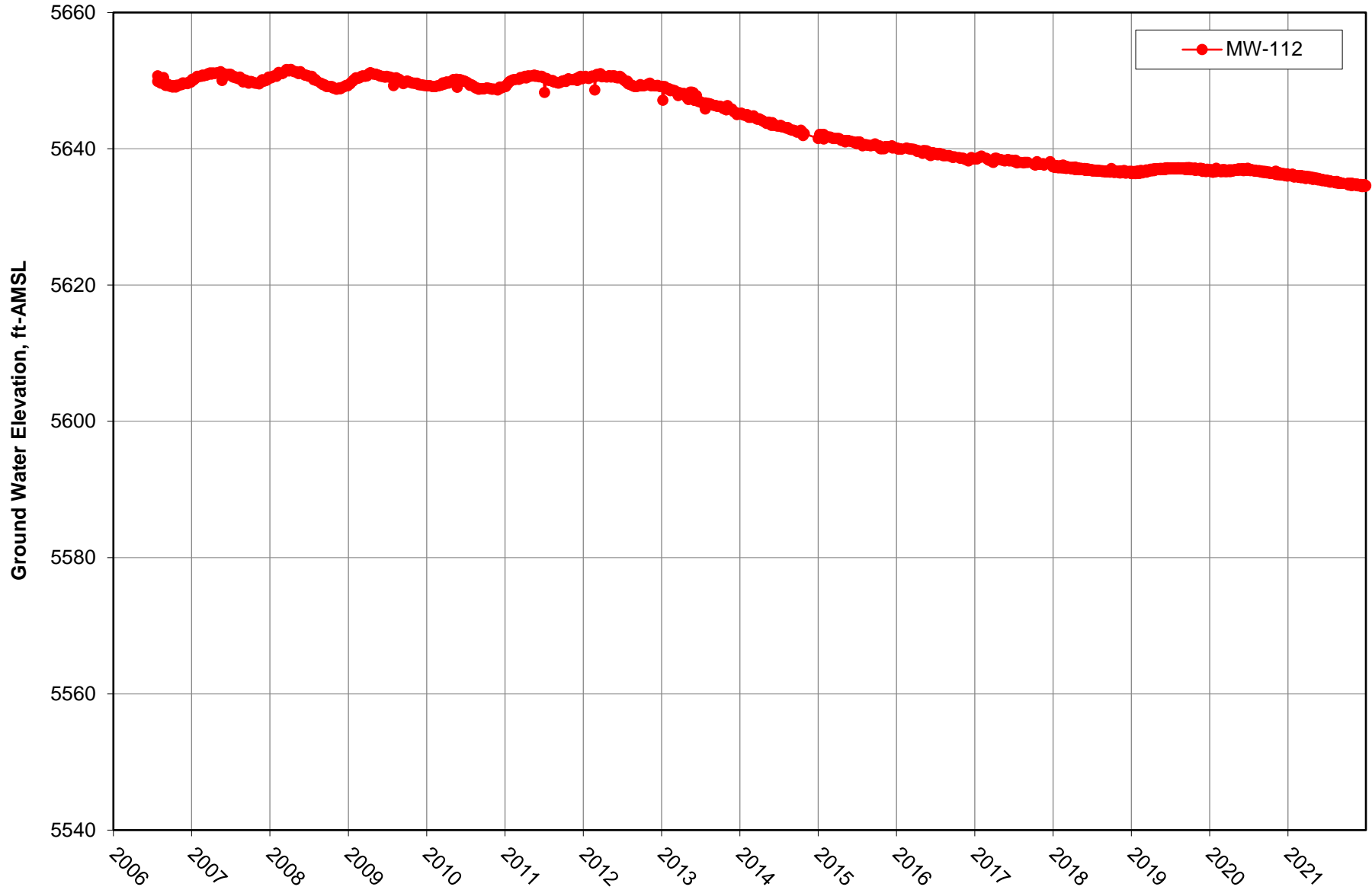
RMGC-Pumping Well GHB-BPW & GHB-11-1
Figure A4



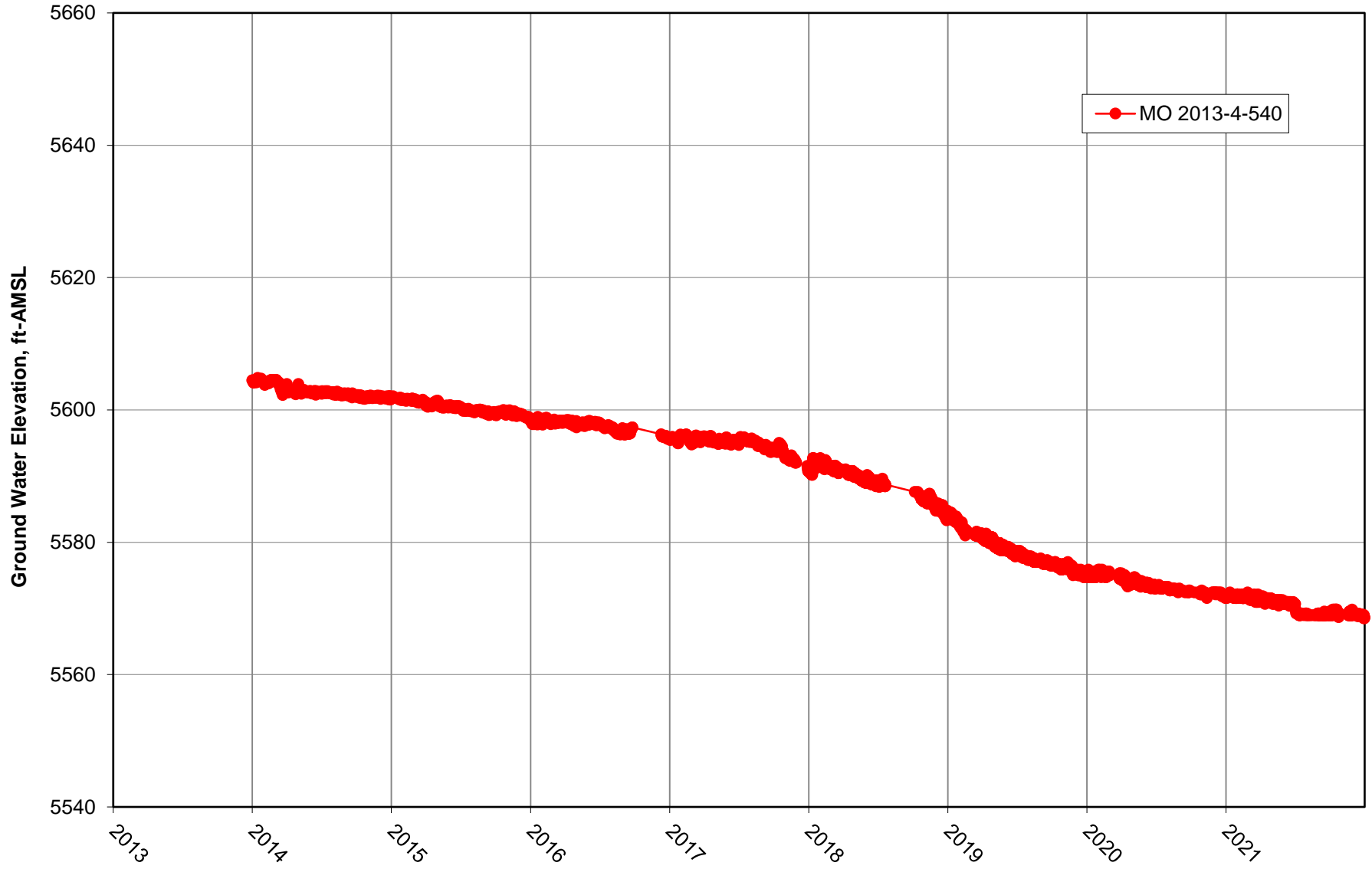
RMGC-Monitoring Well GH-RW-1
Figure A5



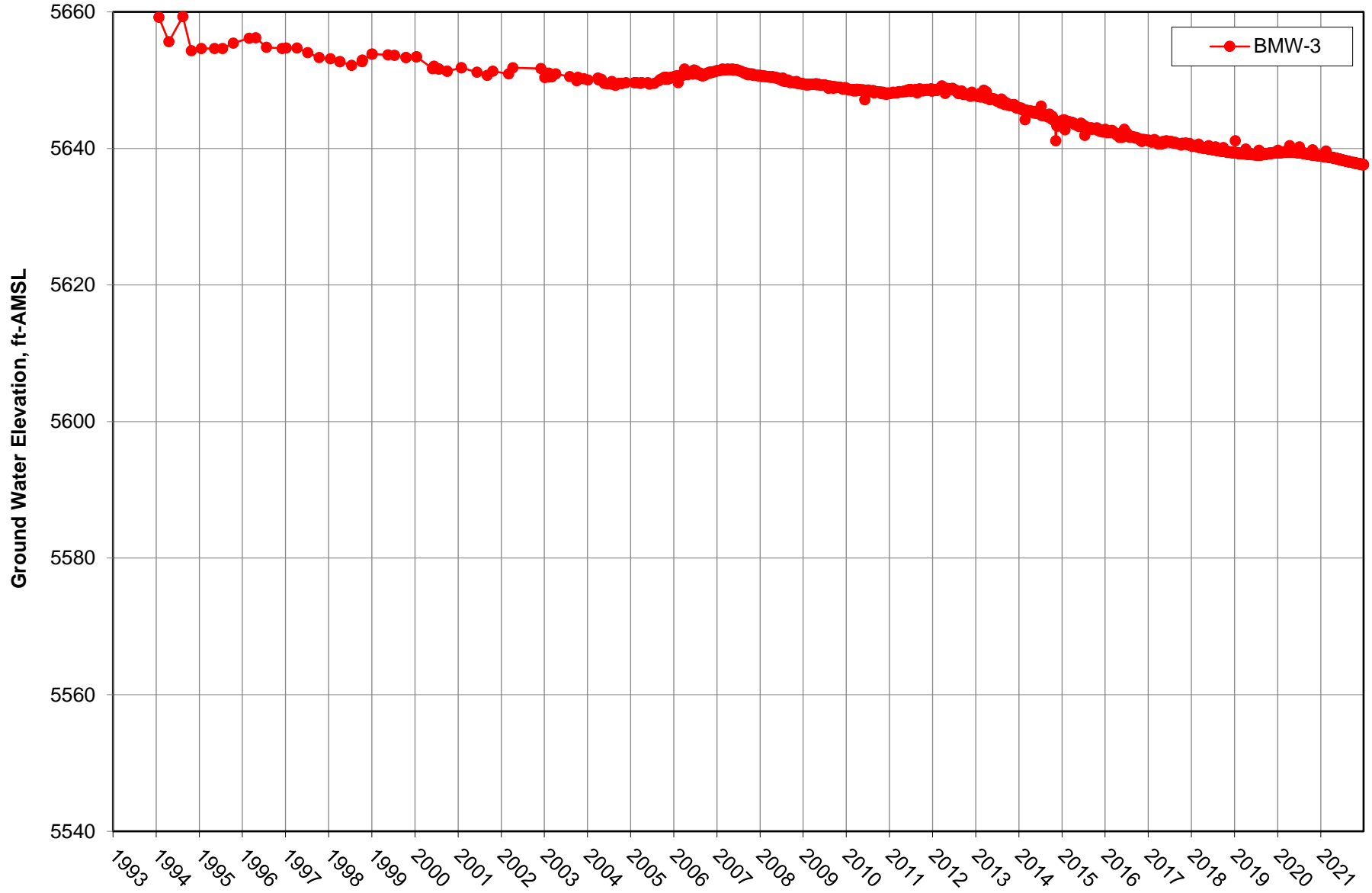
RMGC-Monitoring Well MW-112
Figure A6



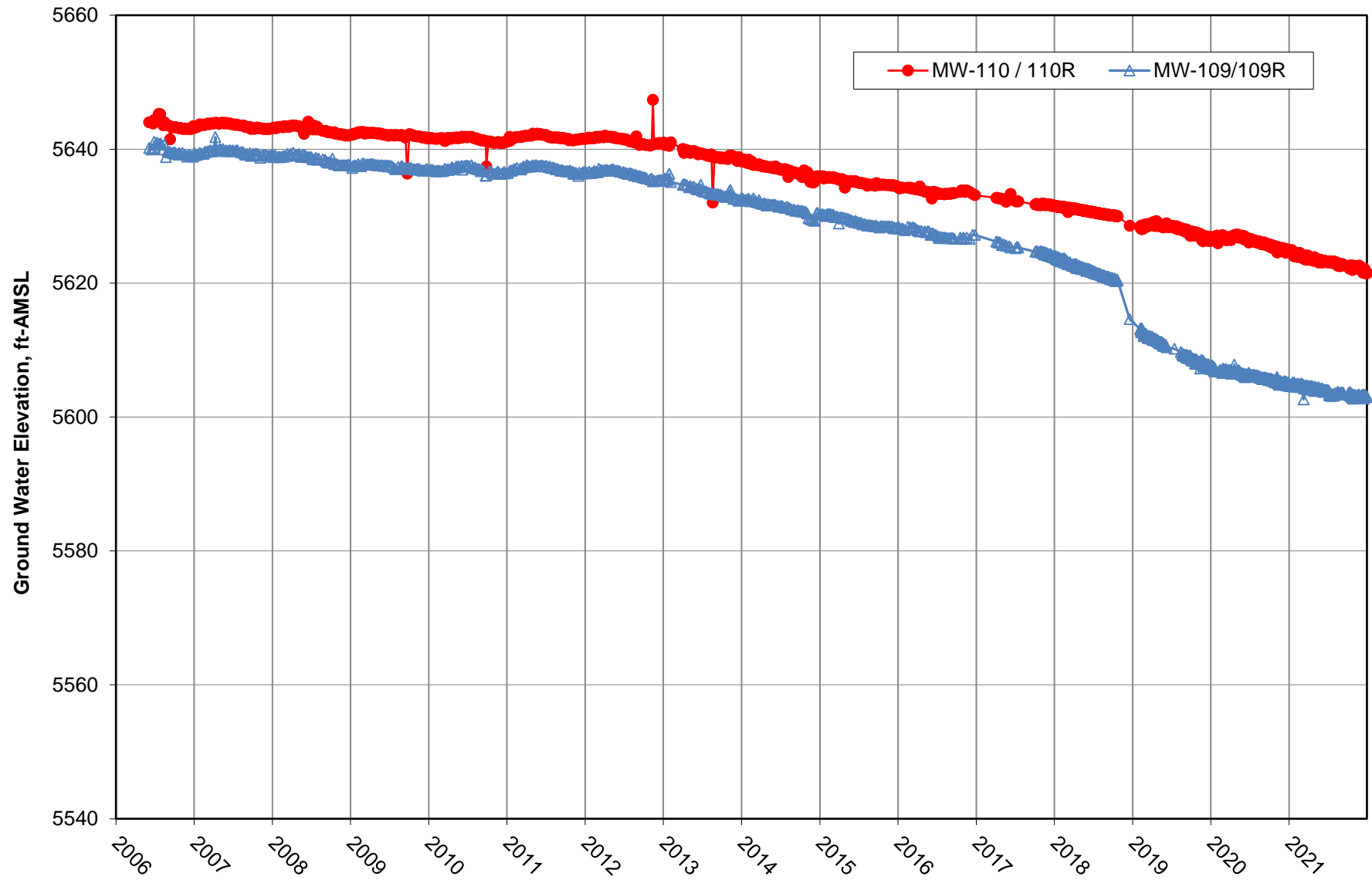
RMGC-Monitoring Well MO 2013-4-540'
Figure A7



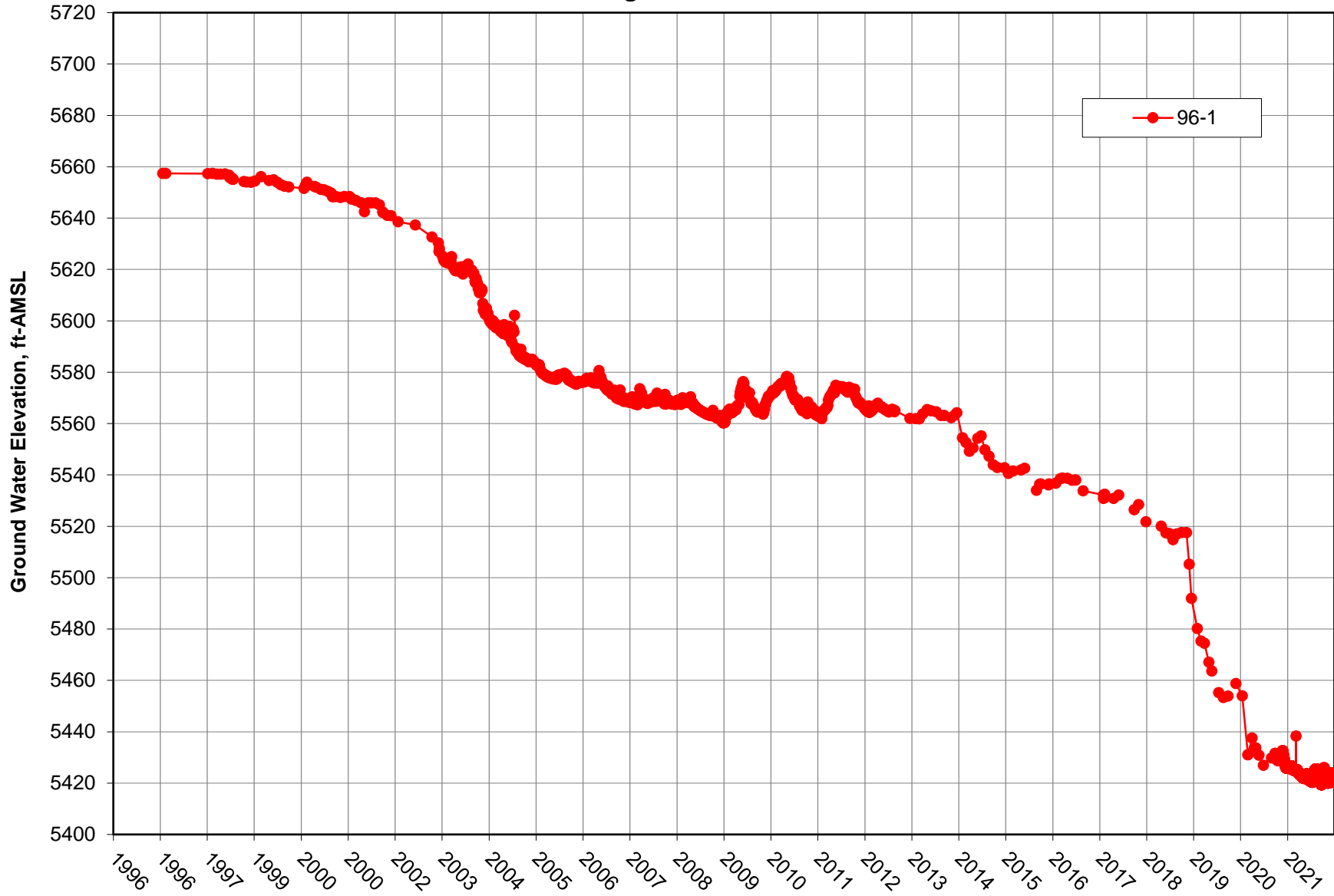
**RMGC-Monitoring Well BMW-3
Figure A8**



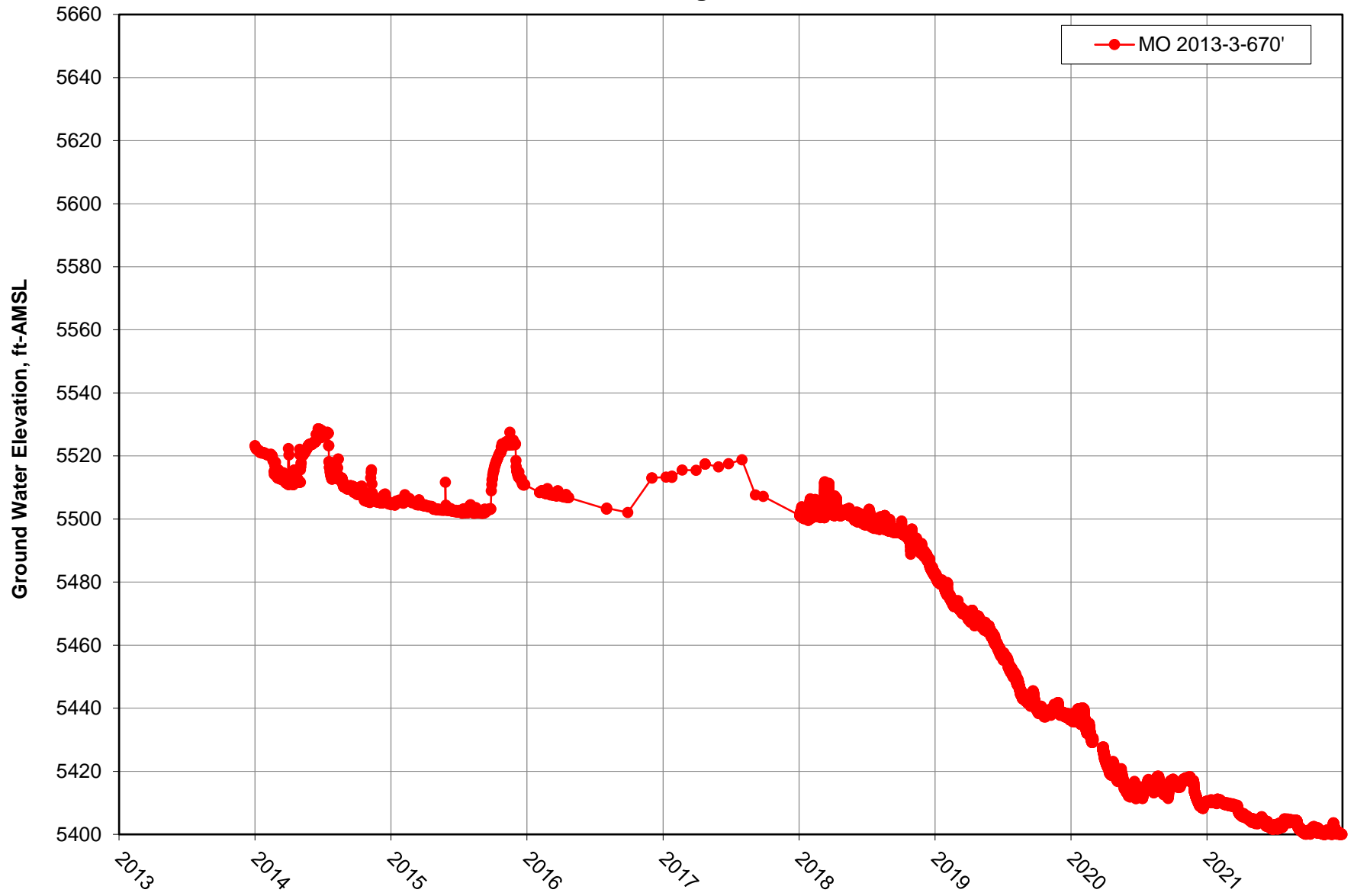
RMGC-Monitoring Wells MW- 109/109R and 110/110R
Figure A9



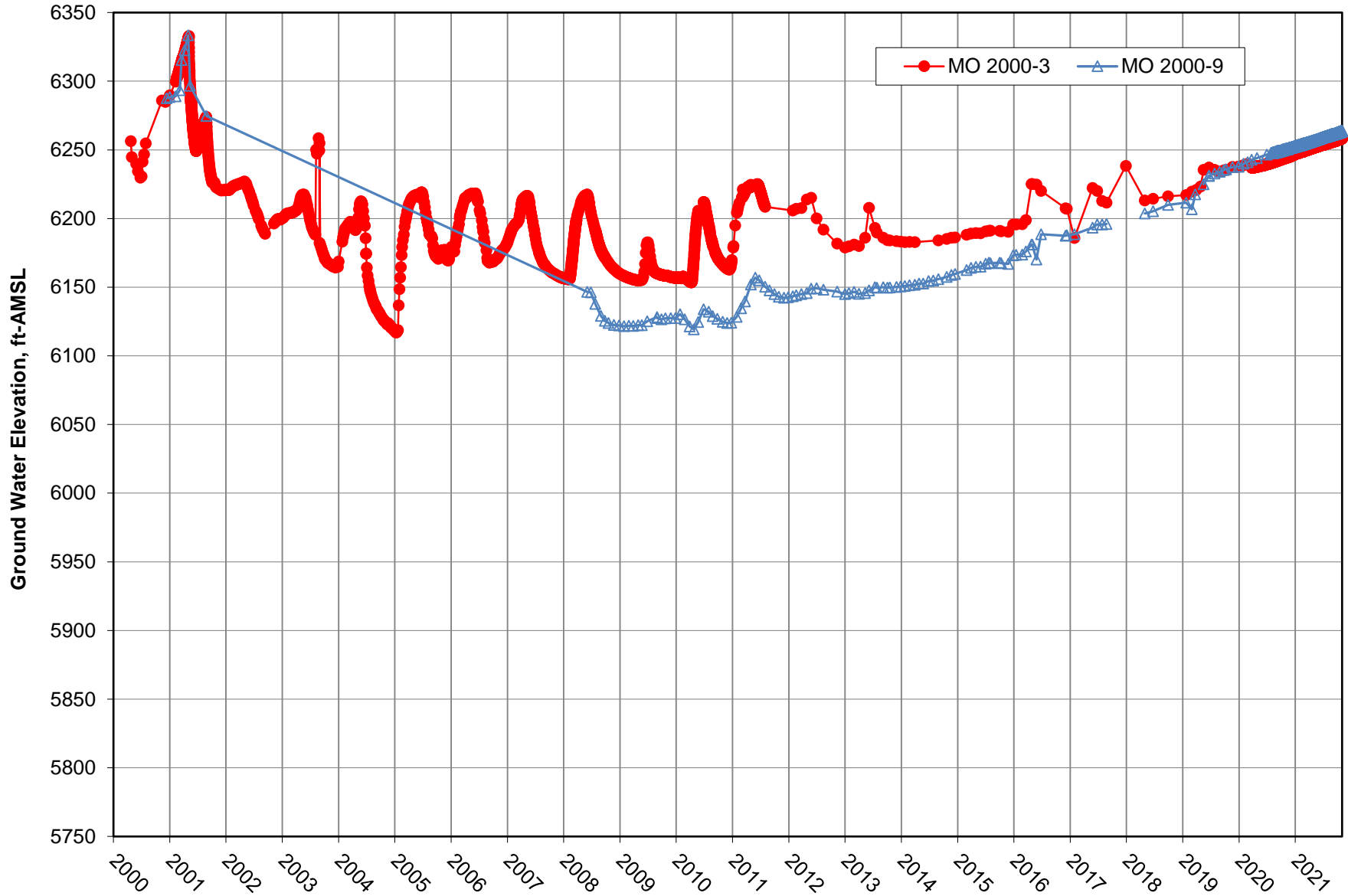
RMGC-Monitoring Well 96-1
Figure A10



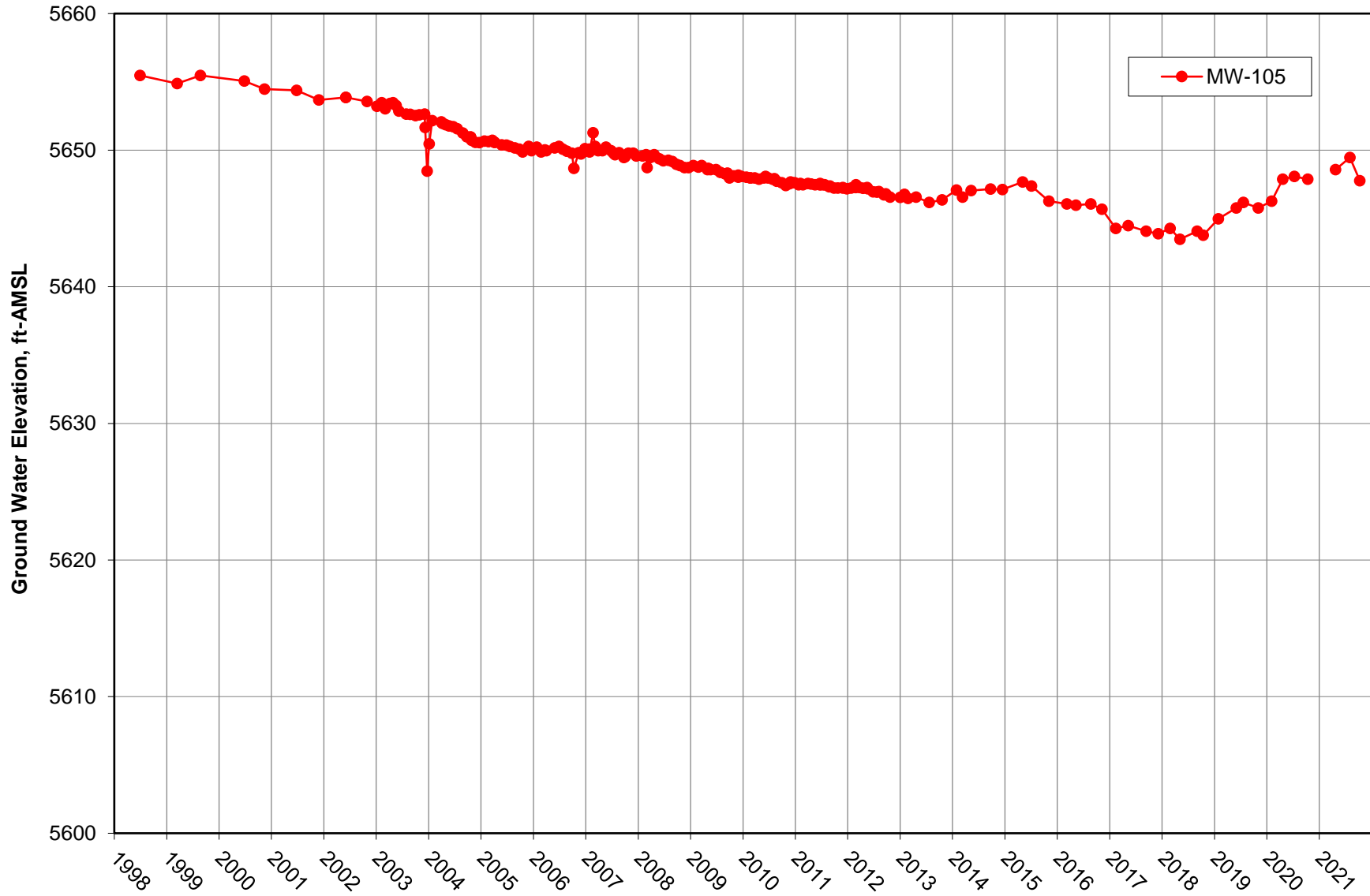
RMGC-Monitoring Well MO 2013-3-670'
Figure A11



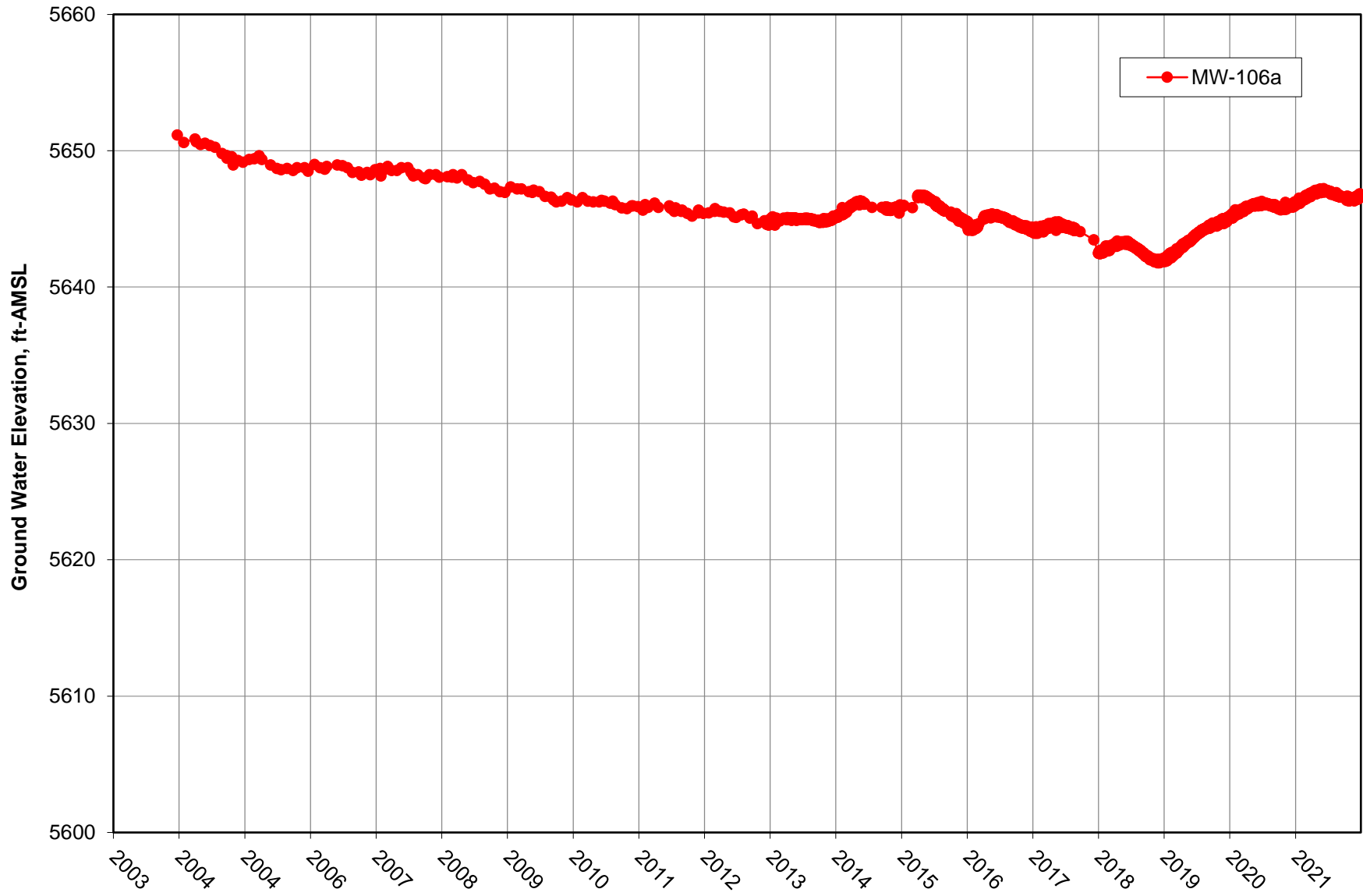
RMGC-Monitoring Wells MO 2000-3 and 2000-9
Figure A12



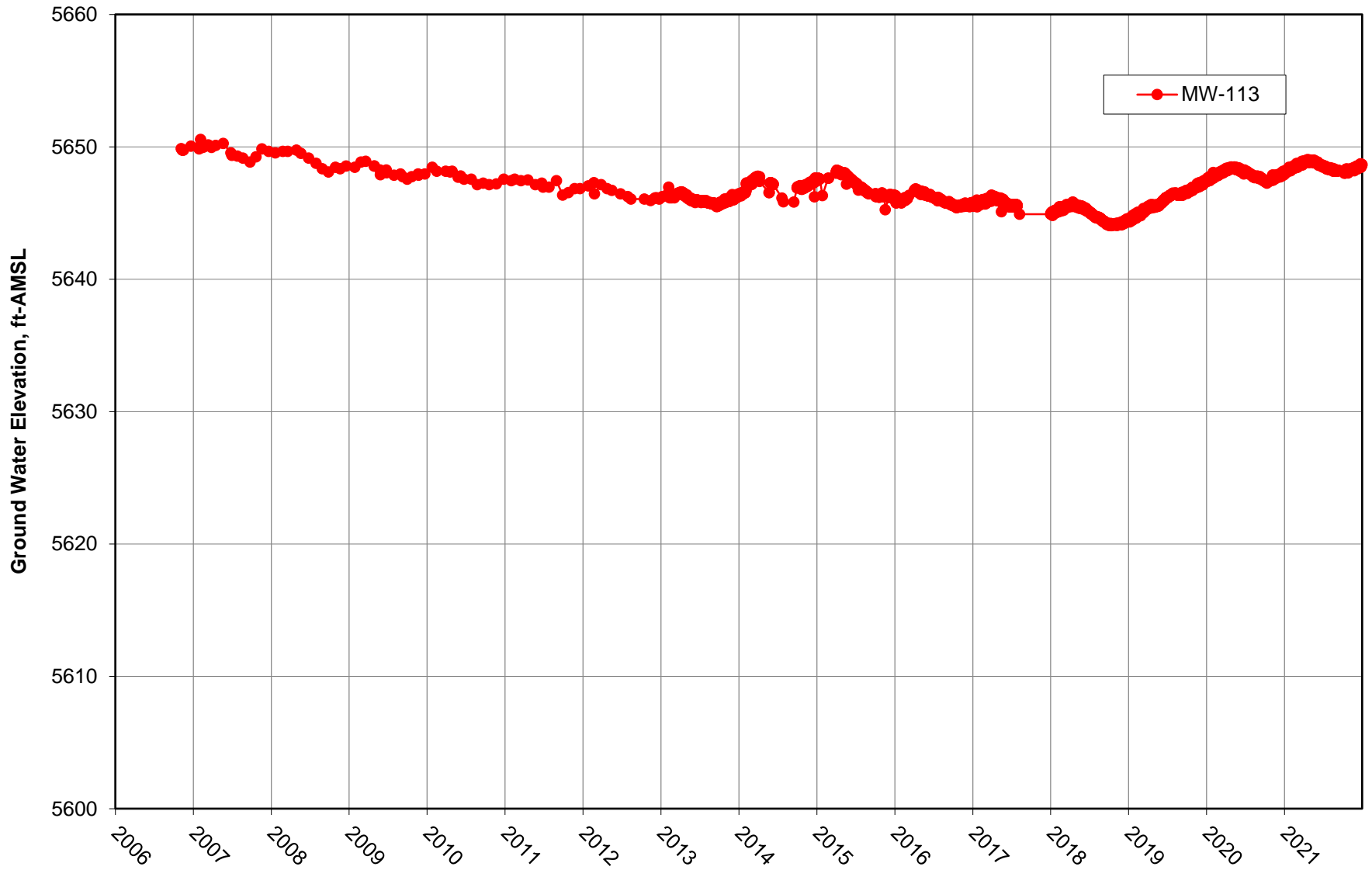
RMGC-Monitoring Well MW-105
Figure A13



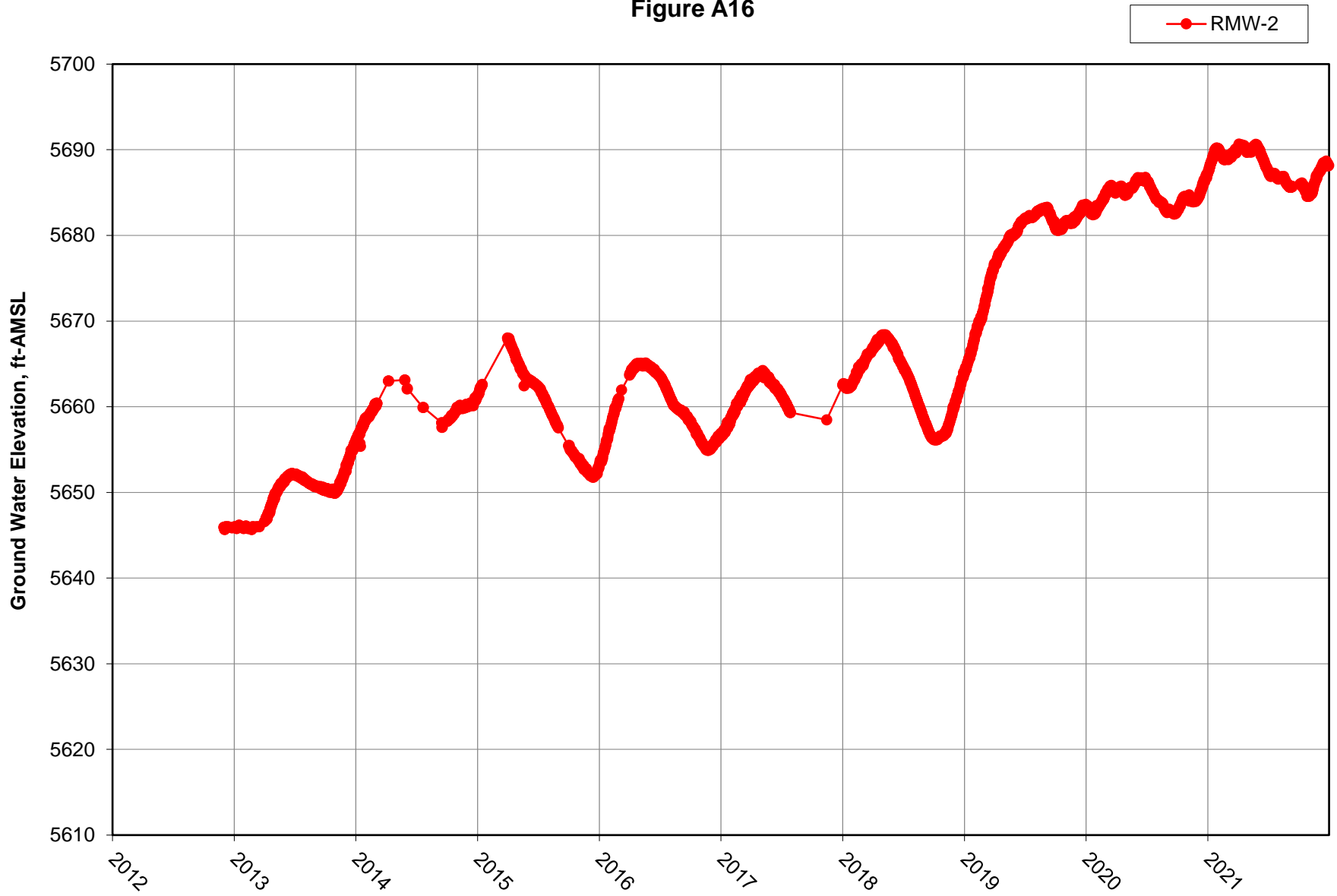
RMGC-Monitoring Well MW-106a
Figure A14



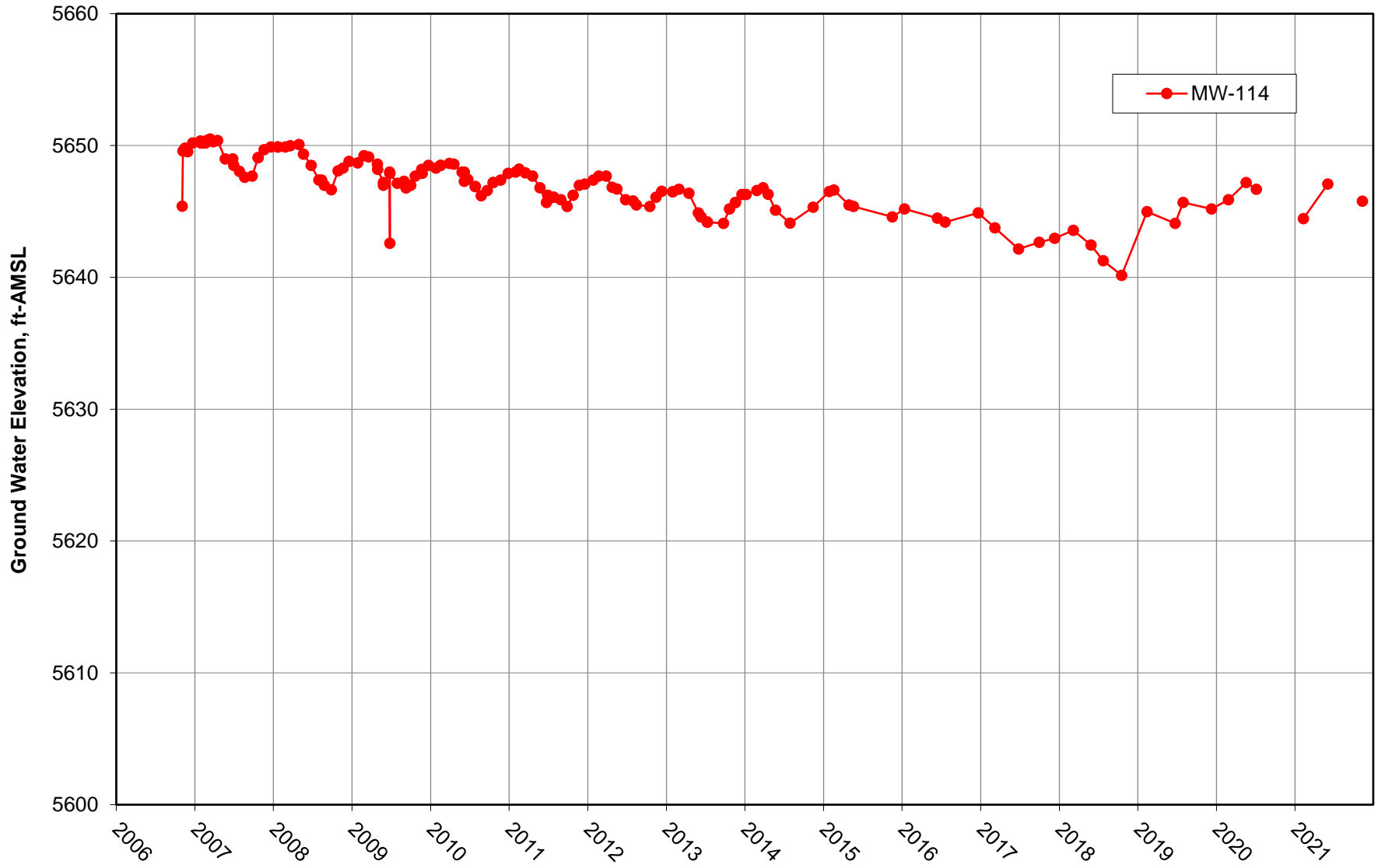
RMGC-Monitoring Well MW-113
Figure A15



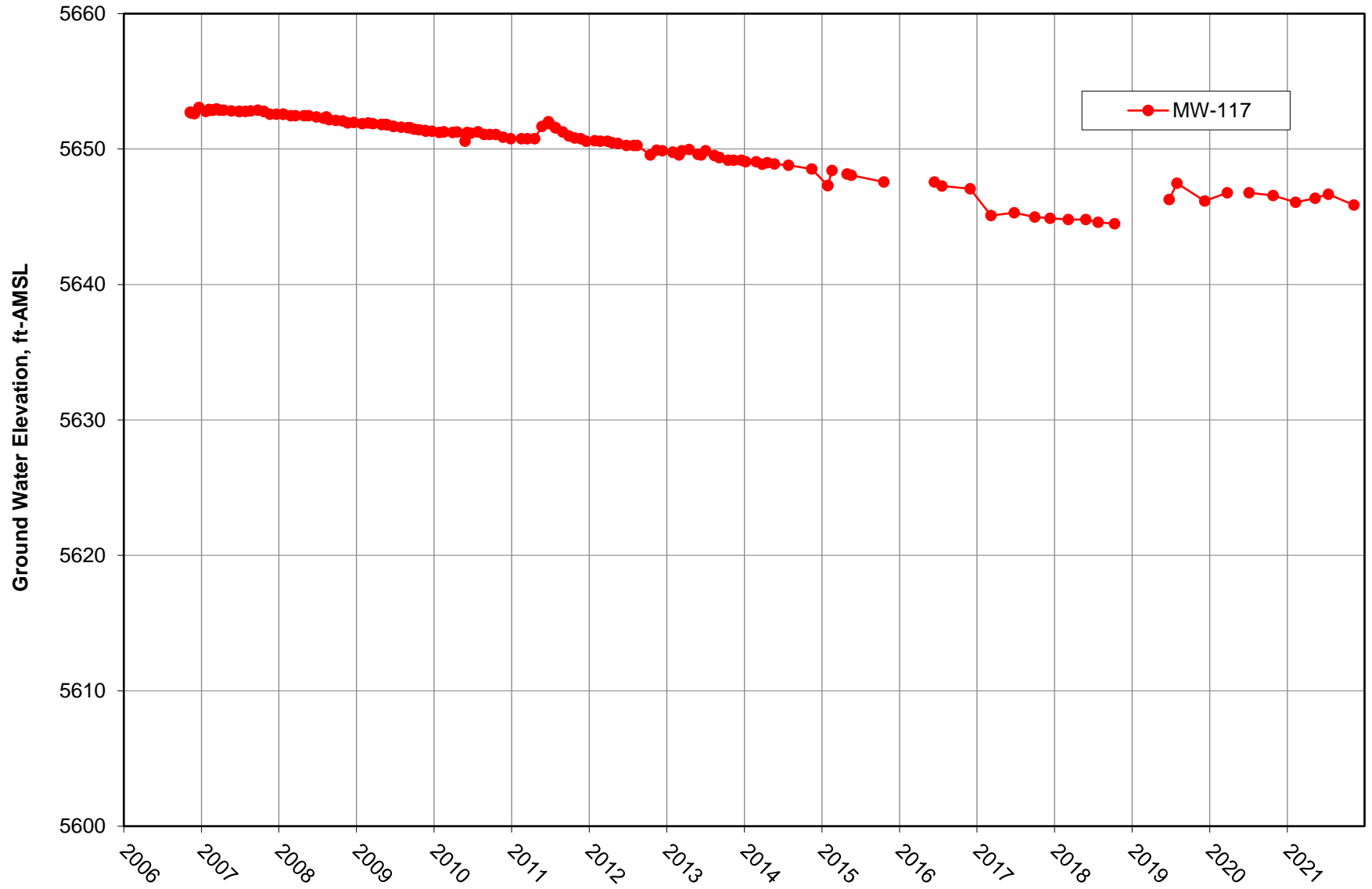
RMGC-Monitoring Well RMW-2
Figure A16



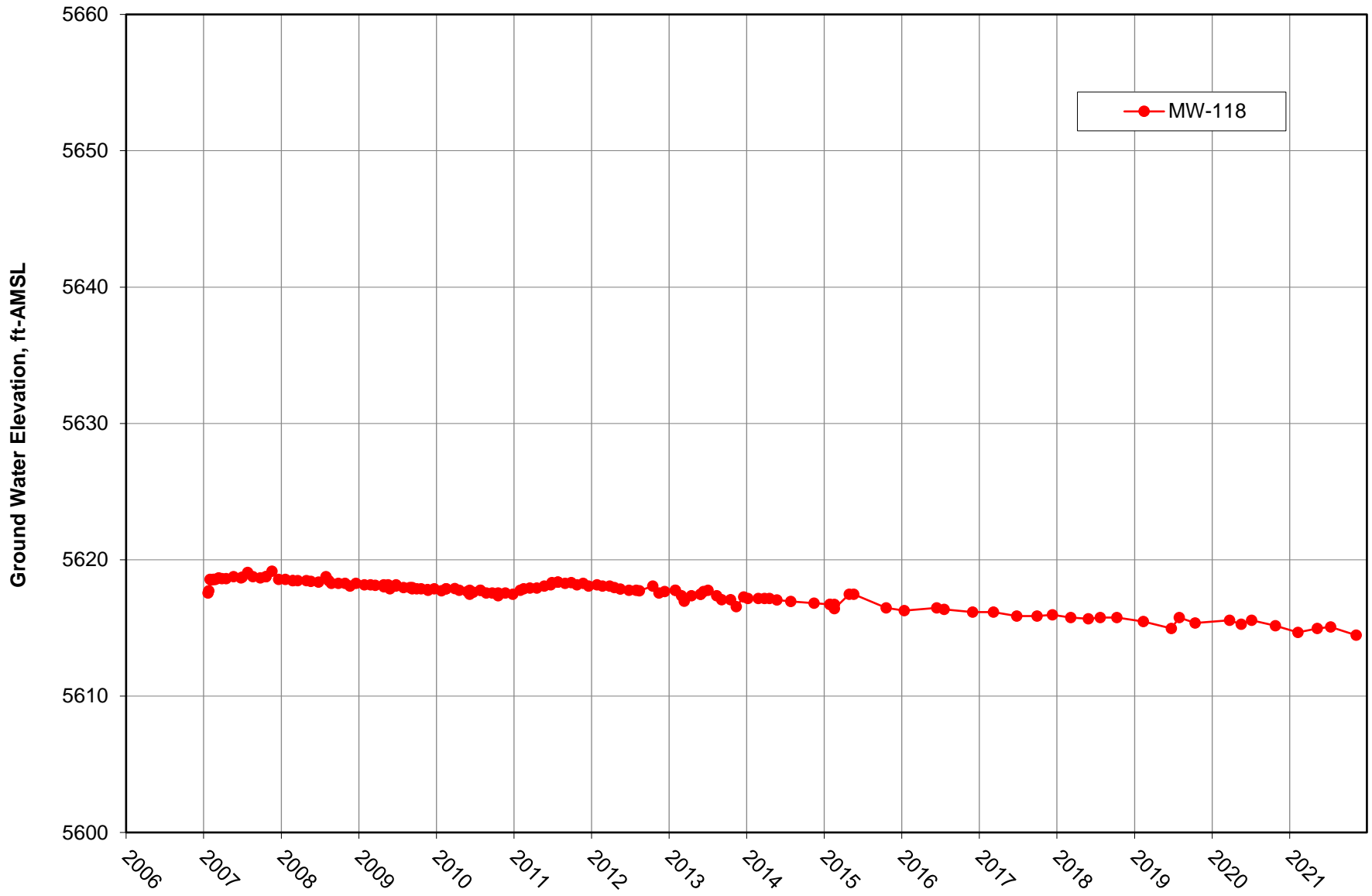
RMGC-Monitoring Well MW-114
Figure A17



RMGC-Monitoring Well MW-117
Figure A18

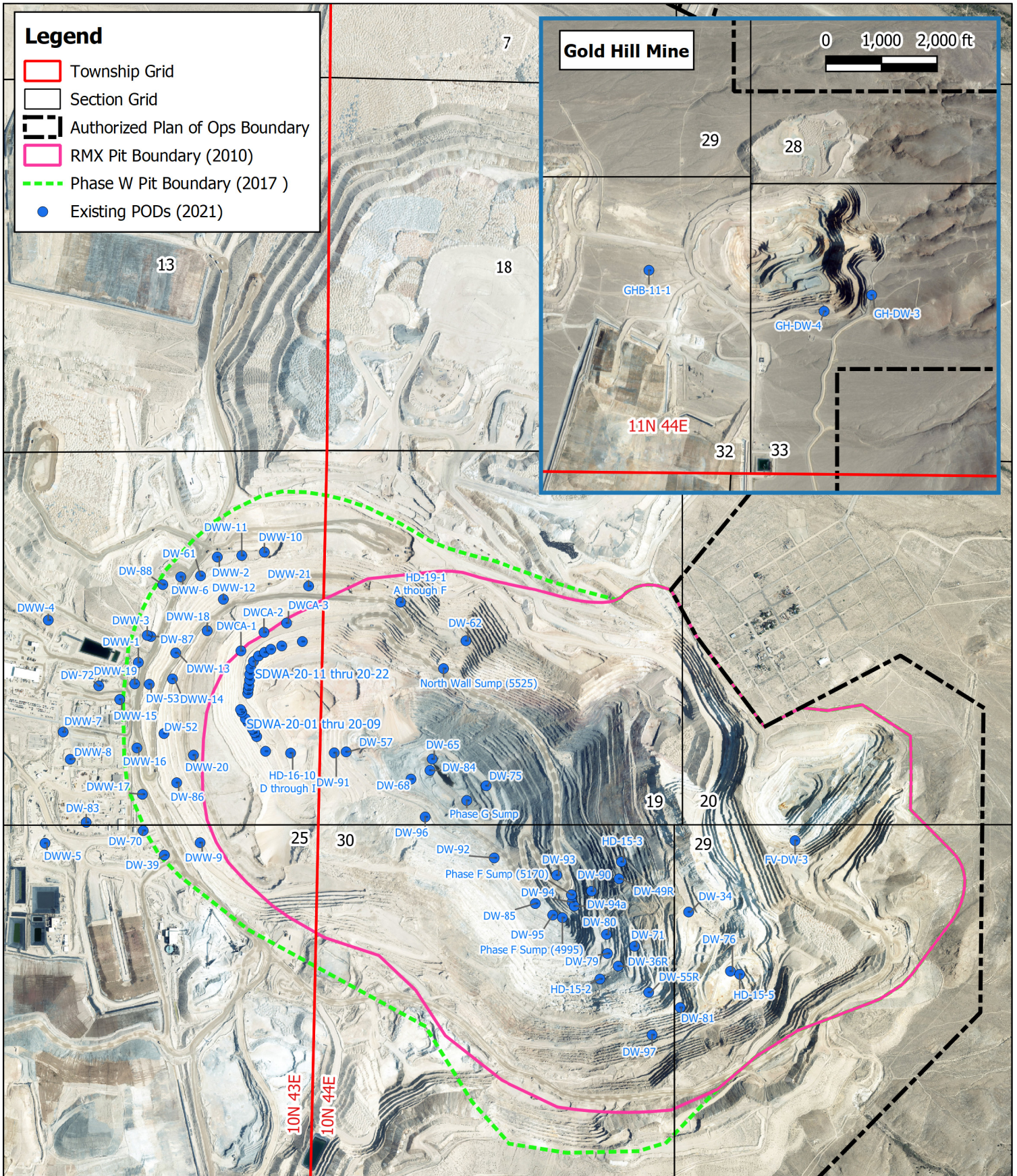


**RMGC-Monitoring Well MW-118
Figure A19**



APPENDIX B

2021 Points of Diversion Accounting / Status



Legend

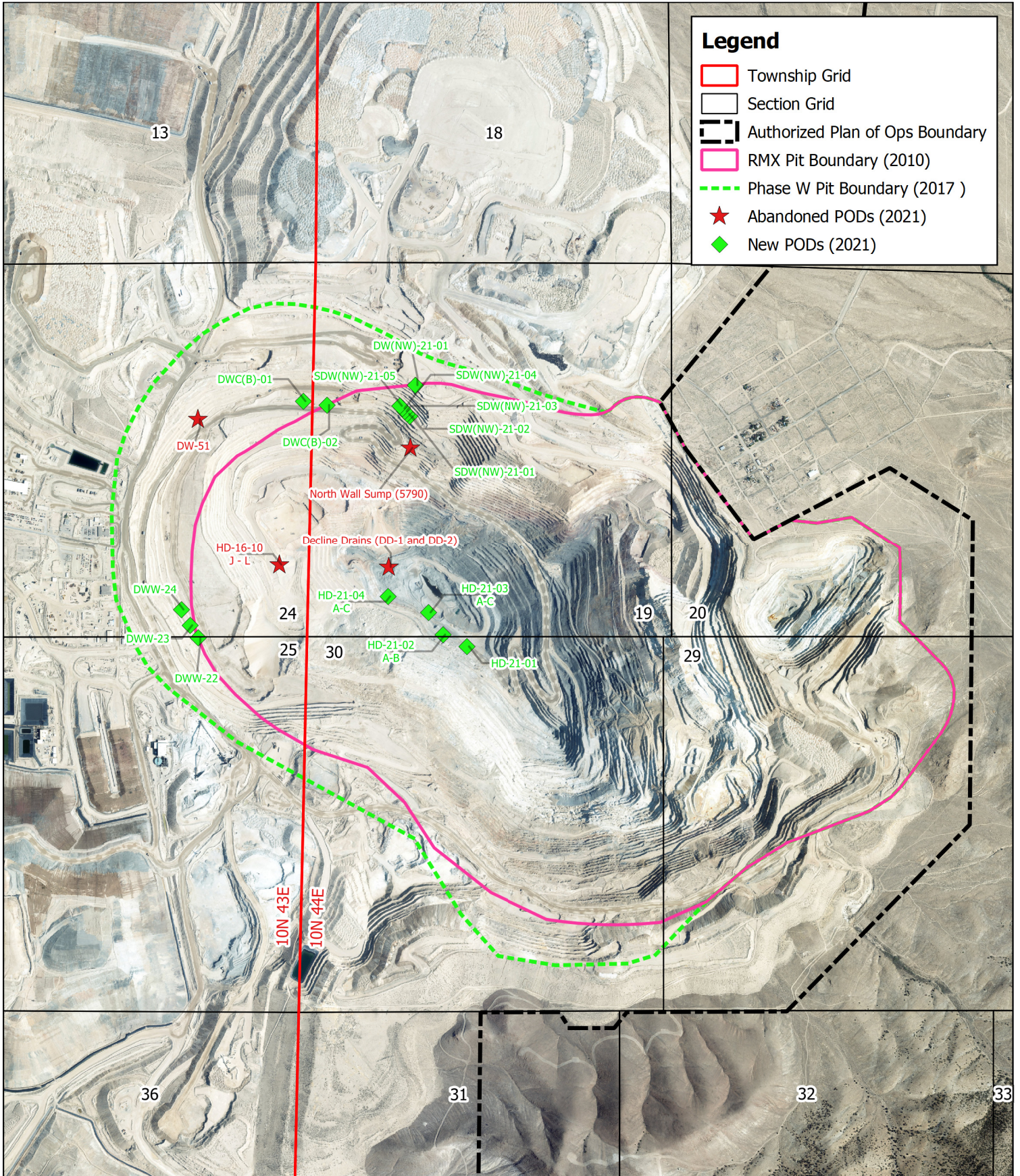
- Township Grid
- Section Grid
- Authorized Plan of Ops Boundary
- RMX Pit Boundary (2010)
- Phase W Pit Boundary (2017)
- Existing PODs (2021)

Gold Hill Mine

0 1,000 2,000 ft

11N 44E

RMGC 2021 ANNUAL REPORT	KINROSS Round Mountain	2021 NEAR-PIT POINTS OF DIVERSION		
	<p>GRAPHIC SCALE</p> <p>0 2,000 4,000 6,000 ft</p>		<p>EXISTING PODS @ END OF YEAR</p>	<p>DRAWING NO.</p>
			<p>DATE: 1/27/2022</p>	<p>B-1</p>
			<p>DRAWN BY: J. DIXON, P.E.</p>	



Legend

- Township Grid
- Section Grid
- Authorized Plan of Ops Boundary
- RMX Pit Boundary (2010)
- Phase W Pit Boundary (2017)
- ★ Abandoned PODs (2021)
- ◆ New PODs (2021)

RMGC 2021 ANNUAL REPORT	Round Mountain	2021 NEAR-PIT POINTS OF DIVERSION						
	<p>GRAPHIC SCALE</p> <p>0 2,000 4,000 6,000 ft</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; font-weight: bold; font-size: 0.8em;">NEW & ABANDONED PODS</td> <td style="text-align: center; font-size: 0.8em;">DRAWING NO.</td> </tr> <tr> <td style="text-align: center; font-size: 0.8em;">DATE: 1/28/2022</td> <td style="text-align: center; font-size: 1.2em; font-weight: bold;">B-2</td> </tr> <tr> <td style="text-align: center; font-size: 0.8em;">DRAWN BY: J. DIXON, P.E.</td> <td></td> </tr> </table>	NEW & ABANDONED PODS	DRAWING NO.	DATE: 1/28/2022	B-2	DRAWN BY: J. DIXON, P.E.	
NEW & ABANDONED PODS	DRAWING NO.							
DATE: 1/28/2022	B-2							
DRAWN BY: J. DIXON, P.E.								

APPENDIX B - 2021 Points of Diversion Status

Point of Diversion Source Name	Completion Date	Current Permit / Waiver	Base Water Right	NDWR Well Log (s)	Township	Range	Section	Quarter-Quarter	Longitude (WGS84)	Latitude (WGS84)	Surface Elev. (ft-Mean Sea Level)	Completed Depth (ft-bgs)	Status / Remarks
Existing PODs at End of 2021													
East Well 1	7/16/1952	14119, 26652, 60875		1999	N10	E43	20	NE-NE	-117.16667	38.71749	5765.3	352	Ancillary (offsite) well
ICT Ranch (GC) Well	3/6/1963	54911, 54912, 64181, 21043, 26891		7211	N10	E43	28	SW-SW	-117.16564	38.69001	5785.9	485	Ancillary (offsite) well, PBU Pending #64181 (golf course)
East Well 2	6/5/1988	51577, 51578, 60876		30764	N10	E43	21	NE-NW	-117.15630	38.71586	5730.7	450	Ancillary (offsite) well
West Well	2/1/1989	12445, 12768, 26650, 60874		31167	N10	E43	20	NE-NE	-117.16802	38.71768	5777.0	400	Ancillary (offsite) well
DW-34	6/7/2002	83333	44297	89290	N10	E44	29	NW-NW	-117.07323	38.70050	5871.9	800	In-pit dewatering well
DW-39	6/15/2003	83333	53365	91992	N10	E43	25	NW-NE	-117.09923	38.70271	6057.7	937.6	Alluvial (ex-pit) dewatering well
DW-53	3/11/2006	76602		99371	N10	E43	24	NW-SE	-117.09998	38.70934	6012.5	878.5	Alluvial (ex-pit) dewatering well
DW-52	3/25/2006	76601		99704	N10	E43	24	NW-SE	-117.09925	38.70743	6023.7	881	Alluvial (ex-pit) dewatering well
DW-36R	3/21/2007	83333	12442	105760	N10	E44	30	SE-NE	-117.07672	38.69840	5522.6	1098	In-pit dewatering well
DW-57	9/11/2010	82950		108787	N10	E44	19	SW-SW	-117.09023	38.70672	5345.1	960	In-pit dewatering well
DW-61	3/14/2011	83333	44297	113687	N10	E43	24	SW-NE	-117.09744	38.71356	6117.2	1000	Alluvial (ex-pit) dewatering well
DW-62	11/2/2011	83333	12442	115219	N10	E44	19	SE-NW	-117.08430	38.71103	5770.5	900	In-pit dewatering well
DW-49R	11/16/2012	83333	53365	116471	10N	44E	30	NE-NE	-117.07668	38.70179	5483.4	1060	In-pit dewatering well
GHB-11-1	12/12/2012	83333	70169	115909	N11	E44	32	SW-NE	-117.05945	38.77153	6165.5	1000	Gold Hill (ex-pit) dewatering / production well
DW-55R	1/23/2013	83333	55503	116413	N10	E44	30	SE-NE	-117.07521	38.69738	5656.5	1180	In-pit dewatering well
DW-68	2/19/2013	83333	55501	116420	N10	E44	19	SE-SW	-117.08702	38.70566	4895.5	880	In-pit dewatering well
DW-70	3/15/2013	82949		118285	N10	E43	25	NW-NE	-117.10028	38.70366	6042.6	1300	Alluvial (ex-pit) dewatering well
DW-71	4/26/2013	83333	60875	121738	N10	E44	30	SE-NE	-117.07591	38.69917	5575.1	1180	In-pit dewatering well
FV-DW-3	7/15/2013	83333	55502	117033	N10	E44	29	NE-NW	-117.06796	38.70327	6394.8	405	In-pit dewatering well
DW-65	3/30/2014	83333		119795	N10	E44	19	SE-SW	-117.08597	38.70644	4925.5	800	In-pit dewatering well
DW-72	10/27/2014	83333		121637	N10	E43	24	NE-SW	-117.10248	38.70928	6061.4	1140	Alluvial (ex-pit) dewatering well
GH-DW-4	6/6/2015	83333		122658	N11	E44	32	SE-NW	-117.04840	38.76950	6305.6	805	New in-pit dewatering well
GH-DW-3	6/9/2015	83333		122633	N11	E44	32	SE-NW	-117.04540	38.77030	6401.8	610	New in-pit dewatering well
HD-15-3	7/5/2015	M/O 1976	N/A	122686-122689	N10	E44	30	NE-NE	-117.07656	38.70245	5418.6	800	Three (3) horizontal drains constructed to relieve highwall pore pressure; all water conveyed into DW-49R
DW-76	8/24/2015	83333		123145	N10	E44	30	SW-NW	-117.07116	38.69820	5971.2	805	New in-pit dewatering well
HD-15-5	8/28/2015	M/O 1976	N/A	123247	N10	E44	30	SW-NW	-117.07070	38.69808	5971.2	800	Two (2) horizontal drains constructed to relieve highwall pore pressure; all water conveyed into DW-76
HD-15-2	9/4/2015	M/O 1976	N/A	124399, 124400, 124401, 124402	N10	E44	30	SE-NE	-117.07762	38.69790	5353.1	900, 900, 800, 800	Four (4) horizontal drains constructed to relieve highwall pore pressure; all water conveyed into DW-36R
DW-75	12/11/2015	83333		124259	N10	E44	30	SE-SW	-117.08330	38.70540	4919.8	900	New in-pit dewatering well
HD-16-10, D through I	10/3/2016	M/O 2080	N/A	126175, 126176, 126177, 126346, 126347, 126348	N10	E43	24	SE-SE, NE-SE	-117.09298	38.70667	5253.3, 5220.6	600, 500, 600, 500, 400, 400	Six (6) horizontal drains constructed to relieve highwall pore pressure
HD-19-1, A through F	5/3/2019	M/O 2252	N/A	132394, 132395, 132396, 132714, 132715, 132716	N10	E44	19	SE-NW	-117.08753	38.71253	5739.6	300, 300, 300, 300, 300, 300	Six (6) horizontal drains constructed to relieve highwall pore pressure

APPENDIX B - 2021 Points of Diversion Status

Point of Diversion Source Name	Completion Date	Current Permit / Waiver	Base Water Right	NDWR Well Log (s)	Township	Range	Section	Quarter-Quarter	Longitude (WGS84)	Latitude (WGS84)	Surface Elev. (ft-Mean Sea Level)	Completed Depth (ft-bgs)	Status / Remarks
Existing PODs at End of 2021													
DW-79	5/29/2016	83333		125233	N10	E44	30	SE-NE	-117.07725	38.69889	5346.7	650	In-pit dewatering well
DW-80	9/4/2016	83333		127273	N10	E44	30	SE-NE	-117.07730	38.69963	5308.5	610	In-pit dewatering well
DW-81	5/7/2016	83333		124994	N10	E44	29	SW-NW	-117.07365	38.69679	5866.8	810	In-pit dewatering well
DW-83	7/28/2016	83333		125553	N10	E43	24	SE-SW	-117.10310	38.70398	6010.8	1010	Alluvial (ex-pit) dewatering well
DW-84	9/26/2016	83333		127302	N10	E44	19	SE-SW	-117.08608	38.70600	4789.5	570	In-pit dewatering well
DW-85	3/21/2017	83333		127566	N10	E44	30	NW-NE	-117.08082	38.70083	5205.6	670	In-pit dewatering well
DW-86	4/27/2017	83333		127709	N10	E43	24	SW-SE	-117.09862	38.70552	6105.6	970	Alluvial (ex-pit) dewatering well
DW-87	6/8/2017	83333		128350	N10	E43	24	SW-NE	-117.09990	38.71120	6187.5	1340	Alluvial (ex-pit) dewatering well
DW-90	7/16/2017	83333		128422	N10	E44	30	NE-NE	-117.07804	38.70131	5312.5	600	In-pit dewatering well
DW-88	7/24/2017	83333		129418	N10	E43	24	SW-NE	-117.09931	38.71322	6190.0	1310	Alluvial (ex-pit) dewatering well
DW-91	9/14/2017	83333		128469	N10	E44	19	SW-SW	-117.09082	38.70668	5064.9	710	In-pit dewatering well
DW-92	12/2/2017	83333		128384	N10	E44	30	NE-NW	-117.08290	38.70260	5103.9	705	In-pit dewatering well
DW-93	12/3/2017	83333		129033	N10	E44	30	NW-NE	-117.07976	38.70193	5174.7	660	In-pit dewatering well
DW-94	4/24/2018	83333		129844	N10	E44	30	NW-NE	-117.07900	38.70088	5105.2	320	In-pit dewatering well
DW-94a	9/10/2018	83333		131219	N10	E44	30	NW-NE	-117.07889	38.70073	5105.9	620	In-pit dewatering well
DW-95	7/27/2018	83333		130562	N10	E44	30	NW-NE	-117.07996	38.70038	5101.9	782	In-pit dewatering well
DW-96	9/30/2018	83333		131149	N10	E44	19	SE-SW	-117.08632	38.70419	4890.1	920	In-pit dewatering well
DW-97	6/2/2019	83333		132382	N10	E44	19	SW-SW	-117.07504	38.69573	5030.9	940	In-pit dewatering well
DWCA-1	2/19/2020	83333		135443	N10	E43	24	NE-SE	-117.09544	38.71064	5518.6	378	Alluvial (In-pit) dewatering well
DWCA-2	2/5/2020	83333		134386	N10	E43	24	SE-NE	-117.09430	38.71136	5555.5	340	Alluvial (In-pit) dewatering well
DWCA-3	10/13/2019	83333		133446	N10	E43	24	SE-NE	-117.09318	38.71172	5592.9	360	Alluvial (In-pit) dewatering well
DWW-1	9/23/2018	83333		130900	N10	E43	24	NW-SE	-117.10052	38.71019	6002.3	1123	Alluvial (ex-pit) dewatering well
DWW-2	8/25/2018	83333		130745	N10	E43	24	SW-NE	-117.09661	38.71429	6119.0	995	Alluvial (ex-pit) dewatering well
DWW-3	6/30/2018	83333		130597	N10	E43	24	SW-NE	-117.10008	38.71124	6102.4	1161	Alluvial (ex-pit) dewatering well
DWW-4	6/19/2018	83333		130249	N10	E43	24	NE-SW	-117.10498	38.71183	5945.4	1240	Alluvial (ex-pit) dewatering well
DWW-5	8/14/2018	83333		130780	N10	E43	25	NE-NW	-117.10514	38.70317	5996.1	1005	Alluvial (ex-pit) dewatering well
DWW-6	5/31/2018	83333		130596	N10	E43	24	SW-NE	-117.09842	38.71352	6120.0	1000	Alluvial (ex-pit) dewatering well
DWW-7	5/23/2018	83333		130185	N10	E43	24	NE-SW	-117.10424	38.70749	5990.5	1115	Alluvial (ex-pit) dewatering well
DWW-8	7/18/2018	83333		130461	N10	E43	24	SE-SW	-117.10389	38.70643	5993.9	1064	Alluvial (ex-pit) dewatering well
DWW-9	3/7/2019	83333		131908	N10	E43	25	NW-NE	-117.09746	38.70319	6084.5	870	Alluvial (ex-pit) dewatering well
DWW-10	7/3/2019	83333		132562	N10	E43	24	SE-NE	-117.09428	38.71448	6117.1	850	Alluvial (ex-pit) dewatering well
DWW-11	8/30/2019	83333		132966	N10	E43	24	SE-NE	-117.09540	38.71435	6118.4	930	Alluvial (ex-pit) dewatering well
DWW-12	8/5/2019	83333		133220	N10	E43	24	SW-NE	-117.09631	38.71264	6022.2	860	Alluvial (ex-pit) dewatering well
DWW-13	10/2/2019	83333		133388	N10	E43	24	NW-SE	-117.09867	38.71056	6023.2	990	Alluvial (ex-pit) dewatering well
DWW-14	9/23/2019	83333		133035	N10	E43	24	NW-SE	-117.09883	38.70955	6019.8	985	Alluvial (ex-pit) dewatering well
DWW-15	12/21/2019	83333		133503	N10	E43	24	NE-SW	-117.10144	38.70875	6003.3	1110	Alluvial (ex-pit) dewatering well
DWW-16	11/4/2019	83333		133278	N10	E43	24	SW-SE	-117.10059	38.70687	6038.5	935	Alluvial (ex-pit) dewatering well
DWW-17	12/10/2019	83333		133650	N10	E43	24	SW-SE	-117.10032	38.70507	6037.0	970	Alluvial (ex-pit) dewatering well

APPENDIX B - 2021 Points of Diversion Status

Point of Diversion Source Name	Completion Date	Current Permit / Waiver	Base Water Right	NDWR Well Log (s)	Township	Range	Section	Quarter-Quarter	Longitude (WGS84)	Latitude (WGS84)	Surface Elev. (ft-Mean Sea Level)	Completed Depth (ft-bgs)	Status / Remarks
Existing PODs at End of 2021													
DWW-18	10/9/2020	83333		137172	N10	E43	24	SW-NE	-117.09711	38.71142	5919.2	1043	Alluvial (In-pit) dewatering well
DWW-19	10/17/2019	83333		133649	N10	E43	24	NW-SE	-117.10070	38.70936	6003.2	1080	Alluvial (ex-pit) dewatering well
DWW-20	12/6/2020	83333		135488	N10	E43	24	SW-SE	-117.09779	38.70659	5917.3	851	Alluvial (In-pit) dewatering well
DWW-21	8/30/2020	83333		134722	N10	E43	24	SE-NE	-117.09209	38.71316	5919.0	793	Alluvial (In-pit) dewatering well
SDWA-20-01	9/25/2020	83333		135616	N10	E43	24	SE-SE	-117.09466	38.70731	5384.4	205	Alluvial (In-pit) dewatering well
SDWA-20-02	9/5/2020	83333		135637	N10	E43	24	NE-SE	-117.09476	38.70746	5384.1	230	Alluvial (In-pit) dewatering well
SDWA-20-03	10/2/2020	83333		135636	N10	E43	24	NE-SE	-117.09487	38.70760	5384.0	180	Alluvial (In-pit) dewatering well
SDWA-20-04	9/3/2020	83333		135635	N10	E43	24	NE-SE	-117.09498	38.70774	5383.6	220	Alluvial (In-pit) dewatering well
SDWA-20-05	10/4/2020	83333		135634	N10	E43	24	NE-SE	-117.09510	38.70787	5382.8	205	Alluvial (In-pit) dewatering well
SDWA-20-06	9/30/2020	83333		135633	N10	E43	24	NE-SE	-117.09522	38.70801	5383.9	245	Alluvial (In-pit) dewatering well
SDWA-20-07	9/28/2020	83333		135632	N10	E43	24	SE-SE	-117.09422	38.70674	5385.4	125	Alluvial (In-pit) dewatering well
SDWA-20-08	9/24/2020	83333		135631	N10	E43	24	NE-SE	-117.09540	38.70826	5383.1	265	Alluvial (In-pit) dewatering well
SDWA-20-09	8/13/2020	83333		136714	N10	E43	24	NE-SE	-117.09546	38.70836	5412.8	300	Alluvial (In-pit) dewatering well
SDWA-20-11	8/21/2020	83333		135629	N10	E43	24	NE-SE	-117.09510	38.70899	5411.6	330	Alluvial (In-pit) dewatering well
SDWA-20-12	8/29/2020	83333		135628	N10	E43	24	NE-SE	-117.09508	38.70914	5410.9	330	Alluvial (In-pit) dewatering well
SDWA-20-13	8/21/2020	83333		135627	N10	E43	24	NE-SE	-117.09505	38.70929	5411.7	325	Alluvial (In-pit) dewatering well
SDWA-20-14	8/12/2020	83333		135002	N10	E43	24	NE-SE	-117.09501	38.70951	5413.1	220	Alluvial (In-pit) dewatering well
SDWA-20-15	10/28/2020	83333		135505	N10	E43	24	NE-SE	-117.09501	38.70973	5383.2	280	Alluvial (In-pit) dewatering well
SDWA-20-16	9/17/2020	83333		NOI N2020-528	N10	E43	24	NE-SE	-117.09496	38.70996	5383.0	290	Alluvial (In-pit) dewatering well
SDWA-20-17	10/22/2020	83333		135506	N10	E43	24	NE-SE	-117.09482	38.71023	5379.3	260	Alluvial (In-pit) dewatering well
SDWA-20-18	9/10/2020	83333		135642	N10	E43	24	NE-SE	-117.09457	38.71044	5378.0	275	Alluvial (In-pit) dewatering well
SDWA-20-19	10/5/2020	83333		NOI N2020-528	N10	E43	24	NE-SE	-117.09427	38.71058	5383.1	300	Alluvial (In-pit) dewatering well
SDWA-20-20	9/15/2020	83333		135046	N10	E43	24	NE-SE	-117.09396	38.71070	5382.4	305	Alluvial (In-pit) dewatering well
SDWA-20-21	8/3/2020	83333		135626	N10	E43	24	NE-SE	-117.09342	38.71083	5412.7	355	Alluvial (In-pit) dewatering well
SDWA-20-22	9/18/2020	83333		135625	N10	E43	24	NE-SE	-117.09240	38.71100	5376.2	350	Alluvial (In-pit) dewatering well
North Wall Sump (5525)	4/15/2019	83333		N/A	N10	E44	19	NE-SW	-117.08541	38.70995	5454.8	N/A	Sump built to collect water from pit inflows. Water is conveyed out of the pit via a booster pump.
Phase F Sump to Booster (4995)	1/1/2020	83333		N/A	N10	E44	30	NW-NE	-117.07948	38.70028	4924.8	N/A	Sump built to collect water from pit inflows. Water is conveyed out of the pit via a booster pump.
Phase F Sump to Booster (5170)	1/1/2019	83333		N/A	N10	E44	30	NW-NE	-117.07903	38.70117	5099.8	N/A	Sump built to collect water from pit inflows. Water is conveyed out of the pit via a booster pump.
Phase G Sump to Booster	1/1/2019	83333		N/A	N10	E44	19	SE-SW	-117.08426	38.70483	4679.8	N/A	Sump built to collect water from pit inflows. Water is conveyed out of the pit via a booster pump.

APPENDIX B - 2021 Points of Diversion Status

Point of Diversion Source Name	Completion Date	Current Permit / Waiver	Base Water Right	NDWR Well Log (s)	Township	Range	Section	Quarter-Quarter	Longitude (WGS84)	Latitude (WGS84)	Surface Elev. (ft-Mean Sea Level)	Completed Depth (ft-bgs)	Status / Remarks
New PODs in 2021													
DW(NW)-21-01	2/16/2021		83333	136504	N10	E44	19	SE-NW	-117.08625	38.71366	6117.7	512	Alluvial (In-pit) dewatering well
DWC(B)-01	3/8/2021		83333	137356	N10	E43	24	SE-NE	-117.09179	38.71304	5820.7	705	Alluvial (In-pit) dewatering well
DWC(B)-02	4/8/2021		83333	137206	N10	E44	19	SW-NW	-117.09062	38.71289	5774.3	625	Alluvial (In-pit) dewatering well
DWW-22	3/30/2021		83333	136643	N10	E43	24	SW-SE	-117.09699	38.70384	5821.3	635	Alluvial (In-pit) dewatering well
DWW-23	3/22/2021		83333	137071	N10	E43	24	SW-SE	-117.09739	38.70432	5820.4	770	Alluvial (In-pit) dewatering well
DWW-24	4/10/2021		83333	136591	N10	E43	24	SW-SE	-117.09782	38.70493	5820.0	710	Alluvial (In-pit) dewatering well
SDW(NW)-21-01	6/27/2021		83333	137515	N10	E44	19	SE-NW	-117.08653	38.71246	5871.5	190	Alluvial (In-pit) dewatering well
SDW(NW)-21-02	6/30/2021		83333	137519	N10	E44	19	SE-NW	-117.08666	38.71255	5871.3	195	Alluvial (In-pit) dewatering well
SDW(NW)-21-03	7/9/2021		83333	137514	N10	E44	19	SE-NW	-117.08678	38.71265	5871.5	225	Alluvial (In-pit) dewatering well
SDW(NW)-21-04	7/14/2021		83333	137517	N10	E44	19	SE-NW	-117.08689	38.71276	5871.6	245	Alluvial (In-pit) dewatering well
SDW(NW)-21-05	7/18/2021		83333	137518	N10	E44	19	SW-NW	-117.08702	38.71286	5871.4	285	Alluvial (In-pit) dewatering well
HD-21-01	11/19/2021	DR-0001	N/A	N2021-963	N10	E44	30	NE-NW	-117.08370	38.70350	4771.4	700	One (1) horizontal drains constructed to relieve highwall pore pressure
HD-21-02, A through B	11/28/2021	DR-0001	N/A	N2021-962	N10	E44	19	SE-SW	-117.08488	38.70396	4771.6	600, 500	Two (2) horizontal drains constructed to relieve highwall pore pressure
HD-21-03, A through C	6/11/2021	DR-0001	N/A	137096, N2021-354, 137097	N10	E44	19	SE-SW	-117.08560	38.70482	4760.1	500, 600, 760	Three (3) horizontal drains constructed to relieve highwall pore pressure
HD-21-04, A through C	5/24/2021	DR-0001	N/A	137054, 137055, 137053	N10	E44	19	SW-SW	-117.08760	38.70544	4762.0	560, 680, 550	Three (3) horizontal drains constructed to relieve highwall pore pressure
Abandoned PODs in 2021													
DW-51	4/16/2007		76600	105762	N10	E43	24	SW-NE	-117.09701	38.71234	6121.5	955	Alluvial (ex-pit) dewatering well
Mined Out PODs in 2021 (Eliminated by Mining)													
Decline Drains (DD-1 and DD-2)	12/7/2015	M/O 2028	83333	124148	N10	E44	19	SW-SW	-117.08757	38.70658	4723.8	600	Two horizontal drain to dewater an underground decline and relieve highwall pressure; water conveyed out of pit via a booster pump.
HD-16-10, J through L	10/3/2016	M/O 2080	N/A	126349, 126351, 126352	N10	E43	24	SE-SE, NE-SE	-117.09298	38.70667	5253.3, 5220.6	440, 340, 400	Three (3) horizontal drains constructed to relieve highwall pore pressure
North Wall Sump (5790)	4/15/2019		83333	N/A	N10	E44	19	SE-NW	-117.08650	38.71123	5719.8	N/A	Sump built to collect water from pit inflows. Water is conveyed out of the pit via a booster pump.

APPENDIX C

2021 Hydrology / Dewatering Drain & MO Waiver Status

APPENDIX C - 2021 Hydrology/Dewatering Drain MO Waiver Status

Completion Name	Completion Date	Waiver Types (1,2,3)	Waiver	NOI #	Township	Range	Section	Quarter-Quarter	Easting-X (NAD27-m)	Northing-Y (NAD27-m)
Existing at End of 2021										
MW 95-9		MO	M/O-901		10N	44E	29	NW-SW	493657	4282545
MW 96-1	9/28/1996	MO	M/O-992A	31353	10N	43E	25	NE-NW	491273	4283693
M/O 2000-3	6/15/2000	MO	M/O-1209	44764	10N	44E	29	NE-SW	494427	4282511
M/O 2000-9	2/9/2001	MO	M/O-1209	46655	10N	44E	29	SW-SE	494379	4282455
M/O 2002-10	5/15/2002	MO	M/O- 1250	50849	10N	44E	29	NW-NW	493709	4283312
M/O 2002-9	5/13/2002	MO	M/O- 1250	50850	10N	44E	29	NW-NW	493707	4283280
M/O 2007-3	2/25/2007	MO	M/O 1436	30754	10N	44E	19	SE-NW	493007	4284518
M/O 2007-6	4/1/2007	MO	M/O 1436	59732	10N	44E	29	NW-SW	493827	4283206
M/O 2008-2	12/3/2008	MO	M/O1500	61043	10N	44E	19	SW-NW	492519	4284776
M/O 2010-4	1/30/2011	MO	M/O 1647	65783	10N	44E	19	NE-SW	492769	4284499
M/O 2010-5	1/14/2011	MO	M/O 1647	65784	10N	44E	19	NW-SE	493213	4284404
M/O 2010-6	1/11/2011	MO	M/O 1647	65785	10N	44E	30	SW-NE	493133	4282903
M/O 2010-7	1/27/2011	MO	M/O 1647	65786	10N	44E	30	NW-NW	492337	4283374
M/O 2010-10	3/21/2011	MO	M/O 1670	65791	10N	44E	30	NW-SE	492958	4282710
D-511	2/14/2012	MO	M/O 1803	33040	10N	43E	24	SW-SE	491492	4283987
HD-12-FV1	12/17/2012	Drain Type 2	M/O 1863	69245	10N	44E	29	NW-NW	493820	4283310
13-FVH-10 through 12		Drain Type 2	M/O 1878		10N	44E	20	SE-SW	494451	4283879
DV-14-15		Drain Type 1	M/O 1947		10N	44E	19	SE-NW	492854	4284685
DV-14-16	10/27/2014	Drain Type 1	M/O 1947	71458	10N	44E	19	SE-NW	492825	4284711
Existing at End of 2021										
DV-14-17	10/30/2014	Drain Type 1	M/O 1947	71458	10N	44E	19	SE-NW	492793	4284727
HD-15-2	9/4/2015	Drain Type 2	M/O 1976	71688	10N	44E	30	SE-NE	493370	4283015
HD-15-3	6/19/2015	Drain Type 2	M/O 1997	73199	10N	44E	30	NE-NE	493417	4283532
HD-15-5	8/19/2015	Drain Type 2	M/O 1997	73256	10N	44E	29	SW-NW	493921	4283064
MO 2016-10	4/8/2016	MO	M/O 2051	73618	10N	44E	30	SE-NE	493389	4283110
HD-16-10d	8/31/2016	Drain Type 2	M/O 2080	75547	10N	43E	24	SE-SE	491997	4283947
HD-16-10e	9/2/2016	Drain Type 2	M/O 2080	75547	10N	43E	24	SE-SE	491995	4283970
HD-16-10f	9/3/2016	Drain Type 2	M/O 2080	75547	10N	43E	24	SE-SE	491995	4284001
HD-16-10g	9/4/2016	Drain Type 2	M/O 2080	75547	10N	43E	24	SE-SE	491995	4284031
HD-16-10h	9/30/2016	Drain Type 2	M/O 2080	75547	10N	43E	24	SE-SE	491995	4284062
HD-16-10i	10/1/2016	Drain Type 2	M/O 2080	75547	10N	43E	24	SE-SE	491995	4284092
RP2-1R	12/15/2016	MO	M/O 2095	75561	9N	43E	1	NW-SW	490512	4279328
AD-16-3	12/10/2016	Drain Type 1	M/O 2094	75573	10N	44E	30	SW-NE	493263	4283140
AD-16-4	12/8/2016	Drain Type 1	M/O 2094	75573	10N	44E	30	SW-NE	493204	4283128
AD-16-5	12/5/2016	Drain Type 1	M/O 2094	75573	10N	44E	30	SW-NE	493172	4283126
AD-16-6	12/2/2016	Drain Type 1	M/O 2094	75573	10N	44E	30	SW-NE	493145	4283135
AD-16-8	12/9/2016	Drain Type 1	M/O 2094	75573	10N	44E	30	SW-NE	493230	4283131
AD-16-10	12/1/2016	Drain Type 1	M/O 2094	75573	10N	44E	30	SW-NE	493189	4283141
HD-19-1a	4/22/2019	Drain Type 2	M/O 2252	74364	10N	44E	19	NW-SW	492464	4284685
HD-19-1b	5/1/2019	Drain Type 2	M/O 2252	74364	10N	44E	19	NW-SW	492467	4284683
HD-19-1c	5/3/2019	Drain Type 2	M/O 2252	74364	10N	44E	19	NW-SW	492469	4284682
HD-19-1d	4/19/2019	Drain Type 2	M/O 2252	74365	10N	44E	19	NW-SE	492521	4284633
HD-19-1e	4/17/2019	Drain Type 2	M/O 2252	74365	10N	44E	19	NW-SE	492523	4284631
HD-19-1f	4/14/2019	Drain Type 2	M/O 2252	74365	10N	44E	19	NW-SE	492526	4284628
OBH(A)-20-02	9/13/2020	MO	M/O 2302-Amended	N2020-528	10N	43E	24	NE-SE	491825	4284389
DA(A)-20-01	12/4/2020	Drain Type 1	M/O 2302-Amended	N2020-823	10N	43E	24	SE-SE	491945	4283963
DA(A)-20-02	12/6/2020	Drain Type 1	M/O 2302-Amended	N2020-824	10N	43E	24	SE-SE	491946	4283979
DA(A)-20-03	12/9/2020	Drain Type 1	M/O 2302-Amended	N2020-825	10N	43E	24	SE-SE	491943	4283992
DA(A)-20-08	12/19/2020	Drain Type 1	M/O 2302-2nd Amended	N2020-1008	10N	43E	24	NE-SE	491876	4284461
DA(A)-20-09	12/22/2020	Drain Type 1	M/O 2302-2nd Amended	N2020-1009	10N	43E	24	SE-NE	492122	4284521

APPENDIX C - 2021 Hydrology/Dewatering Drain MO Waiver Status

Completion Name	Completion Date	Waiver Types (1,2,3)	Waiver	NOI #	Township	Range	Section	Quarter-Quarter	Easting-X (NAD27-m)	Northing-Y (NAD27-m)
New in 2021										
DV(NW)-21-01	3/4/2021	Drain Type 1	DR-0001	N2021-174	10N	43E	24	NE-SE	491898	4284474
DV(NW)-21-02	3/20/2021	Drain Type 1	DR-0001	N2021-175	10N	43E	24	NE-SE	491925	4284486
DV(NW)-21-03	3/23/2021	Drain Type 1	DR-0001	N2021-176	10N	43E	24	NE-SE	491941	4284491
DV(NW)-21-04	3/7/2021	Drain Type 1	DR-0001	N2021-177	10N	43E	24	NE-SE	491973	4284496
DV(NW)-21-05	3/8/2021	Drain Type 1	DR-0001	N2021-178	10N	43E	24	NE-SE	492004	4284504
DV(NW)-21-06	3/20/2021	Drain Type 1	DR-0001	N2021-179	10N	43E	24	NE-SE	492031	4284508
DV(NW)-21-07	3/27/2021	Drain Type 1	DR-0001	N2021-180	10N	43E	24	NE-SE	492065	4284513
DV(NW)-21-08	3/13/2021	Drain Type 1	DR-0001	N2021-181	10N	43E	24	SE-NE	492096	4284517
DV(NW)-21-09	3/19/2021	Drain Type 1	DR-0001	N2021-182	10N	44E	19	SW-NW	492158	4284521
DV(NW)-21-10	4/12/2021	Drain Type 1	DR-0001	N2021-183	10N	44E	19	SW-NW	492189	4284519
DV(NW)-21-11	3/25/2021	Drain Type 1	DR-0001	N2021-184	10N	44E	19	NW-SW	492210	4284505
DV(NW)-21-12	3/16/2021	Drain Type 1	DR-0001	N2021-185	10N	44E	19	NW-SW	492234	4284486
DV(NW)-21-13	3/21/2021	Drain Type 1	DR-0001	N2021-186	10N	44E	19	NW-SW	492265	4284478
DV(NW)-21-14	3/15/2021	Drain Type 1	DR-0001	N2021-187	10N	44E	19	NW-SW	492296	4284476
HD-21-01	11/19/2021	Drain Type 2	DR-0001	N2021-963	10N	44E	30	NE-NW	492802	4283680
HD-21-02a	11/25/2021	Drain Type 2	DR-0001	N2021-962	10N	44E	19	SE-SW	492702	4283730
HD-21-02b	11/28/2021	Drain Type 2	DR-0001	N2021-962	10N	44E	19	SE-SW	492699	4283731
HD-21-03a	6/8/2021	Drain Type 2	DR-0001	N2021-354	10N	44E	19	SE-SW	492605	4283825
HD-21-03b	6/11/2021	Drain Type 2	DR-0001	N2021-354	10N	44E	19	SE-SW	492602	4283827
HD-21-03c	6/5/2021	Drain Type 2	DR-0001	N2021-354	10N	44E	19	SE-SW	492599	4283829
HD-21-04a	5/19/2021	Drain Type 2	DR-0001	N2021-353	10N	44E	19	SW-SW	492466	4283895
HD-21-04b	5/22/2021	Drain Type 2	DR-0001	N2021-353	10N	44E	19	SW-SW	492463	4283896
HD-21-04c	5/24/2021	Drain Type 2	DR-0001	N2021-353	10N	44E	19	SW-SW	492460	4283896
Inc-21-01	5/23/2021	MO	M/O-2351	N2021-425	10N	44E	19	NW-SW	492361	4284467
Inc-21-02	5/25/2021	MO	M/O-2351	N2021-424	10N	43E	24	NE-SE	491994	4284442
Inc-21-03	6/6/2021	MO	M/O-2351	N2021-423	10N	43E	24	NE-SE	491893	4284318
DA(NW)-21-15	8/27/2021	Drain Type 1	DR-0003	N2021-689	10N	43E	24	NE-SE	491844	4284446
DA(NW)-21-16	8/30/2021	Drain Type 1	DR-0003	N2021-688	10N	43E	24	NE-SE	492006	4284511
DV(NW)-21-17	8/25/2021	Drain Type 1	DR-0003	N2021-691	10N	43E	24	NE-SE	492006	4284445
DA(NW)-21-18	10/1/2021	Drain Type 1	DR-0003	N2021-690	10N	44E	19	SW-NW	492146	4284528
DA(NW)-21-19	10/8/2021	Drain Type 1	DR-0003	N2021-687	10N	44E	19	SW-NW	492162	4284519
MOH(G)-21-01	12/11/2021	Drain Type 2	DR-0003	N2021-961	10N	44E	19	SE-SW	492547	4284054
MOH(G)-21-02	12/14/2021	Drain Type 2	DR-0003	N2021-961	10N	44E	19	SE-SW	492496	4283906
DV(NS)-21-01	12/12/2021	Drain Type 1	DR-0004	N2021-1107	10N	44E	19	SW-NW	492501	4284727
DV(NS)-21-02	12/14/2021	Drain Type 1	DR-0004	N2021-1106	10N	44E	19	SW-NW	492487	4284734
Removed from Campaign or Not Drilled in 2021										
FVHD-21-05a		Drain Type 2	DR-0001		10N	44E	20	SE-SW	494419	4283690
FVHD-21-05b		Drain Type 2	DR-0001		10N	44E	20	SE-SW	494421	4283692
FVHD-21-05c		Drain Type 2	DR-0001		10N	44E	20	SE-SW	494417	4283688
FVHD-21-05d		Drain Type 2	DR-0001		10N	44E	20	SE-SW	494418	4283690
FVHD-21-05e		Drain Type 2	DR-0001		10N	44E	20	SE-SW	494416	4283688
FVHD-21-06a		Drain Type 2	DR-0001		10N	44E	29	NE-NW	494318	4283620
FVHD-21-06b		Drain Type 2	DR-0001		10N	44E	29	NE-NW	494317	4283617
FVHD-21-06c		Drain Type 2	DR-0001		10N	44E	29	NE-NW	494314	4283615
FVHD-21-06d		Drain Type 2	DR-0001		10N	44E	29	NE-NW	494312	4283613
MOH(G)-21-02a		Drain Type 2	DR-0003		10N	44E	19	SE-SW	492554	4283880

APPENDIX C - 2021 Hydrology/Dewatering Drain MO Waiver Status

Completion Name	Completion Date	Waiver Types (1,2,3)	Waiver	NOI #	Township	Range	Section	Quarter-Quarter	Easting-X (NAD27-m)	Northing-Y (NAD27-m)
Abandoned in 2021										

NONE IN 2021

Mined Out in 2021 (Eliminated by Mining)										
Decline Drain	11/24/2015	Drain Type 2	M/O 2028	73597	10N	44E	19	SW-SW	492477	4283995
HD-16-10j	10/2/2016	Drain Type 2	M/O 2080	75548	10N	43E	24	NE-SE	491999	4284122
HD-16-10k	10/3/2016	Drain Type 2	M/O 2080	75548	10N	43E	24	NE-SE	492018	4284147
HD-16-10l	10/3/2016	Drain Type 2	M/O 2080	75548	10N	43E	24	NE-SE	492046	4284162
DA(A)-20-04	11/3/2020	Drain Type 1	M/O 2302-Amended	N2020-827	10N	43E	24	SE-SE	491943	4284005
DA(A)-20-05	11/1/2020	Drain Type 1	M/O 2302-Amended	N2020-827	10N	43E	24	SE-SE	491943	4284019
DA(A)-20-19	4/17/2020	Drain Type 1	M/O 2302	76518	10N	43E	24	NE-SE	491836	4284281
DA(A)-20-20	4/22/2020	Drain Type 1	M/O 2302	76518	10N	43E	24	NE-SE	491834	4284301

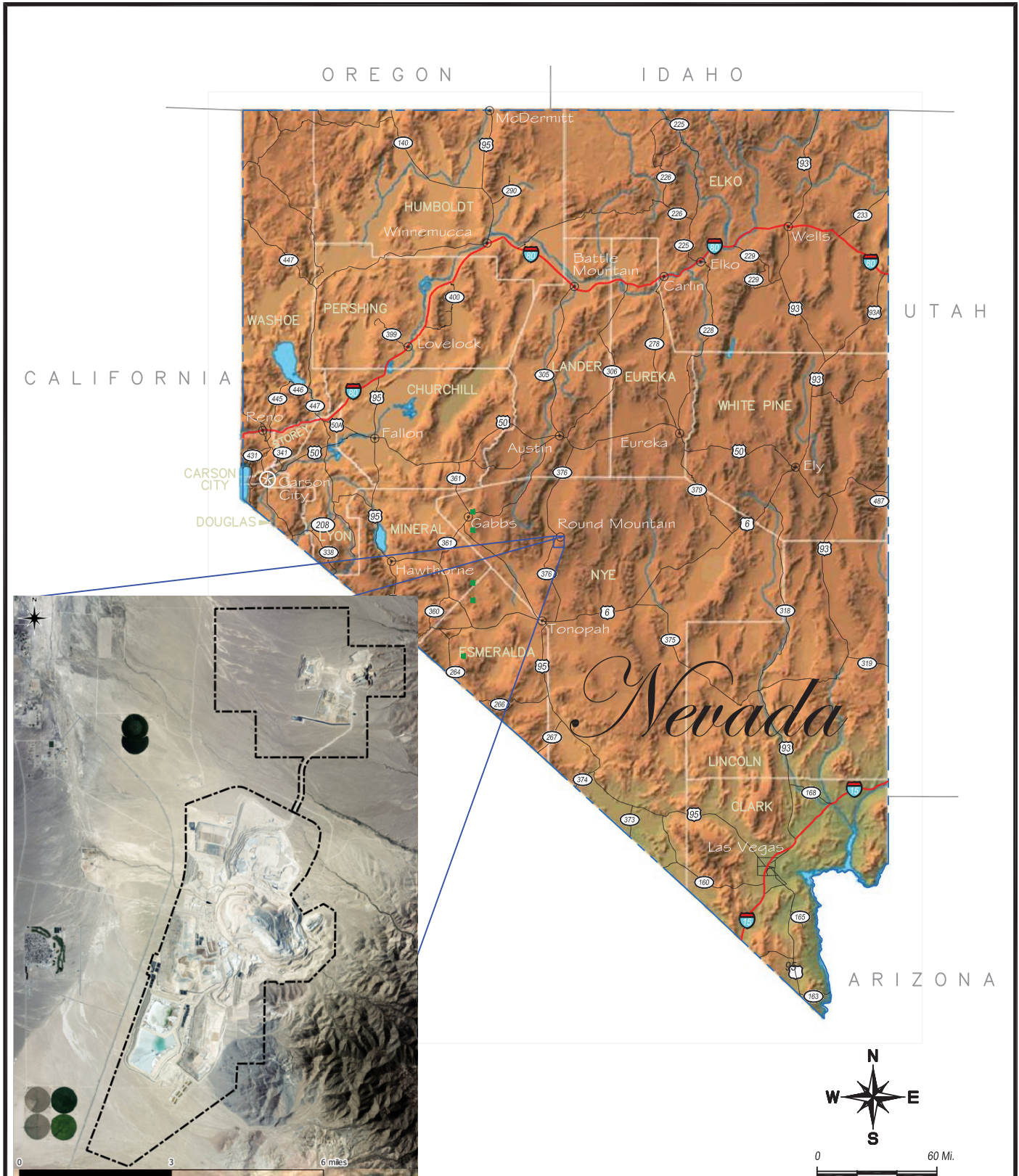
Notes:

¹ **MO Waivers:** Includes wells and certain instrumentation and/or geotechnical boreholes equipped with vibrating wire piezometers that were completed under a MO Waivers. Appendix C only includes MO Waivers associated with dewatering and hydrologic monitoring programs.

² **Drain (DR) Waivers – Type 1:** Includes drains that are completed in areas that require temporary short term groundwater depressurization in advance of mining where the groundwater captured by the drains cannot be directly accounted for within the dewatering system. A common example of this type of drain at Round Mountain is a vertical drain that is used to gravity drain groundwater to another hydrogeologic unit that is already depressurized by existing dewatering components such that the drained groundwater is assumed to be accounted for passively and elsewhere in the system.

³ **Drain (DR) Waivers – Type 2:** Includes drains that are completed in areas that require temporary groundwater depressurization over longer periods of time. A common example of this type of drain at Round Mountain is a horizontal drain used to gravity drain groundwater in areas where the captured water can be or must be conveyed directly to an actively operated dewatering well or sump where the diversion of groundwater is directly accounted for within existing infrastructure.

REPORT PLATES



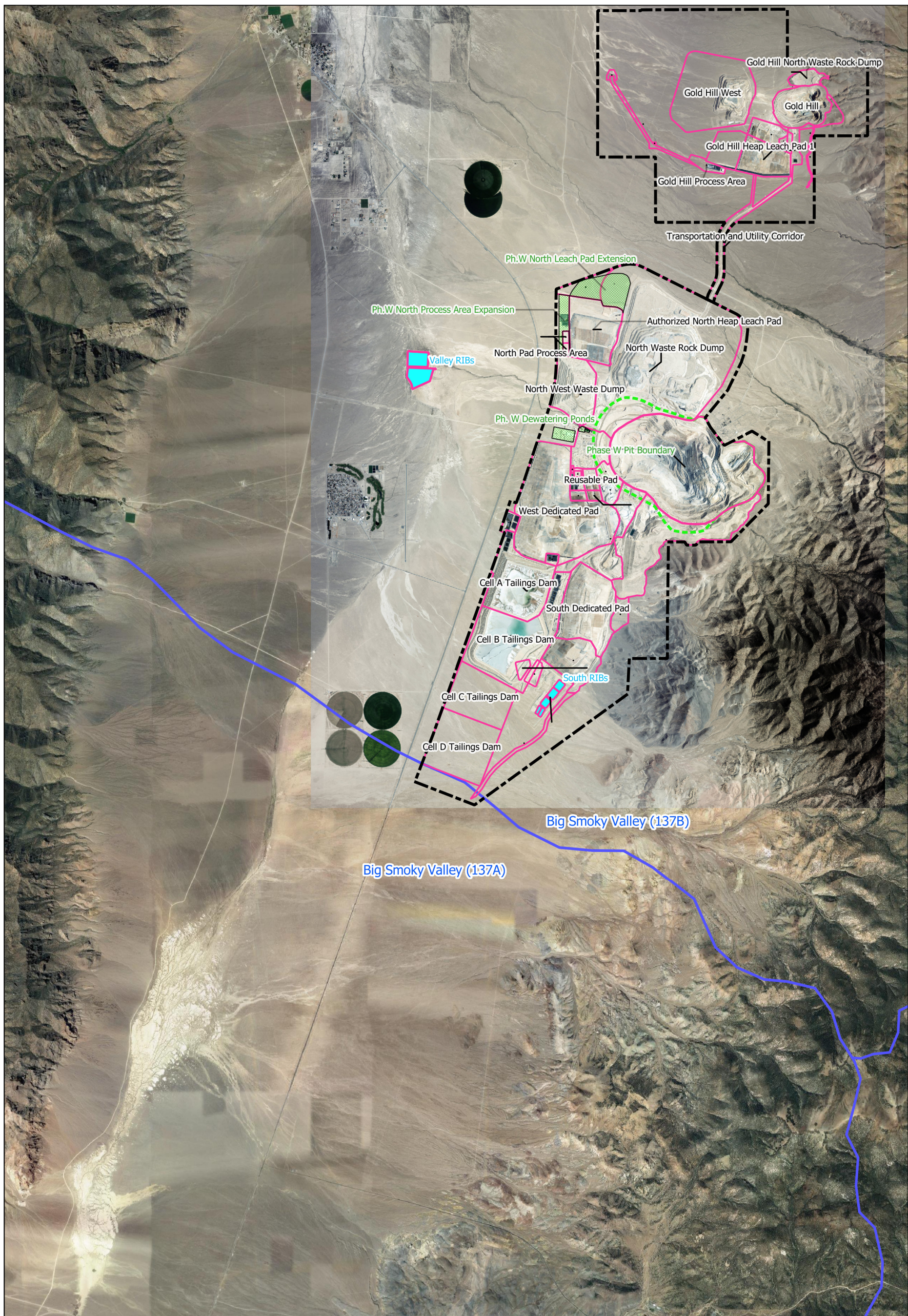
Plan of Operations Boundary

DRAWN BY:	WEM	03.10.10
DESIGNED BY:	WEM	03.10.10
CHECKED BY:		
APPROVED:	JMD	05.27.14
APPROVED:		

KINROSS Round Mountain
 2021 ANNUAL REPORT

ROUND MOUNTAIN GOLD CORPORATION
 VICINITY MAP

SCALE:	AS NOTED	REV.
PROJECT NO.:		0
CADFILE:		
DRAWING NO.		
PLATE 1		



Legend

- Phase W Expansions
 - Authorized Expansion Areas
 - Phase W Pit Boundary (2017)
 - Authorized Plan of Ops Boundary
 - RMX Pit Boundary (2010)
 - Rapid Infiltration Basins (RIBs)
- 2021 RMGC Ortho & Google Earth



Graphic Scale

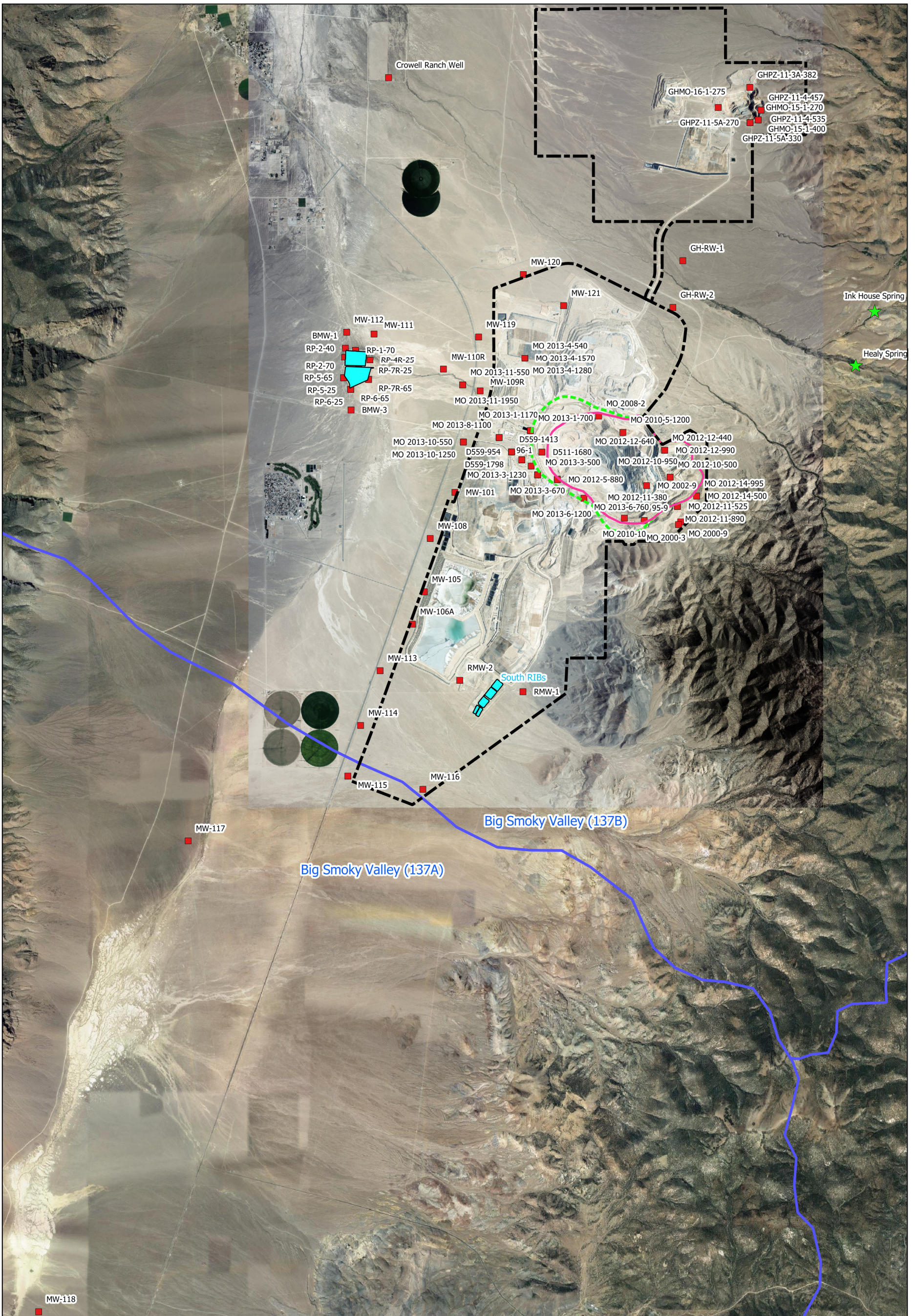




KINROSS Round Mountain

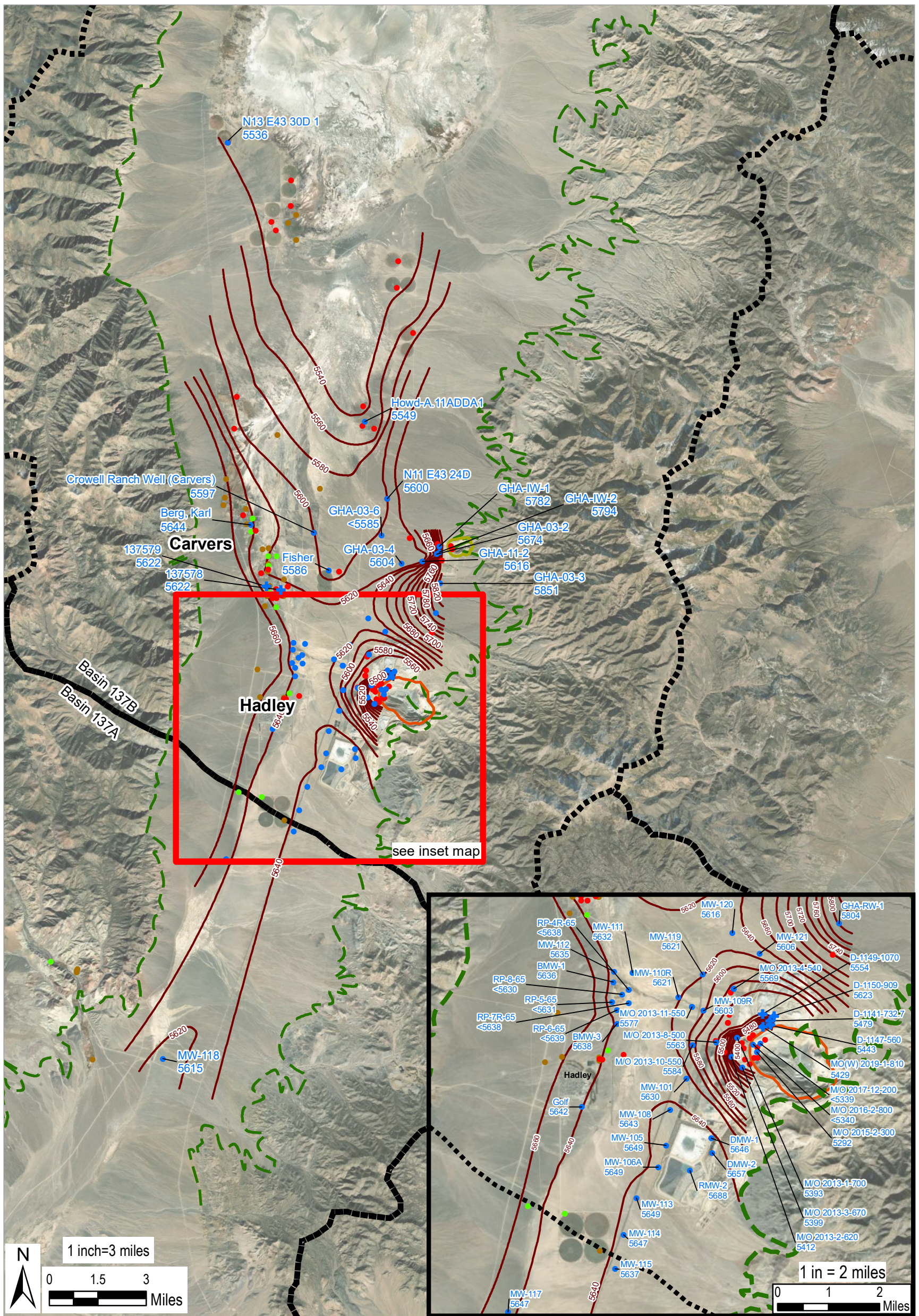
2021 Annual Report

Non-Pumping Monitoring Sites Reported to NDWR

PLATE 2



Legend		 Graphic Scale 0 1 2 3 4 mi	
<ul style="list-style-type: none"> --- Phase W Pit Boundary (2017) Authorized Plan of Ops Boundary RMX Pit Boundary (2010) Phase W Expansion Areas Authorized Expansion Areas 2020 RMGC Ortho & Google Earth 	<ul style="list-style-type: none"> 2021 NDWR Monitoring Sites ■ MW ▲ PW (Not Shown) ★ Spring 		



- Water level measured 2021
- Water level measured 2010-2020
- Water level measured 2000-2010
- Water level measured 1990-1999
- + symbol denotes site added to map in 2021
- Alluvial groundwater contours, 20 ft interval
- ▭ RMX permitted pit boundary
- ▭ GH permitted pit boundary
- Alluvial-bedrock contact
- Hydrographic Basin Boundaries

*Labels and levels shown for 2021 data. Levels for pre-2021 data listed in "Groundwater elevations for regional map_24Jan2022.xlsx"



Big Smoky Valley alluvial well locations and water levels			
CLIENT:	Round Mountain Gold Corporation	PROJECT:	2021 Annual report
JOB #:		DRAWN:	MB
DATE:	January 2022	CHECKED:	MA
		PLATE:	4