

**Eagle Gold Project**

Project Proposal for Executive Committee Review

*Pursuant to the Yukon Environmental and Socio-economic Assessment Act*

Appendix 21: Surface Water Balance Model Report

---

# APPENDIX 21

## Surface Water Balance Model Report



# EAGLE GOLD PROJECT

## Surface Water Balance Model Report



***Prepared for:***

Victoria Gold Corp  
680 – 1066 West Hastings Street  
Vancouver, BC  
V6E 3X2

***Prepared by:***

Stantec  
4370 Dominion Street, Suite 500  
Burnaby, BC  
V5G 4L7  
Tel: (604) 436-3014 Fax: (604) 436-3752

***Project No.:***

1490-10002

December 2010





**AUTHORSHIP**

Jane Bachman, B.Sc. M.Sc Candidate. ....Author  
Sitotaw Yirdaw-Zeleke, Ph.D., P.Eng.. .... Technical Review  
Stephen Wilbur, Ph.D., P.Geol. .... Senior Review

**THIS PAGE INTENTIONALLY LEFT BLANK.**

## TABLE OF CONTENTS

<b>1</b>	<b>Introduction .....</b>	<b>1-1</b>
1.1	Objectives .....	1-1
1.2	Study Area Boundaries .....	1-1
1.3	Scope .....	1-1
1.4	Model Description .....	1-2
1.5	Model Timeframe Modules .....	1-2
<b>2</b>	<b>Water Balance Formulation .....</b>	<b>2-1</b>
<b>3</b>	<b>Baseline Model Development .....</b>	<b>3-1</b>
3.1	Climate Data .....	3-2
3.1.1	Monthly Temperature .....	3-2
3.1.2	Evaporative Processes.....	3-4
3.1.2.1	Evaporation .....	3-4
3.1.2.2	Evapotranspiration .....	3-7
3.1.2.3	Sublimation .....	3-8
3.1.3	Precipitation.....	3-8
3.1.3.1	Precipitation Database.....	3-8
3.1.3.2	Model Predictions for Precipitation .....	3-10
3.2	Streamflow Data.....	3-15
3.2.1	Streamflow Database .....	3-15
3.2.2	Subsurface Flow.....	3-17
3.3	Drainage Basin Assumptions .....	3-17
3.4	Water Balance Scenarios.....	3-19
3.4.1	Scenario Selection Rationale .....	3-21
3.4.2	Hydroclimatic Conditions.....	3-21
3.4.3	Hydroclimatic Events .....	3-22
<b>4</b>	<b>Baseline Calibration and Coefficient Development .....</b>	<b>4-1</b>
<b>5</b>	<b>Project Facilities and Model Development.....</b>	<b>5-1</b>
5.1	Construction .....	5-1
5.2	Operations.....	5-5
5.2.1	Open Pit.....	5-6
5.2.2	Platinum Gulch Waste Rock Storage Area .....	5-8
5.2.3	Eagle Pup Waste Rock Storage Area .....	5-9
5.2.4	Ann Gulch Heap Leach Facility .....	5-10
5.2.5	Mine Water Treatment Plant .....	5-12
5.3	Closure and Reclamation.....	5-13

	5.3.1	Open Pit.....	5-14
	5.3.2	Waste Rock Storage Areas .....	5-15
	5.3.3	Heap Leach Facility .....	5-15
	5.3.4	Mine Water Treatment Plant .....	5-16
	5.4	Post-closure Monitoring .....	5-17
<b>6</b>		<b>Results .....</b>	<b>6-1</b>
	6.1	Construction .....	6-1
	6.1.1	Eagle Creek Drainage .....	6-1
	6.1.2	Haggart Creek .....	6-2
	6.1.2.1	Downstream of the Existing Dublin Gulch (W-4) .....	6-2
	6.1.2.2	Downstream of Eagle Creek (W-29) .....	6-2
	6.2	Operations.....	6-2
	6.2.1	Open Pit.....	6-2
	6.2.2	Waste Rock Storage Areas .....	6-3
	6.2.3	Heap Leach Facility .....	6-5
	6.2.4	Mine Water Treatment Plant .....	6-6
	6.2.5	Process Water .....	6-8
	6.2.6	Streamflows.....	6-8
	6.2.6.1	Eagle Creek .....	6-8
	6.2.6.2	Platinum Gulch.....	6-8
	6.2.6.3	Haggart Creek.....	6-9
	6.2.7	Summary of Results for the Operations Phase.....	6-9
	6.3	Closure, Reclamation, and Post-closure Monitoring.....	6-10
	6.3.1	Open Pit.....	6-10
	6.3.2	Waste Rock Storage Areas .....	6-14
	6.3.3	Heap Leach Facility .....	6-16
	6.3.4	Mine Water Treatment Plant .....	6-18
	6.3.5	Streamflows.....	6-19
	6.3.5.1	Eagle Creek .....	6-19
	6.3.5.2	Platinum Gulch.....	6-19
	6.3.5.3	Haggart Creek.....	6-19
	6.3.6	Summary for the Closure and Reclamation Phase .....	6-20
	6.4	Hydroclimatic Events.....	6-21
<b>7</b>		<b>Sensitivity Analyses .....</b>	<b>7-1</b>
	7.1	General Approach .....	7-1
	7.2	Design Storm .....	7-1
	7.3	Calibration .....	7-1



7.4	Climate Change .....	7-1
7.5	Open Pit Evaporation Coefficients .....	7-2
7.6	Cover Options .....	7-3
7.6.1	Waste Rock Storage Areas .....	7-3
7.6.2	Heap Leach Facility .....	7-4
7.6.3	Effects on Flows in Haggart Creek.....	7-9
<b>8</b>	<b>Summary and Conclusions .....</b>	<b>8-1</b>
<b>9</b>	<b>References.....</b>	<b>9-1</b>
<b>10</b>	<b>Figures .....</b>	<b>10-1</b>

**List of Tables**

Table 1.5-1:	Project Timeline Modules .....	1-3
Table 3-1:	Regional Climate Stations .....	3-1
Table 3.1-1:	Comparison of Mayo (1925-2009) and Keno Hill (1974-1982) Temperatures (°C).....	3-3
Table 3.1-2:	Monthly Regional Lapse Rate Equations .....	3-3
Table 3.1-3:	SA Evaporation Estimates 2007 – 2009.....	3-5
Table 3.1-4:	Average Monthly Lake Evaporation for Regional Climate Stations.....	3-6
Table 3.1-5:	Monthly Distribution of Total Annual Evaporation.....	3-6
Table 3.1-6:	Comparison of Sublimation Estimates.....	3-8
Table 3.1-7:	Annual Precipitation Regional Frequency Analysis .....	3-11
Table 3.1-8:	Orographic Effects: Regional Ratios of Precipitation, Rainfall, and Snowfall.....	3-13
Table 3.1-9:	Regional Regressions of Orographic Effects.....	3-13
Table 3.1-10:	Monthly Distribution of Rainfall, Snowfall and Snowmelt.....	3-14
Table 3.2-1:	Uncertainty Level and Data Source for the Synthetic Streamflow Database .....	3-16
Table 3.3-1:	Basin Area and Elevation Data .....	3-18
Table 3.4-1:	Water Balance Scenarios .....	3-20
Table 3.4-2:	Probability of Hydroclimatic Conditions .....	3-22
Table 3.4-3:	Probability of Hydroclimatic Events .....	3-23
Table 3.4-4:	Design Storm: Regional Intensity-Duration-Frequency Analysis.....	3-23
Table 3.4-5:	Probability of Combined Hydroclimatic Conditions and Events.....	3-23
Table 4-1:	Comparison of Predicted Annual Rainfall, Snowfall and Precipitation for Upper and Lower Areas of the SA.....	4-2
Table 4-2:	Calibrated Coefficients for <i>ET</i> , <i>GWin</i> , <i>Q</i> , <i>RUN</i> and <i>GWout</i> .....	4-3

Table 5.1-1:	Water Storage Capacities .....	5-3
Table 5.2-1:	Major Activities Affecting Water Balance Model during Operations .....	5-5
Table 5.2-2:	Monthly Evaporation Coefficients for the Open Pit.....	5-7
Table 5.2-3:	Total Estimated Groundwater Inflow to the Open Pit .....	5-8
Table 5.2-4:	Monthly Evaporation and Runoff Coefficients for Waste Rock Storage Areas.....	5-10
Table 5.2-5:	Heap Leach Emitter Evaporation.....	5-11
Table 5.2-6:	Ore Feed Moisture as a Function of Net Precipitation.....	5-11
Table 5.2-7:	Heap Leach Facility Moisture Assumptions.....	5-11
Table 5.3-1:	Major Activities Affecting Water Balance Model during the Closure and Reclamation Phase .....	5-14
Table 5.3-2:	Assumed Draindown Proportions and Rates during the Closure and Reclamation Phase .....	5-16
Table 6.2-1:	Platinum Gulch Annual Water Balance during the Operations Phase .....	6-4
Table 6.2-2:	Eagle Pup Average Year Annual Water Balance during the Operations Phase .....	6-5
Table 6.2-3:	Heap Leach Annual Water Balance during the Operations Phase .....	6-6
Table 6.2-4:	Annual Water Balance for Mine Water Treatment Plant during Operations Phase .....	6-7
Table 6.3-1:	Open Pit Annual Water Balance during the Closure and Reclamation and Post-closure Monitoring Phases .....	6-12
Table 6.3-2:	Platinum Gulch Waste Rock Storage Areas Annual Water Balance during the Closure and Reclamation and Post-closure Monitoring Phases .....	6-13
Table 6.3-3:	Eagle Pup Waste Rock Storage Areas Annual Water Balance during the Closure and Reclamation and Post-closure Monitoring Phases .....	6-15
Table 6.3-4:	Heap Leach Facility Annual Water Balance during the Closure and Reclamation and Post-closure Monitoring Phases.....	6-16
Table 6.3-5:	Heap Leach Facility Annual Water Balance during Closure and Reclamation and Post-closure Monitoring with a 20% Infiltration Cover .....	6-17
Table 6.3-6:	Mine Water Treatment Plant Annual Water Balance during Closure and Reclamation and Post-closure Monitoring .....	6-18
Table 7.5-1:	Open Pit Evaporation Sensitivity from Open Pit Walls .....	7-2
Table 7.6-1:	Platinum Gulch Waste Rock Storage Cover Options .....	7-5
Table 7.6-2:	Eagle Pup Waste Rock Storage Cover Options .....	7-6
Table 7.6-3:	Ann Gulch Heap Leach Facility Cover Options .....	7-7
Table 7.6-4:	Infiltration Combinations and Effects on Haggart Creek at W4 and W29.....	7-8

**List of Figures**

Figure 1.1-1: General Location Map ..... 10-2

Figure 1.2-1: Hydrology Study Area with Major Sub-basins ..... 10-3

Figure 1.3-1: Project Facility Layout..... 10-4

Figure 3-1: Regional Climate Stations ..... 10-5

Figure 3.1-1: Hydrometric and Climate Monitoring Stations ..... 10-6

Figure 3.1-2: Comparison of Potato Hills Mean, Maximum, and Minimum Monthly  
 Temperatures to Model Estimates..... 10-7

Figure 3.2-1: Dublin Gulch Basin Streamflows August 2007 to October 2009 ..... 10-8

Figure 3.2-2: Eagle Creek Basin Streamflows August 2007 to October 2009..... 10-9

Figure 3.2-3: Haggart Creek Basin Streamflows August 2007 to October ..... 10-10

Figure 3.3-1: Water Management Schematic – Surface Water Model Baseline Conditions .... 10-11

Figure 4-1: Comparison of Average, Wet, and Dry Precipitation to Measured Annual  
 Precipitation ..... 10-12

Figure 4-2: Comparison of Average, Wet, and Dry Precipitation to Measured Monthly  
 Precipitation ..... 10-13

Figure 4-3: Comparison of Average, Wet, and Dry Precipitation to Measured Monthly  
 Rainfall ..... 10-14

Figure 4-4: Comparison of Average, Wet, and Dry Precipitation to Measured Monthly  
 Snowfall ..... 10-15

Figure 4-5: Synthetic Net Precipitation vs Synthetic Streamflow (Q) for Dublin Gulch at  
 W1..... 10-16

Figure 4-6: Synthetic Net Precipitation vs Predicted Net Precipitation ..... 10-16

Figure 4-7: Synthetic Streamflow vs Predicted Streamflow (Q) for Dublin Gulch at W1 ..... 10-17

Figure 4-8: Synthetic Baseflow vs Predicted Baseflow (*GWout*) for Dublin Gulch at W1..... 10-17

Figure 4-9: Correlation between Monthly Synthetic and Predicted *Net P* for Aug 2007 to  
 Sep 2009 Calibration Period..... 10-18

Figure 4-10: Correlation between Monthly Synthetic and Predicted Evapotranspiration for  
 Aug 2007 to Sep 2009 Calibration Period ..... 10-19

Figure 4-11: Correlation between Monthly Synthetic and Predicted Streamflow at W1 for  
 Aug 2007 to Sep 2009 Calibration Period ..... 10-20

Figure 5.1-1: Water Management Schematic – Surface Water Model Construction ..... 10-21

Figure 5.2-1: Water Management Schematic – Surface Water Model Operations..... 10-22

Figure 5.3-1: Water Management Schematic – Surface Water Model Closure and  
 Reclamation ..... 10-23

Figure 5.4-1: Water Management Schematic – Surface Water Model Post-closure  
 Monitoring ..... 10-24

Figure 6.2-1:	Baseline Schematic .....	10-25
Figure 6.2-2:	Operational Schematic .....	10-26
Figure 6.3-1:	Closure and Reclamation Schematic.....	10-27
Figure 7.4-1:	Platinum Gulch Waste Rock Storage Cover Options .....	10-28
Figure 7.4-2:	Eagle Pup Waste Rock Storage Cover Options .....	10-29
Figure 7.4-3:	Heap Leach Facility Cover Options .....	10-30

## **List of Appendices**

### **Appendix A: Climate and Streamflow Water Balance Input Data**

Table A-1:	Precipitation Database
Table A-2:	Monthly Distributions of Rain, Snow and Precipitation
Table A-3:	Streamflow Database
Table A-4:	Calibration Table

### **Appendix B: Water Balance Input Data for Project Facilities**

Table B-1:	Construction Sequence by Year
Table B-2:	Construction Sequence by Facility
Table B-3:	Master Water Management Schedule
Table B-4:	Operation Sequence by Facility
Table B-5:	Open Pit Geometry Assumptions
Table B-6:	Open Pit Monthly Input Assumptions
Table B-7:	Platinum Gulch Waste Rock Storage Area Geometry Assumptions
Table B-8:	Platinum Gulch Waste Rock Storage Area Monthly Input Assumptions
Table B-9:	Eagle Pup Waste Rock Storage Area Geometry Assumptions
Table B-10:	Eagle Pup Waste Rock Storage Area Monthly Assumptions
Table B-11:	Ann Gulch Heap Leach Facility Geometry Assumptions
Table B-12:	Ann Gulch Heap Leach Facility Monthly Assumptions
Table B-13:	Closure and Reclamation Sequence by Facility

### **Appendix C: Detailed Model Results**

Table C1-1:	Open Pit – Scenario 1 Model Results
Table C1-2:	Open Pit – Scenario 2 Model Results – Selected Years
Table C1-3:	Open Pit – Scenario 3 Model Results – Selected Years
Table C2-1:	Platinum Gulch Waste Rock Storage Area – Scenario 1 Model Results

Table C2-2:	Platinum Gulch Waste Rock Storage Area – Scenario 2 Model Results – Selected Years
Table C2-3:	Platinum Gulch Waste Rock Storage Area – Scenario 3 Model Results – Selected Years
Table C3-1:	Eagle Pup Waste Rock Storage Area – Scenario 1 Model Results
Table C3-2:	Eagle Pup Waste Rock Storage Area – Scenario 2 Model Results – Selected Years
Table C3-3:	Eagle Pup Waste Rock Storage Area – Scenario 3 Model Results – Selected Years
Table C4-1:	Ann Gulch Heap Leach Facility – Scenario 1 Model Results
Table C4-2:	Ann Gulch Heap Leach Facility – Scenario 2 Model Results – Selected Years
Table C4-3:	Ann Gulch Heap Leach Facility – Scenario 3 Model Results – Selected Years
Table C5-1:	Mine Water Treatment Plant – Scenario 1 Model Results
Table C5-2:	Mine Water Treatment Plant – Scenario 2 Model Results – Selected Years
Table C5-3:	Mine Water Treatment Plant – Scenario 3 Model Results – Selected Years
Table C6-1:	Lower Dublin Gulch Sediment Control Pond – Scenario 1 Model Results
Table C6-2:	Lower Dublin Gulch Sediment Control Pond – Scenario 2 Model Results – Selected Years
Table C6-3:	Lower Dublin Gulch Sediment Control Pond – Scenario 3 Model Results – Selected Years
Table C7-1:	Eagle Creek at W27 – Scenario 1 Model Results
Table C7-2:	Eagle Creek at W27 – Scenario 2 Model Results – Selected Years
Table C7-3:	Eagle Creek at W27 – Scenario 3 Model Results – Selected Years
Table C8-1:	Haggart Creek at W4 and W29 – Scenario 1 Model Results
Table C8-2:	Haggart Creek at W4 and W29 – Scenario 2 Model Results – Selected Years
Table C8-3:	Haggart Creek at W4 and W29 – Scenario 3 Model Results – Selected Years
Table C9-1:	Platinum Gulch above Haggart Creek – Scenario 1 Model Results
Table C9-2:	Platinum Gulch above Haggart Creek – Scenario 2 Model Results – Selected Years
Table C9-3:	Platinum Gulch above Haggart Creek – Scenario 3 Model Results – Selected Years

#### **Lists of Figures in Appendix C**

Figure C1-1:	Open Pit – Precipitation, Evaporation and Runoff – Average Hydroclimatic Scenario 1
Figure C1-2:	Flow from the Open Pit Sump to the MWTP – Average Hydroclimatic Scenario 1
Figure C1-3:	Open Pit Sump – Groundwater and Diverted Drainage from Platinum Gulch for Average Hydroclimatic Scenario 1
Figure C1-4:	Open Pit – Comparison Flows from the Open Pit Sump for Average (1), Wet (2), Dry (3) Hydroclimatic Scenarios
Figure C2-1:	Platinum Gulch Waste Rock Storage Area – Water Balance Parameters for Disturbed Area – Average Hydroclimatic Scenario 1
Figure C2-2:	Platinum Gulch Waste Rock Storage Area – Average Hydroclimatic Scenario 1

- Figure C2-3: Platinum Gulch Waste Rock Storage Area – Water Balance Parameters for Undisturbed Area – Average Hydroclimatic Scenario 1
- Figure C2-4: Platinum Gulch Waste Rock Storage Area – for Average (1), Wet (2), Dry (3) Hydroclimatic Scenarios
- Figure C3-1: Eagle Pup Waste Rock Storage Area – Water Balance Parameters for Average Hydroclimatic Scenario 1
- Figure C3-2: Eagle Pup Waste Rock Storage Area – Total Flow from the Eagle Pup Sediment Control Pond for Average Hydroclimatic Scenario 1
- Figure C3-3: Eagle Pup Waste Rock Storage Area – Water Balance Parameters for Undisturbed Area – Average Hydroclimatic Scenario 1
- Figure C3-4: Eagle Pup Waste Rock Storage Area – Total Flow from EP SCP for Average (1), Wet (2), Dry (3) Hydroclimatic Scenarios
- Figure C4-1: Ann Gulch Heap Leach Facility – Water Balance Parameters for Average Hydroclimatic Scenario 1
- Figure C4-2: Ann Gulch Heap Leach Facility – Ponds and Facilities Flow Rates for Average Hydroclimatic Scenario 1
- Figure C4-3: Ann Gulch Heap Leach Facility – Undisturbed Area Water Balance Parameters for Average Hydroclimatic Scenario 1
- Figure C4-4: Ann Gulch Heap Leach Facility – Heap Pond, Irrigation, and ADR Recovery Rates for Average Hydroclimatic Scenario 1
- Figure C4-5: Ann Gulch Heap Leach Facility – Major Outputs and Inputs for Average (1), Wet (2), Dry (3) Hydroclimatic Scenarios
- Figure C5-1: Mine Water Treatment Plant Inputs and Outputs (m<sup>3</sup>/mo) – Average Hydroclimatic Scenario 1
- Figure C5-2: Mine Water Treatment Plant Inputs (m<sup>3</sup>/mo) for Average (1), Wet (2), Dry (3) Hydroclimatic Scenarios
- Figure C6-1: Stuttle Gulch Stockpile Area Runoff and Lower Dublin Gulch Sediment Control Pond Outputs – Average Hydroclimatic Scenario 1
- Figure C6-2: Lower Dublin Gulch Sediment Control Pond Outputs during Construction for Average (1), Wet (2), Dry (3) Hydroclimatic Scenarios
- Figure C6-3: Lower Dublin Gulch Sediment Control Pond Outputs for Average (1), Wet (2), Dry (3) Hydroclimatic Scenarios
- Figure C7-1: Eagle Creek Baseline Conditions – Average Hydroclimatic Scenario 1
- Figure C7-2: Comparison of Flows Contributing to Eagle Creek – Average Hydroclimatic Scenario 1
- Figure C7-3: Eagle Creek Stream Flows at W27 for Average (1), Wet (2), Dry (3) Hydroclimatic Scenarios
- Figure C7-4: Eagle Creek Percentage of Baseline Flow at W27 for Average (1), Wet (2), Dry (3) Hydroclimatic Scenarios
- Figure C8-1: Haggart Creek Flow Components at W4 – Average Hydroclimatic Scenario 1

- Figure C8-2: Haggart Creek Flow Components at W29 – Average Hydroclimatic Scenario 1
- Figure C8-3: Haggart Creek Stream Flows at W4 for Average (1), Wet (2), Dry (3) Hydroclimatic Scenarios
- Figure C8-4: Percentage Change to Baseline Flows at Haggart Creek W4 for Average (1), Wet (2), Dry (3) Hydroclimatic Scenarios
- Figure C8-5: Haggart Creek Stream Flows at W29 for Average (1), Wet (2), Dry (3) Hydroclimatic Scenarios
- Figure C8-6: Percentage Change to Baseline Flows at Haggart Creek W29 for Average (1), Wet (2), Dry (3) Hydroclimatic Scenarios

## LIST OF ACRONYMS

ADR .....	Adsorption, Desorption, and Recovery Plant
AET .....	actual evapotranspiration
AG.....	Ann Gulch
asl .....	above sea level
CCRP .....	Conceptual Closure and Reclamation Plan
D .....	dry year
$D_e$ .....	effective daylength
DG.....	Dublin Gulch
DGDC .....	Dublin Gulch Diversion Channel
D/S .....	downstream
E.....	evaporation
EC .....	Eagle Creek
ECC .....	Eagle Creek Connector
EP .....	Eagle Pup
$e_s$ .....	saturated vapour pressure
ET .....	evapotranspiration
ETS.....	Evaporation-Transpiration-Sublimation
GW .....	groundwater
HLF .....	heap leach facility
HP .....	heap pond
IDF .....	rainfall Intensity-Duration-Frequency
LDG.....	Lower Dublin Gulch
LE.....	Lake Evaporation
MWTP.....	mine water treatment plant
OP .....	open pit
P.....	precipitation
PE .....	potential evaporation
PET .....	potential evapotranspiration
PG.....	Platinum Gulch
Q .....	stream discharge
R .....	rainfall
S.....	snowfall
SA .....	Study Area



SCP.....	sediment control pond
SGP .....	lined seepage collection pond
SM.....	snowmelt
SoG.....	snow on ground
SUB.....	sublimation
SWBM.....	Surface Water Balance Model
SWE.....	Snow Water Equivalent
T.....	temperature
U/S.....	upstream
W .....	wet year
WMP.....	Water Management Plan
WRSA.....	Waste Rock Storage Area
WQ.....	water quality
WQM.....	Water Quality Model
Z.....	elevation

## DEFINITION OF TERMS

$C_{EVAP}$	.....	coefficient of evaporation
$C_{MELT}$	.....	coefficient of snowmelt
$C_{RAIN}$	.....	coefficient of rain
$C_{R:P}$	.....	coefficient of rainfall: precipitation
<i>Net P</i>	.....	net precipitation
<i>GWin</i>	.....	groundwater recharge
<i>GWout</i>	.....	groundwater discharge
$P_{pre}$	.....	predicted precipitation
$P_{meas}$	.....	measured precipitation
$P_{LP:x}$	.....	predicted precipitation condition
$Q_{pre}$	.....	predicted streamflow
$Q_{meas}$	.....	measured streamflow
$R_{AVERAGE}$	.....	predicted average annual rainfall
<i>RUN</i>	.....	surface runoff
$S_{AVERAGE}$	.....	predicted average annual snowfall
$T_{mean}$	.....	mean monthly temperature
$T_{max}$	.....	maximum daily temperature
$T_{min}$	.....	minimum daily temperature
$\Delta GW$	.....	change in groundwater storage

# 1 INTRODUCTION

## 1.1 Objectives

This surface water balance study was undertaken on behalf of Victoria Gold Corp. (VIT) to support the Project Site Water Management Plan. The objectives of the study are to provide a detailed quantitative description of the existing baseline water-balance conditions at the Project site located in central Yukon (Figure 1.1-1), and to provide a detailed water-balance for water conveyance and storage facilities associated with the Project. This information is used to support the assessment of potential effects of the Project on water quality and aquatic habitat. The findings of this study support the requirements of the environmental assessment and the water licensing processes in the Yukon.

## 1.2 Study Area Boundaries

The Eagle Gold Project (the “Project”) study area (SA) lies within the Dublin Gulch and Eagle Creek drainage basins, which are tributaries to Haggart Creek. The SA and surface water model domain includes all of the Dublin Gulch and Eagle Creek drainage basins, plus portions of adjacent Haggart Creek including basins draining into Haggart Creek (i.e., Gil Gulch and 15 Pup). The Project footprint covers all of the Eagle Pup, Stuttle Gulch and Platinum Gulch sub-basins that are tributaries to Eagle Creek, and also covers the entire lower portion of the Dublin Gulch drainage basin, which includes the Ann and Stewart Gulch sub-basins (Figure 1.2-1).

## 1.3 Scope

The Eagle Gold Surface Water Balance Model (SWBM) is a custom-made, linked Excel® spreadsheet-based hydrologic model designed to simulate the effect of land use changes due to the Project within the Dublin Gulch and Eagle Creek drainage basins.

The SWBM includes information on the spatial distribution and layout of natural and engineered water conveyance structures within the existing (non-developed) and proposed facilities (Figure 1.3-1) as described in the Eagle Gold Project Pre Feasibility Report (URS/Scott Wilson 2010) that include the:

- Dublin Gulch Diversion Channel (DGDC)
- Open pit and depressurization system
- Heap Leach Facility (HLF) and associated process and storage ponds
- Waste Rock Storage Areas (WRSAs) and associated sediment control ponds
- Mine water treatment plant (MWTP) system
- Various storage and control ponds and other smaller water storage/conveyance structures around the mine site.

The SWBM is designed to simulate various hydrologic conditions and mine scenarios through all phases of mine activity including the construction, operations, closure and reclamation, and post-closure monitoring phases and to quantify the spatial and temporal changes to the site hydrology

throughout the Project. The results of modeling specific conditions and scenarios for each phase are then used to develop appropriate water management strategies for the mine site. The results are also compared directly to predicted future conditions to facilitate the assessment of potential effects on water quality and aquatic habitat.

## **1.4 Model Description**

The Eagle Gold SWBM is structured to provide a dynamic spatial and temporal modeling framework to accommodate various hydrologic scenarios, short-term hydrologic events (i.e., storms and droughts), short-term upset conditions (i.e., short-term power failure) and various water management decisions that may be required for each of the Project phases. The SWBM is based on theoretical and empirical watershed-process equations that produce results at monthly time steps. Monthly model input and output data facilitate the assessment and management of seasonal watershed processes such as freshet snowmelt, summer storm events and droughts. The model integrates a rainfall-runoff watershed model with proposed facility designs and water management decisions to simulate the natural hydroclimatic processes and effects of water management on water resources. Although the specific design of each facility is based on short-term events such as a 24-hour rainfall runoff event or a rain-on-snow event, the model incorporates the values of these short-term events within the monthly time steps to meet the objective of accounting for accrued monthly water volumes for various flow pathways.

Each of the proposed Project facilities has a suite of linked Excel® worksheets that describe the conditions for the specific month and phase of the Project. The suites of worksheets include:

- Undisturbed basin model inputs (e.g. unit area watershed variables for the reference elevation)
- Facility assumptions (e.g. area, volume, tonnage, irrigation rate)
- Facility model inputs (e.g. unit area values for climate and hydrologic parameters, variables for the reference elevation)
- Facility water balance (e.g. simulation worksheets: contains the primary functioning of the water balance equations).

Additional worksheets that include climate (e.g. orographic effects on temperature and precipitation) and basin parameters (e.g. summary tables of basin areas, elevations) are linked to the model to support the various phases and conditions of the SWBM.

## **1.5 Model Timeframe Modules**

Flow pathways for each Project phase were delineated and quantified for existing (baseline) conditions and for each phase of the Project and then used to develop the following five temporal-based modules within the SWBM: baseline, construction, operations, closure and reclamation, and post-closure monitoring. Each module reflects the flow routing conditions of the natural watershed and/or mine-site facilities during that phase of the Project. Each module is a contiguous simulation such that surface water flows at specific nodes (and along distinct flow pathways) are estimated

though the duration of the Project. Table 1.5-1 provides a summary of the key milestones that are assumed to define the temporal limits of the SWBM.

**Table 1.5-1: Project Timeline Modules**

Module	Assumed Simulation Period	Details
Baseline	August 2007 to September 2009	
Construction	January 2012 to August 2013	Earthworks, construction and implementation of water supply wells, water treatment facilities, water diversion channels, water conveyance structures, bridges, culverts, sediment control ponds and other water storage facilities.
Operations	September 2013 to December 2020	Operation, maintenance and monitoring of all structures associated with water management;
Closure and Reclamation	January 2021 to December 2030	Supplemental gold recovery, rinse-detoxify heap leach facility, heap draindown, site reclamation
Post-closure Monitoring	January 2031* to December 2035	Stream, groundwater and seep water quality monitoring

**NOTES:**

\* For module definition purposes only; environmental monitoring will begin as soon as each facility is reclaimed.

The following is a brief description and rationale for each module:

- **Baseline**—the baseline module simulates existing watershed conditions and functions as a calibration tool that utilizes a locally and regionally-derived database to derive coefficients for model equations. The baseline module is used as an effect assessment tool where baseline module output can be directly compared to output from other Project-phase modules to help assess the potential effects of the Project.
- **Construction**—the construction module simulates the beginning of the Project when various sediment control, water storage and diversion structures are built (in addition to the general infrastructure required to operate the mine) to manage the flow of water and movement of sediment, and mitigate potential adverse effects from construction activities. The simulation period for the construction module is about 1.7 years (Jan 2012 to Aug 2013).
- **Operations**—the operations module simulates the period of time from the start of mining operations to the end of mining and ore processing, including the gradual development and growth of the WRSAs, the HLF and the open pit. The simulation period for the operations module is 7.3 years (88 months) from September 2013 to December 2020.
- **Closure and Reclamation**—the closure and reclamation module simulates the period of time where mining and processing operations have ended and closure and reclamation activities are taking place. These include the initial first year of gold recovery followed by heap rinsing and detoxification, heap draindown and reclaiming of the HLF, the re-contouring and vegetating of the WRSAs, the back-filling of the open pit, and any aquatic habitat enhancements in diversion structures. Although the actual closure and reclamation period

varies for each facility, the simulation period for the closure and reclamation module is simulated for 10 years to accommodate the anticipated longer time period to complete all the reclamation activities for the HLF.

- **Post-closure Monitoring**—this period represents conditions in the SA after reclamation is complete. Although environmental monitoring will occur throughout all phases of the Project, the timing of post-closure monitoring will depend on when reclamation activities are completed for each facility. The boundary conditions of the SWBM assumed that post-closure monitoring will begin in January 2031.

## 2 WATER BALANCE FORMULATION

The basic water balance equation is:

where,

$P$  = precipitation

$ETS$  = evaporation-transpiration-sublimation

$\Delta GW$  = change in groundwater storage

$RUN$  = surface runoff.

$ETS$  represents the three separate processes of evaporation ( $E$ ) from soils and water surfaces, plant transpiration ( $t$ ) and sublimation ( $SUB$ ) from snow.  $P$  is equal to the amount of rainfall ( $R$ ) plus snowfall ( $S$ ) falling on the land surface. So that,

The available water equivalent of the snowpack left after sublimation ( $SUB$ ) or the volume of snow to be melted ( $SM$ ) is:

Combining  $E$  and  $T$ , rearranging and substituting, then:

Assuming net precipitation ( $Net P$ ) is equal to  $R + SM$  yields:

The change in groundwater storage ( $\Delta GW$ ) is equal to the difference between groundwater recharge (where water moves downward from the ground surface to groundwater) and groundwater discharge (where water moves from groundwater to the surface as in a seep, spring or stream). Based on site investigations (Stantec 2010b and 2010d), recharge and discharge in the SA occur on different spatial and temporal scales and reflect the three components of subsurface flow: 1) relatively rapid near-subsurface flow in unsaturated media, or in shallow perched conditions (e.g. supra-permafrost); 2) moderately rapid subsurface saturated flow in shallow alluvial deposits; and 3) relatively slow and deeper subsurface flow in fractured bedrock. Field observations and measurements indicate that the water level or moisture characteristics of (1) and (2) vary significantly from month to month, while there is little observed variation in the deeper zones. Thus, for the surface water balance model, it is assumed that the net change in annual and monthly volumes of groundwater flow from the deeper saturated bedrock is negligible and not considered. Further, the monthly fluxes of water into the upper two shallow zones ( $GW_{in}$ ) do not necessarily equal the monthly fluxes of water discharging from these zones ( $GW_{out}$ ), or ( $GW_{in} \neq GW_{out}$ ) for any given month. Substituting for ( $\Delta GW$ ) yields:

Measured streamflow ( $Q$ ) represents the sum of runoff and subsurface groundwater flow, or

then

For the Project site, climate and streamflow data have been collected since August 2007. From this data,  $Net\ P$  and  $Q$  have been measured and  $ET$  can be calculated, so that only  $GWin$  is an unknown water balance parameter. These water balance equations provided the basis to develop and calibrate the SWBM. The calibration period is from August 2007 through the end of September 2009.



### 3 BASELINE MODEL DEVELOPMENT

The SWBM was developed and calibrated using a combination of measured precipitation (*R* and *S*) and streamflow (*Q*) data collected in the SA that was augmented with additional climate data from nearby regional stations (e.g. Mayo, Calumet, Keno Hill) to fill data gaps (Table 3-1, and Figure 3-1). Further, *ET* (or *E* depending on surface conditions) was also calculated from site climate data. Since *Net P* and *Q* were known and *ET* (or *E*) was estimated, *GWin* was solved for based on the equations described in Section 2. For any particular month, *GWin* ≠ *GWout*, but *GWout* could still be approximated knowing that *Q* could be partitioned into *RUN* and *GWout*, and assuming the *GWout* was approximated by the average 7-day low flow for each month (i.e., the period when the effect of precipitation on runoff had receded to a minor amount). Ratios (or coefficients) of each parameter to *Net P* were calculated. These coefficients were then used as a basis for assigning coefficients for the SWBM to predict *Q* at specific locations for various scenarios. This calibration process is discussed in more detail in Section 3.4.

**Table 3-1: Regional Climate Stations**

Station	Location		Elevation	Years of Record*	Parameters
	Latitude	Longitude	m asl		
Mayo A	63.62	-135.9	504	1925 – 2009 (83)	T, P, R, S, SoG, IDFs, Storms
Dawson A	64.04	-139.13	370	1976 – 2007 (30)	T, P, R, S, SoG, IDFs, Storms
Klondike	64.45	-138.22	973	1966 – 2007 (40)	T, P, R, S, SoG
Calumet	63.55	-135.24	1310	1975 – 2009 (39)	S, SoG
Elsa	63.92	-135.5	814	1948 – 1965; 1974 – 1989 (32)	T,P,R,S
Keno Hill	63.93	-135.2	1473	1974 – 1982 (8)	T,P,R,S
Whitehorse	60.43	135.04	706	1960 – 2001 (37)	IDFs
Watson Lake	60.07	128.49	687	1970 – 1992 (23)	IDFs
Teslin	60.1	-132.4	705	1967 – 1995 (23)	IDFs
Pelly Ranch	62.49	-137.2	454	1966 – 2000 (34)	IDFs
Williams Creek	62.21	-136.41	850	n/a	LE

**NOTES:**

T – Temperature (deg C), P – Precipitation (mm), R – Rainfall (mm), S – Snowfall (cm), LE – Lake Evaporation (mm)  
SoG – Snow on Ground (cm), Storms - 1:100 year 24-hour event depth (mm),  
IDFs – Intensity- Duration-Frequency Curves

**Source:** From Environmental Baseline Report: Climate, Stantec, 2010a, Appendix A: Table 2-1).

\*Some years are partial years

## **3.1 Climate Data**

There are two climate stations in the SA: Potato Hills (1,420 m asl) and Camp (823 m asl) (Figure 3.1-1). There have been two periods of data collection, 1993 – 1996 and 2007-ongoing. Although the Camp station was established in 1993, and the Potato Hills station was established in 1995, there were gaps due to equipment malfunction and winter data was not collected. The Potato Hills station was re-established in August 2007, and the Camp Station was re-established in August 2009. Data collection has been continuous including winter months since re-establishment. Data collection has included temperature, rainfall, relative humidity, solar radiation, wind speed, and wind direction. Snow surveys were also conducted in 1996, 2009 and 2010. The development of the local climate database is described in detail in Stantec (2010a). The following sections describe various spatial and temporal relationships between the short-term local and more long-term regional stations (e.g. Mayo, Keno Hill, Calumet).

### **3.1.1 Monthly Temperature**

Recorded temperatures in the SA have an annual range of approximately 70°C from +30°C to -40°C. Regionally, temperature ranges have been as great as 98°C in the past (Stantec 2010a). Throughout central Yukon, maximum annual temperatures occur in July or August, while minimum temperatures occur in December or January. Daily maximum temperatures exceed 0°C from late April to October, although daily mean temperatures may not rise above freezing until May. Regional historic data from Mayo indicate that its mean annual temperature has fluctuated approximately 4°C over the past 83 years, but there has been no distinct warming or cooling trend (Stantec 2010a). Based on baseline data collected in 2009 and 2010 from the Potato Hills and Camp stations, short-term (several days) temperature inversions (i.e., where relatively warm air at higher elevations traps cooler air in the valley bottoms) have been observed during the late fall and winter at the Project site (Stantec 2010a and unreported data).

Based on data collected from the Camp and Potato Hills climate stations, mean monthly temperature tends to vary with elevation due to an orographic effect, which varies seasonally. Due to the short concurrent temperature record for the two stations, the orographic effect is better quantified using long-term regional stations. The SWBM estimates monthly temperature for the site using monthly mean lapse rate equations between Keno Hill (1,473 m asl) and Mayo (504 m asl) using the available concurrent historical temperature data record (Table 3.1-1). The regional monthly temperature lapse rate equations are summarized in Table 3.1-2. The lapse rates are positive (temperature increases with elevation) from November to February, and negative (temperature decreases with elevation) from April to October and essentially flat in March.

**Table 3.1-1: Comparison of Mayo (1925-2009) and Keno Hill (1974-1982) Temperatures (°C)**

Month	Mean Temperature		Maximum Temperature		Minimum Temperature	
	Mayo	Keno Hill	Mayo	Keno Hill	Mayo	Keno Hill
Elevation (m asl)	504	1473	504	1473	504	1473
October	-2.2	-5.2	2.0	-2.5	-6.4	-8
November	-15.4	-10.9	-10.8	-7.7	-19.9	-14.3
December	-22.3	-16.1	-17.2	-11.4	-27.5	-19.4
January	-25.5	-16.6	-20.3	-13.3	-30.9	-20.2
February	-19.6	-14.1	-13.3	-10.7	-25.9	-17.7
March	-10.7	-11.2	-3.5	-7.8	-18.0	-14.8
April	-0.1	-4.7	6.3	-1.3	-6.5	-8.2
May	8.0	2.1	14.6	5.6	1.4	-1.5
June	13.7	7.8	20.8	11.7	6.5	3.8
July	15.3	10.4	22.3	14.4	8.3	6.4
August	12.5	9.1	19.3	12.9	5.7	5
September	6.4	2.9	12.2	6	0.6	-0.3

Source: From Environmental Baseline Report: Climate, Stantec, 2010a

The monthly temperature dataset at Mayo from 1974 – 1982 was compared to the long-term Mayo dataset to assess the agreement between the datasets. The objective of the analysis was to assess if the long-term Mayo record was comparable to the 1974 – 1982 period and therefore if the use of the long-term record was justified. Secondly, the analysis was needed to assess if the record at Keno Hill represented an anomalous period relative to the long-term regional record.

Overall, the mean difference in mean monthly temperature at Mayo was -0.3°C, and the range was -2.2°C to 2.3°C. The extremes of the range were in November and December when the mean temperatures remained less than -13°C and -22°C, respectively. The analysis confirmed that monthly temperatures at Mayo between 1974 – 1982 were similar to the long-term data and therefore the use of the long-term dataset is justified. Secondly, 1974 – 1982 was not a period of anomalously warm or cold conditions relative to the long-term regional trends.

**Table 3.1-2: Monthly Regional Lapse Rate Equations**

Month	Mean	Maximum	Minimum
October	$T_{\text{mean}} = -0.0031Z - 0.6619$	$T_{\text{max}} = -0.0046Z + 4.3406$	$T_{\text{min}} = -0.0017Z - 5.5678$
November	$T_{\text{mean}} = 0.0046Z - 17.678$	$T_{\text{max}} = 0.0032Z - 12.412$	$T_{\text{min}} = 0.0058Z - 22.813$
December	$T_{\text{mean}} = 0.0064Z - 25.555$	$T_{\text{max}} = 0.006Z - 20.217$	$T_{\text{min}} = 0.0084Z - 31.713$
January	$T_{\text{mean}} = 0.0092Z - 30.189$	$T_{\text{max}} = 0.0072Z - 23.941$	$T_{\text{min}} = 0.011Z - 36.465$

Month	Mean	Maximum	Minimum
February	$T_{\text{mean}} = 0.0057Z - 22.487$	$T_{\text{max}} = 0.0027Z - 14.652$	$T_{\text{min}} = 0.0085Z - 30.165$
March	$T_{\text{mean}} = -0.0005Z - 10.491$	$T_{\text{max}} = -0.0044Z - 1.2635$	$T_{\text{min}} = 0.0033Z - 19.664$
April	$T_{\text{mean}} = -0.0047Z + 2.2596$	$T_{\text{max}} = -0.0078Z + 10.253$	$T_{\text{min}} = -0.0018Z - 5.6158$
May	$T_{\text{mean}} = -0.0061Z + 11.109$	$T_{\text{max}} = -0.0093Z + 19.281$	$T_{\text{min}} = -0.003Z + 2.9084$
June	$T_{\text{mean}} = -0.006Z + 16.703$	$T_{\text{max}} = -0.0094Z + 25.533$	$T_{\text{min}} = -0.0028Z + 7.9043$
July	$T_{\text{mean}} = -0.0051Z + 17.878$	$T_{\text{max}} = -0.0082Z + 26.409$	$T_{\text{min}} = -0.002Z + 9.2882$
August	$T_{\text{mean}} = -0.0035Z + 14.278$	$T_{\text{max}} = -0.0066Z + 22.629$	$T_{\text{min}} = -0.0007Z + 6.0641$
September	$T_{\text{mean}} = -0.0036Z + 8.2351$	$T_{\text{max}} = -0.0064Z + 15.425$	$T_{\text{min}} = -0.0009Z + 1.0681$

**NOTE:**

Z = elevation (m asl),  $T_{\text{mean}}$  = mean monthly temperature (°C),  $T_{\text{max}}$  = maximum monthly temperature (°C),  $T_{\text{min}}$  = minimum monthly temperature (°C)

A comparison of the temperature model estimates for elevation 1,420 m asl and actual measurements at the Potato Hills climate station (elevation 1,420 m asl) indicates that the equations work well for average conditions, but underestimate maximums and overestimate minimums (Figure 3.1-2). As a result, only the average lapse rate equations were used.

### 3.1.2 Evaporative Processes

Evaporative process equations typically require complex data sets specific for the site that include hourly radiation fluxes and soil moisture data. These data were not available for the site, nor were required for the monthly resolution of the SWBM. Nevertheless, several equations and regionalization techniques were tested and compared to regional data from previous reports (e.g. Clearwater Consultants, 1996, 2006). In this case, monthly variations of evaporation, evapotranspiration and sublimation are known to be dependent on temperature. The derivation for these three parameters is described below.

#### 3.1.2.1 Evaporation

Evaporation ( $E$ ) for the site was estimated with the Hamon model (from Hamon 1961) for data collected from Potato Hills (elevation 1,420 m asl) from August 2007 to October 2009 (Table 3.1-3). The Hamon model provides an estimate of  $PET$ , but approximates actual lake evaporation particularly well. Based on testing described in Peters (2003) and in Peters, et al., (2006), Hamon model estimates of evaporation at a lake in northern Canada were within 5% of field measurements during the open-water season. Daily estimates were not well replicated by the Hamon model because the model does not replicate lake energy storage and release processes. However, over monthly or longer intervals, the Hamon method provides a sound method of estimating lake evaporation in the absence of field measurements (Peters 2003).

The site data indicate that evaporation generally begins in late April and ends in early October, while it peaks in June or July (Table 3.1-3). Note the difference in July estimates between 2008 and 2009. The lower 2008 July estimate reflects cooler temperatures and wetter conditions.

**Table 3.1-3: SA Evaporation Estimates 2007 – 2009**

Station	Month												Annual
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
<b>Monthly Total Evaporation (mm)</b>													
<b>2007</b>													
Potato Hills	–	–	–	–	–	–	–	39.1	20.6	2.0	0.0	0.0	
<b>2008</b>													
Potato Hills	0.0	0.0	0.0	6.3	45.7	75.2	70.3	48.8	25.4	2.4	0.0	0.0	274.2
<b>2009</b>													
Potato Hills	0.0	0.0	0.0	7.0	– *	57.8*	94.8	56.5	29.8	0.0			
Camp	–	–	–	–	–	–	–	18.2 <sup>a</sup>	36.2	7.9			

**NOTES:**

<sup>a</sup> Data collection began Aug 21 2009

\* Instrument error - missing data May 1 – June 6 2009

– No available data

Data derived using the Hamon evaporation model (annual data are partial totals from available data)

For comparison, Clearwater (2006) estimated average monthly lake evaporation (*LE*) using Environment Canada’s WREVAP model (NHRI, 1985) for Mayo Airport (504 m asl), Whitehorse Airport (703 m asl), Pelly Ranch (454 m asl) and Williams Creek (850 m asl) (Table 3.1-4). The WREVAP model is a semi-empirical, semi-physical model that calculates *LE* from humidity, air temperature and sunshine duration. The WREVAP model predicts maximum *LE* in June and July, which agrees with the observed results from the SA, but with significantly less total evaporation at Potato Hills, a product likely due to the substantially higher elevation of Potato Hills. The higher elevations yield lower temperatures during the hottest times of the summer (Table 3.1-1), and therefore have less annual total potential evaporation.

**Table 3.1-4: Average Monthly Lake Evaporation for Regional Climate Stations**

Station	Month												Annual
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
<b>Monthly Lake Evaporation (mm)</b>													
Williams Creek – WREVAP	0	0	21.6	61.6	99.7	119.4	110.7	76.5	34	4.1	0	0	527.6
Mayo A – WREVAP	0	0	0	47.8	90.6	110.5	108.4	77.9	26.2	5.7	0	0	467.1
Whitehorse A – WREVAP	0	0	15.3	58.4	97.3	118.7	113.1	81.2	34.1	10.3	0	0	528.4
Whitehorse A – pan*					104.3	124.8	109.9	96.0	47.7				482.7
Pelly Ranch – pan*					107.6	120.3	108.0	79.8	37.2				452.9

**NOTES:**

Reproduced from Clearwater (2006)

\* Class A pan evaporation values adjusted by Environment Canada using a 0.7 pan coefficient

The relationship between annual potential evaporation (*PE* in mm/yr) and elevation is used in the SWBM and is expressed in the following evaporation-elevation regression equation (modified from Clearwater 1996):

$$PE = 466 - (466 * (Z - 700) / 350 * 0.1)$$

where:

*Z* = elevation in m asl.

This equation is based on data obtained from annual measurements at regional climate stations. The annual potential evaporation estimate given by the above equation is distributed monthly to reflect seasonality using a monthly coefficient of evaporation (*C<sub>EVAP</sub>*) value (Table 3.1-5).

**Table 3.1-5: Monthly Distribution of Total Annual Evaporation**

	April*	May	June	July	Aug	Sep	Oct*
<b>Estimated Monthly Mean Evaporation</b>							
Pelly Ranch	454	12	105	121	111	80	37
Mayo A	504	10	102	133	127	75	51
Watson Lake A	609	10	102	116	105	78	47
Whitehorse A	703	9	106	126	113	95	50
Potato Hills	1,420	7	69	75	83	53	28

		April*	May	June	July	Aug	Sep	Oct*
<b>Proportion of Total Annual Evaporation</b>								
Pelly Ranch	454		23.8%	26.6%	23.8%	17.6%	8.2%	
Mayo A	504		21.8%	27.0%	25.7%	15.1%	10.4%	
Watson Lake A	609		22.7%	25.9%	23.4%	17.4%	10.5%	
Whitehorse A	703		21.6%	25.9%	22.6%	19.9%	9.9%	
Potato Hills	1,420		22.5%	24.5%	26.9%	17.1%	9.0%	
<b><math>C_{EVAP}^{**}</math></b>			<b>22.5%</b>	<b>26.0%</b>	<b>24.5%</b>	<b>17.5%</b>	<b>9.6%</b>	

**NOTES:**

The data source for these regional stations is different from the data source for Table 3.1-4, so that the monthly evaporation values for Pelly Ranch, Mayo A and Whitehorse are slightly different, but were kept intact for the comparable analysis.

\* April and October values estimated

\*\* Assumes Annual Total Calculated from May - September (April and October negligible proportion)

In the SWBM, evaporation amounts were also varied with the type of evaporative surface. Where evaporation would occur off free water surfaces (e.g. ponds) it was assumed that pond evaporation is equal to *PE*. Where evaporation would occur off bare surfaces (e.g. WRSAs), the estimated evaporation amounts were adjusted by a coefficient to account for the reduced amount of water available for evaporation (compared to a free-water surface) at the ground-atmosphere interface. These assumptions are discussed in detail in Section 4.0.

### 3.1.2.2 Evapotranspiration

Potential evapotranspiration (*PET*) was calculated by using a temperature-based equation adapted to a monthly timescale (Hamon 1963 from Dingman (p.310) 2002).

$$PET = (29.8 * D_e * e_s) / (T_{mean} + 273.2),$$

where:

$D_e$  = effective daylength (Shuttleworth 1992)

$T_{mean}$  = mean monthly temperature

$e_s$  = saturated vapour pressure (Shuttleworth, 1992) for the reference elevation and of the basin or facility.

To estimate actual evapotranspiration (*AET*), the potential evaporation estimate was input into an equation that used the relationship between precipitation (*P*) and *PET* (Dingman (p.312), 2002) where monthly precipitation is used as a proxy for the soil moisture.

$$AET = P / (1 + (P / PET)^2)^{0.5}$$

Although this equation actually underestimates evapotranspiration during summer-dry periods, such that if  $P = 0$  during summer, the estimated *AET* would be zero. However, for the SWBM, there are no periods when  $P = 0$ .

### 3.1.2.3 Sublimation

Sublimation rates in the Yukon can vary considerably depending on latitude, physiographic location, temperature, time of year, aspect and cloud cover. Estimates from other reports (URS/Scott Wilson 2010; Golder 2008; Pomeroy, et al., 1997; Clearwater Consultants 1996) have ranged from negligible up to 50% of the snowpack (Table 3.1-6). In this case, due to the high uncertainty in the estimate, sublimation was assumed to be 20% of the estimated monthly snowpack, as 20% approximates the median value of the referenced sources.

**Table 3.1-6: Comparison of Sublimation Estimates**

Project	Assumed Sublimation*	Source
2008 Carmacks Copper Project, YT	14-52% reflected range of data from regional sources; assumed Pelly Ranch (29%) was best analog; modeled 0%, 20% and 29%.	Golder (June 2008). Type A Water Use License Application, Appendix E-3, Site Water Balance, Carmacks Copper Project.
2010 Eagle Gold Project, YT	20% of the monthly snowpack.	URS/Scott Wilson (June 2010). KCA Pre-feasibility HLF Water balance.
1996 Dublin Gulch Project, YT	Concluded sublimation was 13% based on review of Keno Hill snowfall data; assumed 25 mm for Dublin Gulch, or 16.8% at 790 m asl, 13.7% at 1,000 m asl, and 9.4% at 1,350 m asl, based on comparisons with Keno Hill, Calumet and Mayo data, but indicated could be up to 50 mm, or 33.6%, 26.4% or 18.9%, respectively.	Clearwater Consultants Ltd. (July, 1996). Dublin Gulch Project Site Hydrology Design Memorandum CCL_DG3.
1999 Wolf Creek Study, NWT	10 – 45% of seasonal snowfall via interception by trees, 3 mm/day	Pomeroy et al (1999). The snow mass balance of Wolf Creek, Yukon: Effects of snow sublimation and redistribution, Wolf Creek Research Basin: Hydrology, Ecology, Environment

**NOTE:**

\* Sublimation assumed to be measured as a percentage of cumulative annual snowpack

### 3.1.3 Precipitation

Regional data suggest an increase in precipitation of about 4 to 11% per 100 m (Stantec 2010a; Clearwater 1996). The *Climate of the Yukon* report (Wahl, et al., 1987) estimates the typical orographic effect on precipitation is an increase of 8% per 100 m. The total relief of the Dublin Gulch and Eagle Creek drainage basins is over 600 m, indicating that approximately 95 to 260 mm more total precipitation would be expected between the upper and lower areas of the SA.

#### 3.1.3.1 Precipitation Database

Historical rainfall data exist for the Potato Hills station from 2007 – 2010 (data collection is ongoing) and for the lower Camp station from 1993 – 1996 and 2009 – 2010 (data collection ongoing). On-site snow surveys were completed in 1996 (HKP 1996), 2009 (Stantec 2010a) and 2010. Although the data



record is short, the on-site rainfall and snowfall data demonstrate the same orographic trends noted regionally of increased precipitation at higher elevations.

Due to data gaps in the on-site precipitation database, a synthetic precipitation database (i.e., includes measured and estimated data) was developed. Rainfall data from August 2007 to September 2009 and snow survey data from April 2009 were used in conjunction with regional precipitation data to develop a synthetic precipitation database for input to the water balance model (Table A-1). The calibration of the Baseline Module of the SWBM included correlation analyses of predicted ( $P_{pre}$ ) and measured ( $P_{meas}$ ) monthly precipitation.

### Rainfall

Due to an equipment malfunction, rainfall data for May 2009 was not recorded. The rainfall amount for this month was estimated using a relationship between the Potato Hills and Mayo climate station, due to the close proximity of the Mayo station and the concurrent rainfall data—data overlapped for the periods 1993 – 1995 and 2007 – 2009. Details of this analysis are provided in Stantec (2010a). Briefly, the analysis indicated the Potato Hills station rainfall exceeded the Mayo station rainfall on average by approximately 30%.

### Snowfall

Although snow surveys have been conducted on site, monthly snowfall data has not been collected. Thus, monthly snowfall for the site was estimated using regional data in a two-step process that included first estimating total snowpack based on snow survey data collected in the SA and regional snowpack data, and then monthly snowfall data from regional annual snowfall trends.

In the three years that snow surveys were conducted in the SA (1996, 2009 and 2010), the Potato Hills station had considerably more snow (from 1.5 to 4 times) and melted later than the lower Camp station (Stantec 2010a). These data were compared to the Calumet (1310 m asl) (1975 – 2009) and Mayo (504 m asl) (1968 – 2009) snow survey stations. In comparison, the Potato Hills station had higher snow depths, densities, and snow-water equivalents (SWE) than both Calumet and Mayo stations, while there was less SWE at the Camp location.

Seasonally, the regional data indicate that, in general, April values represent the annual maximum snow depth and SWE. In contrast, in 1996 the maximum SWE for the Camp and Potato Hills stations were greatest in May. Although, it is not possible to verify that the maximum recorded depths and SWE would always be recorded in April for the SA, this assumption was included in the SWBM based on the analysis of the long-term regional data set.

Snowpack data for years where surveys were not completed (2007 – 2008) were estimated based on analysis of regional data. Snow survey data in the SA indicated the average snowpack for the Potato Hills and Camp stations exceeded the Calumet snowpack by approximately 10%. This ratio was applied to the 2007 and 2008 Calumet snowpack data to estimate maximum snowpack for the SA for the same period. Annual snowpack was then calculated by assuming a 20% sublimation rate throughout the winter as noted in Section 3.1.2.3.

The monthly distribution of snowfall was compared to regional stations. In general, while higher elevations had more overall snow, snowfall also started earlier and ended later at higher elevations.

Based on this comparison, it was determined that the Keno Hill station monthly snowfall record (1974 – 1982), which has a similar elevation (i.e., 1,473 m asl) and physiography to the site, provided the best analog for the SA. Thus, monthly snowfall (for August 2007 to September 2009) was then distributed based on the monthly snowfall distribution observed at Keno Hill (Table A-2.3). Further details of the distribution are found in Stantec (2010a). The synthetic (measured plus estimated data) snowfall database is shown in Table A-1.

### **3.1.3.2 Model Predictions for Precipitation**

#### **Exceedance and Return Interval**

Predicting precipitation ( $P$ , and ultimately  $Net P$ ) in the model was based on analyses of long-term regional data records that were calibrated to on-site data. Five regional stations (Mayo, Dawson, Klondike, Elsa and Keno Hill, Figure 3-1) were selected based on available historical precipitation data records that were also relatively near to the SA and with similar climate conditions (in central Yukon) (Table 3-1). A log Pearson Type III frequency distribution analysis was performed using the annual precipitation data from the five stations. Predicted annual precipitation values (and the two standard deviation confidence limits) for specific return periods and exceedance probabilities were calculated (Table 3.1-7). From this analysis, the wet, average and dry years were defined as the 5%, 50% and 95% exceedances corresponding to the 1.055, 2 and 20-year return intervals. The rationale for using these hydroclimatic conditions is based on several factors including the risk of the precipitation frequency and magnitude occurring within the Project life (see Section 3.5).

**Table 3.1-7: Annual Precipitation Regional Frequency Analysis**

Hydroclimatic Conditions	Statistics		Regional Climate Stations														
	Exceedance Probability	Return Period	Dawson (n = 32 years)	0.05	0.95	Mayo (n=84 years)	0.05	0.95	Elsa (n = 23 years)	0.05	0.95	Klondike (n = 40 years)	0.05	0.95	Keno Hill (n = 9 years)	0.05	0.95
<b>Elevation (m asl)</b>			<b>370</b>			<b>504</b>			<b>814</b>			<b>973</b>			<b>1473</b>		
<b>Units</b>	<b>%</b>	<b>Years</b>	<b>mm/a</b>														
	0.2	500	520	605	469	481	523	450	514	686	429	749	888	662	749	1,161	596
	0.5	200	494	568	449	463	501	434	466	603	396	724	852	642	738	1,136	590
	1	100	473	539	433	447	482	421	431	544	371	701	820	624	727	1,108	582
	2	50	451	508	415	430	461	406	396	487	346	674	782	602	711	1,071	572
<b>Wet Year (20 Year)</b>	<b>5</b>	<b>20</b>	<b>420</b>	<b>465</b>	<b>390</b>	<b>404</b>	<b>430</b>	<b>384</b>	<b>350</b>	<b>416</b>	<b>311</b>	<b>629</b>	<b>722</b>	<b>566</b>	<b>681</b>	<b>1,002</b>	<b>551</b>
	10	10	393	430	368	381	402	363	315	364	284	586	665	531	647	926	528
	20	5	363	391	342	352	369	337	279	313	254	531	594	485	597	820	491
<b>Average Year (2 Year)</b>	<b>50</b>	<b>2</b>	<b>310</b>	<b>328</b>	<b>292</b>	<b>298</b>	<b>310</b>	<b>287</b>	<b>224</b>	<b>244</b>	<b>204</b>	<b>421</b>	<b>460</b>	<b>387</b>	<b>478</b>	<b>601</b>	<b>392</b>
	80	1.25	263	279	244	246	257	235	183	200	162	314	343	282	345	419	256
	90	1.11	240	257	220	221	232	208	166	184	144	262	290	229	278	346	184
<b>Dry Year (20 Year)</b>	<b>95</b>	<b>1.055</b>	<b>223</b>	<b>241</b>	<b>201</b>	<b>201</b>	<b>212</b>	<b>187</b>	<b>154</b>	<b>172</b>	<b>131</b>	<b>222</b>	<b>251</b>	<b>188</b>	<b>227</b>	<b>293</b>	<b>133</b>
	99	1.01	194	213	169	166	178	151	134	153	110	157	186	125	145	209	64

**NOTE:** the 0.05 and 0.95 values are the 5% and 95% standard deviations.

Hydroclimatic Conditions	Equation $y = mx + b$	m	b	$r^2$
Wet Year (20 Year Return Period - 5% Chance Exceedance)	$y = 0.273x + 270.9$	0.273	270.9	0.64
Average Year (2 Year Return Period - 50% Chance Exceedance)	$y = 0.173x + 203.0$	0.173	203.0	0.54
Dry Year <sup>1</sup> (1.055 Year Return Period - 95% Chance Exceedance)	$y = 0.0135x + 194.1$	0.0135	194.1	0.037

1 - Dry regression values indicate negligible correlation with elevation and are similar to mean dry values of the five climate stations

y=precipitation      x = elevation

### Orographic Effects

The next step involved performing precipitation-elevation regressions of the exceedance data for the average, wet and dry conditions of the form:

where  $\hat{P}$  is the predicted wet, average or dry annual precipitation as determined from the log Pearson III analysis,  $E$  is a reference or median elevation for a particular sub-basin and/or facility,  $m$  is the slope (or amount of precipitation gain per unit of elevation), and  $b$  is the y-intercept.

The regression data indicate that there is a fair correlation and orographic effect for the wet and average conditions, but essentially no correlation or orographic effect with the dry condition (Table 3.1-7). That is, while wet conditions are dependent on elevation, dry conditions are similar throughout the region independent of elevation. Further, the large estimate of error for the Keno Hill station produces some uncertainty in predicting precipitation for higher elevations. This uncertainty is reduced by calibrating and then adjusting the predicted precipitation value based on on-site precipitation data. The calibration process is discussed further in Section 3.4.

### Annual Proportions of Rain and Snow

With total precipitation estimated, the proportion of rain or snow needed to be estimated to allow calculation of the other. A rainfall:precipitation coefficient ( $C_{R,P}$ ) was defined as:

$$C_{R,P} = \frac{R}{P}$$

where:

$R$  is the predicted average annual rainfall;

and a rain:snow coefficient was defined as:

$$C_{R,S} = \frac{R}{S}$$

where:

$S$  is the predicted average annual snowfall.

Annual precipitation, rainfall and snowfall data for the five regional stations is provided in Appendix B-1. The coefficients  $C_{R,P}$  and  $C_{R,S}$  for the five regional stations for the average hydroclimatic condition are listed in Table 3.1-8. The data suggest that as elevation increases the proportion of rainfall to snowfall decreases. This relationship is expressed by the regressions of the coefficients versus elevation (Table 3.1-9).

The regression of  $C_{R,P}$  on elevation has a slightly higher correlation coefficient (0.65) than the regression of  $C_{R,S}$  on elevation (0.61). Thus, annual rainfall estimates were obtained by using  $C_{R,P}$  in the following equation:

and then solving for  $\alpha$  using the equation that solves for  $\alpha$  above. The proportion of annual snowfall was defined as  $(1 - \alpha)^*$ . Further,  $\alpha$  was not held constant, but changed over time to reflect changes in sub-basin and facility areas as the operation of the mine proceeded.

**Table 3.1-8: Orographic Effects: Regional Ratios of Precipitation, Rainfall, and Snowfall**

Historical Average Climate Values	Climate Station	Dawson	Mayo A	Elsa	Klondike	Keno Hill
	Elevation (m asl)	370	504	814	973	1,473
Average Annual Precipitation (mm)	$P_{AVG}$	316	302	349	426	489
Average Annual Rainfall (mm)	$R_{AVG}$	195	191	233	233	235
Average Annual Snowfall (SWE mm)	$S_{AVG}$	159	131	168	207	254
Coefficient Of Rain: Precipitation	$C_{RAIN:PRECIP}$	0.62	0.63	0.67	0.55	0.48
Coefficient Of Rain: Snowfall	$C_{RAIN:SNOW}$	1.23	1.46	1.39	1.13	0.92

**Table 3.1-9: Regional Regressions of Orographic Effects**

Regional Climate Variable Regression Equations					
y – Parameter	m	x – Elevation	b	Equation	R <sup>2</sup>
Annual Precipitation	0.1755	x	231.24	$y = 0.1755x + 231.24$	0.92
Annual Rainfall	0.0424	x	182.32	$y = 0.0424x + 182.32$	0.69
Annual Snowfall	0.1029	x	98.752	$y = 0.1029x + 98.752$	0.87
Coefficient Of Rain: Precipitation	-0.00010	x	0.7043	$y = -0.0001x + 0.7043$	0.65
Coefficient Of Rain: Snowfall	-0.0004	x	1.5411	$y = -0.0004x + 1.5411$	0.61

### Monthly Distributions of Rain and Snow

The monthly distributions of rain and snow vary throughout the year and by location. Based on an analysis of the monthly distributions of rain and snow for the five regional stations (Stantec, 2010a; see Tables 5-3, 5-4, 5-5 and 5-15 in Appendix B), and in comparison to precipitation data at the site, it was found that the monthly distributions recorded at Keno Hill more closely represented conditions in the SA than the other regional stations. Thus, the predicted annual rainfall and snowfall totals were distributed into monthly totals using the Keno Hill distribution (Table 3.1-10). These distributions were assumed constant for each year and for each hydroclimatic condition. Of particular note in the Keno Hill data set is that there is a component of snowfall in every month except July, while 50% of the annual snowpack accumulates from October to December.

**Table 3.1-10: Monthly Distribution of Rainfall, Snowfall and Snowmelt**

<b>Month</b>	<b>Rainfall</b>	<b>Snowfall</b>	<b>C<sub>MELT</sub></b>
<b>(Water Year)<sup>1</sup></b>	<b>(Annual Proportion)<sup>2</sup></b>	<b>(Annual Proportion)<sup>2</sup></b>	<b>(Monthly Proportion)<sup>3</sup></b>
October	<b>0.013</b>	<b>0.195</b>	<b>0.500</b>
November	0.000	<b>0.152</b>	0.000
December	0.000	<b>0.151</b>	0.000
January	0.000	<b>0.108</b>	0.000
February	0.000	<b>0.085</b>	0.000
March	0.000	<b>0.111</b>	0.000
April	<b>0.001</b>	<b>0.097</b>	<b>0.100</b>
May	<b>0.069</b>	<b>0.032</b>	<b>0.800</b>
June	<b>0.250</b>	<b>0.009</b>	<b>0.100</b>
July	<b>0.297</b>	0.000	0.000
August	<b>0.215</b>	<b>0.002</b>	<b>1.000</b>
September	<b>0.156</b>	<b>0.057</b>	<b>1.000</b>
<b>Totals</b>	<b>1.00</b>	<b>1.00</b>	<b>n/a</b>

**NOTES:**

<sup>1</sup> Model operates on a water year (October – September)

<sup>2</sup> Distribution based on the Keno Hill historical monthly precipitation amounts (see Climate environmental baseline report, Stantec 2010).

<sup>3</sup> The proportion of remaining accumulated snowpack (SWE) each month.

**Snowmelt and Sublimation**

As described in Section 2, snowmelt defined by snowfall (*S*) minus sublimation (*SUB*) represents a portion of net precipitation (*Net P*). Since *SUB* was estimated to be 20% of the estimated monthly snowpack (Section 3.1.2), snowmelt (*SM*) was calculated as  $0.8 \cdot S$  for each month.

While the snowpack accumulates throughout the winter, snowmelt processes are more dependent on temperature, total daily incident solar radiation, and aspect. Several methods for estimating snowmelt were examined including a temperature-index approach (Western Canadian Mountains after Gray and Prowse, 1992), which was adapted for monthly temperature inputs. To support the snowmelt analysis, the on-site climate data was reviewed to determine the approximate number of days that the maximum temperature exceeded 0°C, field observations of when snow melted (i.e., especially during the spring months) and a review of the streamflow hydrographs that indicated when the effect of snowmelt was occurring.

The Gray and Prowse temperature-index method uses a degree-day calculation for snowmelt in the following equations:

where:

are the maximum and minimum daily temperatures,  $T_m$  is the mean daily temperature, and  $C$  is a constant.

The temperature-index method captured the melt timing correctly, but did not adequately yield the potential melt volumes that matched the estimated monthly site snowpack volumes. The equation either was not optimized to work in the Yukon climate or works best at a daily time scale with the daily temperature ranges, and not averaged monthly temperature values. The on-site temperature data indicated that melting was unlikely to occur (or was negligible) from November through March, and field observations indicated that all the snow that fell in June, August and September melted. Further, field observations and streamflow hydrographs indicated that large quantities of snow were melting in October and May. Based on these findings, the snowmelt coefficients in Table 3.1-10 were assigned. The monthly snowmelt coefficient is defined as the proportion of remaining accumulated snowpack that is melted each month. For example, the monthly snowmelt coefficients for August and September indicate 100% melt, while the 0.80 May value indicates that 80% of the remaining snowpack (accumulated since October) is melted in May.

## 3.2 Streamflow Data

Stream flow data have been collected from 23 stations within the SA (Figure 3.1-1). Continuous stage data and instantaneous flow measurements have been collected from eight of these stations. Stage-discharge relationships have been developed from this data to yield continuous streamflow records. Additional instantaneous flow measurements have been measured at various times from the 15 supplemental hydrometric stations to help understand the spatial and temporal variability of streamflows within the SA. Details on the field methods and analysis of the stage and streamflow data are provided in Stantec (2010b).

Data gaps exist within the streamflow database, including limited winter (November – April) data. Estimates of winter flows are based on site observations, salt dilution measurements and regional relationships. In addition, a portion of the 2009 freshet was not recorded. Some of the stations were deployed after much of freshet had passed.

### 3.2.1 Streamflow Database

The calibration of the Baseline Module of the SWBM required that predicted monthly streamflow ( $Q_{pre}$ ) be compared to (or calibrated to) measured streamflow ( $Q_{meas}$ ). However, in many instances, continuous streamflow data are available for only the major and some of the minor streams, so that a portion of the streamflow database had to be developed from: 1) the existing streamflow record; 2) linear regression relationships between stations; and 3) other physical (i.e., area proportions) and temporal (i.e., spot or daily water balances) conditions. A continuous synthetic

(measured plus estimated) streamflow database was developed for 13 locations that were critical to quantifying flows and flow pathways in the Baseline Module, including (from high to lower elevations): Upper Dublin Gulch – W1, Stewart Creek – W26, Eagle Pup – W9, Ann Gulch – W32, Stuttle Gulch – W10, Eagle Creek – W27, Lower Dublin Gulch – W21, Platinum Gulch – W34, Upper Haggart Creek – W-22, Middle Haggart Creek – W4, Gil Gulch – W33, 15 Pup – W35 and Lower Haggart Creek – W5 (Figure 3.1-1).

The synthetic streamflow and precipitation data were the primary databases used to calibrate the SWBM (see Table A-3 in Stantec, 2010h). Streamflow hydrographs for the Dublin Gulch Basin, Eagle Creek Basin and Haggart Creek Basin streams are shown in Figures 3.2-1, 3.2-2 and 3.2-3, respectively. From August 2007 to September 2009, Stewart and Ann Gulch provided only a small portion of the flows to Dublin Gulch, while Upper Dublin Gulch sometimes had greater flows than Lower Dublin Gulch during portions of the year indicating that the stream loses some of its water to the Lower Dublin Gulch Valley aquifer (Figure 3.2-1). This water is discharged either to Eagle Creek, Haggart Creek, or into the Haggart Creek Valley aquifer. Figure 3.2-2 illustrates that the flow of Eagle Creek was greater than the combined flows of its tributaries, suggesting that groundwater discharge supplies the remaining flow. Much of this flow originates from the spring that feeds Eagle Creek pond located in the center of the Lower Dublin Gulch Valley. Figure 3.2-3 illustrates that Dublin Gulch and Eagle Creek represent only a minor component of flow in Haggart Creek.

Five levels of uncertainty are recognized with the synthetic streamflow database (Table 3.2-1). Uncertainty estimates (or % error) were based on the operational variability associated with field procedures for measuring stage and streamflow, uncertainty associated with developing stage-discharge relationships, observations of channel conditions and hyporheic flow including the recognition of gaining and losing reaches between gauging stations, experience in estimating and measuring streamflows in similar physical environments, and the capability of reducing uncertainty by establishing upstream and downstream water balance checks. Levels of uncertainty were assigned to each monthly streamflow in the synthetic streamflow database (Table A-3).

**Table 3.2-1: Uncertainty Level and Data Source for the Synthetic Streamflow Database**

Uncertainty Level	Primary Data Source	Supplemented by	Estimated Error
1	Continuous flow data developed from continuous stage data and stage-discharge relationships	Adjusted to meet specific water-balance calculations between measurements made at upstream, downstream and/or confluent stations	± 5%
2	Continuous flow data developed from a partial month of continuous stage data and stage-discharge relationships with additional instantaneous flow data	Adjusted to meet water-balance calculations and/or specific regressions between upstream, downstream and confluent stations	± 10%
3	Instantaneous flow data	Continuous flow data and water-balance calculations and/or specific regressions using upstream, downstream and/or confluent stations	± 10-20%



Uncertainty Level	Primary Data Source	Supplemented by	Estimated Error
4	Instantaneous flow data	Water-balance calculations between upstream and downstream stations, and basin area – discharge relationships between basins of similar size and physiography.	± 20-30%
5	No flow data	Upstream and downstream or basin-wide water-balance calculations and basin area-discharge relationships.	± 30-100%

### 3.2.2 Subsurface Flow

As described in Section 2, streamflow ( $Q$ ) is the sum of subsurface flow (shallow unsaturated or perched flow plus deep saturated flow) ( $GWout$ ) and runoff ( $RUN$ ), or ( $Q = RUN + GWout$ ). The contribution of subsurface flow to the streams maintains flow during drier periods after the effects of a rainfall event. Thus,  $GWout$  is assumed to be represented by the minimum 7-day low flow for each month. With  $GWout$  known, then runoff was calculated as  $RUN = Q - GWout$ .

The wintertime flows shown in Table A-2 were estimated based on the lowest recorded 7-day streamflow during the year for each stream, and then estimated to decrease gradually over the winter (November to April) based on field observations of sub-ice flow or no flow during the winter. These flows were small compared to average summertime (ice-free) streamflows. For example, wintertime flow estimates in Dublin Gulch, Eagle Creek and Haggart ranged from 8% to 16%, 2% to 3% and 8% to 18% of the average summertime flows, respectively. Wintertime observations/measurements of either sub-ice flow or no flow helped to confirm these estimates.

### 3.3 Drainage Basin Assumptions

The spatial coverage of the surface water model includes all of the Dublin Gulch and Eagle Creek drainage basins, plus portions of the adjacent Haggart Creek including the near-by basins draining into Haggart Creek (i.e., Gil Gulch and 15 Pup). Sub-basin drainage boundaries are shown on Figures 1.2-1 and 3.1-1.

Portions of the Haggart Creek valley and the lower Dublin Gulch valley have been extensively reworked due to a long history of placer mining and exploration. These works have rerouted several of the drainages in the lower valley. The Eagle Creek drainage was created as a result of historical placer mining activities in the Haggart Creek and Dublin Gulch valleys. The Eagle Creek drainage now captures surface water runoff from the Eagle Pup and Stuttle Gulch basins (which formerly discharged into Dublin Gulch) before entering the Haggart Creek valley south of Dublin Gulch. Eagle Creek then flows parallel to Haggart Creek along the east valley wall for several kilometers through placer deposits including several ponds that are also fed by groundwater seeps before draining to Haggart Creek downstream of the mouth of Gil Gulch.

## Eagle Gold Project

### Surface Water Balance Model Report Section 3: Baseline Model Development

The division of the basins for the purpose of modeling was defined by existing hydrometric measurement sites and important confluent junctions. Haggart Creek has three hydrometric stations (W4, W5 and W22) and four important tributaries including Dublin Gulch, Eagle Creek, Gil Gulch (W33) and 15 Pup (W15). Dublin Gulch has two hydrometric stations (W1 and W21) and three tributaries including Upper Dublin Gulch, Stewart Gulch (W26) and Ann Gulch (W33). Eagle Creek (W27) has four important tributaries including Eagle Pup (W9), Stuttle Gulch (W61), the Eagle Creek Pond outlet (WECP) and Platinum Gulch (W34). Eagle Creek drains to Haggart Creek downstream of Gil Gulch. Hydrometric station locations are shown on Figure 3.1-1. Flow pathways and flow nodes for the baseline conditions are depicted in Figure 3.3-1.

The SA is characterized by topographic relief ranging from a lower (700 m asl) moderately sloping open valley, to steeper and more confined upper basins, to a rolling high plateau at over 1,500 m asl (Stantec 2010b). For model simplicity, a reference or median elevation was used for each sub-basin elevation to accommodate for orographic effects and to adjust monthly temperatures using regional lapse rates. The basin area and median elevations were obtained by GIS from digital elevation data. Table 3.3-1 summarizes the areas and reference elevations for each sub-basin.

Discontinuous permafrost is present within the SA (Stantec 2010c). Although the effects of permafrost on hydrologic processes (i.e., runoff conditions, subsurface flow processes, permafrost melt from disturbed areas) in the SA have not been directly measured, the existing streamflow database captures these effects from permafrost as a component of the overall streamflow, including any diurnal contributions during a melt period. In essence, the permafrost component would be represented by the amplitude of daily fluctuations above baseflow. Small daily oscillations have been observed in Lynx Creek but not in any of the other continuously gauged streams, suggesting that permafrost melt or thaw from the active zone is not a significant contributor to flows in the Dublin Gulch/Eagle Creek valley. Thus, since the water balance model is calibrated (see Section 3.4) to the streamflow database measurements, any effects of permafrost are already indirectly accounted for.

**Table 3.3-1: Basin Area and Elevation Data**

Basin	Upper Dublin Gulch	Stewart Gulch	Eagle Pup	Ann Gulch	Dublin Gulch U/S Haggart Creek	Haggart Creek U/S DG	Gil Gulch
Measurement Station	W1	W26	W9	W32	W21	W22	W33
Area (m <sup>2</sup> )	6,992,370	1,464,330	1,273,300	857,633	10,358,500	67,304,000	3,122,820
Reference Elevation (median) (m asl)	1,307	1,210	1,116	1,029	1,249	1,115	1,035

Basin	15 Pup	Haggart Creek D/S DG	Eagle Creek	Stuttle Gulch	Platinum Gulch	Haggart Creek U/S Lynx	Potato Hills Climate Station	Camp Climate Station
Measurement Station	W35	W4	W27	W10	W34	W5		
Area (m <sup>2</sup> )	5,230,500	76,878,877	2,604,530	933,290	1,395,500	97,561,452	na	na
Reference Elevation (median) (m asl)	1,022	1,127	1,023	994	1,070	1,076	1,420	823

### 3.4 Water Balance Scenarios

Water balance scenarios generate specific climatic input values that force variability in the hydrologic system and test the robustness of the water balance model. Seven proposed scenarios were chosen from a combination of potential *Hydroclimatic Conditions* (i.e., average, wet or dry) which vary on an annual basis, *Hydroclimatic Events* (i.e., storm, drought) which increase or decrease a specific monthly amount of precipitation to account for infrequent and high magnitude precipitation events, and *Facility Upset Conditions* (i.e., power failure) which temporarily change the processes or routing of water in the system and apply to specific facilities or structures (Table 3.4-1). For each scenario, each phase of the Project (i.e., baseline, construction, operations, closure, reclamation, and post-closure) is evaluated, as appropriate, depending on the relevance of the Project phase to the water balance scenario. The following relatively high-risk periods of the Project were simulated:

- Baseline conditions
- The second year of construction (Year 2) when the majority of activities will be underway
- The last year of operations (Year 9) during maximum build out of all facilities
- During the draindown period of closure and reclamation
- During the first year of post-closure monitoring.

These scenarios address the need to assess preliminary Project designs for water conveyance and water storage capacity, provide realistic flow conditions for predicting water quality in receiving streams and provide reasonable flow conditions to assess potential effects on aquatic habitat.

The suite of water balance scenarios provide a comprehensive assessment of hydroclimatic variability (e.g. average, wet, dry,) and seasonality, using monthly time steps, in addition to assessing extreme events (e.g. storm, drought) during phases of the Project where the maximum risks to water management may occur (i.e., at maximum heap or waste rock pile size). Further, while the water volumes for each scenario are managed across the Project site on a monthly basis, individual rainfall-runoff, snowmelt runoff or rain on snow events are also considered in the design of each facility (i.e., a pond capacity).

**Eagle Gold Project**

Surface Water Balance Model Report

Section 3: Baseline Model Development

**Table 3.4-1: Water Balance Scenarios**

Scenario	1	2	3	4	5	6	7
<b>Hydroclimatic Condition</b>	Average Year	Wet Year	Dry Year	Wet Year + Freshet Storm* (May)	Wet Year + Storm* (July)	Dry Year + Summer Drought	Average Year + Freshet (May) (Facility Condition)
				+	+	+	+
<b>Hydroclimatic Event</b>				1:100 Year 24-hour event	Storm Event 1:100 Year 24-hour event	1:50 year drought	
							+
<b>Facility Conditions</b>	HLF Cover Infiltration: 0/10/20/30/100%; WRSAs Cover Infiltration: 0/5/10/20/30/100%	HLF Cover Infiltration: 0/10/20/30/100%; WRSAs Cover Infiltration: 0/5/10/20/30/100%	HLF Cover Infiltration: 0/10/20/30/100%; WRSAs Cover Infiltration: 0/5/10/20/30/100%	HLF Cover Infiltration: 20%; WRSAs Cover Infiltration: 20%	HLF Cover Infiltration: 20%; WRSAs Cover Infiltration: 20%	HLF Cover Infiltration: 20%; WRSAs Cover Infiltration: 20%	HLF Cover Infiltration: 20%; WRSAs Cover Infiltration: 20%; Process Plant & MWTP Shutdown (7 Day Draindown)

**NOTES:**

A = Average Year

W = Wet Year

D = Dry Year

\*1 in 100 Year, 24 Hr Storm Event (95% confidence limit, defined in Table 3.4-4)

Facility Condition simulation was a HLF liner malfunction and included a 7-day draindown condition

### 3.4.1 Scenario Selection Rationale

A review of hydrologic statistical reporting for similar mining projects in the Yukon (Clearwater Consultants 1996; Gartner Lee 2001; Clearwater Consultants 2006) indicated that there is no consistent methodology for assessing risks associated with hydroclimatic conditions and events with the exception of requirements of engineering design guidelines (e.g. Dam Safety Guidelines). Temporal resolution of hydrologic data analysis, modeling time steps, event frequencies and extreme event durations vary from annual to daily periods. Each project appears to have chosen the most appropriate time scale and statistic to report or model based on professional judgment and the water management objectives of the specific project. A similar approach was used here.

The acceptable probability (or risk) of a combination of *Hydrologic Conditions* and *Events* were assessed by addressing the following criteria:

- Risk of the precipitation frequency and magnitude occurring within the Project life
- Relative magnitude of the annual precipitation compared to the design storm event used in the engineering designs
- Comparison to previous hydrologic statistical reporting in the Yukon for similar project applications.

### 3.4.2 Hydroclimatic Conditions

*Hydroclimatic Conditions* are intended to reflect large-scale hydroclimatic variability in the region. The variability of annual and monthly precipitation depths and frequencies may be attributed to large-scale climate patterns with periodicities approximately decadal in length (e.g. El Nino Southern Oscillation or the Pacific Decadal Oscillation). Three hydroclimatic conditions are defined. Each hydroclimatic condition (i.e., average, wet and dry) has a magnitude and statistical frequency developed from log Pearson Type III frequency distributions for five regional climate stations that have a good precipitation data set (i.e., Mayo, Dawson, Klondike, Elsa and Keno Hill; Table 3.1).

1. An average year represents an annual precipitation with a two year return interval or 50% chance that the annual precipitation value will be exceeded in any given year.
2. The wet year scenario represents an annual precipitation value with a 20 year return interval or a 5% chance of exceedance in any given year.
3. The dry scenario represents the annual precipitation amount occurring every 1.055 years or a 95% chance of exceedance in any given year. The dry year is also defined as having a 5% chance of not exceeding an annual precipitation amount.

The average condition tests how the Water Management Plan will be required to operate on a regular basis. The wet condition tests how the Water Management Plan will operate with greater than average conditions to ensure that water storage and conveyance structures are appropriately sized. The dry scenario determines whether there will be sufficient water on the site for operations while maintaining minimum instream flow volumes for aquatic habitat downstream.

The proposed Project water management system will be active with full capacity for an approximate 12-year period. This includes 1.7 years for construction, 7.3 years for operations, and the first 3.0 years of reclamation (including the peak of the heap draindown period). After 12 years, various reclamation activities will have been completed and much of the water-routing and storage facilities will have changed, therefore requiring less overall capacity. Table 3.4-2 provides return periods and recurrence probabilities for the average, wet and dry conditions. The probability of the wet or dry year occurring once during the 12-year period is 46%.

**Table 3.4-2: Probability of Hydroclimatic Conditions**

Condition	Return Period	Annual Probability of Occurring	Probability of Occurring in 12-year Period (qc)*
Average Year	2	50%	100%
Wet Year	20	5%	46%
Dry Year	20	5%	46%

**NOTE:**

\* $qc = 1 - (1-p)^n$ , where p is annual probability and n is number of years

### 3.4.3 Hydroclimatic Events

**Hydroclimatic Conditions** are supplemented with storm and drought **Hydroclimatic Events** that would increase or decrease the amount of precipitation in a short period (e.g. one month for storm, three months for drought). The storm event magnitude was determined using intensity-duration-frequency (IDF) data from the six regional climate stations where IDF analyses have been conducted. Table 3.4-3 indicates that the probability of the 1:100 year 24-hour event occurring in a 12-year period is 11%. A linear regression of the 24-hour storm event from the six regional stations versus elevation predicts a storm with an intensity of 3.3 mm/hr at Potato Hills (elevation 1,420 m asl) and 2.3 mm/hr at Camp (elevation 823 m asl) (Table 3.4-4). Design capacities for the extreme event are based on 1:100 year runoff value (URS/Scott Wilson 2010). As a conservative measure in the water balance, the 95% confidence limit of the Potato Hills value, 4.3 mm/hr or 103.5 mm/24 hours, is used as the 1:100 year 24-hour event. This value is added to the monthly total precipitation amounts for May (when the effect of freshet in the streams is the greatest) and July (when streamflows are high and available storage in facilities is low).

The summer months (June, July and August) are the period when aquatic habitat is most sensitive to low streamflow conditions. A drought condition is an extended period of low rainfall. Therefore, for the SWBM, a drought event is defined as the 1:50 year low rainfall depth of accumulation over the three-month period of June through August. To derive an estimate of the *drought condition*, the statistical frequency, determined using a log Pearson Type III distribution, was derived from regional rainfall data for the June to August period. This value was used to estimate the expected *drought condition* for the site. The estimated three-month rainfall for the drought condition was then used for the combined months of June, July and August with the dry scenario.

**Table 3.4-3: Probability of Hydroclimatic Events**

Condition/Event	Return Period	Annual Probability of Occurring	Probability of Occurring in 12-year Period (qe)*
Average Year	2	50%	100%
Storm	100	1%	11%
Drought	50	2%	22%

**NOTE:**

\* $q_e = 1 - (1-p)^n$ , where  $p$  is annual probability and  $n$  is number of years

**Table 3.4-4: Design Storm: Regional Intensity-Duration-Frequency Analysis**

Station	Elevation (m asl)	24 HR – 10 Year	24 HR – 50 Year	24 HR – 100 Year	24 HR – 100 Year (0.95)	24 HR – 100 Year (0.05)
Mayo	504	1.1	1.3	1.5	1.9	1.1
Dawson	370	1.1	1.4	1.5	1.8	1.2
Pelly Ranch	454	1.2	1.6	1.8	2.2	1.4
Teslin	705	1.2	1.5	1.6	2	1.2
Whitehorse	706	1.3	1.8	2	2.5	1.5
Watson Lake	687	1.8	2.4	2.7	3.5	1.9
<b>Regional Equations</b>		$y=0.001*x+0.7034$	$y=0.0015*x+0.7871$	$y=0.0017*x+0.8739$	$y=0.0024*x+0.9184$	$y=0.001*x+0.8293$
		$y=0.001*x+0.7034$	$y=0.0015*x+0.7871$	$y=0.0017*x+0.8739$	$y=0.0024*x+0.9184$	$y=0.001*x+0.8293$
<b>Eagle Gold – Potato Hills</b>	<b>1,420</b>	<b>2.1</b>	<b>2.9</b>	<b>3.3</b>	<b>4.3</b>	<b>2.2</b>
<b>Camp</b>	<b>823</b>	<b>1.5</b>	<b>2.0</b>	<b>2.3</b>	<b>2.9</b>	<b>1.7</b>

**NOTES:**

<sup>1</sup> All precipitation units in mm/hr

<sup>2</sup> Data Source: Regional IDF.xlsx (Stantec 2009)

Each **Hydroclimatic Condition** provides a base-case precipitation amount from which extreme **Hydroclimatic Events** can be added (i.e., storm) or subtracted (i.e., droughts) from any particular month to address particular risks for water management (i.e., freshet). The use of **Hydroclimatic Events** in combination with **Hydroclimatic Conditions** adds comprehensiveness to the water balance model. The combined probability of a 1:100 year storm in a wet year is 5% (Table 3.4-5).

**Table 3.4-5: Probability of Combined Hydroclimatic Conditions and Events**

Condition	Event	Probability of Occurring in 12-year Period (qT)*
Average Year	1:100 yr Storm	11%
Wet Year	1:100 yr Storm	5%
Dry Year	1:50 yr Drought	10%

**NOTE:**

\* $q_T = q_c \times q_e$

The acceptable risk was then considered with regard to model uncertainty. For example, comparison of on-site Potato Hills station data to regional data indicated that the 2008 hydrologic year produced an exceptionally wet July (201 mm) and August (130 mm), while July 2009 was an exceptionally dry month for July (13 mm).

For context, the Potato Hills July 2008 rainfall accumulation exceeded the 500-year event frequency for Mayo and Keno Hill. Although the uncertainty of these estimates is very high, it is still noteworthy that the regional data clearly underestimate high magnitude monthly rainfall volumes for the SA. Similarly, the August 2008 rainfall accumulation exceeded the 500-year event frequency at Mayo and the 200-year frequency at Keno Hill. Based on these comparisons, it is reasonable to assume that the July and Aug 2008 rainfall accumulations at Potato Hills were greater than the 200-yr and 100-yr return intervals, respectively.

For dry event analysis, the log Pearson III frequency analysis tended to overestimate rainfall for low probabilities at low exceedances. This trend was systematic throughout all the regional climate data. Based on the frequency analysis, the tendency for overestimation, and the lack of a well-defined orographic factor during dry periods (Section 3.1.3.2), the July 2009 rainfall accumulation at Potato Hills was less than the 1.05-year event at Mayo and is below the predicted confidence limits for Keno Hill.

This large range in measured rainfall at the Potato Hills station was addressed during the Baseline Calibration stage (Section 4). For example, while annual and monthly precipitation amounts were the result of regionally-derived precipitation-elevation regressions, the predicted values were then adjusted by precipitation factors to match the observed (e.g. at Potato Hills) wet or average or dry month values. This provided a better fit to the observed precipitation data record and reduced the uncertainty in the estimates for average, wet and dry year precipitation.



## 4 BASELINE CALIBRATION AND COEFFICIENT DEVELOPMENT

The baseline module of the SWBM was calibrated following nine steps:

1. Selected the Upper Dublin Gulch basin to be the representative sub-basin for the SA based on four criteria:
  - Basin size (i.e., larger than most of sub-basins but smaller than Haggart Creek sub-basin)
  - Good streamflow record
  - Potato Hills climate station lies within the basin
  - A higher overall elevation which yields conservative precipitation values due to orographic effects represented in model equations.
2. Calculated *Net P* and *ET* on a monthly basis from the Aug 2007 to September 2009 rain and snow database and other climate data for each sub-basin.
3. Calculated *RUN*, *GWin* and *GWout* on a monthly basis using the synthetic streamflow database and following the equations in Section 2.
4. Calculated monthly coefficients for *RUN* and *GWout* as a function of *Net P*.
5. Reviewed the August 2007 to September 2009 monthly climate (temperature, precipitation) and streamflow data, and assigned them as surrogates for average, wet or dry months.
6. Used the equations described in Section 3.1 to calculate predicted values for rainfall, snowfall, snowmelt and evapotranspiration.
7. Used the runoff coefficients from Steps 4 and 5 to calculate *RUN* and *GWout*, and equations from Section 2 to calculate *Q* and *GWin*.
8. Adjusted predicted monthly precipitation values by a coefficient based on its average, wet or dry condition (from step 5) to improve the correlation between synthetic and predicted values of *ET*, *RUN*, *Q*, *GWin* and *GWout*.
9. Determined the best fit between predicted and synthetic datasets using annual precipitation factors (i.e., Potato Hills data had higher *Net P* during 2007 – 2009 than predicted by regional orographic regression equations).

In summary, annual precipitation factors of 1.40, 1.55 and 1.00 for average, wet and dry hydroclimatic conditions were determined to yield the best fit between predicted and synthetic datasets. Predicted rainfall, snowfall and precipitation totals for average, wet and dry hydroclimatic conditions are summarized in Table 4-1. These values are compared to annual site climate data in Figure 4-1. The comparison suggests that the 2007 – 2009 data period were average to sub-average hydroclimatic years. However, when the precipitation, rainfall and snowfall data are compared on a monthly basis (Figure 4-2, Figure 4-3 and Figure 4-4, respectively), it is noteworthy that the SWBM annual data do not compare well with the measured data. This is because the model is not designed

to predict the natural variability of historical data, but to yield realistic magnitudes of monthly precipitation values. Further, the relatively high precipitation in August 2008 (130 mm) is captured by the wet condition, while the extremely high precipitation in July 2008 (201 mm<sup>1</sup>) is captured by the wet condition plus a storm hydrologic event (described in Section 3.4).

**Table 4-1: Comparison of Predicted Annual Rainfall, Snowfall and Precipitation for Upper and Lower Areas of the SA**

	Average		Wet (1:20 yr)		Dry (1:20 yr)	
	823 m asl	1,420 m asl	823 m asl	1,420 m asl	823 m asl	1,420 m asl
Rainfall	301	354	479	575	128	120
Snowfall	183	276	291	449	78	94
Precipitation	484	630	770	1024	205	213

Calibration results comparing the predicted and synthetic values for *P*, *ET*, *GWin*, *Q*, *RUN* and *GWout* are presented in Table A-4. Predicted *Net P* was 98.1% of measured *Net P* for the calibration period August 2007 to September 2009, while *ET* and *Q* were approximately 37% and 50% of *Net P* (Table 4-2). The relatively high *GWout* values compared to *GWin* values reflect the losing nature of Dublin Gulch stream channel as it flows across the alluvium and placer deposits in the lower valley. Further, the high *GWout* value may also reflect the working definition for *GWout* (i.e., 7-day minimum monthly flow), which may have some residual component of runoff. Figure 4-5 depicts the relationship between synthetic *Net P* and synthetic *Q* for Dublin Gulch at W1, and shows that while *Net P* is substantially more variable than *Q* during summer months and represents a minor proportion, flows are sustained throughout the winter when there is no *Net P* available. Comparisons of predicted versus synthetic data for *Net P*, *Q* and *GWout* are provided in Figure 4-6, Figure 4-7 and Figure 4-8, respectively based on the calibration run. Figure 4-9, Figure 4-10 and Figure 4-11 show the trend lines and correlation coefficients as a measure of the reliability of the calibration for *Net P*, *ET* and *Q*. Calculated *r*<sup>2</sup> values for *Net P*, *Q* and *ET* are 0.813, 0.807, and 0.869, respectively, demonstrating the model can explain most of the natural variability expressed in the synthetic datasets.

<sup>1</sup> The July 2008 total rainfall of 201 mm is substantially higher than the predicted 1:100 year value of 153 mm, although it is within two standard deviations of the predicted value.

**Table 4-2: Calibrated Coefficients for *ET*, *GWin*, *Q*, *RUN* and *GWout***

Water Balance Parameter	Symbol	Coefficients (proportion of <i>Net P</i> )	
		Measured	Predicted
Evapotranspiration	<i>ET</i>	0.37	0.36
Recharge	<i>GWin</i>	0.14	0.13
Streamflow	<i>Q</i>	0.49	0.51
Runoff	<i>RUN</i>	0.13	0.16
Subsurface Flow Discharge	<i>GWout</i>	0.36	0.34

After calibration was complete, *Net P* and *ET* were calculated per sub-basin using the precipitation factors for average, wet and dry hydroclimatic conditions, and following the methodology described in Section 3.1. Monthly coefficients for *RUN* and *GWout* were then computed for each sub-basin. These coefficients were then used in the model to calculate predicted values for *RUN* and *GWout*.

**THIS PAGE INTENTIONALLY LEFT BLANK.**

## **5 PROJECT FACILITIES AND MODEL DEVELOPMENT**

This section describes the assumptions used in the model to represent the general layout and flow routing for each phase of the Project.

### **5.1 Construction**

This section describes the water routing activities during the first two years of the Project. The construction phase of the Project will require approximately 1.7 yrs to complete (January 2012 to August 2013), and include approximately 69 weeks over two summer construction periods. Thus the water balance addresses conditions during two spring freshets, and two summer rainfall-runoff periods (including storm events), and two summer low flow periods. As there will be no major changes to sub-basin divides and drainage areas, baseline conditions, with the exception for flow routing, are assumed for the construction phase.

The approximate 1.7-year schedule for major construction activities and water routing during the construction phase includes the:

- Drilling and installation of groundwater wells and the initiation of depressurization and dewatering prior to excavation of the open pit
- Construction of diversion ditches and sediment control ponds
- Construction of pre and post-treatment ponds, and the Heap Leach Facility (HLF) Events Ponds
- Staged construction of the Dublin Gulch Diversion Channel (DGDC)
- Construction of waste rock storage area (WRSA) starter embankments and associated seepage collection ponds
- Construction of the HLF embankment and in-heap pond.

A detailed construction sequence by year for major activities affecting the water balance is provided in Table B-1. Table B-2 outlines the construction sequence by major facility. Figure 5.1-1 provides the overall flow pathway of water conveyance facilities during freshet of construction year 2. Specific reference maps and sequence details for each facility are described in the Water Management Plan report (Sections 6.3 to 6.8).

The surface water balance model recognizes and simulates five different stages during construction. Each successive stage represents the progressive development of distinct water routing and conveyance conditions up to operation. For example, streamflow from Dublin Gulch and Eagle Creek are diverted in several different configurations to provide water and sediment management controls while facilities are being built. The five general stages of construction are:

1. The camp and sediment control in the vicinity of the camp and the Lower Dublin Gulch Sediment Control Pond (LDGSCP) are constructed. Dublin Gulch and Eagle Creek flow as per existing conditions.

## Eagle Gold Project

### Surface Water Balance Model Report

#### Section 5: Project Facilities and Model Development

---

2. Dublin Gulch is temporarily diverted through the LDGSCP and routed to the lower Dublin Gulch channel. The treated sewage outfall comes online and is routed to Haggart Creek via the lower Dublin Gulch Channel. The Events Ponds and upper DGDC are constructed. Eagle Creek (including Eagle Pup and Stuttle Gulch) flows as per existing conditions.
3. Eagle Creek and Dublin Gulch are routed via the upper DGDC through the Events Ponds (which functions as a temporary sediment control pond) then to the LDGSCP and the lower Dublin Gulch channel. The lower DGDC is constructed during this stage.
4. Eagle Creek and Dublin Gulch flows are routed via the DGDC and out via the lower Dublin Gulch existing channel while the mine water treatment plant (MWTP) and Eagle Creek Connector (ECC) are constructed.
5. All facilities come on-line before operations start and water is routed through the pathways that will operate during mining operations (described in Section 5.2).

General water storage capacity design elements assumed for the SWBM and the effects assessment are provided in Table 5.1-1. For the purposes of the following discussion, contact water is defined as any collected surface water that has runoff, or been in contact with, a Project facility, excluding diversion channels or ditches that convey non-contact water (surface water runoff from undisturbed areas) through or around the Project footprint. Table B-3 is the monthly master Water Management Plan schedule assumed in the SWBM, and describes the specific proposed changes to the sequential development of water routing used in the model.

**Table 5.1-1: Water Storage Capacities**

Location	Project Phase		Max. Water Surface Area m <sup>2</sup>	Maximum Depth m	Max. Volume m <sup>3</sup>	Base Area m <sup>2</sup>	Allowable Volume m <sup>3</sup>	Total Volume m <sup>3</sup>	Water Quality	Operational Monitoring	From	To	Notes, Data Sources
	From	To											
Dublin Gulch Upstream Velocity Reduction Pond	Construction	Post-closure Monitoring	10,428	3	35,000				Non-contact	Yes	Upper Dublin Gulch	Dublin Gulch Diversion Channel	[1], [2], [4]
Dublin Gulch Velocity Reduction Pond at Energy Dissipaters	Construction	Post-closure Monitoring	n/a	n/a	n/a				Non-contact	No	Dublin Gulch Diversion Channel	Dublin Gulch Diversion Channel	[1], [2], [5]
Eagle Pup Sediment Control Pond	Construction	Closure and Reclamation	6,589	8	26,559				Non-Contact + Contact	Yes	Eagle Pup Waste Rock Storage Area	Depending on water quality result To MWTP Feed Pond or Diversion Channel	[1], [2], [5]
Platinum Gulch WRSA Sediment Control Pond	Construction	Closure and Reclamation	8,537	8	37,546				Non-Contact	No	Undisturbed Basin Area - Platinum Gulch	Platinum Gulch	[5]
Platinum Gulch WRSA Lined Seepage Collection Pond	Construction	Closure and Reclamation	8,338	n/a	n/a				Contact	Yes	Platinum Gulch Waste Rock Storage Area	Gravity drain to OP Sump Then to MWTP Feed Pond	[1], [2], [3]
Secondary HLF Storage 1 (Events Pond 1)	Construction	Closure and Reclamation	18,169	12		5,278	87,500	112,502	Contact	Yes	HLF drainage to Process Plant	Cycled back to HLF via irrigation unless extra storage is required	[1], [3], [5], [6]
Secondary HLF Storage 2 (Events Pond 2)	Construction	Closure and Reclamation	18,673	12		5,812	87,500	116,550	Contact	Yes	HLF drainage to Process Plant	Cycled back to HLF via irrigation unless extra storage is required	[1], [3], [5], [6]
Ann Gulch Sediment Control Pond East	Construction	Closure and Reclamation	13,566	2				27,132	Non-Contact	No	Ann Gulch (undisturbed)	Dublin Gulch Upstream Velocity Reduction Pond	[1], [2], [3]
MWTP - Feed Pond (Polishing Pond 1)	Construction	Closure and Reclamation	4,951	5		2,431	13,449		Contact	Yes	OP Sump, Eagle Pup WRSA SCP, Platinum Gulch WRSA SCP	To MWTP	[1], [5], [6]
MWTP - Product Pond (Polishing Pond 2)	Construction	Closure and Reclamation	4,951	5		2,431	13,449		Treated	Yes	MWTP	Lower Dublin Gulch Sediment Control Pond 1 (Inlet)	[1], [5]
Lower Dublin Gulch Sediment Control Pond 1 (Inlet)	Construction	Closure and Reclamation	5,422	4		2,240		14,954	Treated/ Settled	Yes	MWTP Product Pond	Lower Dublin Gulch Sediment Control Pond 2 (Outlet)	[1], [5], [6]
Lower Dublin Gulch Sediment Control Pond 2 (Outlet)	Construction	Closure and Reclamation	5,510	5		1,820		17,605	Treated/ Settled	Yes	Lower Dublin Gulch Sediment Control Pond 2 (Outlet)	Eagle Creek/Lower Diversion Channel (optional to Haggart)	[1], [5], [6]
Open Pit Sump – Year 1 to 3	Operations	Operations	As required	As required				As required	Contact	Yes	OP Runoff and Dewatering	To MWTP Feed Pond	[1], [2], [3]
Open Pit Sump – Year 3 to 5	Operations	Operations	As required	As required				As required	Contact	Yes	OP Runoff and Dewatering	To MWTP Feed Pond	[1], [2], [3]
Open Pit Sump – Year 5 to 6	Operations	Operations	10,301	5				48,375	Contact	Yes	OP Runoff and Dewatering	To MWTP Feed Pond	[1], [2], [3]
Open Pit Sump – Year 6 to final	Operations	Operations	25,235	11				279,793	Contact	Yes	OP Runoff and Dewatering	To MWTP Feed Pond	[1], [2], [3]
Open Pit Sump – Backfilled	Final Year	Closure and Reclamation		10				249,793	Contact	Yes	OP Runoff	To MWTP Feed Pond	[3]

**NOTES:**

[1] - Stantec GIS calculations from pre-feasibility design drawings provided by URS/Scott Wilson (May, 2010)

[2] - Average depth

[3] - Volumes obtained from Project Description (Stantec, 2010) \* Allowable volume is the maximum filling capacity to maintain adequate freeboard and minimum volumes to protect the liners.

[4] - Estimated Volume based on Pre-Feasibility Information

[5] - Source: Dublin Gulch - pond storage capacities.xls - via email from Jason Cox: Mon 7/12/2010 6:20 AM

[6] - Surface area revisions from July 30, 2010 Stantec master drawing 1053550-179 - Water balance model will use data from [5]

tbd -To be determined

n/a- Detailed design data not available





## 5.2 Operations

This section quantifies the water routing activities during the 7.3 year operations phase (September 2013 to December 2020), and includes the gradual excavation and enlargement of the open pit, and the gradual build-up of the WRSAs and the HLF. Thus, the water balance addresses hydrologic conditions associated with the increasing footprint areas and elevations of each major facility over time.

The approximate 7.3-year schedule for major activities and water routing during the operations phase includes the:

- Continued depressurization and perimeter dewatering of the open pit
- The use of the DGDC and other diversion ditches and sediment control ponds
- The use of the MWTP and associated pre and post-treatment ponds
- Water accounting of runoff and seepage associated with the WRSAs
- The water requirements of the HLF
- Staged construction of the DGDC.

The major activities affecting inputs to the water balance model during operations are summarized in Table 5.2-1. Table B-4 outlines the construction sequence by major facility. Figure 5.2-1 provides the flow nodes and pathways assumed by the SWBM for throughout operations. Specific reference maps and sequence details for each facility are described in the Water Management Plan report (Sections 7.3 to 7.9). Since there are no proposed changes to flow routing and conveyance once operation begins, the surface water balance model recognizes and simulates only one condition during operations.

**Table 5.2-1: Major Activities Affecting Water Balance Model during Operations**

Year	Month	Activities Affecting Inputs to Water Balance Model
Years 1.7 to 5.8	September 2013 to September 2016	<ul style="list-style-type: none"> <li>▪ Full operations begin</li> <li>▪ Active open pit depressurization and dewatering</li> <li>▪ Both PG WRSA and EP WRSA in use including sediment control and seepage collection ponds</li> <li>▪ Dublin Gulch diverted through diversion channel to Eagle Creek</li> <li>▪ All treated water discharged to Haggart Creek</li> <li>▪ High water demand to maintain proposed rates for irrigating the operating the adsorption and recovery plant</li> <li>▪ All water management systems (e.g. sediment control ponds, diversions, treatment ponds and facilities, water supply wells, etc) will be operational</li> </ul>

## Eagle Gold Project

### Surface Water Balance Model Report

#### Section 5: Project Facilities and Model Development

---

Year	Month	Activities Affecting Inputs to Water Balance Model
Year 6	May 2017 to October 2017	<ul style="list-style-type: none"><li>▪ Decommission the PG WRSA and begin progressive reclamation including re-contouring and capping as appropriate</li><li>▪ Water routing from collection pond at PG WRSA to open pit sump will continue as long as water supply is needed and water chemistry requires some level of treatment</li></ul>
Years 5.8 to 9	October 2016 to December 2020	<ul style="list-style-type: none"><li>▪ Full operations using only EP WRSA</li><li>▪ Continued active open pit depressurization and dewatering</li><li>▪ Dublin Gulch diverted through diversion channel to Eagle Creek</li><li>▪ Continued high water demand from the HLF</li><li>▪ All treated water still discharged to Haggart Creek</li><li>▪ No changes to water routing or management at other facilities</li></ul>
Year 9	December 2020	<ul style="list-style-type: none"><li>▪ End mining operations</li></ul>
Year 10	January 2021	<ul style="list-style-type: none"><li>▪ Begin supplemental gold recovery at HLF and decommissioning and reclamation at other facilities</li></ul>

The operations module accommodates the proposed changes in elevation and area of the open pit, WRSAs and the HLF. Reference elevations (median facility elevation during each year) were used to address orographic effects to compute precipitation and temperature values for the model over time. This process was conducted for both the developed and undeveloped areas (i.e., while the facility footprint increased the undisturbed basin area decreased). Proposed changes in median elevations and areas for each proposed facility during operations were provided in URS/Scott Wilson (2010)<sup>2</sup> and are summarized in Table B-5 (open pit), Table B-7 (Platinum Gulch Waste Rock Storage Area), Table B-9 (Eagle Pup Waste Rock Storage Area) and Table B-11 (Ann Gulch Heap Leach Facility). These tables also provide other important properties (e.g. rock tonnage, waste rock density) for each facility assumed in the model. The assumptions regarding reference elevations, facility footprint areas, facility volumes, moisture content and water routing are presented in monthly time steps for the duration of the Project in Table B-6 (open pit), Table B-8 (Platinum Gulch Waste Rock Storage Area), B-10 (Eagle Pup Waste Rock Storage Area) and B-12 (Ann Gulch Heap Leach Facility).

### 5.2.1 Open Pit

Inputs to the water balance model associated with the open pit include the capture and temporary storage of runoff from the open pit sub-basin (i.e., non-diverted contact water from the open pit walls and the adjacent areas) and active depressurization and dewatering from the open pit perimeter. Both of these inputs vary in time based on the enlargement of the open pit. The predicted volume of collected contact runoff gradually increases through the 7.3-year operations phase as the footprint of the open pit increases. The estimated monthly coefficients for evaporation (i.e., defined as the

---

<sup>2</sup> Preliminary designs for the WRSAs were provided for years 1, 3, 5 and at maximum build-out (Year 7.3). The median elevation and footprint area for each facility was interpolated for years 2, 4, 6 and 7. Preliminary designs for the HLF were provided for years 1, 2 and 7.3. HLF data for years 3, 4, 5, 6 and 7 were interpolated.

proportion of potential evaporation ( $PE$ ) from the open pit are listed in Table 5.2-2. The distribution attempts to reflect seasonal effects due to ice formation on the open pit walls and/or benches, and the overall reduction reflects the reduced average surface area exposed to evaporation due to open pit wall steepness and or aspect. These coefficients might be even lower if the rock fracture density is high, but it was conservatively assumed that the effects of rock fracture density were negligible. These uncertainties were examined in the sensitivity analysis (Section 7).

Collected runoff and groundwater seepage will be temporarily retained in an open pit sump, which will be periodically pumped (or gravity fed) via a pipeline to the MWTP Feed Pond. The location of the open pit sump will periodically be re-located as the open pit geometry changes and is assumed to have a maximum storage capacity of 280,000 m<sup>3</sup> during the final year of operations (Table B-5).

**Table 5.2-2: Monthly Evaporation Coefficients for the Open Pit**

Month	Coefficient of Evaporation (Bare Surface) <sup>1</sup>
	$C_{E-BARE}$
October	0.3
November	0.0
December	0.0
January	0.0
February	0.0
March	0.0
April	0.0
May	0.2
June	0.4
July	0.5
August	0.4
September	0.3

**NOTE:**

<sup>1</sup> Estimate of proportion of  $PE$  evaporating from open pit benches and walls

Based on the likelihood that some wells will be installed in areas of enhanced permeability associated with fracturing, it is assumed that the depressurization of the open pit slopes will be accomplished using horizontal drains and perimeter wells rather than only a no well scenario. It is also assumed that open pit depressurization will begin in the first year of construction. Thus, based on Figure 21<sup>3</sup> in BGC (2010b) and T. Crozier (BGC, personal communication, August 25, 2010 e-mail), the total groundwater discharge rate is predicted to be low, ranging from approximately 38 m<sup>3</sup>/d in

<sup>3</sup> Assumes the total groundwater discharge rate is equal to the added values for pit inflows and well intake beginning in first year of construction.

## Eagle Gold Project

### Surface Water Balance Model Report

#### Section 5: Project Facilities and Model Development

Year 7 to approximately 429 m<sup>3</sup>/d in Year 3. Table 5.2-3 summarizes the estimated open pit inflows for the construction and operations phase.

**Table 5.2-3: Total Estimated Groundwater Inflow to the Open Pit**

Project Year	Active Depressurization Scenario			
	Year	Open Pit Flows (m <sup>3</sup> /d)	Well Flows (m <sup>3</sup> /d)	Total (m <sup>3</sup> /d)
1	Jan 2012 to Sep 2012	0.0	90.8	90.8
2	Oct 2012 to Aug 2013	0.0	172.8	172.8
3	Sep 2013 to Sep 2014	44.7	70.3	115.0
4	Oct 2014 to Sep 2015	218.7	81.1	299.8
5	Oct 2015 to Sep 2016	23.6	42.6	66.2
6	Oct 2016 to Sep 2017	330.5	98.4	428.9
7	Oct 2017 to Sep 2018	34.6	43.1	77.7
8	Oct 2018 to Sep 2019	399.0	1.0	400.0
9	Oct 2019 to Sep 2020	45.9	0.0	45.9
10	Oct 2020 to Dec 2020*	38.0	0.0	38.0
10 to 20	Closure and Reclamation**	38.0	0.0	38.0

**NOTES:**

\* Year 10 is a partial year from October 2020 to December 2020

\*\* Closure and post-closure dewatering rates were not included in BGC (2010b). However, BGC provided guidance on conservative flow rates based on pre-feasibility data (pers. comm. T. Crozier, August, 2010). Horizontal drains are assumed to yield a constant flow rate after closure equivalent to the flow rates during the last year of operations.

### 5.2.2 Platinum Gulch Waste Rock Storage Area

Inputs to the water balance model associated with the PG WRSA include the collection and temporary storage in the seepage collection pond of contact runoff from waste rock pile and seepage from the rock drains under the rock pile and diversion of non-contact water around the waste rock pile to a sediment control pond. The assumptions and details associated with the design of the WRSA, ponds and rock drains are found in URS/Scott Wilson (2010). Aspects associated with the management of water at the PG WRSA are described in the Water Management Plan (Stantec 2010h). For the purposes of the SWBM, it is conservatively assumed that the Platinum Gulch rock drains are 100% effective in capturing all water that recharges through the rock pile.

All three of the inputs vary in time based on the enlargement of the PG WRSA over time. The predicted volume of collected contact water (both runoff and seepage) gradually increases through the first three years of the operations phase as the footprint of the PG WRSA increases. The assumed monthly coefficients for runoff and evaporation for the PG WRSA are listed in Table 5.2-4. Due to the rubbly and granular texture of waste rock, they have large surface areas where evaporation can take place. Further, their high porosity enables evaporative processes to occur at

depth. Thus, evaporation from the WRSA surface was estimated to be 70% of PE. As fresh waste rock is dumped on the pile it is assumed to retain 1% of its moisture prior to blasting, hauling and dumping.

The model assumes that the collected contact water will be temporarily retained (no longer than one month) and periodically pumped (or gravity fed) via a pipeline to the open pit sump or directly to the MWTP Feed Pond. Seepage collection and sediment control pond capacities are provided in Table 5.1-1. The model assumes that the non-contact water will be discharged directly to Platinum Gulch and that pond retention times will vary depending on the ratio of monthly inflow to maximum capacity. Preliminary pond design capacity is such that retention times are expected to be at least one month during average hydroclimatic years and no less than 15 days during a particularly wet month.

### **5.2.3 Eagle Pup Waste Rock Storage Area**

Inputs to the water balance model associated with the EP WRSA include the collection and temporary storage of contact runoff from waste rock pile and seepage from the rock drains under the rock pile, and non-contact water from surrounding basin. Preliminary geotechnical findings indicated that the steep valley walls and lack of available area prevented the construction of diversion ditches and a separate seepage collection pond. Thus, the water balance model assumes that both contact and non-contact water will be collected in the Eagle Pup Sediment Control Pond. The assumptions and details associated with the design of the WRSA, sediment control pond and rock drains are found in URS/Scott Wilson (2010). Aspects associated with the management of water at the EP WRSA are described in the Water Management Plan (Stantec 2010h). For the purposes of the SWBM, it is conservatively assumed that the Eagle Pup rock drains are 100% effective in capturing all water that recharges through the rock pile.

All three of the inputs vary in time based on the enlargement of the EP WRSA over time. The predicted volume of collected contact water (both runoff and seepage) gradually increases through the 7.3 years of the operations phase as the footprint of the EP WRSA increases. The assumed monthly coefficients for runoff and evaporation for the EP WRSA are listed in Table 5.2-4. Rationale for the evaporation coefficients and moisture retention for Eagle Pup waste rock is the same as for Platinum Gulch waste rock and is discussed in Section 5.2.2.

The model assumes that the collected water will be temporarily retained (no longer than one month) and periodically pumped (or gravity fed) via a pipeline to the open pit sump or directly to the MWTP Feed Pond. Pond and sump storage capacities are provided in Table 5.1-1. Preliminary pond design capacity is such that retention times during the operations phase can be at least 15 days during average hydroclimatic years and no less than 6 days during a wet May (during freshet).

**Table 5.2-4: Monthly Evaporation and Runoff Coefficients for Waste Rock Storage Areas**

Month	Coefficient of Evaporation from WRSA Surface <sup>1</sup>	Coefficient of Runoff from WRSA Surface <sup>2</sup>
	$C_{E-Dump}$	$C_{Run}$
October	0.70	0.10
November	0.0	0.00
December	0.0	0.00
January	0.0	0.00
February	0.0	0.00
March	0.0	0.00
April	0.0	0.00
May	0.70	0.10
June	0.70	0.10
July	0.70	0.10
August	0.70	0.10
September	0.70	0.10

**NOTES:**

<sup>1</sup> Evaporation coefficient is a proportion of *PE* that evaporates from the bare surface of the pile

<sup>2</sup> Runoff coefficient is the proportion of *Net P* that drains off the pile

### 5.2.4 Ann Gulch Heap Leach Facility

Details associated with the design of the Ann Gulch Heap Leach Facility (HLF) and associated facilities (e.g. ADR plant, barren tank, Events Ponds and the irrigation system) are found in URS/Scott Wilson (2010). Aspects associated with the management of water for the HLF is described in the Water Management Plan (Stantec 2010h). A preliminary water balance for operations years 1, 2, and 7 and the ultimate pad height was conducted by KCA (2009). KCA's water balance assumptions were integrated into the SWBM with other assumptions to assess the various water balance scenarios. Inputs to the water balance model associated with the HLF include:

#### Heap Surface

- Collection and infiltration of all runoff from snowmelt or rainfall into the heap
- There will be no snow-plowing on the top of the HLF, all snowmelt on the HLF footprint will be collected in the Heap Pond
- The HLF will receive crushed ore from the open pit with an added moisture content of 1%
- The ore feed moisture is a function of *Net P* on the HLF
- The HLF will be irrigated year round; the emitters will be buried about 3m below the heap surface during the wintertime to prevent freeze-up.

Assumptions regarding the ore feed moisture, ore adsorption percentage and the emitter evaporation rate are listed in Tables 5.2-5, 5.2-6 and 5.2-7. Further, the idle heap evapotranspiration rate was assumed to be 70% of the pan evaporation rate, and it was assumed that there would be an additional 80 m<sup>3</sup>/day of make-up water from either a non-contact surface water or groundwater source for the recovery plant.

**Table 5.2-5: Heap Leach Emitter Evaporation**

Month	Estimated % of Hourly Irrigation Rate Lost to Evaporation <sup>1</sup>
	C <sub>EMIT</sub>
October	0.0
November	0.0
December	0.0
January	0.0
February	0.0
March	0.0
April	0.0
May	1.0
June	1.3
July	1.2
August	1.0
September	0.6

**NOTE:**

<sup>1</sup> from KCA (2010) Eagle Gold Heap Leach Water Balance in URS/Scott Wilson (2010)

**Table 5.2-6: Ore Feed Moisture as a Function of Net Precipitation**

0 – 35mm	35 – 50mm	>50mm
3%	4%	5%

**NOTE:**

Moisture assumptions from KCA (2010) Eagle Gold Heap Leach Water Balance in URS/Scott Wilson (2010)

**Table 5.2-7: Heap Leach Facility Moisture Assumptions**

Year	Active Moisture (%)	Moisture Added in Crushing (%)	Residual Moisture After Draindown (%)
1	13.3%	1%	–
2	–	1%	8.6%
3	–	1%	8.6%

**NOTES:**

Year 1: ore adsorption % = active moisture – ore feed moisture (from Table 5.2-6)

Other years: ore adsorption % = residual moisture after draindown – moisture added in crushing - ore feed moisture

**Source:** from KCA (2010) Eagle Gold Heap Leach Water Balance in URS/Scott Wilson (2010)

### **Sub-heap Water**

- The volume of water collected in the sub-liner groundwater drains is assumed to be equal to 50% of the amount recharged up-gradient of the HLF. Depending on make-up requirements, the SWBM assumes that this water is either used as process make-up water or discharged into Haggart Creek.
- The liner system and leak detection and recovery systems are internal to the HLF system and do not affect the volumes of surface water and so are not included in the SWBM.

### **Heap Pond (Primary Storage)**

- The in-heap pond will provide approximately 435,000 m<sup>3</sup> of solution storage (via pore space in the ore pile). Normal operating levels will be approximately 60,000 m<sup>3</sup>. The SWBM assumes 200,000 m<sup>3</sup> to be conservative in light of potential upset conditions or extreme hydroclimatic events.

### **Events Ponds (Secondary Storage)**

- Two ponds designed to receive excess flow from storm or snowmelt events that would cause the primary storage to exceed capacity and/or exceed pumping/ irrigation capacity
- Will receive contact water through the MWTP Feed Pond as process water from various sources (EP SCP, PG SGP and the open pit sump)
- Has maximum allowable (accounting for freeboard) combined volume of 175,000 m<sup>3</sup>
- When drained, water is cycled through the cyanide detoxification plant prior to treatment in the MWTP.

### **Up-gradient Areas**

- Diversion of all non-contact runoff derived from areas up-gradient from the active heap.

## **5.2.5 Mine Water Treatment Plant**

Inputs to the water balance model associated with the mine water treatment plant (MWTP) include the use of the Feed Pond and Product Pond. Both of these have relatively small capacities (Table 5.1-1) so the water balance model assumes they are used primarily for staging and routing contact water either to the Events Ponds (for use as process make-up water) or in the event that the Events Ponds are at capacity, directly to the MWTP. The Feed Pond receives water from either the cyanide detoxification plant<sup>4</sup> (during reclamation) and/or contact water from the: open pit sump, PG SGP (via the open pit sump), and EP SCP. The product pond receives treated water from the MWTP and functions as a temporary storage pond and then discharges to Haggart Creek via the Lower Dublin Gulch Sediment Control Pond (LDG SCP).

---

<sup>4</sup> Alternatively, detoxified process water could be conveyed directly to the MWTP.



### 5.3 Closure and Reclamation

This section describes the water routing activities during the 10-year closure and reclamation phase (January 2021 to December 2030), and includes the closing and reclaiming of the WRSAs, the decommissioning of various ponds and ditches and the gradual decommissioning, closing and reclamation of the HLF. The 10-year length of time is a product of the required time to close the HLF, whereas most of the other facilities are less constrained and could be closed and reclaimed in a shorter time period. The Conceptual Closure and Reclamation Plan (Stantec 2010j) provides descriptions of key mitigation concepts for each facility with respect to the various valued environmental components of terrestrial and aquatic ecosystems.

The closure and reclamation water balance module assumes that there will be no significant adjustments to the configuration of elevation and area of the open pit, WRSAs and the HLF after operations. Thus, the reference elevations (median facility elevation) and footprint areas remain constant through the closure and reclamation phase.

The approximate 10-year schedule for major activities and water routing during the closure and reclamation phase includes the:

- Supplemental recovery of gold, heap rinsing and heap draining
- Continued use of horizontal drains in the open pit
- Decommissioning of the sediment control ponds
- Construction of a reclamation soil cover on the EP WRSA and HLF will reduce infiltration into the rock pile and increase runoff to receiving streams
- Decommissioning of the EP SCP and reconnection into the DGDC
- Reclamation of the Events Ponds, MWTP Feed and Product ponds, the LDG SCP, and if necessary based on water quality conditions, the creation of a passive wetland system for attenuating metals concentrations from the HLF
- Gradual decrease in camp water supply demands.

The major activities affecting inputs to the water balance model during closure and reclamation are summarized in Table 5.3-1. Table B-13 outlines the construction sequence by major facility during closure and reclamation. Figure 5.3-1 provides the flow nodes and pathways assumed by the SWBM for throughout closure and reclamation. Specific reference maps and sequence details for each facility are described in the Water Management Plan report (Sections 8.3 to 8.9).

**Table 5.3-1: Major Activities Affecting Water Balance Model during the Closure and Reclamation Phase**

Project Year	Month	Activities Affecting Inputs to Water Balance Model
Year 9.3 to 10.3	January 2021 to December 2021	<ul style="list-style-type: none"> <li>▪ Continue with gold recovery from HLF</li> <li>▪ Stabilize all long-term diversion ditches and SCPs</li> <li>▪ LDGSCP will receive all water until WQ standards are met</li> <li>▪ EP WRSA re-contouring and cap construction changes infiltration and runoff conditions</li> <li>▪ PG WRSA collection pond continues to route to OP until WQ standards met</li> <li>▪ PG WRSA SCP remains in place until WQ standards are met</li> <li>▪ Horizontal drains remain open to flow to open pit sump</li> <li>▪ OP lake formation starts</li> </ul>
Years 10.3 to 13.8	January 2022 to June 2024	<ul style="list-style-type: none"> <li>▪ Rinsing and detoxification of heap</li> <li>▪ Pit lake begins draining to Haggart Creek via Platinum Gulch provided water quality criteria are met</li> </ul>
Years 13.8 to 19.3	July 2024 to December 2030	<ul style="list-style-type: none"> <li>▪ Begin draindown of heap</li> <li>▪ Gradual decrease in use of the MWTP followed by decommissioning of the EP WRSA</li> <li>▪ Construct reclamation cap on HLF</li> <li>▪ MWTP maintained until WQ criteria are met</li> <li>▪ reclamation of the Events Ponds, MWTP feed and product ponds, and the LDG SCP into a passive wetland system, if necessary, for attenuating metals concentrations from the heap</li> </ul>
Year 19.3	December 2030	<ul style="list-style-type: none"> <li>▪ End active closure and reclamation activities</li> </ul>

Several proposed changes to flow routing and conveyance will occur at different times once the closure and reclamation phase begins. Thus, the SWBM recognizes and simulates the progressive stages as outlined in Table 5.3-1. Each successive stage represents the gradual decommissioning and closure of distinct water routing and conveyance conditions. These changes are noted in Table B-3.

### 5.3.1 Open Pit

At closure, the open pit volume will be approximately 280,000 m<sup>3</sup>, of which 150,000 m<sup>3</sup> of waste rock will be used as open pit backfill, leaving approximately 130,000 m<sup>3</sup> to fill with water. Prior to backfilling, the open pit will be about 20 m deep. The final depth of the pit lake will depend on how the backfill is placed. The final depth of the lake will likely be less than 20 m (assumes base of open pit at 940 m asl, and lowest rim at 960 m asl – URS/Scott Wilson 2010). At the beginning of the closure and reclamation phase, the open pit sump will still be receiving water from the PG SGP as well as collecting runoff and groundwater from the horizontal drains. When the pit lake is filled and water quality meets discharge criteria, the lake will then drain toward and form a tributary to Platinum Gulch. The estimate of the time to fill the open pit has a number of unknowns including: 1) the rate of residual groundwater flow from the horizontal drains; 2) the rock fracture density and the amount or

recharge to groundwater beneath the lake; and 3) a well-defined set of evaporation and runoff coefficients for the open pit walls and benches. For purposes of the SWBM, it has been conservatively assumed that: 1) the rate of seepage from the horizontal drains will be constant assuming the rate during the last year of the operations phase; 2) there are no losses to groundwater recharge; and 3), runoff and evaporation coefficients are the same as during the operations phase.

### **5.3.2 Waste Rock Storage Areas**

Activities on the PG WRSA are assumed to be complete by Year 5 of the Project (September 2016), and progressive reclamation including construction of a soil cover is assumed to be complete by end of summer 2017 (Year 6). Activities on the EP WRSA are assumed complete at the end of the operations phase (December 2020) and the soil cover will be constructed during the first year of the reclamation phase. For the purposes of the SWBM, it is assumed the reclamation soil cover will have an infiltration capacity of 20% of net precipitation, and will be fully operational by October 2017 (PG WRSA), and by October 2021 (EP WRSA). The effect on predicted runoff and seepage collection from the variation of cover infiltration rate is examined in the Sensitivity Analysis (Section 7).

### **5.3.3 Heap Leach Facility**

After the operations phase is complete, the HLF will go through three stages of closure: 1) supplemental gold recovery; 2) rinsing and detoxification; and 3) draindown. For the purposes of the SWBM, it was assumed that supplemental gold recovery will last one year (January 2021 to December 2021), rinsing and detoxification will last 2.5 years (January 2022 to June 2024), the soil cover will be placed in 2024, and draindown will last more than six years (July 2024 to December 2030).

At the cessation of the rinse and detoxification stage, the HLF will continue to drain freely. It is assumed that approximately 613,000 m<sup>3</sup> of rinsed solution will be left in a saturated condition above the heap pond. This volume is based on having to drain 13,000,000 tonnes (or 6,500,000 m<sup>3</sup>) of ore with a draindown rate of 47 L/tonne of ore and a leached volume at 9.4% of the ore mass (Carl Defilippi, KCA, pers. comm., Aug 25, 2010). These figures assume over 200,000 m<sup>2</sup> surface area of heap that will be irrigated during the last rinse cycle, and an average height of heap above the heap pond of 100 m. Based on the 5 mm crush size, and the placement of a soil cover in the first year after rinsing, it is assumed that the rate of heap draindown will be rapid at first (360 m<sup>3</sup>/hr or 42% of the total in first month, 74% in first three months, and 88% in the first year). The draindown rate is assumed to become increasingly slower over time, achieving about 95% draindown by month 31, and 100% by end of the sixth year of the closure and reclamation phase. However, it is likely that a residual draindown volume could remain for many years (including from added infiltration from rain and snowmelt through the cover), but this rate will be negligible compared to the assumed draindown period during the closure and reclamation phase. In general, tall heaps such as the proposed Project HLF, are expected to draindown at approximately the same rate as solution being applied (1,950 m<sup>3</sup>/hr for the Project) for two days at most, and then the rate will quickly drop to levels significantly below the application rate within about three days. This draindown rate continues to decrease slowly

## Eagle Gold Project

### Surface Water Balance Model Report

#### Section 5: Project Facilities and Model Development

over time for what could be greater than 10 to 20 years, depending on heap characteristics and climate conditions (Carl Defilippi, KCA, personal communication, Aug 25, 2010).

**Table 5.3-2: Assumed Draindown Proportions and Rates during the Closure and Reclamation Phase**

Months Since Draindown Began	Year	Month	Cumulative Proportion of Draindown	Average Drain Rate (m <sup>3</sup> /hr)
1	2024	Jul	42.3%	360.3
2		Aug	63.5%	180.2
3		Sep	73.9%	88.7
4		Oct	79.1%	44.4
5		Nov	81.7%	22.2
6		Dec	83.0%	11.1
7	2025	Jan	84.1%	8.9
13		Jul	88.2%	5.1
19	2026	Jan	91.1%	3.4
25		Jul	93.0%	2.4
31	2027	Jan	94.5%	1.9
43	2028	Jan	96.7%	1.4
55	2029	Jan	98.4%	1
67	2030	Jan	99.6%	0.8
72		Jun	100.0%	0.7

### 5.3.4 Mine Water Treatment Plant

The MWTP will continue to operate during the closure and reclamation phase until treatment is no longer required. The SWBM assumes the following:

- Runoff and seepage from the PG WRSA will no longer need to be collected in the Platinum Gulch SGP and conveyed to the MWTP by October 2025
- Runoff and seepage from the EP WRSA will no longer need to be collected in the Eagle Pup SCP and conveyed to the MWTP by October 2026
- Open pit wall runoff and groundwater from the horizontal drains collected in the open pit sump will no longer need to be conveyed to the MWTP by September 2027
- Runoff and seepage from the HLF will no longer need to be collected in the Events Ponds 2030, and can be discharged to Haggart Creek via engineered wetlands.

## 5.4 Post-closure Monitoring

Although reclamation activities will have been completed on the PG WRSA (2017), EP WRSA (2021) and open pit (2028), the SWBM assumes that post-closure monitoring does not begin until draindown of the HLF is essentially complete (2030), and the soil reclamation cover on the HLF has been constructed. More details regarding the characteristics of the proposed covers are found in Stantec (2010j). Further, for modeling purposes, a five-year period of monitoring from January 2031 to December 2035 is used for simulation. The major attributes of each facility that affect the water balance include:

- Establishment of soil covers with an effective infiltration rate<sup>5</sup> of 20% of *Net P* on the WRSAs and 10% on the HLF
- Re-connection of the Eagle Pup and Stuttle Gulch drainages to the DGDC and Eagle Creek
- Establishment of a drainage from the seep at the base of the HLF that ultimately discharges to Haggart Creek. As part of the adaptive management plan in the CCRP (Stantec 2010j), it is assumed that the HLF seepage will likely need to be discharged into a passive wetland treatment system before reaching Haggart Creek
- An established drainage that connects the pit lake to Haggart Creek via Platinum Gulch.

Post-closure module nodes and flow routing based on these attributes are depicted in Figure 5.4-1.

---

<sup>5</sup> The sensitivity of the SWBM to variations in cover infiltration rates is examined in Section 7.

**THIS PAGE INTENTIONALLY LEFT BLANK.**

## 6 RESULTS

### 6.1 Construction

Although none of the major Project facilities (i.e., HLF, WRSAs and open pit) will be in service during the construction phase, various structures, including sediment control ponds, feed and polishing ponds, the Events Ponds and diversion ditches and channels will be built prior to any upstream site development and utilized to control the routing of runoff and associated erosion and sediment movement from two freshets and two summer seasons. During this time, there are several key water routing changes that are addressed by the model, including:

- Construction and use of the DGDC and rehabilitation and enhancement of Eagle Creek will occur in Year 1. During Year 1, all controlled flows will leave the developed area and drain to Haggart Creek via the LDG SCP. During Year 2, only the controlled flows from disturbed areas will leave the developed area and feed Haggart Creek via the LDG SCP, while upper Dublin Gulch flows will feed the rehabilitated Eagle Creek. The effect will be to slightly increase the flows in Haggart Creek (at W4) during the first year, while resulting in a decrease in total flows during May through August in the second year.
- Open pit depressurization and dewatering will begin in the first year and will continue throughout the construction phase. During the second year after full build out of the drains and wells, an estimated 53,000 m<sup>3</sup> of area is expected to be dewatered prior to open pit development. It is expected that this water will be conveyed through the Feed Pond to be stored in the Events Ponds, where it will eventually used to begin the heap process later in the second year.
- The EP SCP will be built early in Year 2. Water collected in the SCP can also be conveyed through the Feed Pond and into the Events Ponds. Any excess water from the combined sources of the dewatering and SCP would ultimately be discharged through the polishing pond, and the LDG SCP to Haggart Creek, provided water quality criteria are met.

The results from the construction module of the SWBM for Eagle Creek and Haggart Creek facility are summarized in the following sections.

#### 6.1.1 Eagle Creek Drainage

After freshet 2012 (first year of construction), all upper Eagle Creek flows (i.e., derived from Stuttle Gulch, Eagle Pup and groundwater seeps within the basin) will be routed to the LDG SCP and out to Haggart Creek via the lower channel of Dublin Gulch. This will accommodate the re-habilitation work for fish enhancement and stream stabilization on lower Eagle Creek. Additionally, diversions will be required to collect and route surface runoff and groundwater seeps away from various reaches (from the existing W-27 site to the confluence of Eagle and Haggart Creeks) under construction. Thus, there will be no flow in the existing Eagle Creek channel during almost all of the ice-free season in the first year of construction.

In the second year of construction and after the completion of the Eagle Creek connector and the Eagle Creek Fish Enhancement channel, the DGDC will be complete and all of upper Dublin Gulch flows will begin discharging into Eagle Creek. This will result in a substantial increase in flows over baseline. The SWBM predicts flows will increase in Eagle Creek by the greatest margins during May (7 to 8 times depending on average wet or dry scenarios), between 4 and 5 time greater in June and variable increases (2 to 7 times) in July and August, depending on average, wet or dry scenario. These changes are due primarily to the re-routing of all of upper Dublin Gulch into Eagle Creek, while some of the rainfall and snowmelt runoff from the upper Eagle Creek basin will be re-routed to the Events Ponds for subsequent use when leaching begins in the HLF in the latter part of the year. Figures C7-1 to C7-4 illustrate the expected changes in flow in Eagle Creek at W-27 during construction based on results of the SWBM.

## **6.1.2 Haggart Creek**

### **6.1.2.1 Downstream of the Existing Dublin Gulch (W-4)**

No measureable changes in flow are expected in Haggart Creek at hydrometric station W4 during the first year of construction, as there will be no major re-routing of drainages, although Dublin Gulch will pass through the LDG SCP before being discharged to Haggart Creek.

In the second year of construction and all subsequent years (including through post-closure monitoring), Haggart Creek (at W4) flows will diminish due to the re-routing of Dublin Gulch into Eagle Creek. During the second year of construction flows during May through August are expected to be 79% to 90% of baseline flows during an average year, 75% to 90% during a wet year, and 82% to 92% during a dry year. For an average year, the 4-month (May through August) mean flow of 0.90 m<sup>3</sup>/s drops to 0.78 m<sup>3</sup>/s, due to the loss of flows from upper Dublin Gulch. Figures C8-1, C8-3 and C8-5 illustrate the expected changes in flow in Haggart Creek at W-4 during construction. The monthly percent changes to the streamflow in Haggart Creek at W4 are summarized in Table C8-1: Part 1.

### **6.1.2.2 Downstream of Eagle Creek (W-29)**

In the first year of construction and during average, wet and dry years, minor decreases in flow (up to 4%) are expected in Haggart Creek at hydrometric station W29. In the second year of construction, flows during May through August in average, wet and dry years are expected to differ by less than 1% of baseline (Figures C8-2, C8-4 and C8-6). The monthly percent changes to the streamflow in Haggart Creek at W29 are summarized in Table C8-1: Part 2.

## **6.2 Operations**

### **6.2.1 Open Pit**

As the open pit grows in footprint area, the maximum volumes of monthly *Net P*, *RUN* and *E* all gradually increase over the 7.3-year period of the operations phase (Figure C1-1). During an average year, *Net P* is expected to increase during May from 25,500 m<sup>3</sup>/mo in the first full year of the



operations phase (year 4) to 94,500 m<sup>3</sup>/mo by the end of the operations phase (Year 9), *RUN* is expected to increase during May from 22,500 to 82,700 m<sup>3</sup>/mo (May) and *E* is expected to increase during July from 8,000 to 31,600 m<sup>3</sup>/mo. During a wet year for Year 7, the corresponding values for *Net P* and *RUN* are expected to be twice as high, while *E* is approximately the same. During a dry year, the corresponding values for *Net P* and *RUN* are expected to be significantly smaller, 37.1% and 28.1%, respectively, while total *E* is also only 25% of baseline conditions (Tables C1-1, C1-2 and C1-3). During the operations phase, active open pit dewatering and depressurization of groundwater will be occurring, but due to the timing and geometry of open pit expansion, the rates of groundwater withdrawals are predicted to fluctuate over time, averaging 6,000 m<sup>3</sup>/mo over the 7.3 years of the operations phase, and peaking at 9,300 m<sup>3</sup>/mo in Year 4 (2<sup>nd</sup> year of operations), 13,300 m<sup>3</sup>/mo in Year 6 (4<sup>th</sup> year of operations) and 12,400 m<sup>3</sup>/mo in Year 8 (6<sup>th</sup> year of operations) (Figure C1-1 and see Table 5.2-3).

Also during the operations phase, contact water collected from the Platinum Gulch seepage collection pond (PG SGP) will be routed towards the open pit. For SWBM purposes, it is assumed that the combined volumes from open pit runoff, groundwater dewatering and the PG contact water will be routed to the open pit sump and then piped downhill and across the DGDC to the MWTP Feed Pond. The changes in time over the 7.3 year operations phase of this combined volume passing through the open pit sump is shown in Figures C1-2 and C1-3. The model predicts that during an average year the maximum monthly volume of the open pit sump will peak each May (during freshet) and gradually increase from 29,600 m<sup>3</sup>/mo in Year 3 (1<sup>st</sup> year of operations) to 127,400 m<sup>3</sup>/mo in Year 8 (6<sup>th</sup> year of operations) (Table C1-1). Thus, as the open pit excavation proceeds each year a larger open pit volume will be required. The SWBM assumes a maximum available open pit volume of 280,000 m<sup>3</sup> during the last year of the operations phase. During a wet year, the peak volumes are expected to be significantly higher and the maximum monthly volume in May during the last year for the wet scenario is expected to be 242,000 m<sup>3</sup>. During a dry year, the peak volumes are expected to be significantly lower and the maximum monthly volume in May during the last year for the dry scenario is expected to be only 34,000 m<sup>3</sup> (Figure C1-4 and Tables C1-2 and C1-3).

## 6.2.2 Waste Rock Storage Areas

As the PG WRSA grows in footprint area, the monthly volumes of contact water generated from runoff and seepage will increase. The maximum monthly *Net P* during an average year is expected to increase from about 15,400 m<sup>3</sup>/mo in September of Year 2 to 49,300 m<sup>3</sup>/mo in May of Year 4 (Table C2-1). These totals are essentially doubled during a wet year as peak *Net P* in May of Year 4 is estimated at 94,400 m<sup>3</sup>/mo (Table C2-2). Conversely, in a dry year peak *Net P* in May of Year 4 is only 37% of the average year, or 18,000 m<sup>3</sup>/mo (Table C2-3).

While the annual *Net P* during an average year is expected to increase from 139,000 m<sup>3</sup> in Year 3 (first full year of the operations phase) to 173,000 m<sup>3</sup> in Year 5, due to the coarse and rubbly nature of the rock pile, infiltration (*I*) into the dump is expected to represent about 40% to 42%, evaporation (*E*) about 54% to 56% of *Net P*, and runoff is expected to be a relatively minor component (4%) (Table 6.2-1) until the construction of the cover is complete by freshet season in Year 7 (5<sup>th</sup> year of

operations). Build up of the PG WRSA will stop after Year 5 (3<sup>rd</sup> year of operations phase), and reclamation activities, including construction of a cover, will begin in the next year. Annual *Net P* on the dump (301,000 m<sup>3</sup>) during a wet year is estimated to be 74% higher than average and during a dry year only 64,000 m<sup>3</sup> or 36% of the average year.

**Table 6.2-1: Platinum Gulch Annual Water Balance during the Operations Phase**

(Project Year) Calendar Year	Net Precip.	Evaporation		Infiltration		WRSA Runoff		Moisture Content Added from Rock	Rock Drain Seepage	To Open Pit Sump and then to MWTP Feed Pond	
		m <sup>3</sup> /yr	% of <i>Net P</i>	m <sup>3</sup> /yr	% of <i>Net P</i>	m <sup>3</sup> /yr	% of <i>Net P</i>			m <sup>3</sup> /yr	% of <i>Net P</i>
(2) Sept 2013	15,457	6,784	44%	7,805	50%	867	6%	2,885	0	867	6%
(3) Oct 2013 to Sep 2014	139,211	77,488	56%	55,921	40%	5,800	4%	14,620	43,205	49,006	35%
(4) Oct 2014 to Sep 2015	171,359	93,426	55%	70,639	41%	7,295	4%	42,004	46,922	54,216	32%
(5) Oct 2015 to Sep 2016	172,932	92,729	54%	72,689	42%	7,514	4%	76,943	28,486	35,999	21%
(9) Wet Year* Oct 2019 to Sep 2020	301,175	88,063	29%	42,623	14%	170,489	57%	0	39,942	210,429	70%
(9) Dry Year* Oct 2019 to Sep 2020	63,580	38,943	61%	4,927	8%	19,708	31%	0	6,887	26,597	42%

**NOTE:**

\* The wet year and dry year were simulated for Year 9 (Oct 2019 to Sep 2020) at the time of maximum build out for all facilities; at this time progressive reclamation activities and construction of a soil cover on the PG WRSA should be complete; thus there will be no moisture added from new waste rock, and runoff will be relatively high.

The combined volume of seepage and runoff collected in the PG SGP during an average year and conveyed to the open pit sump will peak at 13,000 m<sup>3</sup> during June<sup>6</sup> in Year 3. Approximately 96% of this June volume is expected to come from seepage (*GWout*). From May to November, flows from the PG SCP to the open pit are expected to range from 3,500 to 13,000 m<sup>3</sup>/mo in the first year, 2,500 to 11,400 m<sup>3</sup>/mo in the second year, and 1,000 to 9,500 m<sup>3</sup>/mo in the third year, while no seepage (or runoff) is expected from December through April. These volumes represent about 16% to 53% in the first year, 14% to 43% in the second year and 3% to 31% in the third year of the total monthly volumes collected in the open pit sump.

As the EP WRSA grows in footprint area over the 7.3-year period of the operations phase, the monthly volumes of contact water generated from runoff and seepage will increase. The maximum monthly *Net P* during an average year is expected to increase from about 17,600 m<sup>3</sup>/mo in May of Year 3 to 109,000 m<sup>3</sup>/mo in May of Year 9 (Table C3-1). While the annual *Net P* during an average year is expected to increase from 141,000 m<sup>3</sup>/yr in Year 3 (first full year of the operations phase) to 384,000 m<sup>3</sup>/yr in Year 7, infiltration (*I*) into the dump is estimated to be about 41% to 42% of *Net P*,

<sup>6</sup> Assumes a one month lag time to percolate through the rock pile and report to the seepage collection pond

evaporation (*E*) about 53% to 55% of *Net P*, while runoff is expected to be a relatively minor component (4%) (Table 6.2-2). During a wet year annual *E* drops to 31% of *Net P*, infiltration increases to 62% of *Net P* and *RUN* increases to 7% of *Net P*. During a dry year annual *E*, *I* and *RUN* remain essentially the same as during an average year.

**Table 6.2-2: Eagle Pup Average Year Annual Water Balance during the Operations Phase**

(Project Year) Calendar Year	Net Precip	Evaporation		Infiltration		WRSA Runoff		Moisture Content Added from Rock	Rock Drain Seepage	To MWTP Feed Pond	
		m <sup>3</sup> /yr	% of <i>Net P</i>	m <sup>3</sup> /yr	% of <i>Net P</i>	m <sup>3</sup> /yr	% of <i>Net P</i>			m <sup>3</sup> /yr	% of <i>Net P</i>
(2) Sept 2013											
(3) Oct 2013 to Sep 2014	70,268	37,538	53%	29,636	42%	3,092	4%	27,318	8,543	99,435	142%
(4) Oct 2014 to Sep 2015	141,282	75,514	53%	59,568	42%	6,198	4%	42,004	27,692	110,880	79%
(5) Oct 2015 to Sep 2016	230,667	123,920	54%	96,728	42%	10,018	4%	104,526	38,584	102,504	44%
(6) Oct 2016 to Sep 2017	281,942	151,973	54%	117,781	42%	12,190	4%	122,873	38,910	97,284	35%
(7) Oct 2017 to Sep 2018	326,554	176,755	54%	135,762	42%	14,037	4%	153,062	45,322	96,937	30%
(8) Oct 2018 to Sep 2019	356,498	194,278	55%	147,026	41%	15,194	4%	141,807	52,715	100,762	28%
(9) Oct 2019 to Sep 2020	383,883	209,663	55%	157,917	41%	16,304	4%	55,996	104,324	149,541	39%
(9) Wet Year* Oct 2019 to Sep 2020	667,757	209,663	31%	414,479	62%	43,616	7%	55,996	332,783	425,421	64%
(9) Dry Year* Oct 2019 to Sep 2020	142,421	77,542	54%	58,808	41%	6,072	4%	55,535	16,388	38,489	27%
(10) Oct 2020 to Dec 2020	16,587	0	0%	14,929	90%	1,659	10%	9,099	23,422	29,728	179%

### 6.2.3 Heap Leach Facility

As ore is added to the HLF and the heap grows in size, moisture losses from emitter evaporation, idle heap evaporation and ore adsorption will also continue to increase. Annual *Net P* will be less than the annual total of all moisture losses throughout the operations phase for average, wet and dry years (Table 6.2-3). This negative balance is depicted in Figure C4-1, which shows that the total moisture losses are expected to be substantially greater than *Net P*, especially during the first few years. Total moisture losses during an average year are expected to range from 2.7 to 5 times *Net P* during the operations phase. During a wet year, total moisture losses are still 1.6 times *Net P*, and during a dry year total moisture losses are expected to be 6.4 times *Net P*. This means that the HLF

will require moisture from other sources (i.e., make-up water), which include water routed from the open pit sump, the EP SCP and groundwater. Total make-up water supplied to the HLF during an average year is expected to grow from 180,000 m<sup>3</sup> in the first full year of the operations phase and then range from 240,000 to 268,000 m<sup>3</sup> over the next six years (Table 6.2-3). During a wet year, total make-up water is still expected to be over 210,000 m<sup>3</sup> and during a dry year, total make-up water is expected to be 350,000 m<sup>3</sup>. The peak monthly demand during an average year is approximately 37,363 m<sup>3</sup>/mo (Table C4-1).

**Table 6.2-3: Heap Leach Annual Water Balance during the Operations Phase**

(Project Year) Calendar Year	Net Precipitation	Moisture from Crushing	Make-up Water to HLF*	Irrigation to HLF**	Total Moisture Losses	Net Moisture Added to HLF***
Units	m <sup>3</sup> /yr	m <sup>3</sup> /yr	m <sup>3</sup> /yr	m <sup>3</sup> /yr	m <sup>3</sup> /yr	m <sup>3</sup> /yr
(2) Sept 2013	19,984	15,980	4,152	855,360	37,056	854,268
(3) Oct 2013 to Sep 2014	163,607	294,063	180,380	10,406,880	612,774	10,251,775
(4) Oct 2014 to Sep 2015	173,636	427,700	267,635	17,082,000	868,215	16,815,121
(5) Oct 2015 to Sep 2016	216,389	427,700	253,053	17,128,800	868,218	16,904,671
(6) Oct 2016 to Sep 2017	255,320	427,700	243,664	17,082,000	868,218	16,896,801
(7) Oct 2017 to Sep 2018	289,525	427,700	239,611	17,082,000	868,218	16,931,006
(8) Oct 2018 to Sep 2019	294,250	427,700	239,611	17,082,000	874,976	16,928,975
(9) Oct 2019 to Sep 2020	346,804	427,700	246,269	17,128,800	925,282	16,978,023
(9) Wet Year Oct 2019 to Sep 2020	600,129	436,800	214,244	17,128,800	947,859	17,217,869
(9) Dry Year Oct 2019 to Sep 2020	132,549	391,300	350,099	17,128,800	854,473	16,798,178
(10) Oct 2020 to Dec 2020	18,245	106,926	95,812	4,305,600	211,575	4,219,195

**NOTES:**

\* Make-up water to HLF is supplied from external sources (seepage ponds, sediment control ponds, open pit sump, and groundwater wells)

\*\* Total irrigation to heap and net moisture to heap includes continuously recycled solution at a rate of 1100 m<sup>3</sup>/hr in the first year and 1950 m<sup>3</sup>/hr during full operation

\*\*\* Net Moisture = Net Precipitation + Moisture from Cushing + Irrigation to HLF – Total Moisture Losses

### 6.2.4 Mine Water Treatment Plant

The MWTP will receive water through the Feed Pond and discharge to the Product Pond. During times when the HLF requires make-up water, water will be routed through the Feed Pond to the Events Ponds. When the heap does not need water, water that requires treatment will be routed from the Feed Pond and into the MWTP. During normal operations, the Feed Pond will receive water from two principal sources (the EP SCP and the open pit). Total water supplied to the MWTP Feed Pond from the open pit sump is estimated to range from 89,200 m<sup>3</sup>/yr to 366,000 m<sup>3</sup>/yr (Table 6.2-4), with the higher rates later in the mine life and occurring during snowmelt periods and runoff periods. Total water supplied to the MWTP Feed Pond from the EP SCP sump is estimated to range from 36,000

m<sup>3</sup>/yr to 98,100 m<sup>3</sup>/yr, with the higher rates occurring later in the mine life during snowmelt and high runoff periods.

Early on in the operations phase, the HLF will use almost all of the excess water derived from both the open pit and the EP SCP. Assuming conservatively that the “contact” water from the open pit and the EP SCP will require some form of treatment, treatment will not be required until Year 4, and then during one to three months of the year. As the facility sizes grow during the operations phase, contact water volumes will increase, and treatment rates will also increase. Annual treatment volumes are expected to peak at 326,000 m<sup>3</sup> in Year 8 (Table 6.2-4). None of this treated water will be derived from the HLF. During a wet year (Year 9), make-up requirements for the HLF are expected to be fairly low as *Net P* will be relatively higher; thus, annual treatment volumes during this time are expected to be about 3.8 times (or 916,000 m<sup>3</sup>) an average year. During a dry year, no treatment is expected even during full build-out in Year 9.

**Table 6.2-4: Annual Water Balance for Mine Water Treatment Plant during Operations Phase**

(Project Year) Calendar Year	From PG WRSA	From Open Pit	From EP SCP	Total to MWTP Feed Pond	Make-up Requirements for Heap	To Heap or Events Ponds	To MWTP
Units	m <sup>3</sup> /yr	m <sup>3</sup> /yr	m <sup>3</sup> /yr	m <sup>3</sup> /yr	m <sup>3</sup> /yr	m <sup>3</sup> /yr	m <sup>3</sup> /yr
(2) Sept 2013	867	10,839	15,013	26,719	4,152	26,719	–
(3) Oct 2013 to Sep 2014	49,006	89,222	99,435	237,660	180,380	237,660	–
(4) Oct 2014 to Sep 2015	54,216	156,815	110,880	321,912	267,635	272,326	49,586
(5) Oct 2015 to Sep 2016	35,999	190,422	102,504	328,925	253,052	235,445	93,480
(6) Oct 2016 to Sep 2017	77,067	322,232	97,284	496,582	243,662	243,664	252,918
(7) Oct 2017 to Sep 2018	98,134	234,496	96,937	429,567	239,610	231,388	198,179
(8) Oct 2018 to Sep 2019	98,134	366,237	100,762	565,131	239,610	239,610	325,521
(9) Oct 2019 to Sep 2020	98,134	238,183	149,541	485,858	246,267	241,885	243,973
(9) Wet Year Oct 2019 to Sep 2020	210,429	493,988	425,421	1,129,840	214,243	214,244	915,596
(9) Dry Year Oct 2019 to Sep 2020	26,597	85,069	38,489	150,154	350,098	150,154	–
(10) Oct 2020 to Dec 2020	9,706	14,509	29,728	53,945	95,811	33,358	20,587

Figure C5-1 provides an estimate of the predicted average monthly flow rate (in m<sup>3</sup>/mo) to the treatment facility during the operations and closure and reclamation phases. During the operations phase, the maximum monthly treatment rates are expected to be no more than approximately 100 m<sup>3</sup>/hr during average years, and treatment will only be needed for a few months during late summer. During the wet year, average monthly flow rates to the treatment facility could reach 365 m<sup>3</sup>/hr during a single month and treatment would be required from May to October (Table C5-2). These rates are all well below the design flow capacity of 620 m<sup>3</sup>/hr.

## **6.2.5 Process Water**

During the operations phase, process make-up water will be derived from several sources including groundwater, seepage and runoff from the open pit and WRSAs. This water will be piped directly to the MWTP Feed Pond, where it will then be transferred into the Events Ponds as necessary and when the Events Ponds volume is below the 175,000 m<sup>3</sup> maximum operating volume.

SWBM results indicate that during average conditions, a supplemental groundwater supply will be required only during April (approximately 10,000 to 20,000 m<sup>3</sup>/mo) when the Events Ponds have been fully depleted and there is no available runoff water. This supplemental groundwater supply could originate from the groundwater drains located below HLF, or from supplemental wells located near the recovery plant. During dry years, a supplemental groundwater supply may be needed to supply all of the process demands during some the winter months and a small proportion of the demand during summer.

During the first year of the operations phase, the demand on water for crushing will increase from 3,400 m<sup>3</sup>/mo to 5,400 m<sup>3</sup>/mo. By the second year, demand will reach approximately 7,600 m<sup>3</sup>/mo, or 91,000 m<sup>3</sup> per year until closure. This water will be supplied from a nearby source, which could be either a groundwater well located adjacent to the crusher facility (this may a perimeter depressurization well), or from water in the Platinum Gulch SGP or open pit sump, if water quality meets the appropriate criteria.

## **6.2.6 Streamflows**

### **6.2.6.1 Eagle Creek**

During all of the operations phase and as a permanent condition, there will be a substantial increase in flows in the Eagle Creek channel as a result of accommodating all flow from what was Dublin Gulch. The SWBM predicts flows in Eagle Creek will have the largest percentage increase over baseline during the winter, although the flow magnitude will not be significant.

For the average scenario, wintertime (December through April) baseflows are expected to increase from 0.8 to 2.8 L/s (2,100 to 7,200 m<sup>3</sup>/mo) to 14.1 to 36.3 L/s (37,000 to 94,000 m<sup>3</sup>/mo) (Table C7-1). The wintertime increases are similar for the wet and dry scenarios (Tables C7-2 and C7-3).

From June to October, increases range from approximately 4 to 7 times for the average and wet scenarios, while the increase are less substantial during the dry scenario, approximately 1 to 4 times, while increases in May are expected to be 7 to 8 times baseline during average, wet and dry scenarios. Figures C7-3 and C7-4 illustrate the expected changes in Eagle Creek (at W27) during operations based on results of the SWBM (Table C7-2 and C7-3).

### **6.2.6.2 Platinum Gulch**

As the open pit increases in size, the area of the Platinum Gulch drainage basin will decrease, and the size of the PG WRSA will increase. Thus, non-contact runoff reporting to Platinum Gulch will decrease from 65,000 m<sup>3</sup>/yr (2.1 L/s) in Year 3 (Oct 2013 to Sep 2014) to only 21,700 m<sup>3</sup>/yr (0.70

L/s) in Year 9 (Oct 2019 to Sep 2020) (Table C2-1 and Figure C2-3). The maximum average monthly rates that occur in May are predicted to decrease from 18,800 m<sup>3</sup>/mo (7.0 L/s) in May 2014 to 6,000 m<sup>3</sup>/mo (2.2 L/s) in May 2020. At these low flow rates, Platinum Gulch is expected to remain ephemeral.

### 6.2.6.3 Haggart Creek

#### Downstream of the Existing Dublin Gulch (W4)

Throughout the operations phase, due to re-routing of upper Dublin Gulch into Eagle Creek via the DGDC, minor decreases in flow (8 to 13%) are expected in Haggart Creek at hydrometric station W4 during almost of the full year (August through June) considering average, wet and dry scenarios. During July, the predicted decreases are somewhat greater and are 18% to 21%, 21% and 12% less than baseline for the average, wet and dry scenarios, respectively. This proportional loss becomes less in the downstream direction as tributaries and groundwater discharge feed Haggart Creek. The re-routed upper Dublin Gulch water then returns to Haggart via Eagle Creek, where Eagle Creek joins Haggart downstream of Gil Gulch. Figures C8-1 illustrates the relative proportions of various flow components in Haggart Creek at W4, and Figures C8-3 and C8-5 illustrate the expected changes in Haggart Creek at W4 based on results of the SWBM (Tables C8-1, C8-2 and C8-3, Part 1).

#### Downstream of Eagle Creek (W29)

Throughout the operations phase and during an average year, flows at Haggart (W29) (located downstream of the Project footprint), are expected to vary little (between 99% and 102%) from baseline. During a wet year, flows are expected to increase only slightly from May to September (102% to 106%), and be essentially the same (<1% change) for the remainder of the year (October to April). During a dry year, flows are expected to decrease only slightly (1.2% to 1.6%) from June through August, and be essentially the same for (<1% change) the remainder of the year (September – May). Figures C8-2 illustrates the relative proportions of various flow components in Haggart Creek at W29, and Figures C8-4 and C8-6 illustrate the expected changes in Haggart Creek at W29 based on results of the SWBM (Tables C8-1, C8-2 and C8-3, Part 2).

### 6.2.7 Summary of Results for the Operations Phase

Figure 6.2-1 is a summary water balance flowsheet for baseline conditions, and Figure 6.2-2 is a summary balance flowsheet for Year 7. Each figure depicts the annual flow volumes passing through the major flow nodes. For simplification, the climate input (rain and snowmelt) and output parameters (evaporation, sublimation, and evapotranspiration) are left off the figure. Comparison between the baseline and operations flowsheets indicates:

- Stream flow at Haggart Creek (W4) downstream of Dublin Gulch will be reduced by approximately 12% during the operations phase compared to baseline conditions. Stream flow at W29 on Haggart Creek below the Project footprint will increase by approximately 0.5% from baseline conditions.

- Larger magnitude changes are estimated to occur at the Eagle Creek (W27) station. During the operations phase, Eagle Creek flows will be approximately 5.6 times larger than baseline flow. This reflects the input of flows from the DGDC.

For the operations phase, Figure 6.2-2 depicts several points of interest, including:

- Continued open pit dewatering, runoff, and contact water from the Platinum Gulch WRSA represent about 69% of the inflow to the Feed Pond, while contact and non-contact water from Eagle Pup WRSA make up the remaining 31%. Depending on water quality conditions, process make-up requirements and treatment requirements, some of this water could be conveyed directly to the LDG SCP to minimize treatment rates.
- While much of the year treatment will not be required (November through April), or be required intermittently, expected average monthly feed rates will be less than 100 m<sup>3</sup>/hr (compared to a design capacity of 620 m<sup>3</sup>/hr) for all but June and July. The maximum treatment feed rate is expected to peak at 185 m<sup>3</sup>/hr during June 2020, with a maximum overall annual total treatment feed volume during of approximately 326,000 m<sup>3</sup> during Year 8.
- In an average or dry Year 7, all the water used by the HLF is recycled, and no solution would need to go through cyanide detoxification prior to treatment.
- Dublin Gulch passes through the Project via the DGDC and does not receive any inflows except from the LDG SCP.
- The DGDC represents 86% of the flow to the new Eagle Creek Compensation Channel, which will carry flows up to a maximum of 5.6 times the existing flow regime.
- Eagle Creek (including flows from the DGDC) represents about 15% of the flow in Haggart Creek at their confluence.

## 6.3 Closure, Reclamation, and Post-closure Monitoring

### 6.3.1 Open Pit

At the beginning of the closure and reclamation phase, seepage and runoff from the PG SGP will still be conveyed to open pit sump at a rate of approximately 98,000 m<sup>3</sup> per average year, with a peak rate of 33,600 m<sup>3</sup>/mo during freshet of an average year (Table C2-1). Further, the SWBM assumes that the open pit will be collecting runoff from the exposed walls and groundwater from the horizontal drains. The annual volume of water conveyed from the open pit sump to the MWTP Feed Pond will decrease from 353,000 m<sup>3</sup>/yr during the first five years of reclamation, to 255,000 m<sup>3</sup>/yr in the next two years (Table 6.3-1).

After May or freshet 2027, the open pit water will no longer be conveyed to the MWTP Feed Pond (Figure C1-1). At that time, the open pit will be back filled with ~150,000 m<sup>3</sup> and then be allowed to slowly fill and form a small pit lake with a maximum depth of approximately 20 m with an outlet elevation at around 960 m asl. The lake is expected to take approximately three months including a freshet season to fill approximately 120,000 m<sup>3</sup> and then overflow and drain to Platinum Gulch, provided water quality criteria are met. Average annual flow is estimated to be 255,000 m<sup>3</sup>/yr or 8.1



L/s (Table 6.3-1). Maximum average monthly outflows from the pit lake are expected during May (freshet) at 31.8 L/s. During a wet year, the annual and maximum monthly lake outflows are expected to be 511,000 m<sup>3</sup>/yr (16.2 L/s) and 175,000 m<sup>3</sup>/mo (65.3 L/s), and during a dry year, the annual and maximum monthly lake outflows are expected to be only 102,000 m<sup>3</sup>/yr (3.2 L/s) and 23,600 m<sup>3</sup>/mo (8.8 L/s) (Table C1-2 and C1-3).

**Table 6.3-1: Open Pit Annual Water Balance during the Closure and Reclamation and Post-closure Monitoring Phases**

(Project Year) Calendar Year	Net Precipitation	Evap from Open Pit Walls	Runoff from Open Pit Walls	Dewatering/ Depress	Diverted Drainage from Platinum Gulch WRSA	Flow to Open Pit Sump	Open Pit Sump Overflow to PG
Units	m <sup>3</sup> /yr	m <sup>3</sup> /yr	m <sup>3</sup> /yr	m <sup>3</sup> /yr	m <sup>3</sup> /yr	m <sup>3</sup> /yr	m <sup>3</sup> /yr
(10) Jan 2021 to Sep 2021	318,313	95,652	222,661	11,394	88,428	324,819	0
(11) Oct 2021 to Sep 2022	332,697	95,652	237,045	15,234	98,134	353,315	0
(12) Oct 2022 to Sep 2023	332,697	95,652	237,045	15,234	98,134	353,315	0
(13) Oct 2023 to Sep 2024	332,697	95,652	237,045	15,276	98,134	353,357	0
(14) Oct 2024 to Sep 2025	332,697	95,652	237,045	15,234	98,134	353,315	0
(13-14) Wet Year Jul 2024 to Jun 2025	578,804	95,652	483,152	15,234	209,224	720,209	0
(13-14) Dry Year Jul 2024 to Jun 2025	123,297	31,116	92,182	15,234	27,022	129,089	0
(15) Oct 2025 to Sep 2026	332,697	95,652	237,045	15,234	0	255,180	0
(16) Oct 2026 to Sep 2027	332,697	95,652	237,045	15,234	0	255,180	34,447
(17) Oct 2027 to Sep 2028	332,697	95,652	237,045	15,276	0	255,222	255,220
(18) Oct 2028 to Sep 2029	332,697	95,652	237,045	15,234	0	255,180	255,180
(19) Oct 2029 to Sep 2030	332,697	95,652	237,045	15,234	0	255,180	255,180
(20) Oct 2030 to Sep 2031	332,697	95,652	237,045	15,234	0	255,180	255,180
(20) Wet Year Oct 2030 to Sep 2031	578,804	95,652	483,152	15,276	0	511,026	511,026
(20) Dry Year Oct 2030 to Sep 2031	123,297	31,116	92,182	15,276	0	102,109	102,109
(21) Oct 2031 to Sep 2032	332,697	95,652	237,045	15,276	0	255,222	255,222
(22) Oct 2032 to Sep 2033	332,697	95,652	237,045	15,234	0	255,180	255,180
(23) Oct 2033 to Sep 2034	332,697	95,652	237,045	15,234	0	255,180	255,180
(24) Oct 2034 to Dec 2035	14,384	0	14,384	5,134	0	20,084	20,084

**NOTES:**

Wet and dry years during closure and reclamation assumed to occur during period of peak drawdown or from July 2024 to June 2025; wet and dry years during Post-closure and reclamation assumed to occur from Oct 2031 to September 2032.

**Table 6.3-2: Platinum Gulch Waste Rock Storage Areas Annual Water Balance during the Closure and Reclamation and Post-closure Monitoring Phases**

(Project Year) Calendar Year	Net Precipitation	Evapotranspiration		Infiltration		WRSA Runoff		Moisture Content Added from Rock	Rock Drain Seepage	To Open Pit Sump and then to MWTP Feed Pond	
		m <sup>3</sup> /yr	% of Net P	m <sup>3</sup> /yr	% of Net P	m <sup>3</sup> /yr	% of Net P			m <sup>3</sup> /yr	% of Net P
(10) Jan 2021 to Sept 2021	165,424	74,796	45%	18,126	11%	72,503	44%	0	15,926	88,429	53%
(11) Oct 2021 to Sep 2022	172,931	74,796	43%	19,627	11%	78,508	45%	0	19,627	98,135	57%
(12) Oct 2022 to Sep 2023	172,931	74,796	43%	19,627	11%	78,508	45%	0	19,627	98,135	57%
(13) Oct 2023 to Sep 2024	172,931	74,796	43%	19,627	11%	78,508	45%	0	19,627	98,135	57%
(14) Oct 2024 to Sep 2025	172,931	74,796	43%	19,627	11%	78,508	45%	0	19,627	98,135	57%
(13-14) Wet Year Jul 2024 to Jun 2025	301,176	88,063	29%	42,622	14%	170,490	57%	0	38,736	209,226	69%
(13-14) Dry Year Jul 2024 to Jun 2025	63,580	38,944	61%	4,927	8%	19,709	31%	0	7,312	27,021	42%
(15) Oct 2025 to Sep 2026	172,931	74,796	43%	19,627	11%	78,508	45%	0	19,627	0	0%
(16) Oct 2026 to Sep 2027	172,931	74,796	43%	19,627	11%	78,508	45%	0	19,627	0	0%
(17) Oct 2027 to Sep 2028	172,931	74,796	43%	19,627	11%	78,508	45%	0	19,627	0	0%
(18) Oct 2028 to Sep 2029	172,931	74,796	43%	19,627	11%	78,508	45%	0	19,627	0	0%
(19) Oct 2029 to Sep 2030	172,931	74,796	43%	19,627	11%	78,508	45%	0	19,627	0	0%
(20) Oct 2030 to Sep 2031	172,931	74,796	43%	19,627	11%	78,508	45%	0	19,627	0	0%
(20) Wet Year Oct 2030 to Sep 2031	301,176	88,063	29%	42,622	14%	170,490	57%	0	39,941	0	0%
(20) Dry Year Oct 2030 to Sep 2031	63,580	38,944	61%	4,927	8%	19,709	31%	0	6,887	0	0%
(21) Oct 2031 to Sep 2032	172,931	74,796	43%	19,627	11%	78,508	45%	0	19,627	0	0%
(22) Oct 2032 to Sep 2033	172,931	74,796	43%	19,627	11%	78,508	45%	0	19,627	0	0%
(23) Oct 2033 to Sep 2034	172,931	74,796	43%	19,627	11%	78,508	45%	0	19,627	0	0%
(24) Oct 2034 to Jan 2035	7,507	0	0%	1,501	20%	6,006	80%	0	3,701	0	0%

### **6.3.2 Waste Rock Storage Areas**

At the beginning of closure and reclamation, seepage and runoff from the PG SGP will still be conveyed to the open pit sump at a rate of approximately 98,000 m<sup>3</sup> per average year, with a peak of 33,600 m<sup>3</sup>/mo during freshet of an average year (Tables 6.3-2 and C2-1). During a wet year, the peak monthly and annual rates approximately double to 68,400 m<sup>3</sup>/mo and 209,000 m<sup>3</sup>/yr, respectively. During a dry year, the rates are less than one half the average year or 12,000 m<sup>3</sup>/mo and 27,000 m<sup>3</sup>/yr (Tables 6.3-2, C2-2 and C2-3). The SWBM conservatively assumes that this will continue for another five years to allow for reclamation activities on the PG WRSA to be completed and water quality criteria to be achieved. In Year 15 (2026), the SWBM assumes that the diverted drainage from PG SCP will be returned to Platinum Gulch.

Similarly, during closure and reclamation, seepage and runoff from the EP SCP will still be conveyed to MWTP Feed Pond at rates ranging from approximately 224,000 m<sup>3</sup> to 371,000 m<sup>3</sup> per average year, with peaks ranging from 65,600 m<sup>3</sup>/mo to 93,700 m<sup>3</sup>/mo following freshet of an average year (Tables 6.3-3 and C3-1). During a wet year, the peak monthly and annual rates approximately double to 183,000 m<sup>3</sup>/mo and 672,000 m<sup>3</sup>/yr, respectively. During a dry year, the corresponding rates are less than one half the average year or 33,900 m<sup>3</sup>/mo and 140,000 m<sup>3</sup>/yr (Tables 6.3-3, C3-2 and C3-3). The SWBM conservatively assumes that this will continue for another five years to allow for reclamation activities on the EP WRSA to be completed and water quality criteria to be achieved. In Year 16 (2026), the SWBM assumes that the diverted drainage from EP SCP will be returned to the DGDC.

**Table 6.3-3: Eagle Pup Waste Rock Storage Areas Annual Water Balance during the Closure and Reclamation and Post-closure Monitoring Phases**

(Project Year) Calendar Year	Net Precip	Evaporation		Evapo-Transpiration		Infiltration		WRSA Runoff		Moisture Content Added from Rock	Rock Drain Seep-age	To MWTP Feed Pond	
	Units	m <sup>3</sup> /yr	m <sup>3</sup> /yr	% of Net P	m <sup>3</sup> /yr	% of Net P	m <sup>3</sup> /yr	% of Net P	m <sup>3</sup> /yr	% of Net P	m <sup>3</sup> /yr	m <sup>3</sup> /yr	m <sup>3</sup> /yr
(10) Jan 2021 to Sept 2021	397,076	226,662	57%	0	0%	154,581	39%	15,833	4%	0	129,076	165,162	42%
(11) Oct 2021 to Sep 2022	415,009	205,129	49%	8,904	2%	153,408	37%	47,567	11%	0	170,720	224,067	54%
(12) Oct 2022 to Sep 2023	415,009	0	0%	67,975	16%	69,407	17%	277,627	67%	0	69,407	371,243	89%
(13) Oct 2023 to Sep 2024	415,009	0	0%	67,975	16%	69,407	17%	277,627	67%	0	69,407	371,243	89%
(14) Oct 2024 to Sep 2025	415,009	0	0%	67,975	16%	69,407	17%	277,627	67%	0	69,407	371,243	89%
(13-14) Wet Year Jul 2024 to Jun 2025	721,900	0	0%	80,632	11%	128,254	18%	513,014	71%	0	117,987	672,383	93%
(13-14) Dry Year Jul 2024 to Jun 2025	153,970	0	0%	35,585	23%	23,677	15%	94,709	62%	0	32,141	139,965	91%
(15) Oct 2025 to Sep 2026	415,009	0	0%	67,975	16%	69,407	17%	277,627	67%	0	69,407	371,243	89%
(16) Oct 2026 to Sep 2027	415,009	0	0%	67,975	16%	69,407	17%	277,627	67%	0	69,407	0	0%
(17) Oct 2027 to Sep 2028	415,009	0	0%	67,975	16%	69,407	17%	277,627	67%	0	69,407	0	0%
(18) Oct 2028 to Sep 2029	415,009	0	0%	67,975	16%	69,407	17%	277,627	67%	0	69,407	0	0%
(19) Oct 2029 to Sep 2030	415,009	0	0%	67,975	16%	69,407	17%	277,627	67%	0	69,407	0	0%
(20) Oct 2030 to Sep 2031	415,009	0	0%	67,975	16%	69,407	17%	277,627	67%	0	69,407	0	0%
(20) Wet Year Oct 2030 to Sep 2031	721,900	0	0%	80,632	11%	128,254	18%	513,014	71%	0	121,634	0	0%
(20) Dry Year Oct 2030 to Sep 2031	153,970	0	0%	35,585	23%	23,677	15%	94,709	62%	0	29,343	0	0%
(21) Oct 2031 to Sep 2032	415,009	0	0%	67,975	16%	69,407	17%	277,627	67%	0	69,407	0	0%
(22) Oct 2032 to Sep 2033	415,009	0	0%	67,975	16%	69,407	17%	277,627	67%	0	69,407	0	0%
(23) Oct 2033 to Sep 2034	415,009	0	0%	67,975	16%	69,407	17%	277,627	67%	0	69,407	0	0%
(24) Oct 2034 to Jan 2035	17,932	0	0%	0	0%	3,586	20%	14,346	80%	0	11,780	0	0%

### 6.3.3 Heap Leach Facility

After mining has stopped at the end of Year 9, the HLF will continue to operate for supplemental gold recovery during approximately the first year of reclamation. The net moisture added to the heap during this time will be similar to the operations phase and is expected to exceed 13M m<sup>3</sup> and gradually decline to approximately 429,000 m<sup>3</sup>/yr while finishing up the detoxification and rinsing stage. During subsequent years (during and after draindown) the total moisture added will equal Net P on the heap (Tables 6.3-4, C4-1, C4-2 and C4-3).

The effects of the 20%<sup>7</sup> infiltration cover on the HLF will be to reduce the amount of water added to the heap and ultimately draindown (Table 6.3.5). ET processes from the vegetated cover will remove 26% of *Net P* on average, infiltration of the cover will account for 15% of *Net P* on average, and runoff from the cover will account for 59% of *Net P*.

**Table 6.3-4: Heap Leach Facility Annual Water Balance during the Closure and Reclamation and Post-closure Monitoring Phases**

(Project Year) Calendar Year	Net Precipitation	Moisture from Crushing	Make-up Water to HLF	Irrigation to HLF	Total Moisture Losses	Net Moisture Added to HLF
Units	m <sup>3</sup> /yr	m <sup>3</sup> /yr	m <sup>3</sup> /yr	m <sup>3</sup> /yr	m <sup>3</sup> /yr	m <sup>3</sup> /yr
(10) Jan 2021 to Sept 2021	410,408	0	186,247	12,776,400	186,247	13,000,560
(11) Oct 2021 to Sep 2022	428,653	0	186,247	4,305,600	186,247	4,548,005
(12) Oct 2022 to Sep 2023	428,653	0	186,247	0	186,247	242,405
(13) Oct 2023 to Sep 2024	428,653	0	41,470	0	41,470	387,183
(14) Oct 2024 to Sep 2025	428,653	0	0	0	0	428,653
(13-14) Wet Year Jul 2024 to Jun 2025	742,630	0	0	0	0	742,630
(13-14) Dry Year Jul 2024 to Jun 2025	163,832	0	0	0	0	163,832
(15) Oct 2025 to Sep 2026	428,653	0	0	0	0	428,653
(16) Oct 2026 to Sep 2027	428,653	0	0	0	0	428,653
(17) Oct 2027 to Sep 2028	428,653	0	0	0	0	428,653
(18) Oct 2028 to Sep 2029	428,653	0	0	0	0	428,653
(19) Oct 2029 to Sep 2030	428,653	0	0	0	0	428,653
(20) Oct 2030 to Sep 2031	428,653	0	0	0	0	428,653
(20) Wet Year Oct 2030 to Sep 2031	742,630	0	0	0	0	742,630

<sup>7</sup> The effect of changing the cover characteristics to achieve lower (10%) or higher (30%) infiltration rates is described in Section 7 (Sensitivity Analyses). The data reported in this section (including Tables 6.3-4, 6.3-5 and 6.3-6 and supporting Tables in Figures in Appendix C are based on a 20% infiltration rate; the results of the 10% infiltration rate cover are described in Section 7; the results for the 10% infiltration rate cover were used for the water quality effects assessment as described in Section 6 of the PP.

(Project Year) Calendar Year	Net Precipitation	Moisture from Crushing	Make-up Water to HLF	Irrigation to HLF	Total Moisture Losses	Net Moisture Added to HLF
Units	m <sup>3</sup> /yr	m <sup>3</sup> /yr	m <sup>3</sup> /yr	m <sup>3</sup> /yr	m <sup>3</sup> /yr	m <sup>3</sup> /yr
(20) Dry Year Oct 2030 to Sep 2031	163,832	0	0	0	0	163,832
(21) Oct 2031 to Sep 2032	428,653	0	0	0	0	428,653
(22) Oct 2032 to Sep 2033	428,653	0	0	0	0	428,653
(23) Oct 2033 to Sep 2034	428,653	0	0	0	0	428,653
(24) Oct 2034 to Jan 2035	18,245	0	0	0	0	18,245

**Table 6.3-5: Heap Leach Facility Annual Water Balance during Closure and Reclamation and Post-closure Monitoring with a 20% Infiltration Cover**

(Project Year) Calendar Year	Net Precipitation	Cover Evapotranspiration		Cover Infiltration		Cover Runoff		Infiltration, Runoff, Draindown Volume(To Detox,MWTP)	
		m <sup>3</sup> /yr	% of Net P	m <sup>3</sup> /yr	% of Net P	m <sup>3</sup> /yr	% of Net P	m <sup>3</sup> /yr	% of Net P
(10) Jan 2021 to Sept 2021	410,408	0	0%	0	0%	0	0%	0	0%
(11) Oct 2021 to Sep 2022	428,653	0	0%	0	0%	0	0%	0	0%
(12) Oct 2022 to Sep 2023	428,653	0	0%	0	0%	0	0%	0	0%
(13) Oct 2023 to Sep 2024	428,653	71,675	17%	24,580	6%	98,322	23%	477,620	111%
(14) Oct 2024 to Sep 2025	428,653	113,146	26%	63,101	15%	252,406	59%	157,479	37%
(13-14) Wet Year Jul 2024 to Jun 2025	742,630	134,749	18%	121,576	16%	486,305	65%	658,615	89%
(13-14) Dry Year Jul 2024 to Jun 2025	163,832	59,425	36%	20,881	13%	83,525	51%	557,920	341%
(15) Oct 2025 to Sep 2026	428,653	113,146	26%	63,101	15%	252,406	59%	88,869	21%
(16) Oct 2026 to Sep 2027	428,653	113,146	26%	63,101	15%	252,406	59%	78,638	18%
(17) Oct 2027 to Sep 2028	428,653	113,146	26%	63,101	15%	252,406	59%	74,558	17%
(18) Oct 2028 to Sep 2029	428,653	113,146	26%	63,101	15%	252,406	59%	71,134	17%
(19) Oct 2029 to Sep 2030	428,653	113,146	26%	63,101	15%	252,406	59%	69,011	16%
(20) Oct 2030 to Sep 2031	428,653	113,146	26%	63,101	15%	252,406	59%	63,475	15%
(20) Wet Year Oct 2030 to Sep 2031	742,630	134,749	18%	121,576	16%	486,305	65%	121,576	16%
(20) Dry Year Oct 2030 to Sep 2031	163,832	59,425	36%	20,881	13%	83,525	51%	20,881	13%
(21) Oct 2031 to Sep 2032	428,653	113,146	26%	63,101	15%	252,406	59%	63,101	15%
(22) Oct 2032 to Sep 2033	428,653	113,146	26%	63,101	15%	252,406	59%	63,101	15%
(23) Oct 2033 to Sep 2034	428,653	113,146	26%	63,101	15%	252,406	59%	63,101	15%
(24) Oct 2034 to Jan 2035	18,245	0	0%	3,649	20%	14,596	80%	3,649	0

### 6.3.4 Mine Water Treatment Plant

After mining has stopped at the end of Year 9, the MWTP will continue to operate during the supplemental gold recovery stage of the HLF operations for approximately the first year of the closure and reclamation phase. The estimated annual treatment volume during draindown is 1,313,000 m<sup>3</sup> (or 150 m<sup>3</sup>/hr). During a wet year, the annual treatment volume would be considerably more at approximately 2,051,000 m<sup>3</sup> (or 234 m<sup>3</sup>/hr). The maximum monthly treatment rate during draindown is expected to occur during July and will exceed 379,000 m<sup>3</sup>/mo (or 509 m<sup>3</sup>/hr) for the average year and 487,000 m<sup>3</sup>/mo (or 654 m<sup>3</sup>/hr) for the wet year. After draindown is complete, the treatment rates will decline incrementally until the end of the Project (Table 6.3-6).

**Table 6.3-6: Mine Water Treatment Plant Annual Water Balance during Closure and Reclamation and Post-closure Monitoring**

(Project Year) Calendar Year	From PG WRSA	From Open Pit	From EP SCP	Total to MWTP Feed Pond	Make-up Requirements for Heap	To MWTP
Units	m <sup>3</sup> /yr	m <sup>3</sup> /yr	m <sup>3</sup> /yr	m <sup>3</sup> /yr	m <sup>3</sup> /yr	m <sup>3</sup> /yr
(10) Jan 2021 to Sept 2021	88,429	236,389	165,162	489,980	208,087	219,438
(11) Oct 2021 to Sep 2022	98,135	255,178	224,067	577,380	215,447	361,933
(12) Oct 2022 to Sep 2023	98,135	255,178	371,243	724,556	215,447	509,109
(13) Oct 2023 to Sep 2024	98,135	732,839	371,243	1,202,218	63,390	1,313,827
(14) Oct 2024 to Sep 2025	98,135	412,657	371,243	882,035	0	882,035
(13-14) Wet Year Jul 2024 to Jun 2025	209,226	720,208	672,383	2,051,206	0	2,051,206
(13-14) Dry Year Jul 2024 to Jun 2025	27,021	129,087	139,965	826,973	0	826,973
(15) Oct 2025 to Sep 2026	0	344,047	371,243	715,290	0	715,290
(16) Oct 2026 to Sep 2027	0	197,898	0	197,898	0	197,898
(17) Oct 2027 to Sep 2028	0	74,558	0	74,558	0	74,558
(18) Oct 2028 to Sep 2029	0	71,134	0	71,134	0	71,134
(19) Oct 2029 to Sep 2030	0	69,011	0	69,011	0	69,011
(20) Oct 2030 to Sep 2031	0	63,475	0	63,475	0	63,475
(20) Wet Year Oct 2030 to Sep 2031	0	0	0	63,475	0	63,475
(20) Dry Year Oct 2030 to Sep 2031	0	0	0	63,475	0	63,475
(21) Oct 2031 to Sep 2032	0	63,101	0	63,101	0	63,101
(22) Oct 2032 to Sep 2033	0	63,101	0	63,101	0	63,101
(23) Oct 2033 to Sep 2034	0	63,101	0	63,101	0	63,101
(24) Oct 2034 to Jan 2035	0	3,649	0	3,649	0	3,649



## 6.3.5 Streamflows

### 6.3.5.1 Eagle Creek

The effects on Eagle Creek at W-27 (large proportional increases in flow) predicted for the operations phase (Section 6.2.6) will continue for the first part of the closure and reclamation phase. Flows will increase slightly more (less than 5 to 10% depending on season and year) after Eagle Pup and Stuttle Gulch are re-directed into the DGDC in 2025. The monthly percent changes to the streamflow in Eagle Creek at W27 are summarized in Tables C7-1, C7-2 and C7-3 for average, wet and dry years, respectively, and depicted in Figures C7-3 and C7-4.

### 6.3.5.2 Platinum Gulch

During the closure and reclamation phase, flows in Platinum Gulch will progressively increase based on three stages of reclamation at various facilities.

1. In the first five years of the closure and reclamation phase, Platinum Gulch will initially receive flow from only the undisturbed areas of the drainage basin. During an average year, the annual flow is approximately 17,000 m<sup>3</sup>/yr (or 0.54 L/s), while ranging from 0 to 4900 m<sup>3</sup>/mo (0.16 L/s) (Table C2-1). During wet and dry years, the flows are approximately 200% higher and 40% lower, respectively (Tables C2-2 and C2-3).
2. After the soil cover is established and water quality criteria are met, the PG SGP will be decommissioned and flow from the PG WRSA will be re-connected to Platinum Gulch. The SWBM assumes this will occur in 2026, with annual flow of 210,000 m<sup>3</sup> and range in flow from 0 to 68,000 m<sup>3</sup>/mo (Table C2-1). During wet and dry years, the flows are approximately 200% higher and 40% lower, respectively (Tables C2-2 and C2-3).
3. When the pit lake has filled and water quality criteria are met, the lake will overflow and form a tributary to Platinum Gulch. The SWBM assumes this will occur in 2028. The pit lake contribution during an average year is expected to peak at greater than 85,000 m<sup>3</sup>/mo during freshet with an annual total flow of 255,000 m<sup>3</sup> (Table C1-1 and Figure C1-2). During a wet year, flows are essentially double, while in a dry year flows are only 40% of the average year. At this time, flows to Haggart Creek will have increased to 482,000 m<sup>3</sup>/yr since the Project began and be over 25 times greater than during the operations phase.

### 6.3.5.3 Haggart Creek

#### Downstream of the Existing Dublin Gulch (W-4)

The effects on Haggart Creek at W-4 (flow decreases from 8 to 13% of baseline) in flow predicted for the operations phase (Section 7.3.3) will continue for the first part of the closure and reclamation phase. Flows will begin to decrease marginally (less than a few percent) as the MWTP discharge rate decreases due to gradual re-direction of flows from the EP SCP and open pit sump. The monthly percent changes to the streamflow in Haggart Creek at W4 are summarized in Tables C8-1, C8-2 and C8-3, Part 1 for average, wet and dry years, respectively, and depicted in Figures C8-3 and C8-5.

### Downstream of Eagle Creek and Platinum Gulch (W-29)

During the rinsing stage, the SWBM predicts that flows in Haggart Creek at W-29 are 99 – 102% of baseline, and slightly higher (104 – 107%) during freshet. During the first year of drain-down predicted flows are 103% to 115% higher; afterwards predicted flows are essentially the same during winter, 102% to 105% of baseline during summer and 108% to 111% of baseline during freshet throughout the remainder of the time (Tables C8-1, C8-2 and C8-3, Figures C8-4 and C8-6).

### 6.3.6 Summary for the Closure and Reclamation Phase

After mine closure and the beginning of reclamation activities, the routing of water among the various Project facilities will change over several years, and the amount of water to manage will become increasingly less. The exception will be the first year of the HLF draindown, where water stored in the heap will need to be detoxified and then treated. Figure 6.3-1 is a summary water balance flowsheet for Year 4 of the closure and reclamation phase (or the period following 2.5 years of rinsing and the beginning of draindown—assumed to occur in July 2024). The flowsheet depicts the annual flow volumes passing through the major flow nodes. As with Figure 6.2-1, climate inputs and outputs are left off the figure. The figure depicts several points of interest, including:

- Stream flows at Haggart Creek (W4) will be approximately 96% of baseline flow conditions. Stream flows at W29 on Haggart Creek below the Project footprint will increase by approximately 7% from baseline conditions.
- During this phase, Eagle Creek flows will be approximately 5.6 times larger than baseline flow. This reflects the input of flows from the DGDC.
- The majority of the heap is expected to draindown in Year 4 of the closure and reclamation phase. This follows one year of supplemental gold recovery and 2.5 years of heap rinsing. Although the draindown process will likely take a number of years, a large portion (74%) of the draindown is expected to occur in the first three months (June, July and August). The water will be cycled to the cyanide detoxification plant, and then to the MWTP. During peak draindown, the MWTP feed rate could exceed 500 m<sup>3</sup>/hr (during an average year), which exceeds the design feed rate of 620 m<sup>3</sup>/hr. This includes the additional water piped from the open pit sump and the EP SCP. Treatment feed rates are expected to decrease quickly after the first several months of draindown, and ultimately treatment of low feed rates with residual concentrations could be handled with a passive wetland treatment system.
- During the first several years of the closure and reclamation phase the open pit sump will receive approximately 353,000 m<sup>3</sup>/yr of inflows from horizontal drains and open pit wall runoff, as well as contact water from the PG SGP. This will be reduced to 240,000 m<sup>3</sup>/yr when water originating from PG WRSA is no longer conveyed to the sump. Eventually, the average year annual total of 255,000 m<sup>3</sup>/yr (8.1 L/s) will be discharged to a tributary of Platinum Gulch.
- At closure the open pit volume will be approximately 280,000 m<sup>3</sup>. About 150,000 m<sup>3</sup> of waste rock will be used as open pit backfill, leaving approximately 120,000 m<sup>3</sup> to fill with water to a depth of approximately 20 m (assumes maximum base of open pit prior to backfill at 940 m asl,

and lowest rim at 960 m asl— URS/Scott Wilson 2010) based on final configuration. When the pit lake water quality meets discharge criteria, and after the pit lake has filled (estimated to take approximately one average water year), the lake will then drain toward and form a tributary of Platinum Gulch. Uncertainty in the fill rate estimate is high due to unknowns associated with rate of flow from horizontal drains, evaporation and runoff coefficients for the open pit, and the fracture density of the exposed rocks within the open pit sump.

- During the first several years of the closure and reclamation phase, the EP WRSA will be capped with a soil cover assumed to allow 20% of *Net P* to infiltrate the rock pile. Approximately 371,000 m<sup>3</sup>/yr (140,000 m<sup>3</sup> in a dry year, 672,000 m<sup>3</sup> in a wet year) of seepage and runoff from the EP WRSA would still be collected in the EP SCP and conveyed to the Feed Pond until it is demonstrated that the water meets discharge criteria. The SWBM assumes that active treatment of this source would cease in 2028, and after which the water would drain directly into the DGDC.
- As reclamation progresses and continues through the post-closure monitoring phase, minor decreases (8 – 13% during freshet and summer months) in flow for Haggart Creek at W4 are expected to continue. These effects, however, decrease in the downstream direction, so that no measureable changes are expected in Haggart Creek at W29.

## 6.4 Hydroclimatic Events

As discussed in Section 3.4.3, *Hydroclimatic Conditions* are supplemented with storm and drought *Hydroclimatic Events* that effectively increase or decrease the amount of precipitation occurring over a short period (e.g. one month for storm, three months for drought). For water balance scenarios 4 and 5, the storm event magnitude (4.3 mm/hr or 103.5 mm/24 hours<sup>8</sup>) was added to the average year monthly total precipitation amounts for May (when the effect of freshet in the streams is the greatest) and July (when streamflows are high and available storage in facilities is low. For scenarios 4 and 5, the storm event is added to the wet year monthly total precipitation amounts for May and July, respectively. More specifically the storm event was added to the following years:

- 2013 – Project Year 2 (second year of construction)
- 2020 – Project Year 9 (last year of operations)
- 2024 – Project Year 12 (during maximum heap draindown)
- 2032 – Project Year 19 (during the second year of post-closure monitoring).

Results indicate that the May storm during a wet year results in flows that are 125% to 138% higher than baseline in Upper Dublin Gulch, Platinum Gulch and Haggart Creek for all phases of the Project (Table 6.4-1). Similarly, the site-wide increase in rainfall results in flows that are 124% to 139% higher from the EP SCP, the open pit sump, and to the MWTP. Predicted treatment rates would be 174% higher during operations (approximately 385 m<sup>3</sup>/hr), and 139% higher during the draindown

---

<sup>8</sup> This volume is calculated for the Potato Hills elevation, but is applied conservatively and uniformly across the site for all facilities and sub-basins independent of elevation.

period in the closure and reclamation phase (approximately 872 m<sup>3</sup>/hr). The results indicate that if a large magnitude storm occurs during freshet, then other mitigation measures would be necessary to handle the excess flow to the Feed Pond. It is likely though that although much of this water originates within the Project footprint, most of it would require only settling and not treatment. Further, several options are available to handle the extra short-term treatment requirement, and include: delay the piping of open pit sump water (as there will be capacity in the sump), recycle some of the heap drain water back to the heap, or increase treatment capacity.

For the July storm, although all the monthly values are less than those for the May freshet storm scenario, the increases from baseline are higher and more variable. Increases range from 139% to 189% in the streams, 115% to 203% in the WRSA and open pit facilities, while treatment rates would increase by 137% to 160%, approaching 385 m<sup>3</sup>/hr during the operations phase and 890 m<sup>3</sup>/hr during draindown. Again, the results indicate that if a large magnitude storm occurs during draindown, then the draindown process would have to be postponed until the effects of the storm pass.

For the drought scenario, the SWBM assumed a three-month period (June, July and August) of low rainfall during a dry year, which is the period when aquatic habitat is most sensitive to low streamflow conditions. As with the storm condition, the drought event is assumed to occur during the second year of the construction phase, the last year of the operations phase, the fourth year of the closure and reclamation phase and the second year of the post-closure monitoring phase.

SWBM results indicate that flows in the streams will be 76% to 89% lower, while collected runoff, seepage and groundwater from the various up-gradient facilities (i.e., WRSAs and the open pit areas) will significantly decline, so that inputs to the MWTP will be only 51% during the construction phase, 11% during the operations phase, and 85% during draindown (Table 6.4-2).

## 7 SENSITIVITY ANALYSES

### 7.1 General Approach

Model uncertainty, and the sensitivity to various parameters, was addressed in several ways, including incorporating:

- A built-in conservatism to estimating design storm volumes
- A calibration to on-site precipitation data
- Examining predicted precipitation estimates in the context of expected climate change
- Estimating the effect of varying evaporation from the open pit
- Modeling the potential differences in runoff and seepage due to varying infiltration rates for soil reclamation covers.

### 7.2 Design Storm

Design capacities are based on the 1:100 year runoff value. As a conservative measure the water balance, uses the 95% confidence limit of the Potato Hills value, 4.3 mm/hr or 103.5 mm/24 hours, rather than the predicted mean 3.3 mm/hr or 79.2 mm/24 hrs value. Further, this value is used for the entire Project footprint, which is lower in elevation, and would be expected to have lower storm magnitudes. For water balance scenarios 4 and 5, this storm event value is then added to the monthly total precipitation amounts for a wet May and wet July to address the effects of a rare high magnitude runoff period.

### 7.3 Calibration

The SWBM used regional orographic equations to predict annual precipitation, which seemed to underestimate actual rainfall and snowfall accumulations at Potato Hills. Thus, the preliminary monthly precipitation values were adjusted (increased) by a coefficient to improve the correlation between synthetic and predicted values of *ET*, *RUN*, *Q*, *GW<sub>in</sub>* and *GW<sub>out</sub>* (as discussed in Section 4). These coefficients varied on a monthly basis depending on the observed average, wet or dry conditions, including the exceptionally wet July 2008 (201 mm) and wet Aug 2008 (130 mm), which as discussed in Section 3.4 are likely greater than a 1:200 year and 1:100 year accumulations, respectively. The adjustment resulted in a best fit between predicted and synthetic datasets. Constant annual precipitation factors of 1.40, 1.55 and 1.00 for average, wet and dry hydroclimatic conditions were determined to yield the best fits.

### 7.4 Climate Change

As part of the surface water model development, recent local and regional precipitation data were compared and used to develop precipitation-elevation regression equations. It is noteworthy that these equations are based on long-term data sets (i.e., Mayo: 85 years) that may underestimate the effect of increased magnitudes or intensities due to climate change. As discussed in Section 4.0,

regional precipitation trends that are possibly linked with climate variability (i.e., Werner et al., 2009) were accounted for in the calibration and sensitivity analysis of the surface water balance model by using a precipitation factor, which essentially increased the precipitation estimates predicted by the regression equations to match those observed on the site in the last three years. The precipitation factors were 1.55 for Wet year scenarios, 1.4 for Average year scenarios, and 1.0 for Dry year scenarios. By applying these factors, the magnitude of the modeled scenarios exceeds the estimated 11% precipitation increases derived from the CGCM2 models (Denis Lacroix, Environment Canada, pers. comm. October 4, 2010 e-mail). Therefore, while the net effect of climate variability on the site Water Management Plan is not clearly definable, the scenarios modeled in the water balance model are sufficiently robust to address the effects of predicted climate changes in the Yukon.

## 7.5 Open Pit Evaporation Coefficients

Evaporation from the open pit walls and benches can vary significantly based on various physical conditions such as aspect, slope, depth, rock fracture density, snowpack/ice depth and distribution as well as the expected seasonal range in evaporation. The effect of varying evaporation coefficients for the open pit walls on potential runoff was assessed by calculating the % of *Net P* left after evaporation. Three sets of evaporation coefficient values were examined. As a base case, potential evaporation (*PE*) is approximately 78% of *Net P*. If *PE* is reduced uniformly with an evaporation coefficient of 0.7, *PE* would be 54% of *Net P*. If a distributed evaporation coefficient ranging from 0.2 to 0.5 is used to reflect reasonable reductions in *Net P* due to varying physical conditions (as assumed for all the SWBM simulations) then *PE* would be only 29% of *Net P*. Finally, if *PE* is reduced uniformly with an evaporation coefficient of 0.1 to reflect for example high rock fracture density then *PE* is only 8% of *Net P*. Assuming that for the case of the open pit, that  $Net\ P - E = RUN$ , then the corresponding proportions for *RUN* for each case are equal to 100%—the resultant value, (Table 7.5-1).

**Table 7.5-1: Open Pit Evaporation Sensitivity from Open Pit Walls**

Month	Net Precip	Potential Evaporation	Open Pit Evaporation from Open Pit Walls <sup>1</sup>					
			C <sub>E-BARE</sub>	Evaporation (0.7)	C <sub>E-BARE</sub>	Evaporation (distrib.)	C <sub>E-BARE</sub>	Evaporation (0.1)
October	0.022	0.000	<b>0.7</b>	0.000	<b>0.3</b>	0.000	<b>0.1</b>	0.000
November	0.000	0.000	0	0.000	0	0.000	0	0.000
December	0.000	0.000	0	0.000	0	0.000	0	0.000
January	0.000	0.000	0	0.000	0	0.000	0	0.000
February	0.000	0.000	0	0.000	0	0.000	0	0.000
March	0.000	0.000	0	0.000	0	0.000	0	0.000
April	0.015	0.000	0	0.000	0	0.000	0	0.000
May	0.148	0.092	<b>0.7</b>	0.065	<b>0.2</b>	0.018	<b>0.1</b>	0.009
June	0.101	0.105	<b>0.7</b>	0.073	<b>0.4</b>	0.042	<b>0.1</b>	0.010

Month	Net Precip	Potential Evaporation	Open Pit Evaporation from Open Pit Walls <sup>1</sup>					
			C <sub>E-BARE</sub>	Evaporation (0.7)	C <sub>E-BARE</sub>	Evaporation (distrib.)	C <sub>E-BARE</sub>	Evaporation (0.1)
July	0.099	0.099	<b>0.7</b>	0.069	<b>0.5</b>	0.049	<b>0.1</b>	0.010
August	0.072	0.070	<b>0.7</b>	0.049	<b>0.4</b>	0.028	<b>0.1</b>	0.007
September	0.062	0.038	<b>0.7</b>	0.027	<b>0.3</b>	0.012	<b>0.1</b>	0.004
<b>Total</b>	<b>0.519</b>	<b>0.404</b>		<b>0.283</b>		<b>0.149</b>		<b>0.040</b>
<b>Percentage of Net Precip.</b>		<b>78%</b>		<b>54%</b>		<b>29%</b>		<b>8%</b>

**NOTE:**

<sup>1</sup> Data reflect results for an average scenario, final year of mining, and final open pit shell.

## 7.6 Cover Options

Different types of reclamation covers can result in variations in infiltration rates. The effect of varying cover infiltration rates for the WRSAs and HLF during the closure and reclamation phase was examined.

### 7.6.1 Waste Rock Storage Areas

For each of the WRSAs, simulations were run for the end of operations phase (no cover) assuming 100% infiltration, and then covers with infiltration equal to 30%, 20% and 5% of *Net P* (Table 7.6-1). This analysis demonstrated that the rates of seepage draining to the collection ponds were proportional to the infiltration capacity of the cover.

For example, with no runoff from the PG WRSA, maximum monthly seepage (at freshet) was approximately 40,000 m<sup>3</sup>, but with a 20% infiltration cover, the maximum monthly seepage was approximately 8,000 m<sup>3</sup> and the 5% infiltration cover had a maximum monthly seepage rate of approximately 2,000 m<sup>3</sup> (Table 7.6-1, and Figure 7.6-1). These values represent 15%, 3% and 0.8%, respectively, of the total flow to the open pit sump during the draindown period.

At the EP WRSA, the maximum monthly seepage was approximately 110,000 m<sup>3</sup> with no runoff. With a 20% infiltration cover, the maximum monthly seepage was approximately 22,000 m<sup>3</sup> and the 5% infiltration cover had a maximum monthly seepage rate of approximately 5,500 m<sup>3</sup> (Table 7.6-2, and Figure 7.6-2). These values represent 30%, 6% and 1.5%, respectively, of the total flow to the MWTP Feed Pond during the draindown period.

### **7.6.2 Heap Leach Facility**

Similar model runs were completed for the HLF, where simulations were run for a condition of no cover (no runoff), and covers with 30%, 20% and 10% infiltration rates (Table 7.6-3). The simulation results demonstrate that the maximum draindown volume to the MWTP is reduced substantially with lower infiltration rate covers (Table 7.6-3 and Figure 7.6-3).

For example, the maximum monthly seepage at the HLF with no cover is approximately 309,000 m<sup>3</sup>. With a 20% infiltration cover, the maximum monthly seepage is approximately 269,000 m<sup>3</sup> or a 13% reduction in draindown volume to the MWTP. A 10% infiltration cover would have a maximum monthly seepage of approximately 264,000 m<sup>3</sup> or a 15% reduction in draindown volume routed to the MWTP (Table 7.6-3 and Figure 7.6-3).



**Table 7.6-1: Platinum Gulch Waste Rock Storage Cover Options**

Month - Year (First Year of Draindown)	Open Pit Sump Volume (incl. PG WRSA inputs)	PG WRSA Net Precipitation (Average Year)	Cover Evapo-transpiration (Average Year)	PG WRSA No Cover - 100 % Infiltration			PG WRSA Engineered Soil Cover to Reduce Infiltration to 30%			PG WRSA Engineered Soil Cover to Reduce Infiltration to 20%			PG WRSA Engineered Soil Cover to Reduce Infiltration to 5%		
				Infiltration	Runoff	Rock Drain Seepage (1 month lag)	Infiltration	Runoff	Rock Drain Seepage (1 month lag)	Infiltration	Runoff	Rock Drain Seepage (1 month lag)	Infiltration	Runoff	Rock Drain Seepage (1 month lag)
July	44,348	32,784	21,583	11,201	0	14,637	3,360	7,841	4,391	2,240	8,961	2,927	560	10,641	732
August	37,600	23,925	15,974	7,951	0	11,201	2,385	5,566	3,360	1,590	6,361	2,240	398	7,553	560
September	45,292	20,741	9,743	10,998	0	7,951	3,299	7,698	2,385	2,200	8,798	1,590	550	10,448	398
October	23,925	7,507	0	7,507	0	10,998	2,252	5,255	3,299	1,501	6,006	2,200	375	7,132	550
November	1,627	0	0	0	0	7,507	0	0	2,252	0	0	1,501	0	0	375
December	1,294	0	0	0	0	0	0	0	0	0	0	0	0	0	0
January	1,294	0	0	0	0	0	0	0	0	0	0	0	0	0	0
February	1,168	0	0	0	0	0	0	0	0	0	0	0	0	0	0
March	1,294	0	0	0	0	0	0	0	0	0	0	0	0	0	0
April	16,145	5,069	0	5,069	0	0	1,521	3,548	0	1,014	4,055	0	253	4,815	0
May	124,373	49,340	8,567	40,773	0	5,069	12,232	28,541	1,521	8,155	32,618	1,014	2,039	38,734	253
June	54,952	33,566	18,929	14,637	0	40,773	4,391	10,246	12,232	2,927	11,710	8,155	732	13,905	2,039

**Table 7.6-2: Eagle Pup Waste Rock Storage Cover Options**

Month - Year (First Year of Draindown)	Non-Contact Water to EP WRSA SCP	EP WRSA Net Precipitation (Average Year)	Cover Evapo-transpiration (Average Year)	EP WRSA No Cover - 100 % Infiltration			EP WRSA Engineered Soil Cover to Reduce Infiltration to 30%			EP WRSA Engineered Soil Cover to Reduce Infiltration to 20%			EP WRSA Engineered Soil Cover to Reduce Infiltration to 5%		
				Infiltration	Runoff	Rock Drain Seepage (1 month lag)	Infiltration	Runoff	Rock Drain Seepage (1 month lag)	Infiltration	Runoff	Rock Drain Seepage (1 month lag)	Infiltration	Runoff	Rock Drain Seepage (1 month lag)
July	4,880	78,968	19,647	59,321	0	63,450	17,796	41,525	19,035	11,864	47,457	12,690	2,966	56,355	3,172
August	3,789	57,627	14,482	43,145	0	59,321	12,943	30,201	17,796	8,629	34,516	11,864	2,157	40,987	2,966
September	3,816	49,872	8,904	40,969	0	43,145	12,291	28,678	12,943	8,194	32,775	8,629	2,048	38,920	2,157
October	2,850	17,932	0	17,932	0	40,969	5,380	12,553	12,291	3,586	14,346	8,194	897	17,036	2,048
November	609	0	0	0	0	17,932	0	0	5,380	0	0	3,586	0	0	897
December	349	0	0	0	0	0	0	0	0	0	0	0	0	0	0
January	195	0	0	0	0	0	0	0	0	0	0	0	0	0	0
February	132	0	0	0	0	0	0	0	0	0	0	0	0	0	0
March	104	0	0	0	0	0	0	0	0	0	0	0	0	0	0
April	122	12,085	0	12,085	0	0	3,626	8,460	0	2,417	9,668	0	604	11,481	0
May	2,801	117,817	7,685	110,132	0	12,085	33,040	77,092	3,626	22,026	88,106	2,417	5,507	104,626	604
June	3,811	80,706	17,256	63,450	0	110,132	19,035	44,415	33,040	12,690	50,760	22,026	3,172	60,277	5,507

**Table 7.6-3: Ann Gulch Heap Leach Facility Cover Options**

Month – Year (First Year of Draindown)	Net Precip (Average Year)	Evapo-transpiration (Average Year)	Assumed Draindown Volume	HLF No Cover - 100 % Infiltration			HLF Engineered Soil Cover to Reduce Infiltration to 30%			HLF Engineered Soil Cover to Reduce Infiltration to 20%			HLF Engineered Soil Cover to Reduce Infiltration to 10%		
				Infiltration	Runoff	Total Draindown Volume to Detox/MWTP	Infiltration	Runoff	Total Draindown Volume to Detox/MWTP	Infiltration	Runoff	Total Draindown Volume to Detox/MWTP	Infiltration	Runoff	Total Draindown Volume to Detox/MWTP
July	82,530	32,732	<b>259,450</b>	49,798	0	<b>309,248</b>	14,939	34,859	<b>274,389</b>	9,960	39,838	<b>269,409</b>	4,980	44,818	<b>264,430</b>
August	60,214	24,077	<b>129,725</b>	36,137	0	<b>165,862</b>	10,841	25,296	<b>140,566</b>	7,227	28,909	<b>136,952</b>	3,614	32,523	<b>133,339</b>
September	51,834	14,866	<b>63,865</b>	36,968	0	<b>100,832</b>	11,090	25,877	<b>74,955</b>	7,394	29,574	<b>71,258</b>	3,697	33,271	<b>67,561</b>
October	18,245	0	<b>31,932</b>	18,245	0	<b>50,178</b>	5,474	12,772	<b>37,406</b>	3,649	14,596	<b>35,581</b>	1,825	16,421	<b>33,757</b>
November	0	0	<b>15,966</b>	0	0	<b>15,966</b>	0	0	<b>15,966</b>	0	0	<b>15,966</b>	0	0	<b>15,966</b>
December	0	0	<b>7,983</b>	0	0	<b>7,983</b>	0	0	<b>7,983</b>	0	0	<b>7,983</b>	0	0	<b>7,983</b>
January	0	0	<b>6,386</b>	0	0	<b>6,386</b>	0	0	<b>6,386</b>	0	0	<b>6,386</b>	0	0	<b>6,386</b>
February	0	0	<b>4,790</b>	0	0	<b>4,790</b>	0	0	<b>4,790</b>	0	0	<b>4,790</b>	0	0	<b>4,790</b>
March	0	0	<b>4,568</b>	0	0	<b>4,568</b>	0	0	<b>4,568</b>	0	0	<b>4,568</b>	0	0	<b>4,568</b>
April	12,223	0	<b>4,346</b>	12,223	0	<b>16,570</b>	3,667	8,556	<b>8,013</b>	2,445	9,779	<b>6,791</b>	1,222	11,001	<b>5,569</b>
May	119,744	12,703	<b>4,125</b>	107,041	0	<b>111,166</b>	32,112	74,929	<b>36,237</b>	21,408	85,633	<b>25,533</b>	10,704	96,337	<b>14,829</b>
June	83,862	28,767	<b>3,903</b>	55,095	0	<b>58,998</b>	16,528	38,566	<b>20,431</b>	11,019	44,076	<b>14,922</b>	5,509	49,585	<b>9,412</b>

**Table 7.6-4: Infiltration Combinations and Effects on Haggart Creek at W4 and W29**

Month - Year (First Year of Draindown)	HLF 100% Infiltration; PG and EP WRSAs 100% Infiltration				HLF 20% Infiltration; PG and EP WRSAs 20% Infiltration				HLF 10% Infiltration; PG and EP WRSAs 5% Infiltration			
	MWTP Output m <sup>3</sup> /yr	MWTP Output m <sup>3</sup> /hr	Haggart Creek W4 m <sup>3</sup> /yr	Haggart Creek W29 m <sup>3</sup> /yr	MWTP Output m <sup>3</sup> /yr	MWTP Output m <sup>3</sup> /hr	Haggart Creek W4 m <sup>3</sup> /yr	Haggart Creek W29 m <sup>3</sup> /yr	MWTP Output m <sup>3</sup> /yr	MWTP Output m <sup>3</sup> /hr	Haggart Creek W4 m <sup>3</sup> /yr	Haggart Creek W29 m <sup>3</sup> /yr
July	425,189	571	2,133,073	2,836,655	379,299	510	2,127,021	2,830,603	373,185	502	2,125,886	2,829,468
August	269,670	362	1,931,808	2,347,040	225,220	303	1,916,267	2,331,499	218,692	294	1,913,353	2,328,585
September	190,348	264	2,123,852	2,587,297	161,471	224	2,124,549	2,587,994	157,905	219	2,124,679	2,588,124
October	121,385	163	1,955,919	2,381,688	85,567	115	1,934,698	2,360,466	79,764	107	1,930,718	2,356,487
November	43,266	60	1,118,196	1,299,445	22,914	32	1,097,845	1,279,094	19,099	27	1,094,029	1,275,278
December	9,626	13	764,086	887,157	9,626	13	764,086	887,157	9,626	13	764,086	887,157
January	7,875	11	486,422	562,934	7,875	11	486,422	562,934	7,875	11	486,422	562,934
February	6,090	9	358,183	414,209	6,090	9	358,183	414,209	6,090	9	358,183	414,209
March	5,966	8	306,655	354,315	5,966	8	306,655	354,315	5,966	8	306,655	354,315
April	28,121	39	329,021	378,993	32,066	45	342,745	392,717	33,416	46	345,318	395,290
May	216,869	291	3,020,026	3,536,589	238,237	320	3,127,027	3,643,590	247,595	333	3,147,089	3,663,652
June	252,696	351	2,327,034	2,753,605	150,366	209	2,268,779	2,695,351	133,934	186	2,257,857	2,684,428
Month - Year (First Year of Draindown)			% of Baseline W4	% of Baseline W29			% of Baseline W4	% of Baseline W29			% of Baseline W4	% of Baseline W29
July			98.1%	115.3%			97.8%	115.1%			97.8%	115.0%
August			100.6%	111.3%			99.8%	110.6%			99.6%	110.5%
September			95.3%	106.5%			95.3%	106.6%			95.3%	106.6%
October			92.3%	104.3%			91.3%	103.4%			91.1%	103.2%
November			92.9%	103.0%			91.2%	101.4%			90.8%	101.1%
December			90.6%	100.8%			90.6%	100.8%			90.6%	100.8%
January			91.1%	101.3%			91.1%	101.3%			91.1%	101.3%
February			91.2%	101.4%			91.2%	101.4%			91.2%	101.4%
March			91.4%	101.6%			91.4%	101.6%			91.4%	101.6%
April			97.5%	107.9%			101.5%	111.8%			102.3%	112.5%
May			95.5%	105.6%			98.8%	108.8%			99.5%	109.4%
June			99.4%	108.7%			96.9%	106.4%			96.4%	106.0%

### 7.6.3 Effects on Flows in Haggart Creek

The effect of varying infiltration rates for covers on the streamflows in Haggart Creek was also examined. When no runoff from WRSAs or the HLF is assumed (i.e., Net P is recharged and leached through the facilities with a one month lag), the maximum monthly percent change in flows decrease by approximately 10% at W4 and an increase by approximately 15% at W29 (Table 7.6-4). The differences reflect the water routing plans for the site, specifically, the diversion of water from Dublin Gulch, the addition of flows to Eagle Creek and the modified connections to Haggart Creek via Platinum Gulch. Under this condition, the maximum output rate of the MWTP would be 571 m<sup>3</sup>/hr, a rate below the 620 m<sup>3</sup>/hr design capacity. This also assumes that all contact water originating from the EP WRSA, PG WRSA, HLF and the open pit would be routed to the MWTP.

In comparison, the effect of a 20% infiltration cover (i.e., condition assumed for the Project case) on the HLF and the WRSAs results in a maximum monthly percent changes in Haggart Creek flows similar to the no cover scenario, with a maximum MWTP feed rate of 510 m<sup>3</sup>/hr (Table 7.6-4). The reduced MWTP output is a function of small flow reductions over the summer and fall months.

Further, the effect of a 10% infiltration cover on the HLF and a 5% infiltration cover on the WRSAs results in a maximum monthly percent changes in flows to be similar to the no cover condition, while the maximum output rate of the MWTP would be 502 m<sup>3</sup>/hr. The reduced output rate is also a function of small flow reductions over the summer and fall months on the order of 1 to 2% (Table 7.4-4).

**THIS PAGE INTENTIONALLY LEFT BLANK.**

## 8 SUMMARY AND CONCLUSIONS

The Eagle Gold Surface Water Balance Model (SWBM) report provides a quantitative description of the existing baseline water-balance conditions at the Project and provides a detailed water-balance for water conveyance and storage facilities associated with the Project.

- The SWBM is a custom-made, linked Excel<sup>®</sup> spreadsheet-based precipitation-runoff model designed to simulate the effect of land use changes associated with the Project within the spatial boundaries of the Project footprint. The model utilizes information on the spatial distribution and layout of natural and engineered water conveyance structures, initially described in URS/Scott Wilson (2010), and subsequently modified and/or elaborated upon where necessary to accommodate preliminary model findings.
- The temporal boundaries of the model are defined by the Project phases. Thus, water balance results were generated for the following phases: Baseline, construction, operations, closure and reclamation, and post-closure monitoring. The spatial coverage of the SWBM includes a six km reach on Haggart Creek, all of the Dublin Gulch and Eagle Creek basins, plus two tributaries Gil Gulch and 15 Pup that flow into Haggart Creek opposite the Project site.
- Orthographic gradients were quantified for the site and indicate that precipitation varies at a rate of 18 mm/100 m. This is reflected in the estimated annual precipitation accumulations at the Project site. In the upper areas of the Project site, the average annual precipitation volume is 630mm (rain = 354 mm; snow = 276 mm [SWE]). In the valley areas of the Project site, the average annual precipitation volume is 484 mm (rain = 301 mm; snow = 183 mm [SWE]).
- The annual distribution of precipitation at the site was based on the Keno Hill distribution because the Project site had similar physiography and elevation as Keno Hill, and similar annual precipitation volumes.
- Based on regional analysis and on-site data, the model assumes 50% of the October snowpack melts, while the snow accumulating through the remainder of the year has a snowmelts distribution of April (10%), May (80%), and June (10%).
- The model was calibrated to existing conditions using a 2007-2010 on-site climate and hydrometric station database. Regional climate and hydrometric data analysis was completed to establish the regional climatic and hydrometric trends. Relationships were established between regional and local data to generate synthetic data where applicable to fill data gaps.
- Calibration to on-site precipitation and streamflows resulted in the need to adjust an initial predicted Net P by factors of 1.55 for wet months, 1.40 for average months and 1.00 for dry months.
- The SWBM was designed around three hydroclimatic conditions. Average, wet, and dry year conditions were defined based on regional precipitation trends. An average year represents an annual precipitation with a two year return interval or 50% chance that the annual precipitation value will be exceeded in any given year. A wet year scenario represents an annual precipitation value with a 20 year return interval or a 5% chance of exceedance in

any given year. A dry year scenario represents the annual precipitation amount occurring every 1.055 years or a 95% chance of exceedance in any given year. The dry year is also defined as having a 5% chance of not exceeding an annual precipitation amount.

- The probabilities of average, wet, and dry year conditions occurring over the 12-year timeline of the water management system are 100%, 46%, and 46%, respectively.

Significant results include:

- During Year 1 of the construction phase, the Eagle Creek drainage above the Project facilities would be routed to lower Dublin Gulch to accommodate the construction of the Eagle Creek compensation channel. In Year 2 of the construction phase, Eagle Creek flows would increase up to 7 times baseline conditions due to the additional flows from the re-routed Dublin Gulch Diversion Channel.
- During the operations phase, Haggart Creek flows would decrease by 8 to 13% as a result of the diversion of Dublin Gulch into the Eagle Creek drainage, while the Dublin Gulch Diversion Channel represents 81% of the flow to the proposed Eagle Creek Compensation Channel. The Eagle Creek channel would carry flows up to 10 times the baseline flow regime and Eagle Creek represents approximately 15% of the Haggart Creek flow lower in the valley at hydrometric monitoring station W29. Downstream of the Project site, however, Haggart Creek flows would vary little from baseline conditions ( $\pm 2\%$  of baseline flow). These stream flow conditions would continue through the closure and reclamation and post-closure monitoring phases.
- During the operations phase, Platinum Gulch is expected to remain as an ephemeral channel. However, as a result of a staged reclamation activities and the eventual outflow of the pit lake to the Platinum Gulch drainage, the flows in the channel will be approximately 25 times the operations phase flow conditions.
- During average conditions, the HLF would operate with a negative water balance, so that all the water used in the leaching process would be recycled and no solution would need to go through cyanide detoxification and subsequent treatment.
- Further, for much of the year during the operations phase, water treatment of other water sources would not be required, or will be required intermittently. Assuming all the water originating from open pit dewatering, runoff and contact water from the WRSA's would require treatment, the average monthly feed rates would be 24% of the design capacity of the mine water treatment plant when treatment is required. The maximum treatment feed rate is expected to be 44% of design capacity during an average year.
- The HLF is assumed to draindown during Year 4 of the closure and reclamation phase following one year of supplemental gold recovery and 2.5 years of heap rinsing. Approximately 74% of the draindown will occur over the first three months of the summer of Year 4.



- When the pit lake water quality meets discharge criteria, and after the pit lake has filled (estimated to take approximately one average water year), the lake will then drain toward and form a tributary of Platinum Gulch.
- During the first several years of the closure and reclamation phase, the EP WRSA will be capped with a soil cover assumed to allow 20% of *Net P* to infiltrate the rock pile. Seepage and runoff from the EP WRSA will still be collected in the EP SCP and conveyed to the Feed Pond until it is demonstrated that the water meets discharge criteria, after which the drainage will be re-connected to DGDC.
- The effects of hydroclimatic events coupled with hydroclimatic scenarios indicates a storm event during freshet will result in stream flows of 125% to 138% higher than baseline in Upper Dublin Gulch, Platinum Gulch and Haggart Creek for all phases of the Project. The storm event will result in treatment flows from the EP SCP and the open pit sump that are 124% to 139% higher than average conditions. Treatment rates in excess of the design capacity (620 m<sup>3</sup>/hr) during the closure and reclamation phase would be mitigated by delaying the draindown until the hydrologic effects of the storm pass.
- For a July storm event, coupled with wet year conditions, monthly values are lower than the May conditions, but proportionate increases are greater. Increases range from 139% to 189% in the streams, 115% to 203% in the WRSA and open pit facilities, while treatment rates would increase by 137% to 160%, approaching 385 m<sup>3</sup>/hr during operations and 890 m<sup>3</sup>/hr during draindown. Treatment rates in excess of the design capacity during the closure and reclamation phase would be mitigated by delaying the draindown until the hydrologic effects of the storm pass.
- During drought conditions in the summer, stream flows would be 76% to 89% lower than baseline conditions. Runoff and seepage from the Project facilities would decline substantially and inputs to the MWTP will be only 51% during construction, 11% during operations, and 85% during draindown.
- Post-closure monitoring will continue at the site until water quality criteria are achieved.
- Sensitivity analysis on the effects of climate change indicated the predicted 11% increase in precipitation in the Yukon over the Project timeline were accounted for in the SWBM by using a wet year scenario that was of larger magnitude than the predicted affects of climate change.
- Sensitivity analysis on the infiltration rates of different cover options demonstrated a proportional reduction in runoff from the WRSAs down to 0.8% of the total flow to the MWTP during the draindown period.
- Sensitivity analysis on the infiltration rates of different cover options of the WRSAs and the HLF demonstrate that they would have small effects on the Haggart Creek flows.

**THIS PAGE INTENTIONALLY LEFT BLANK.**

## 9 REFERENCES

- BGC Engineering Inc., 2010a. Eagle Gold Project Pre-Feasibility Open Pit Slope Design, Final Report issued to Victoria Gold Corp. May 19, 2010.
- BGC Engineering Inc., 2010b. Eagle Gold Project Pre-Feasibility Open Depressurization, Final Report issued to Victoria Gold Corp. May 31, 2010.
- Clearwater Consultants Ltd. (1996). Dublin Gulch Project - Site Hydrology Design Memorandum CCL\_DG3, July 26, 1996; prepared for Ivanhoe Goldfields Ltd.
- Clearwater Consultants Ltd. (2006). Carmacks Copper Project - Williams Creek Site Hydrology Update, Final Draft Memorandum CCL-CC6, January 13, 2006; prepared for Access Consulting Group.
- Dingman, S.L. 2002. Physical hydrology. USA: Waveland Press.
- Gartner Lee (2001). Letter Report #2 - Regional Hydrologic Analysis for the Finlayson Project Site; prepared for Expatriate Resources, May 8, 2001; In: Wolverine Advance Exploration Program - Water Licence Application - Appendix D.
- Gordon, N., McMahon, T., Finalyson, B., Grippel, C., & Nathan, R. (2004). Stream Hydrology 2nd Ed. UK: John Wiley and Sons Ltd.
- Hamon, WR. 1961. Estimating potential evapotranspiration. J. Hydraulic Division, Proc. ASCE. 87, 107-120.
- KCA (2010). Preliminary Water Balance for Heap Leach Facility: file: Eagle Gold Water Balance 9.1 million tpa Rev C.xls - Feb 2010; prepared by Carl Defilippi, Kappes, Cassidy and Associates, Reno, NV.
- Peters, D.L. (2003). Controls on the persistence of water in perched basins of the Peace-Athabasca Delta, Northern Canada. PhD thesis, Trent University, Peterborough Ontario. 194p.
- Peters, D.L., T.D. Prowse, A. Pietroniro, R. Leconte. 2006. Flood Hydrology of the Peace-Athabasca Delta, Northern Canada. *Northern Rivers Ecosystem Initiative Special Issue, Hydrological Processes*, 20:4073-4096.
- Pomeroy, J.W., P. Marsh, D.M. Gray. 1997. Application of a distributed blowing snow model to the Arctic. *Hydrological Processes*. 11:1451-1464.
- Sitka Corp. (1996). Dublin Gulch Project IEE Addendum section 8.0, Eagle Pup MWRSA. Prepared for New Millennium Mining Ltd.
- Stantec Ltd. (2010a). Eagle Gold Project, Environmental Baseline Report: Climate. Burnaby, BC. 65p.
- Stantec Ltd. (2010b). Eagle Gold Project, Environmental Baseline Report: Hydrology. Burnaby, BC. 93p.
- Stantec Ltd. (2010c). Eagle Gold Project, Environmental Baseline Report: Surficial Geology, Terrain and Soils, Burnaby, BC. 396p.
- Stantec Ltd. (2010d). Eagle Gold Project, Environmental Baseline Report: Hydrogeology. Burnaby, BC. 296p.

## **Eagle Gold Project**

Surface Water Balance Model Report

Section 9: References

---

- Stantec Ltd. (2010e). Eagle Gold Project, Environmental Baseline Report: Water Quality and Aquatic Biota, Burnaby, BC, 493p.
- Stantec Ltd. (2010f). DRAFT Eagle Gold Project Proposal for Executive Committee Review, Pursuant to the Yukon Environmental and Social Assessment Act. Burnaby, BC: Prepared for Victoria Gold Corporation.
- Stantec Ltd. (2010g). Eagle Gold Project Memorandum – Aquifer Test for Camp Water Supply, August 3, 2010, from J. Todd, M. Trewartha and S. Wilbur (Stantec) to M. Padula, (Victoria Gold).
- Stantec Ltd. (2010h). Eagle Gold Project Water Management Plan. Burnaby BC.
- Stantec Ltd. (2010j). Eagle Gold Project Conceptual Closure and Reclamation Plan, Burnaby, BC.
- URS/Scott Wilson (2010). Pre-feasibility study on the Eagle Gold Project, Yukon Territory, Canada. Toronto, ON. 338p.
- Wahl, H.E., D.B. Fraser, R.C. Harvey, J.B. Maxwell (1987). The Climate of Yukon; AES Climatological Studies Number 40. Government of Canada.

## **10 FIGURES**

Please see the following pages.



Data Sources: Government of Canada, Victoria Gold Corp.

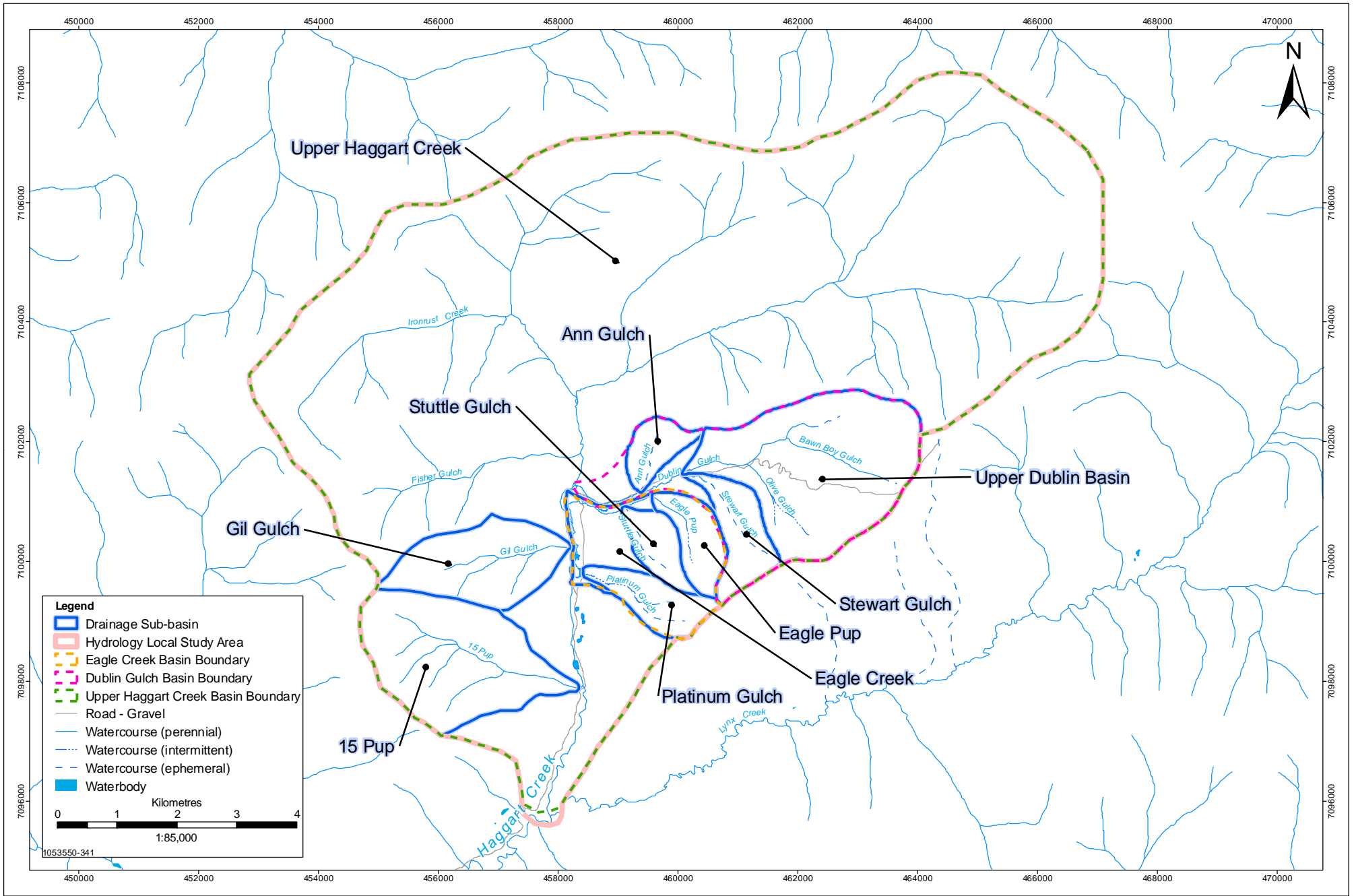


Stantec  
4370 Dominion Street  
Burnaby, British Columbia  
V5G 4L7  
Tel. (604) 436 3014  
Fax. (604) 436 3752

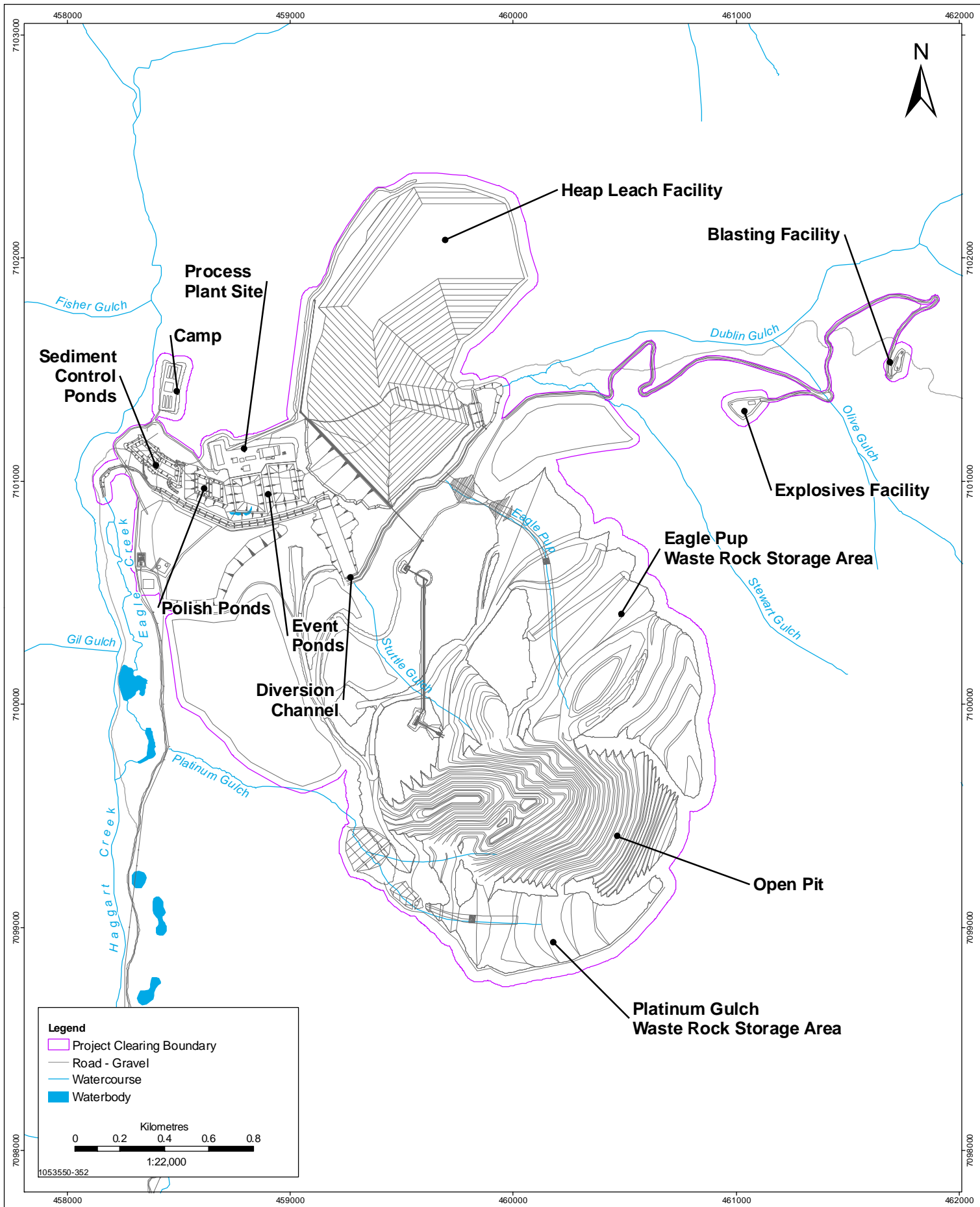


**GENERAL LOCATION MAP**  
EAGLE GOLD PROPERTY  
YUKON TERRITORY

PROJECTION UTM - ZONE 8	DRAWN BY LS
DATUM NAD 83	CHECKED BY RS
DATE 8-November-2010	FIGURE NO. 1,1-1



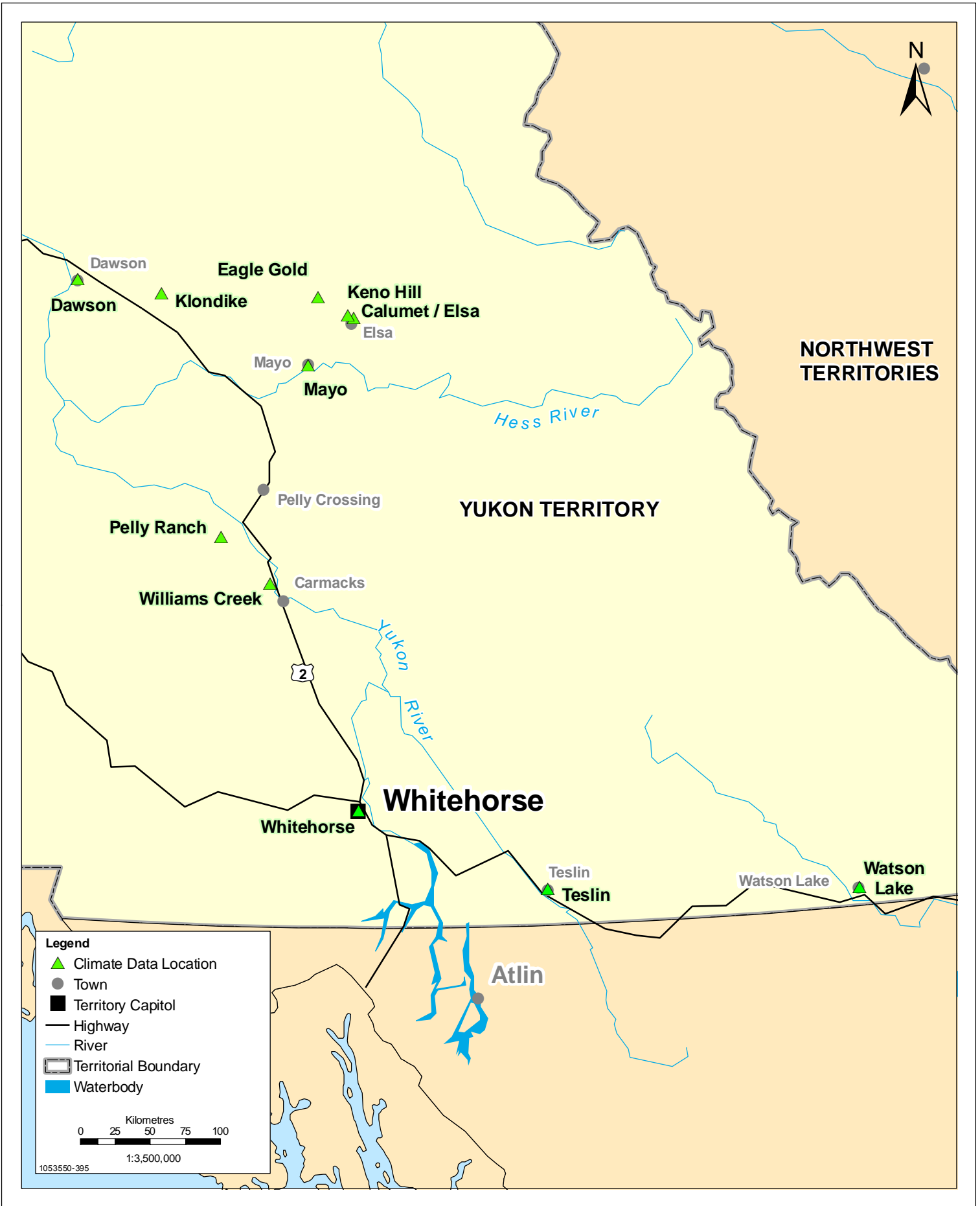
Data Sources: Government of Canada, Victoria Gold Corp.



Data Sources: Government of Canada, Victoria Gold Corp.

PROJECTION UTM - ZONE 8	DRAWN BY LS
DATUM NAD 83	CHECKED BY RS
DATE 18-October-2010	FIGURE NO. 1.3-1





Data Sources: Government of Canada, Victoria Gold Corp.



Stantec  
4370 Dominion Street  
Burnaby, British Columbia  
V5G 4L7  
Tel. (604) 436 3014  
Fax. (604) 436 3752

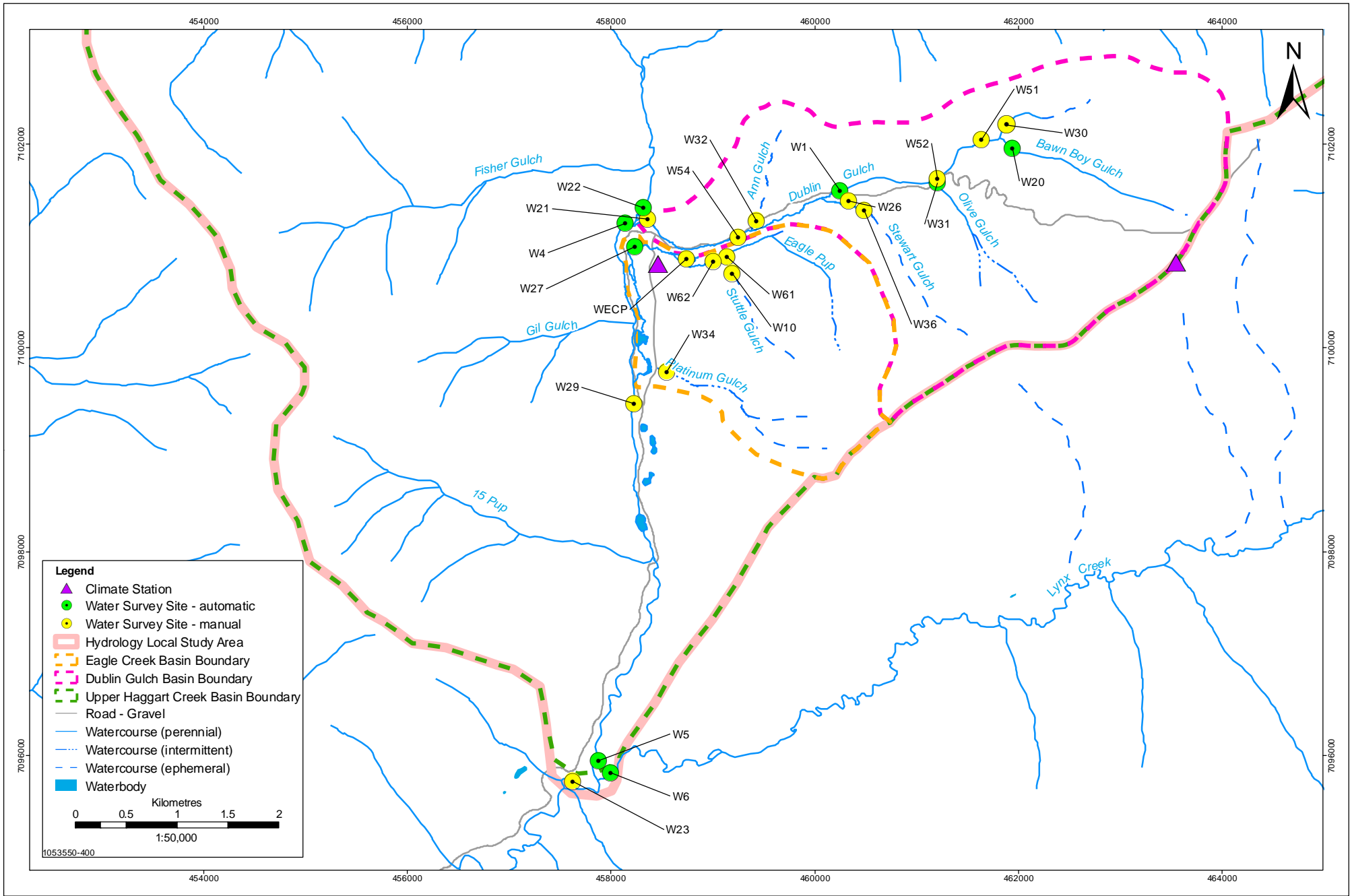


Victoria  
GOLD CORP

## REGIONAL CLIMATE STATIONS

EAGLE GOLD PROPERTY  
YUKON TERRITORY

PROJECTION UTM - ZONE 8	DRAWN BY LS
DATUM NAD 83	CHECKED BY RS
DATE 01-November-2010	FIGURE NO. 3-1



Data Sources: Government of Canada, Victoria Gold Corp.



## HYDROMETRIC AND CLIMATE MONITORING STATIONS

EAGLE GOLD PROPERTY  
YUKON TERRITORY

PROJECTION	UTM - ZONE 8	DRAWN BY	LS
DATUM	NAD 83	CHECKED BY	RS
DATE	3-November-2010	FIGURE NO.	3.1-1

Figure 3.1-2: Comparison of Potato Hills Mean, Maximum, and Minimum Monthly Temperatures to Model Estimates

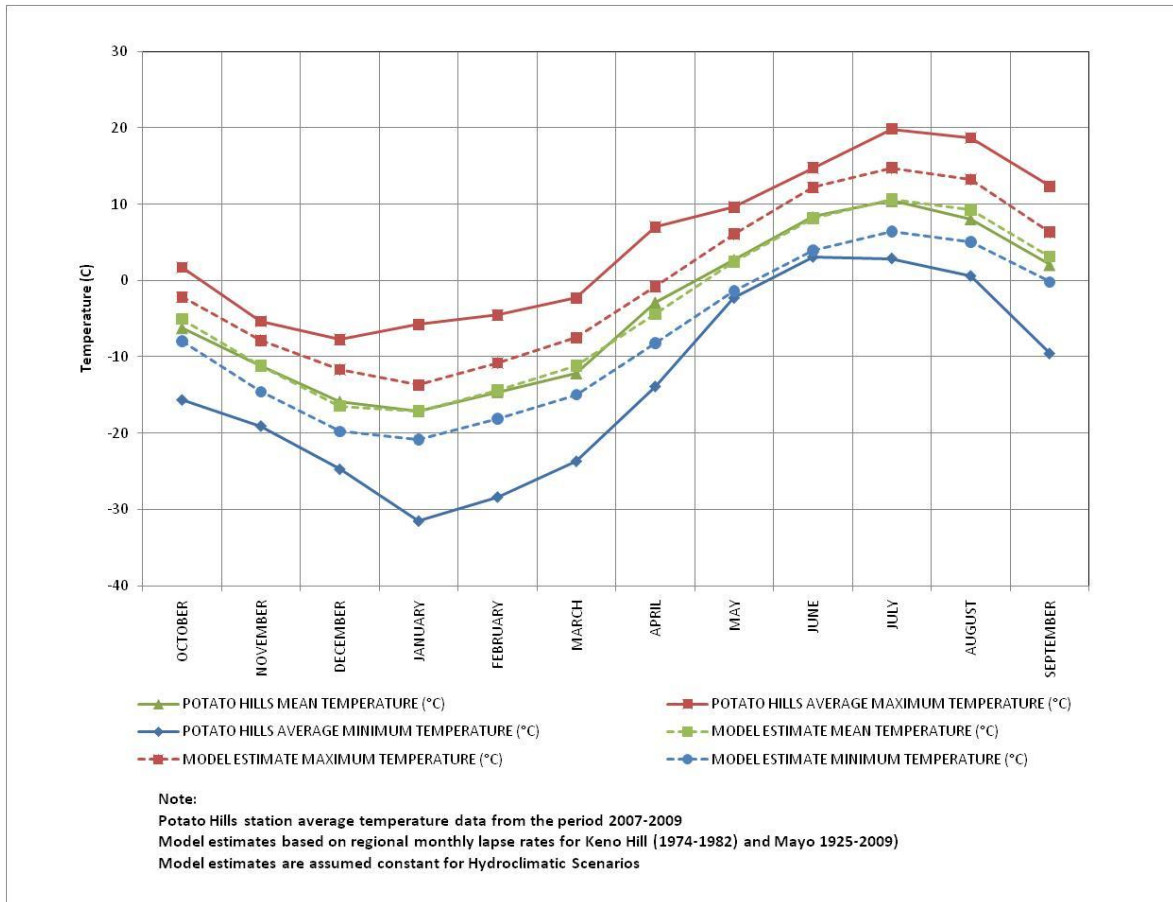


Figure 3.2-1: Dublin Gulch Basin Streamflows August 2007 to October 2009

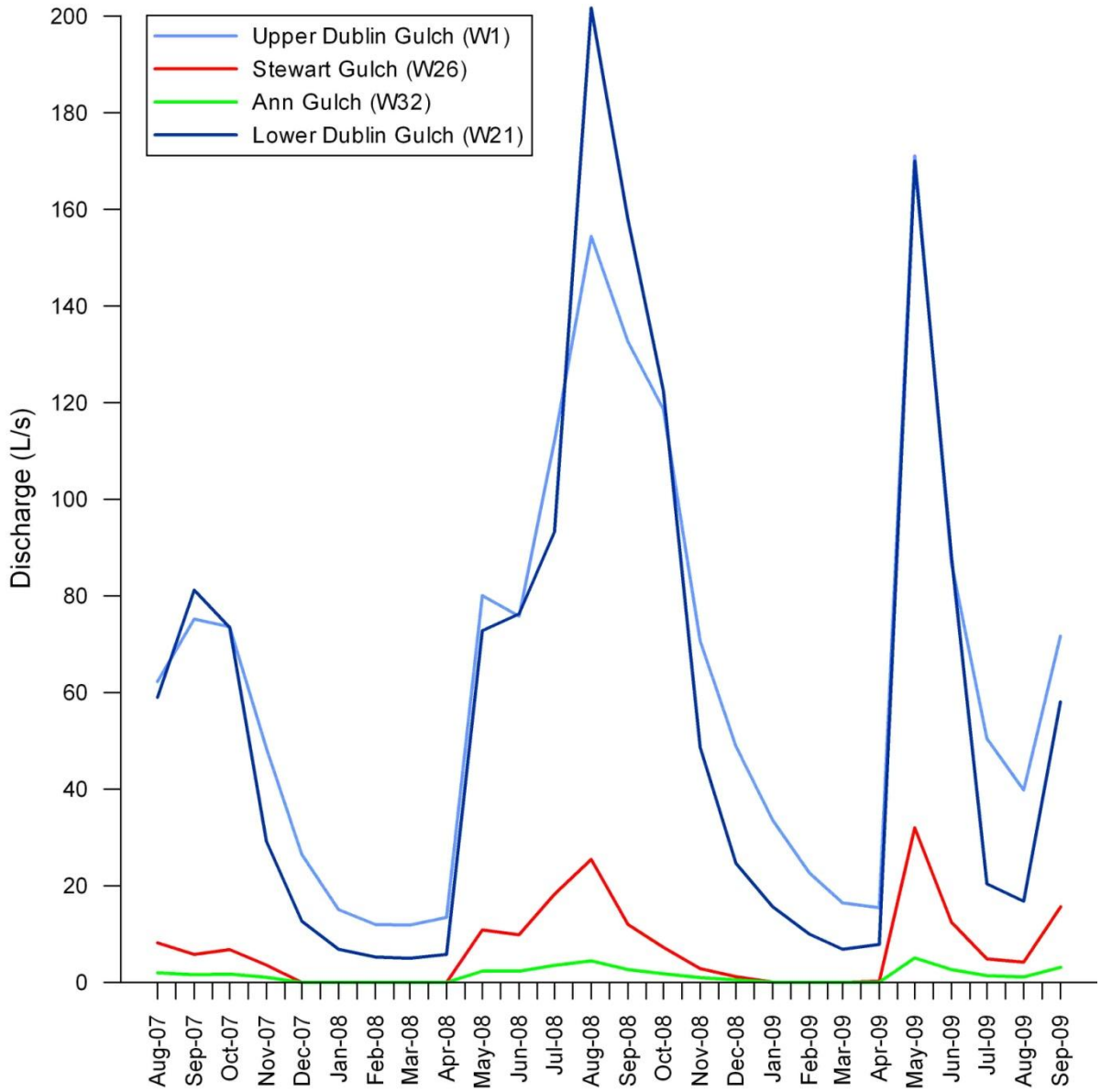


Figure 3.2-2: Eagle Creek Basin Streamflows August 2007 to October 2009

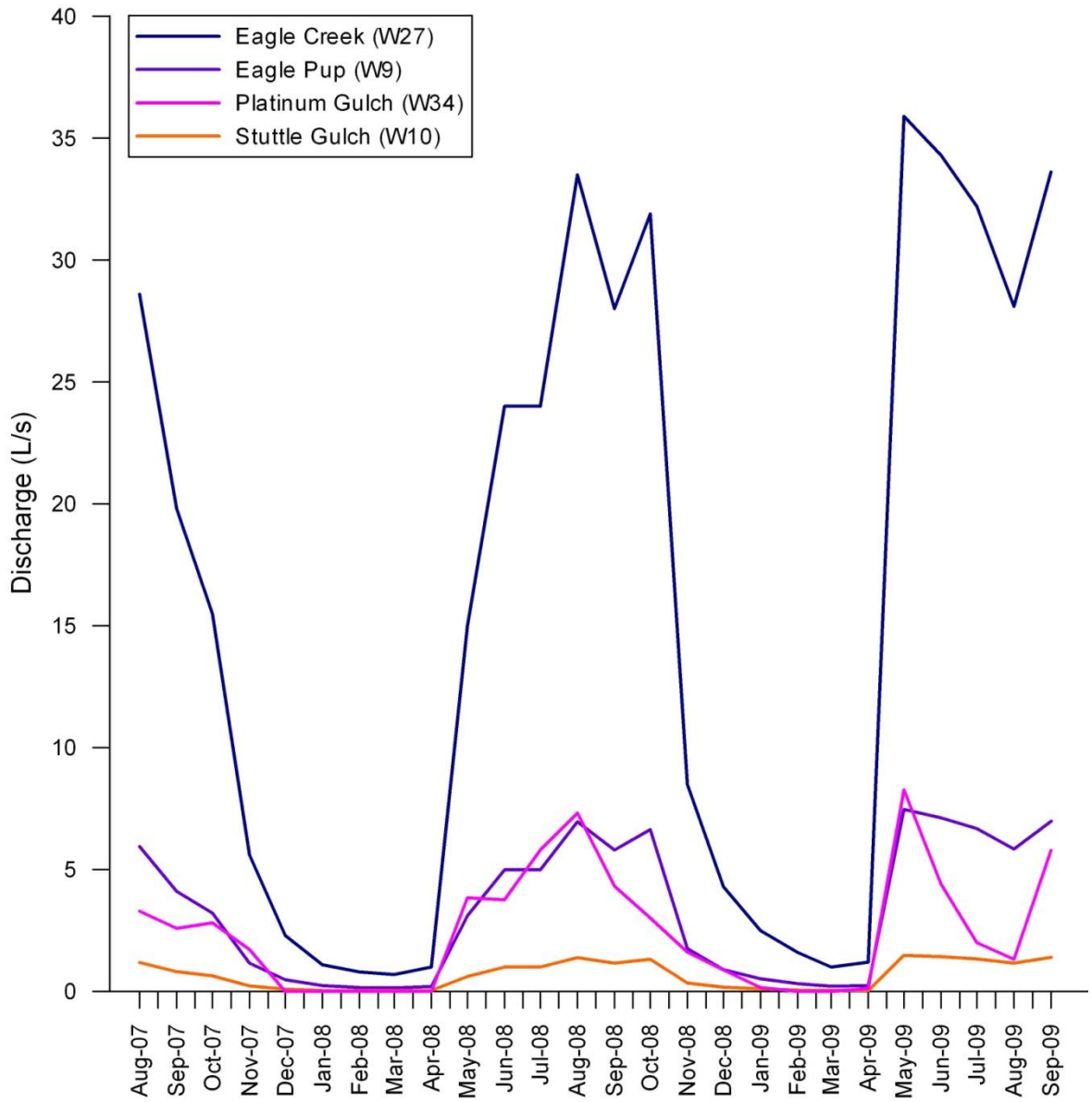
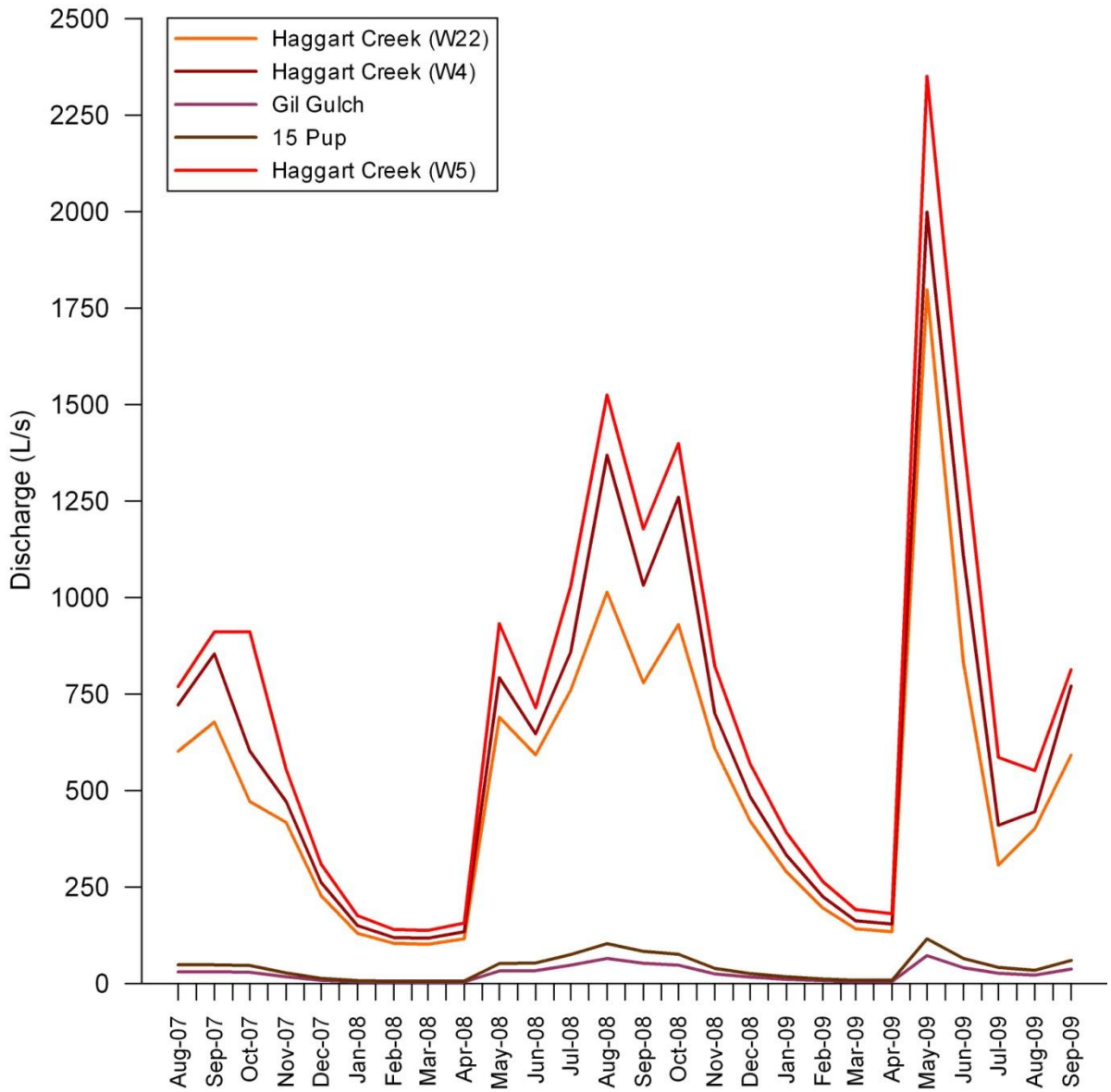


Figure 3.2-3: Haggart Creek Basin Streamflows August 2007 to October



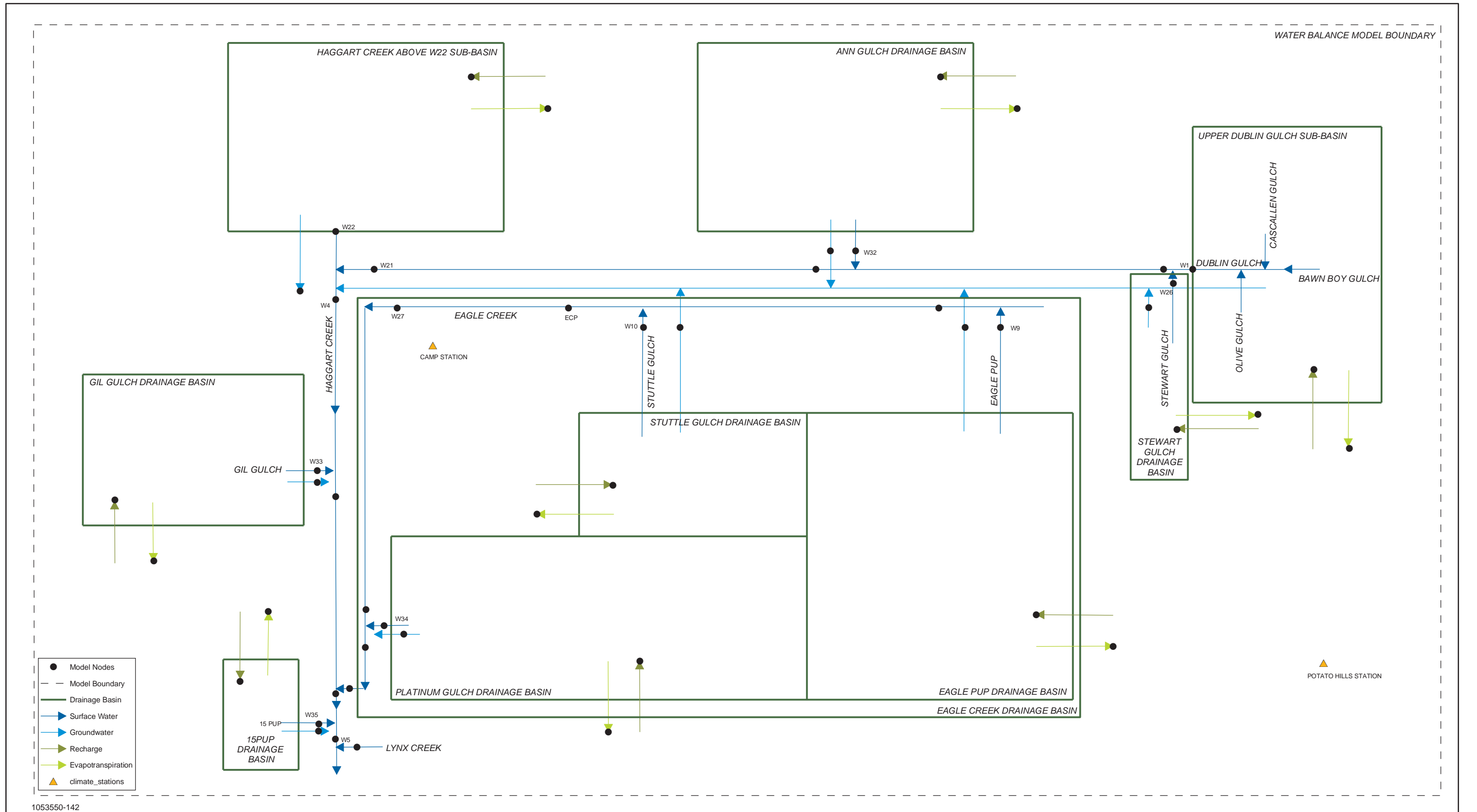


Figure 4-1: Comparison of Average, Wet, and Dry Precipitation to Measured Annual Precipitation

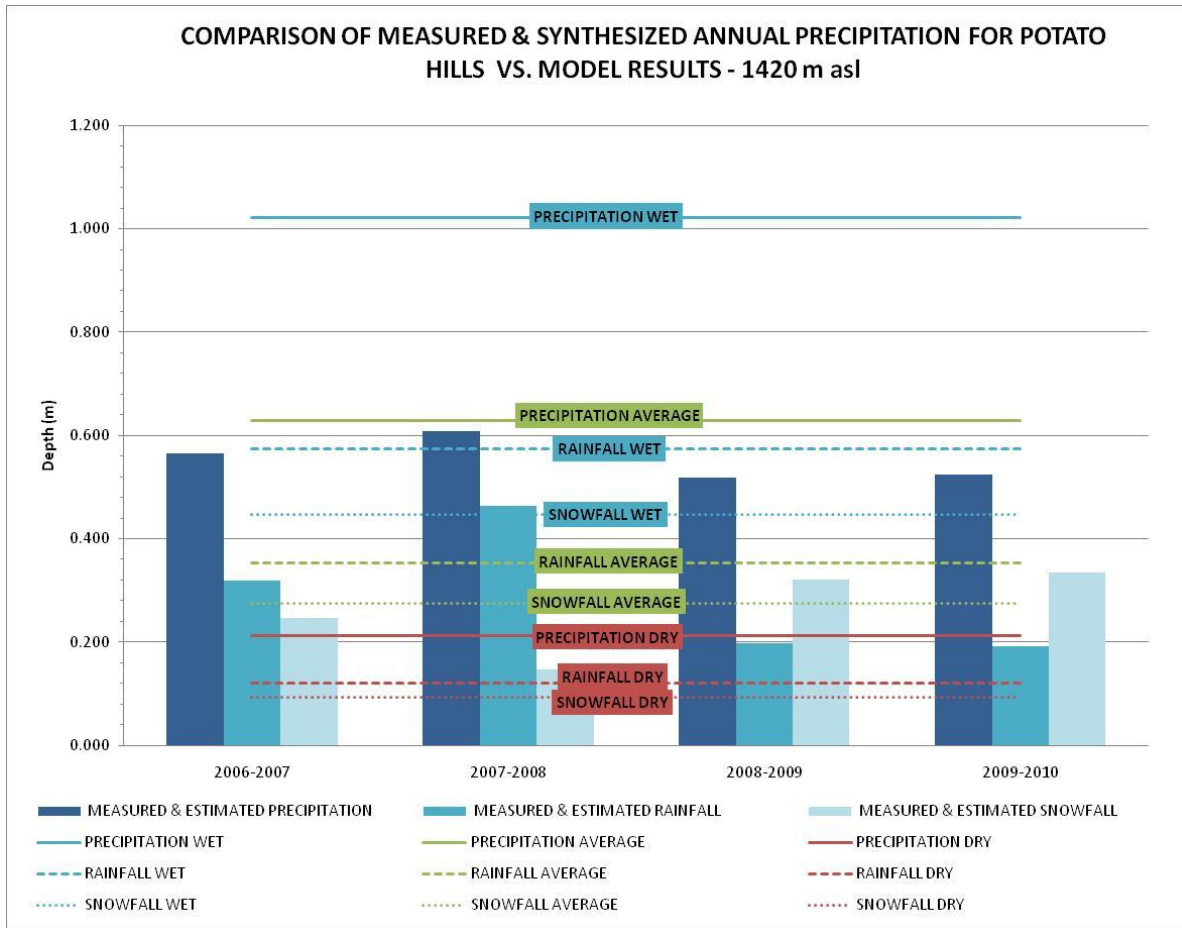




Figure 4-2: Comparison of Average, Wet, and Dry Precipitation to Measured Monthly Precipitation

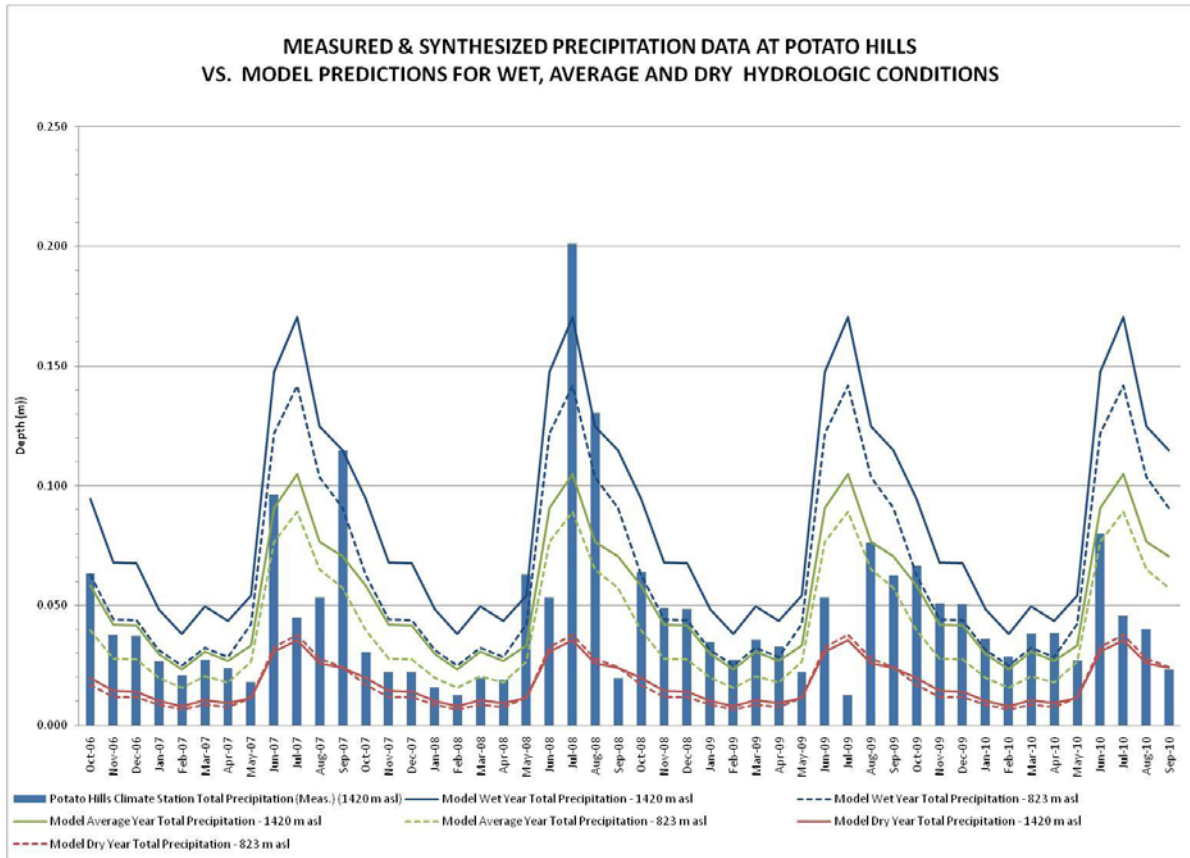


Figure 4-3: Comparison of Average, Wet, and Dry Precipitation to Measured Monthly Rainfall

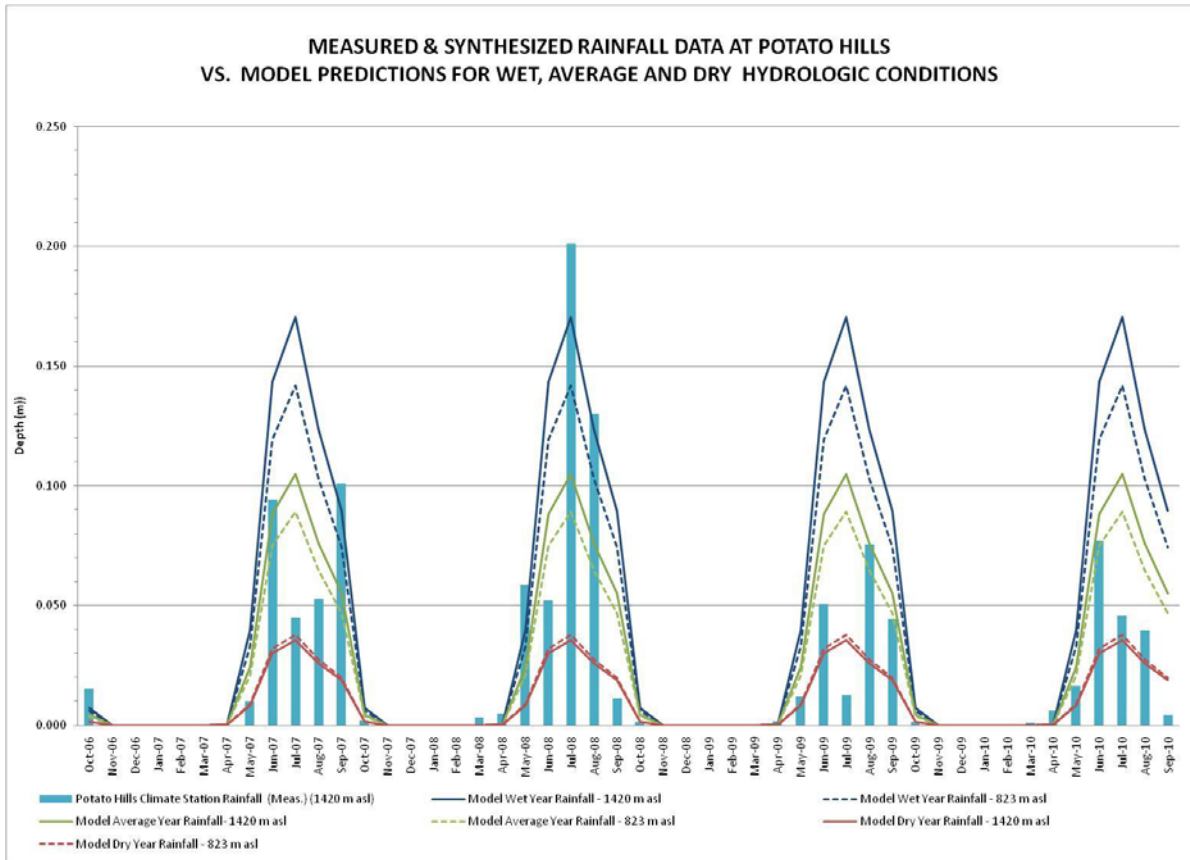


Figure 4-4: Comparison of Average, Wet, and Dry Precipitation to Measured Monthly Snowfall

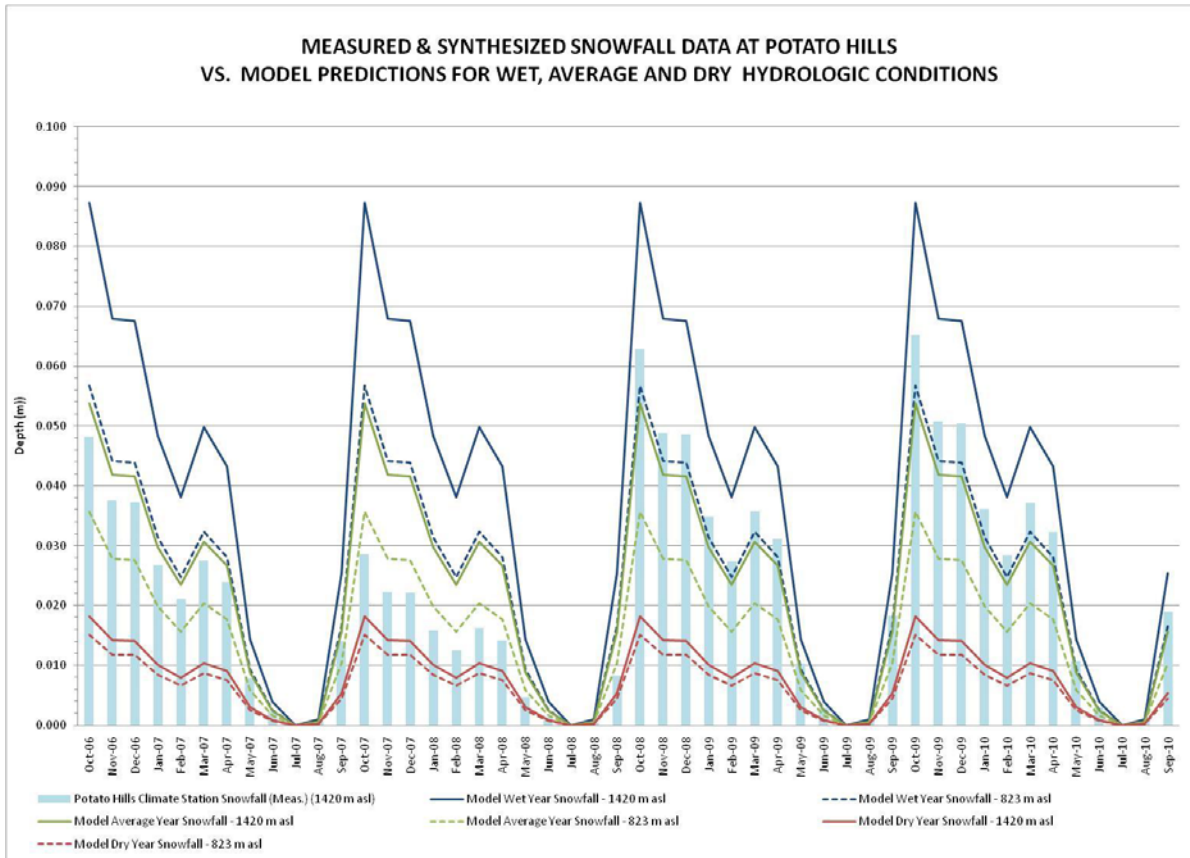


Figure 4-5: Synthetic Net Precipitation vs Synthetic Streamflow (Q) for Dublin Gulch at W1

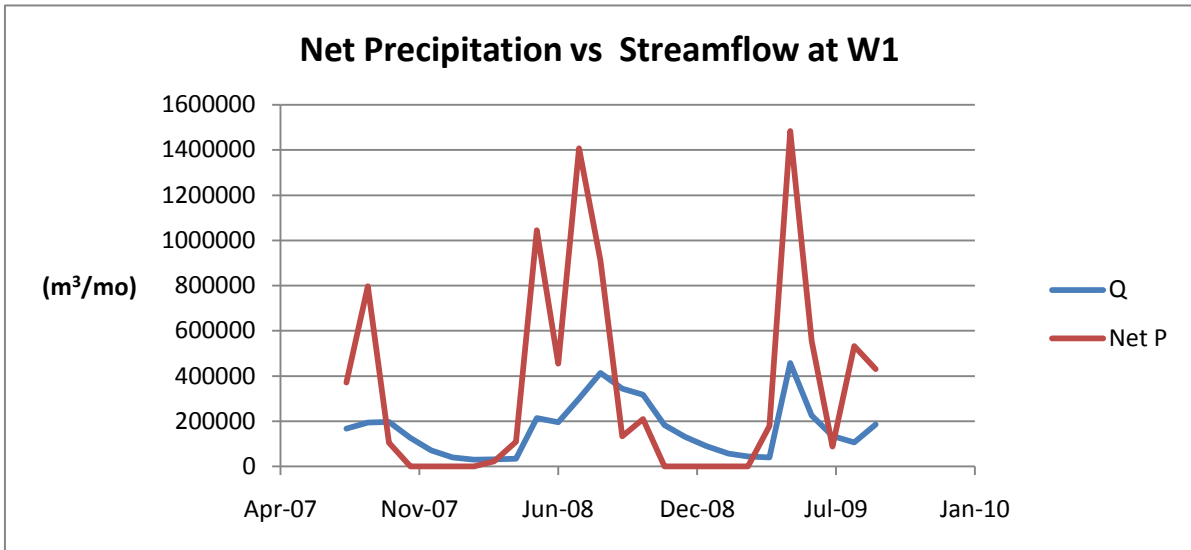


Figure 4-6: Synthetic Net Precipitation vs Predicted Net Precipitation

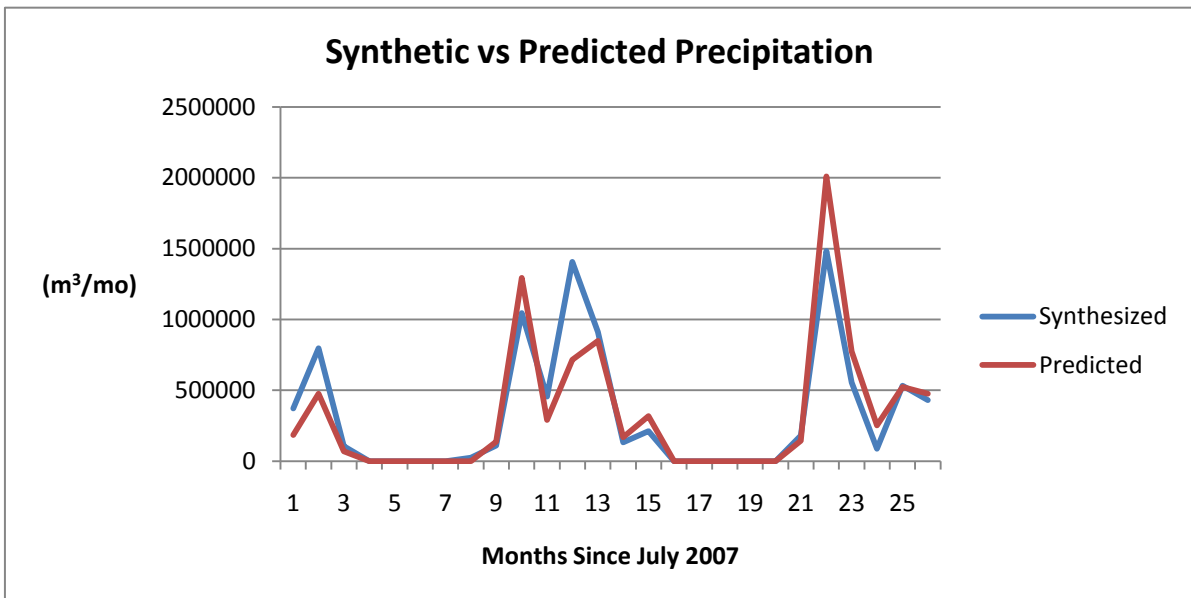


Figure 4-7: Synthetic Streamflow vs Predicted Streamflow (Q) for Dublin Gulch at W1

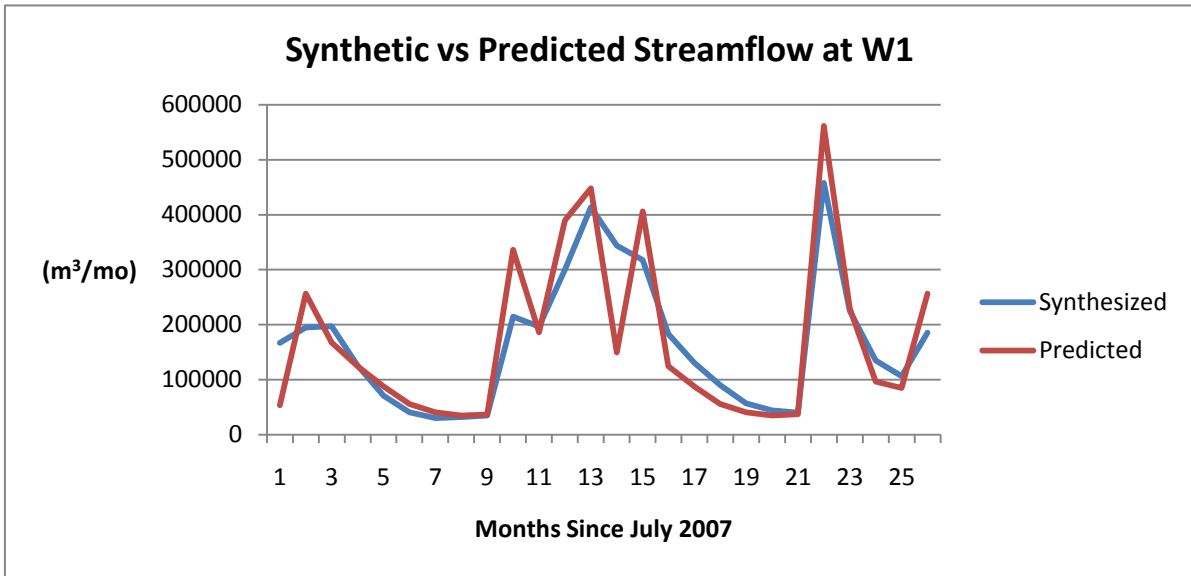


Figure 4-8: Synthetic Baseflow vs Predicted Baseflow (GWout) for Dublin Gulch at W1

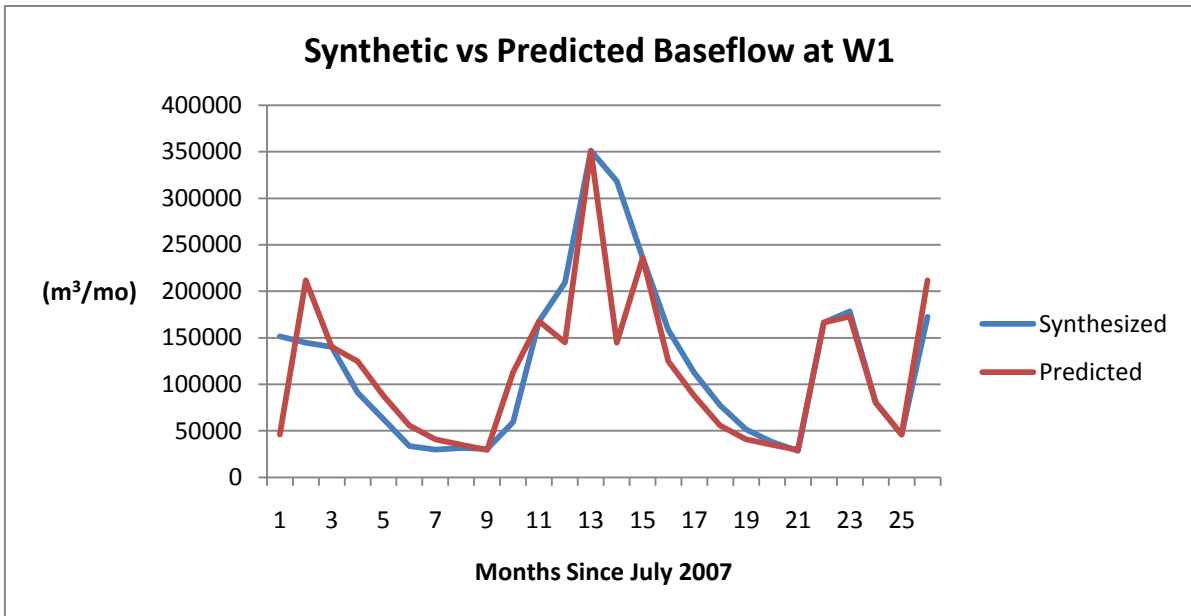


Figure 4-9: Correlation between Monthly Synthetic and Predicted *Net P* for Aug 2007 to Sep 2009 Calibration Period

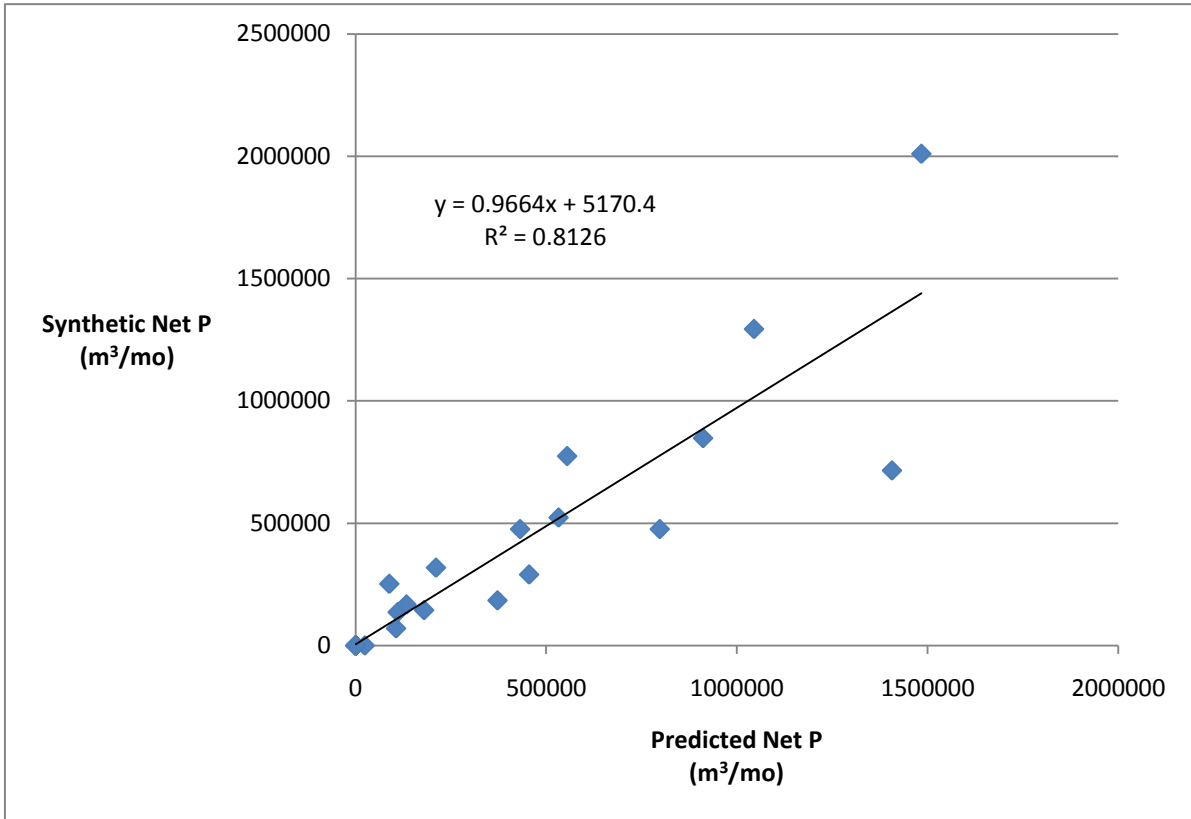
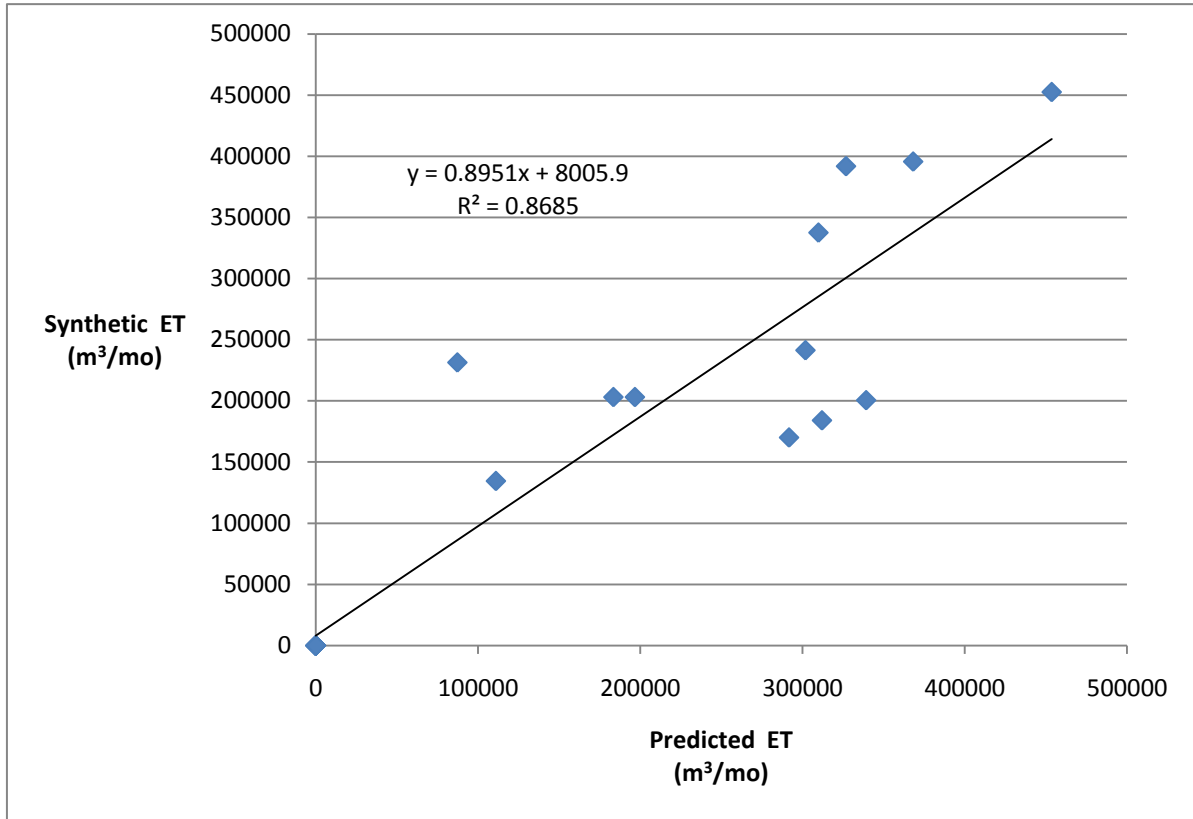
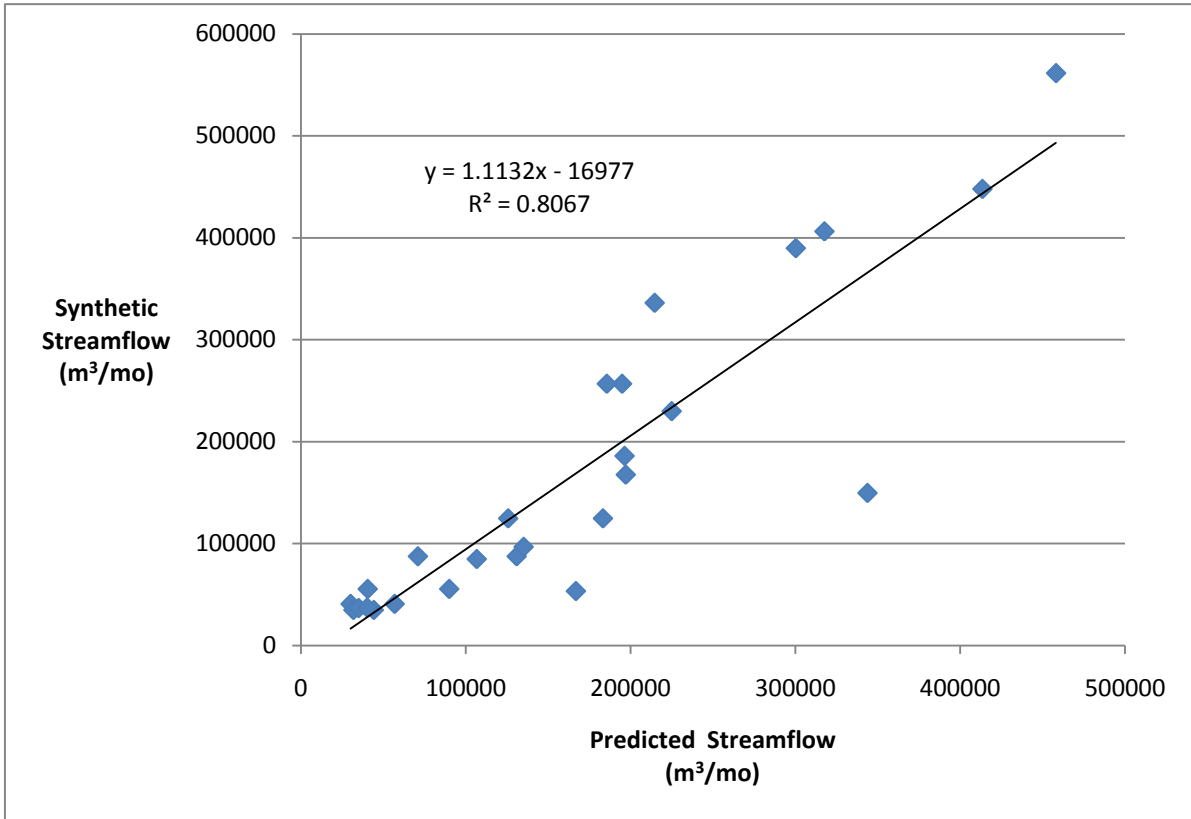


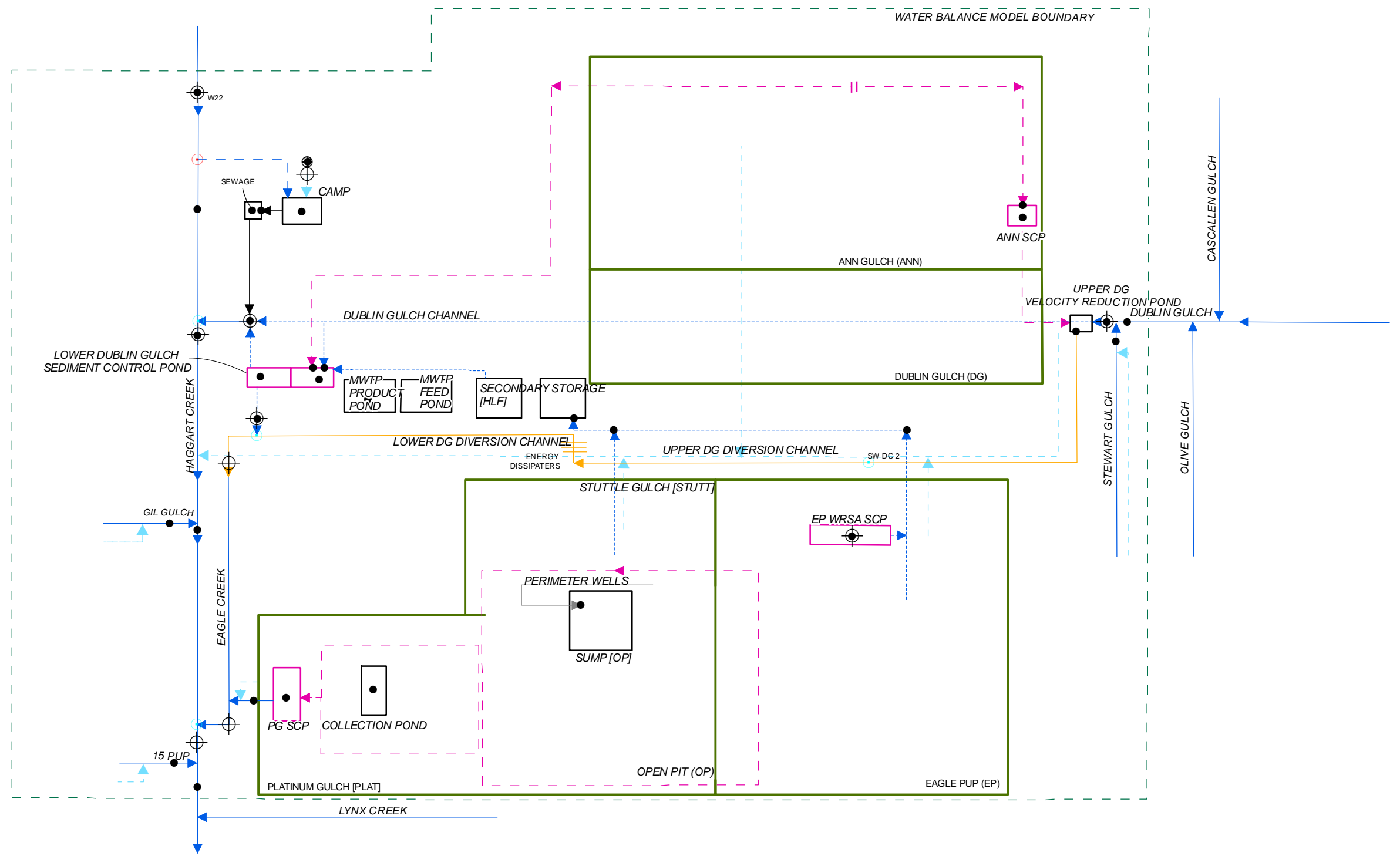
Figure 4-10: Correlation between Monthly Synthetic and Predicted Evapotranspiration for Aug 2007 to Sep 2009 Calibration Period



**Figure 4-11: Correlation between Monthly Synthetic and Predicted Streamflow at W1 for Aug 2007 to Sep 2009 Calibration Period**







- Legend**
- Discharge to Channel
  - Withdrawal from Channel
  - Environmental Monitoring Location
  - Model Node
  - Groundwater Well
  - Water Balance Model Boundary
  - Drainage Basin
  - Surface Water Storage
  - Mine Facility
  - Sediment Control Pond
  - Contact Surface Water
  - Contact Groundwater
  - Optional Routing
  - Diversion Channel (DC)
  - Diverted Runoff (DRO)
  - Non-Contact Surface Water (SW)
  - Surface Water Intake (Temporary)
  - Surface Water Temporary
  - Non-Contact Captured Groundwater (GW)
  - Regional Groundwater
  - Energy Dissipaters

1053550-197

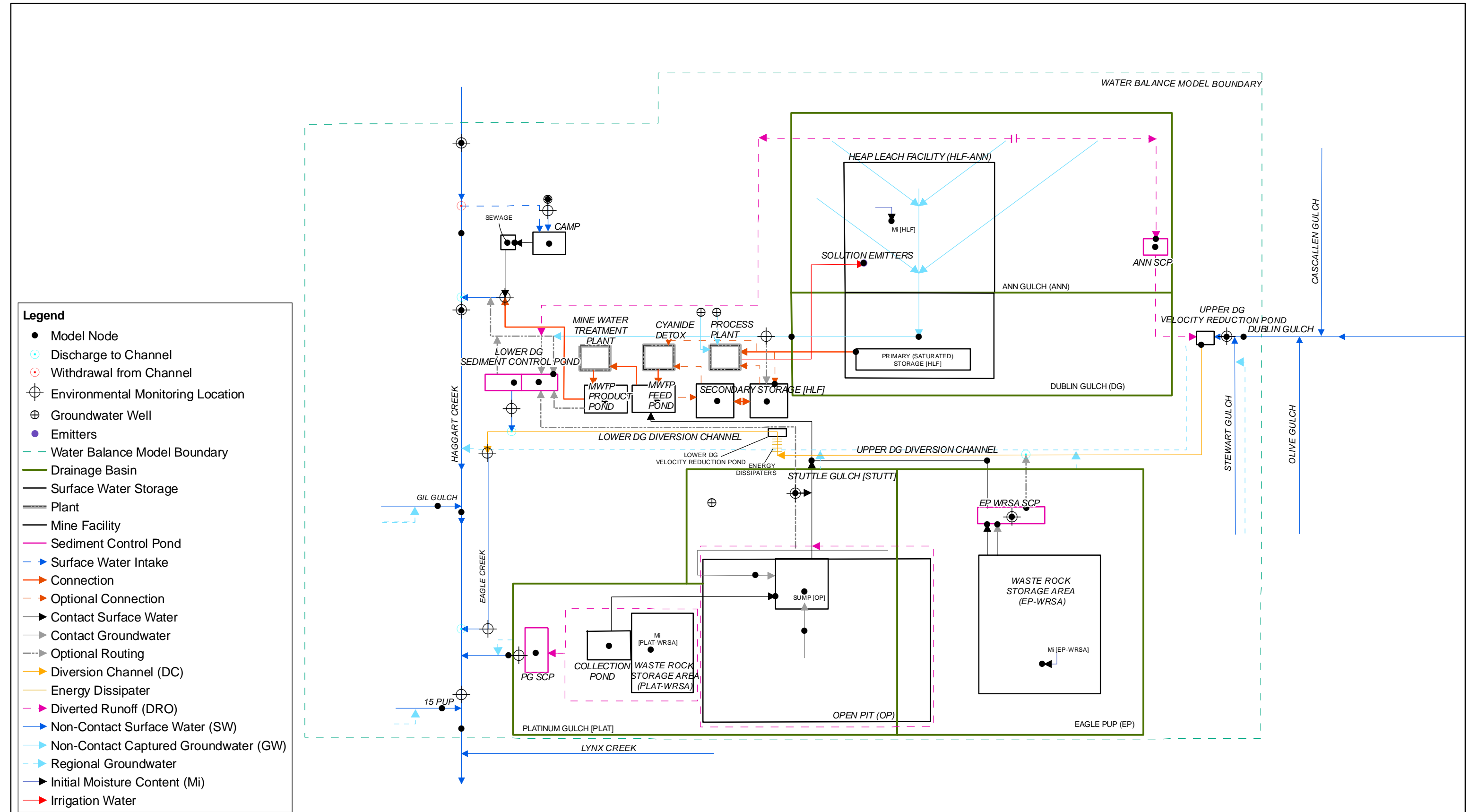


Stantec  
 4370 Dominion Street  
 Burnaby, British Columbia  
 V5G 4L7  
 Tel. (604) 436 3014  
 Fax. (604) 436 3752



**WATER MANAGEMENT SCHEMATIC - SURFACE WATER MODEL CONSTRUCTION**  
 EAGLE GOLD PROPERTY  
 YUKON TERRITORY


PROJECTION	N/A	DRAWN BY	TG/JB
DATUM	N/A	CHECKED BY	LS
DATE	29-October-2010	FIGURE NO.	5.1-1



**Legend**

- Model Node
- Discharge to Channel
- ⊖ Withdrawal from Channel
- ⊕ Environmental Monitoring Location
- ⊕ Groundwater Well
- Emitters
- - - Water Balance Model Boundary
- ▭ Drainage Basin
- ▭ Surface Water Storage
- ▭ Plant
- ▭ Mine Facility
- ▭ Sediment Control Pond
- ➡ Surface Water Intake
- ➡ Connection
- ➡ Optional Connection
- ➡ Contact Surface Water
- ➡ Contact Groundwater
- ➡ Optional Routing
- ➡ Diversion Channel (DC)
- ➡ Energy Dissipater
- ➡ Diverted Runoff (DRO)
- ➡ Non-Contact Surface Water (SW)
- ➡ Non-Contact Captured Groundwater (GW)
- ➡ Regional Groundwater
- ➡ Initial Moisture Content (Mi)
- ➡ Irrigation Water

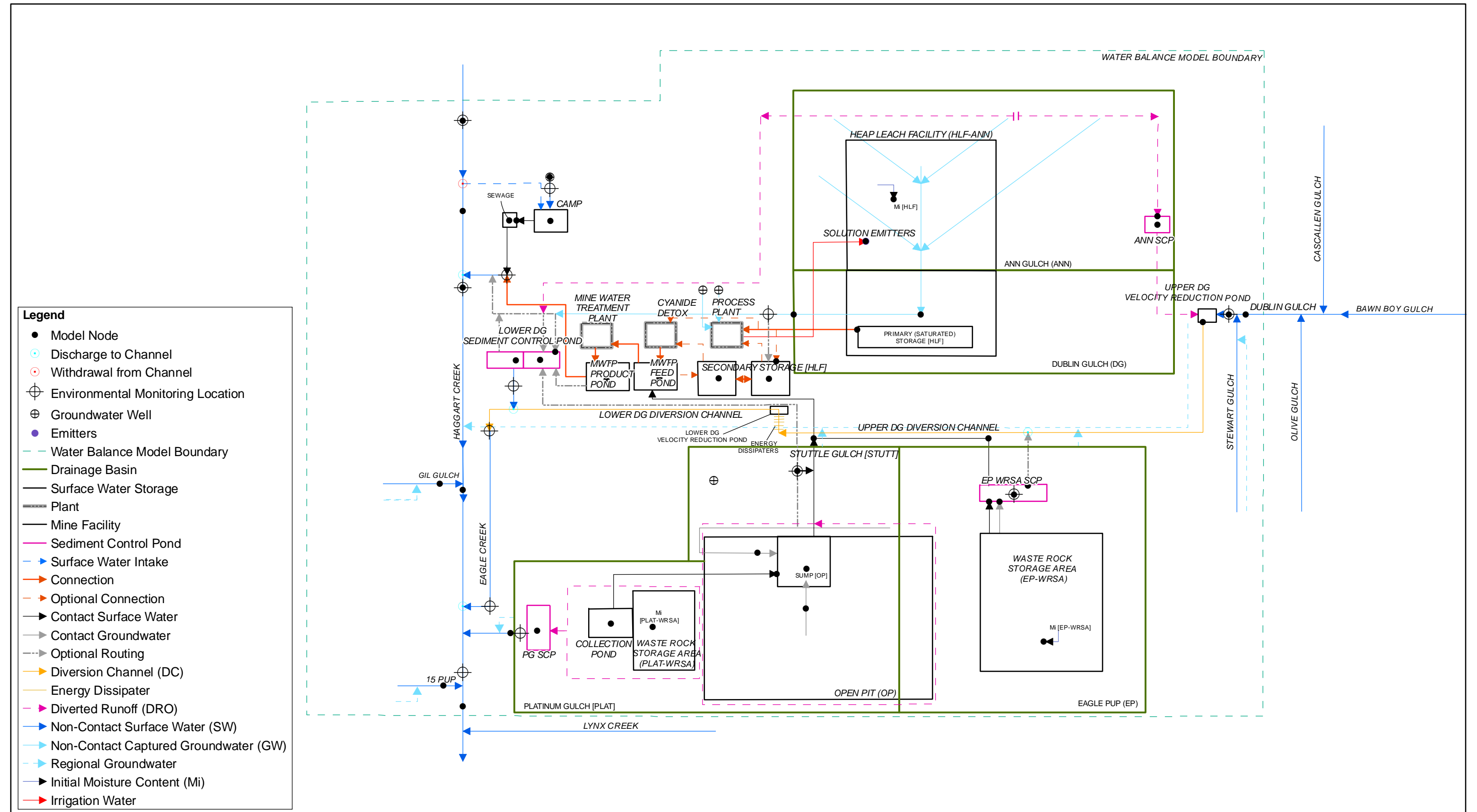
1053550-198c


  
 Stantec  
 4370 Dominion Street  
 Burnaby, British Columbia  
 V5G 4L7  
 Tel. (604) 436 3014  
 Fax. (604) 436 3752


  
 Victoria  
 GOLD CORP

**WATER MANAGEMENT SCHEMATIC - SURFACE WATER MODEL**  
**OPERATION**  
 EAGLE GOLD PROPERTY  
 YUKON TERRITORY

PROJECTION	N/A	DRAWN BY	JB
DATUM	N/A	CHECKED BY	SW
DATE	30-November-2010	FIGURE NO.	5.2-1



- Legend**
- Model Node
  - Discharge to Channel
  - ⊕ Withdrawal from Channel
  - ⊕ Environmental Monitoring Location
  - ⊕ Groundwater Well
  - Emitters
  - Water Balance Model Boundary
  - Drainage Basin
  - Surface Water Storage
  - Plant
  - Mine Facility
  - Sediment Control Pond
  - Surface Water Intake
  - Connection
  - Optional Connection
  - Contact Surface Water
  - Contact Groundwater
  - Optional Routing
  - Diversion Channel (DC)
  - Energy Dissipater
  - Diverted Runoff (DRO)
  - Non-Contact Surface Water (SW)
  - Non-Contact Captured Groundwater (GW)
  - Regional Groundwater
  - Initial Moisture Content (Mi)
  - Irrigation Water

Source:1053550-207

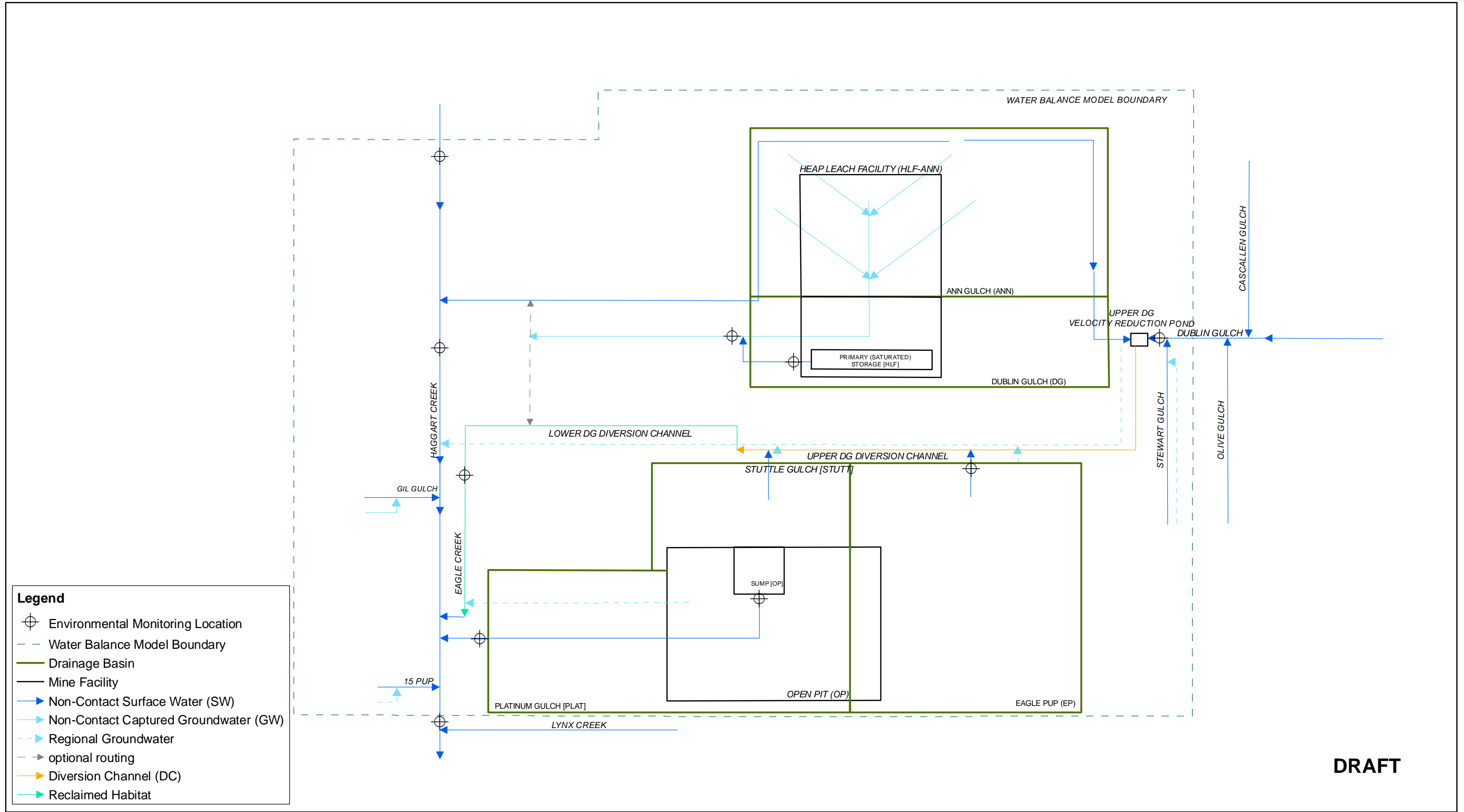


Stantec  
4370 Dominion Street  
Burnaby, British Columbia  
V5G 4L7  
Tel. (604) 436 3014  
Fax. (604) 436 3752



**WATER MANAGEMENT SCHEMATIC - SURFACE WATER MODEL  
CLOSURE AND RECLAMATION**  
EAGLE GOLD PROPERTY  
YUKON TERRITORY


PROJECTION	N/A	DRAWN BY	TG
DATUM	N/A	CHECKED BY	SW
DATE	30-November-2010	FIGURE NO.	5.3-1



- Legend**
- ⊕ Environmental Monitoring Location
  - - - Water Balance Model Boundary
  - Drainage Basin
  - Mine Facility
  - Non-Contact Surface Water (SW)
  - Non-Contact Captured Groundwater (GW)
  - - - Regional Groundwater
  - - - optional routing
  - Diversion Channel (DC)
  - Reclaimed Habitat

**DRAFT**

Source:1053550-206



Stantec  
4370 Dominion Street  
Burnaby, British Columbia  
V5G 4L7  
Tel. (604) 436 3014  
Fax. (604) 436 3752



Victoria  
GOLD CORP

**WATER MANAGEMENT SCHEMATIC - SURFACE WATER MODEL  
POST-CLOSURE MONITORING**  
EAGLE GOLD PROPERTY  
YUKON TERRITORY

PROJECTION	N/A	DRAWN BY	TG
DATUM	N/A	CHECKED BY	-
DATE	9-November-2010	FIGURE NO.	<b>5.4-1</b>

R:\2009\Fiscal\1053550\_EagleGold\GIS\MXD

Figure 6.2-1: WATER BALANCE FLOW SHEET FOR BASELINE

Baseline: October-September (m<sup>3</sup>/year)

Hydroclimatic Scenario:

1

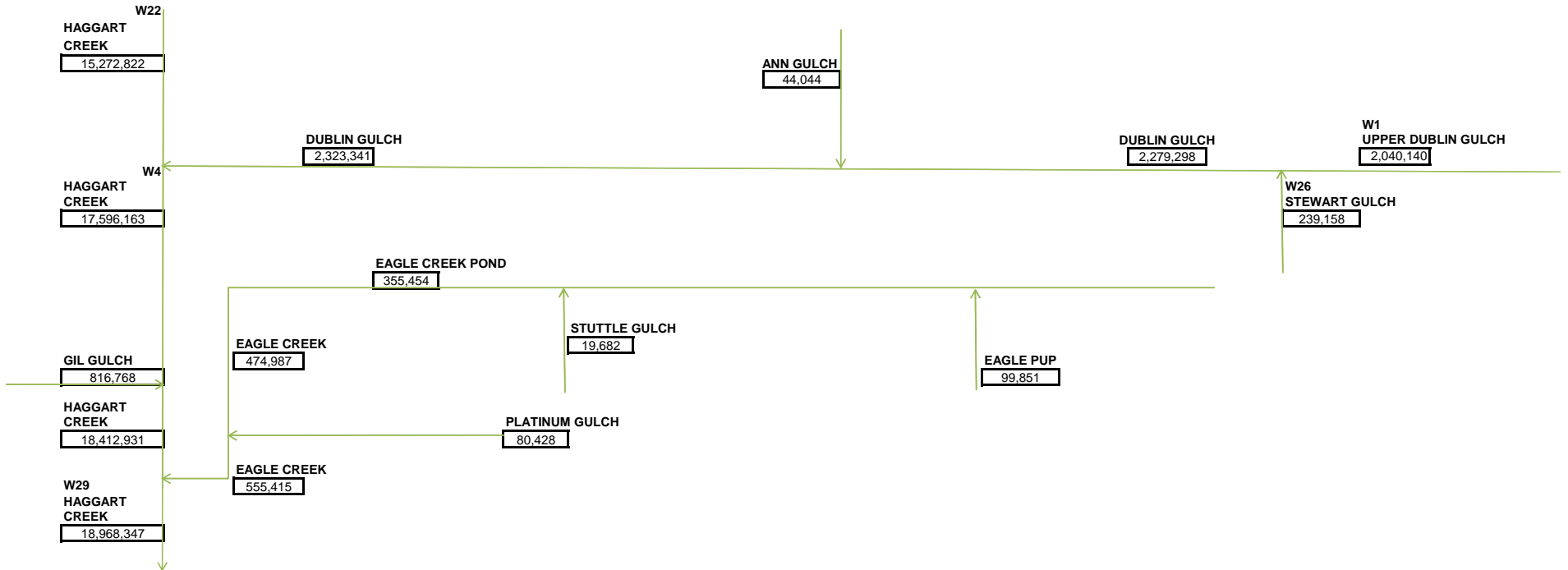


Figure 6.2-2 - WATER BALANCE FLOW SHEET FOR OPERATIONS  
 Operation: Final Year October - September (m<sup>3</sup>/year)  
 Hydroclimatic Scenario: 1

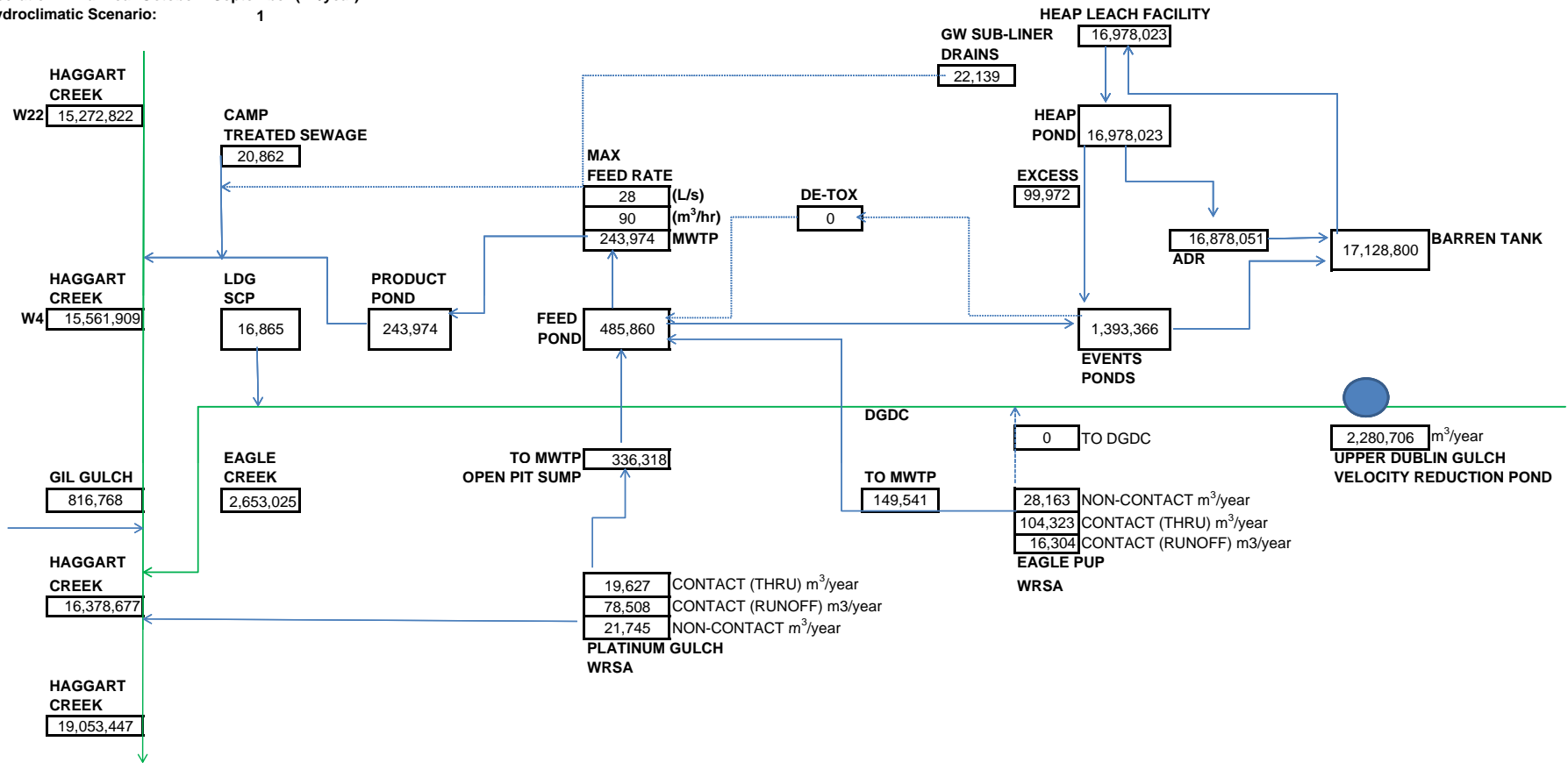


Figure 6.3-1 - WATER MANAGEMENT FLOW SHEET FOR CLOSURE AND RECLAMATION  
 Closure & Reclamation (First Year of Draindown/HLF Cap July - June)  
 Hydroclimatic Scenario: 1

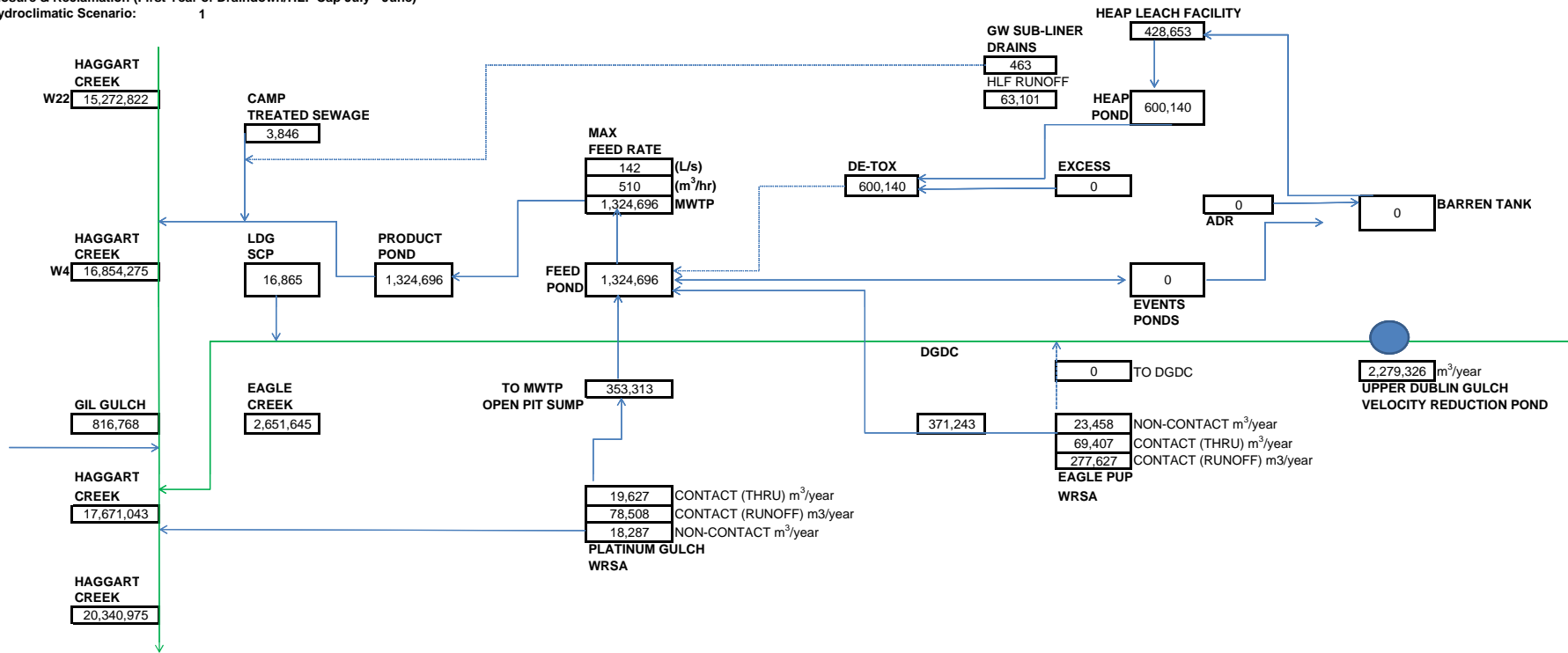


Figure 7.4-1: Platinum Gulch Waste Rock Storage Cover Options

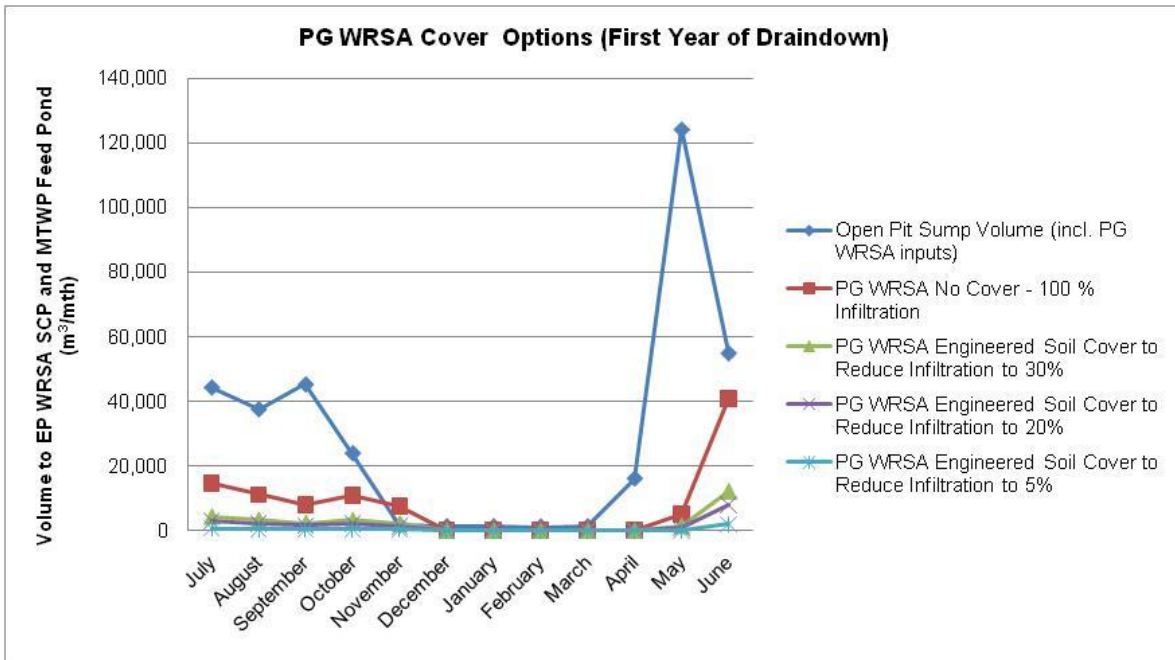




Figure 7.4-2: Eagle Pup Waste Rock Storage Cover Options

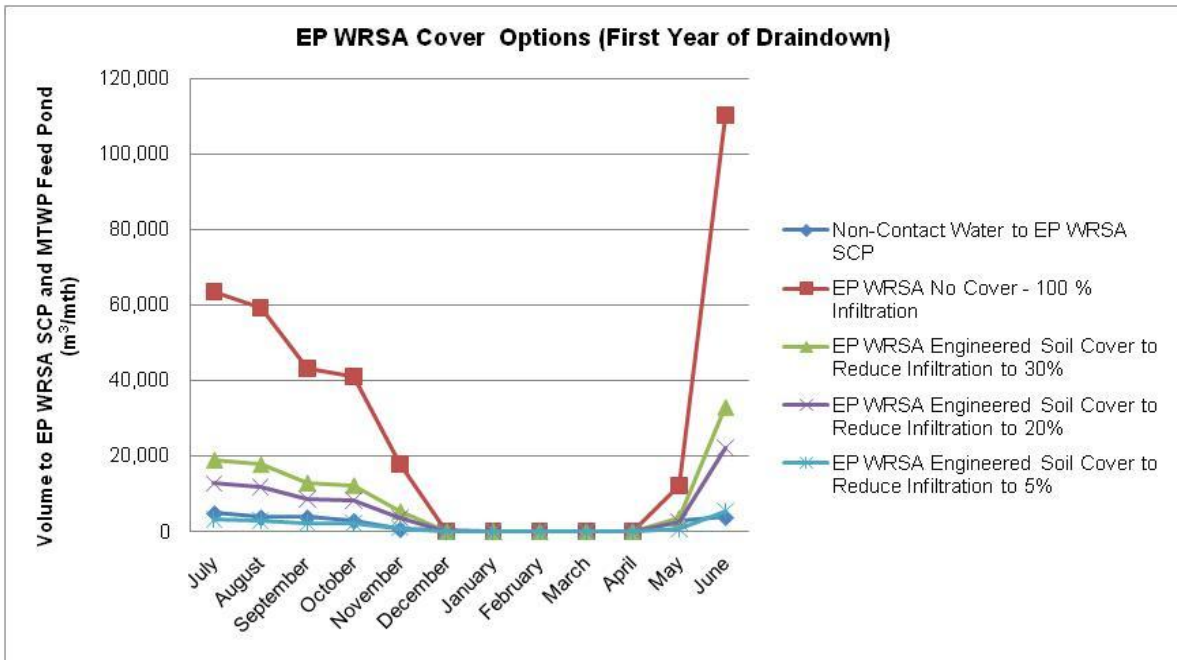
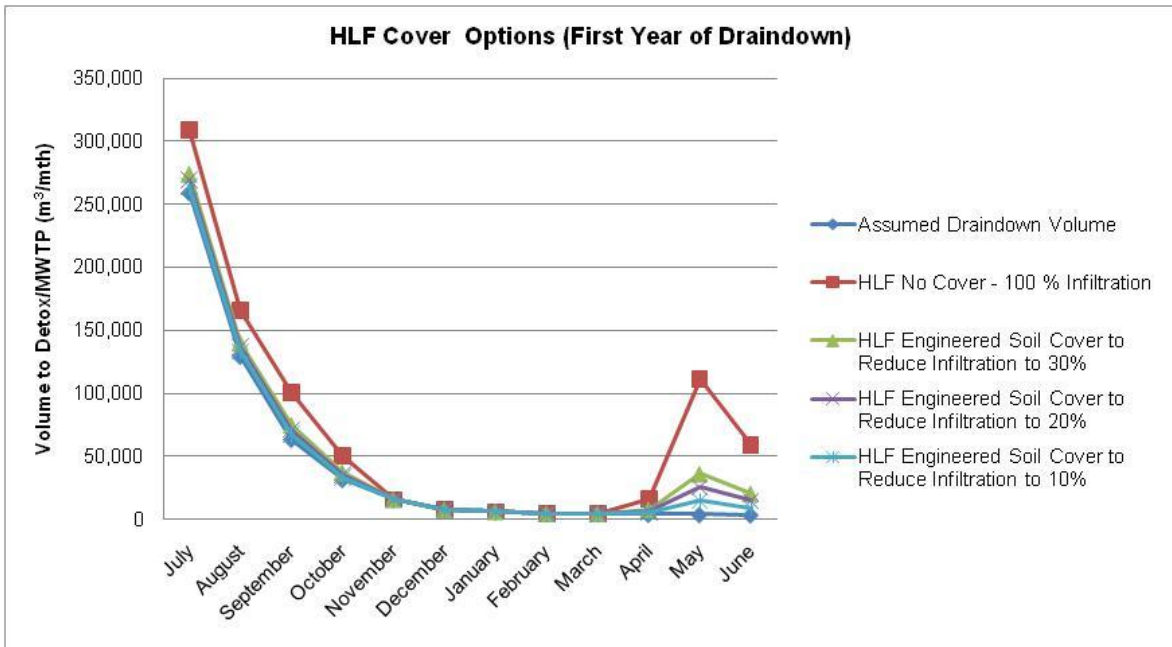


Figure 7.4-3: Heap Leach Facility Cover Options



# **APPENDIX A**

## **Climate and Streamflow Water Balance Input Data**



**Table A-1.1: Synthesized Precipitation Database for Potato Hills (August 2007 – September 2010)**

Month	Monthly Precipitation	Annual Total Precipitation	Monthly Rainfall	Annual Total Rainfall	Monthly Snowfall	Annual Total Snowfall	Annual Total Snowfall before Sublimation	Mayo Rainfall	Calumet Snowpack (1,300 m asl)
	(mm)	(mm)	(mm)	(mm)	(SWE mm)	(SWE mm)	(SWE mm)	(mm)	(SWE mm)
(Water Year)	P <sub>A</sub> [2]	P <sub>TOTAL</sub>	R <sub>A</sub> [3]	R <sub>TOTAL</sub>	S <sub>A</sub> [4]	S-SUB <sub>TOTAL</sub>	S <sub>TOTAL</sub>	R <sub>TOTAL</sub>	S-SUB <sub>TOTAL</sub>
Oct-06	63	565	15	318	48	206	247	12	186
Nov-06	38		0		38			0	
Dec-06	37		0		37			0	
Jan-07	27		0		27			0	
Feb-07	21		0		21			0	
Mar-07	27		0		27			0	
Apr-07	24		0		24			0	
May-07	18		10		8			8	
Jun-07	96		94		2			72	
Jul-07	45		45		0			35	
Aug-07	53	53	1	41					
Sep-07	115	101	14	56					
Oct-07	31	609	2	463	29	122	146	2	–
Nov-07	22		0		22			0	–
Dec-07	22		0		22			0	–
Jan-08	16		0		16			0	–
Feb-08	12		0		12			0	–
Mar-08	20		3		16			0	104
Apr-08	19		5		14			1	110
May-08	63		58		5			30	158
Jun-08	53		52		1			28	–
Jul-08	201		201		0			95	–
Aug-08	130	130	0	89	–				
Sep-08	19	11	8	51	–				
Oct-08	64	519	1	198	63	–	321	15	–
Nov-08	49		0		49	–		0	–

Month	Monthly Precipitation	Annual Total Precipitation	Monthly Rainfall	Annual Total Rainfall	Monthly Snowfall	Annual Total Snowfall	Annual Total Snowfall before Sublimation	Mayo Rainfall	Calumet Snowpack (1,300 m asl)
	(mm)	(mm)	(mm)	(mm)	(SWE mm)	(SWE mm)	(SWE mm)	(mm)	(SWE mm)
(Water Year)	P <sub>A</sub> [2]	P <sub>TOTAL</sub>	R <sub>A</sub> [3]	R <sub>TOTAL</sub>	S <sub>A</sub> [4]	S-SUB <sub>TOTAL</sub>	S <sub>TOTAL</sub>	R <sub>TOTAL</sub>	S-SUB <sub>TOTAL</sub>
Dec-08	49		0		49	-		0	-
Jan-09	35		0		35	-		0	-
Feb-09	27		0		27	-		0	-
Mar-09	36		0		36	178		0	-
Apr-09	33		2		31	268		0	242
May-09	22		12		10	260		9	235
Jun-09	53		51		3	-		38	-
Jul-09	13		13		0	-		13	-
Aug-09	76		75		1	-		60	-
Sep-09	63		44		18	-		49	-
Oct-09	66	525	1	191	65	-	334	10	-
Nov-09	51		0		51	-		0	-
Dec-09	50		0		50	-		0	-
Jan-10	36		0		36	-		0	-
Feb-10	28		0		28	-		-	-
Mar-10	38		1		37	199		-	110
Apr-10	38		6		32	278		1	154
May-10	27		16		11	240		19	133
Jun-10	80		77		3	-		-	-
Jul-10	46		46		0	-		-	-
Aug-10	40		39		1	-		-	-
Sep-10	23		4		19	-		-	-

**NOTES:**

No highlight = measured values

Yellow highlight = values estimated based on the following:

[1] From Climate Environmental Baseline Report (Stantec, 2010) (CALIBRATION\_E.G.OnSiteData.SummaryTables.xlsx)

[2] Precipitation values are calculated by adding monthly snowfall and rainfall values.

[3] Partial monthly data exists at Dublin Gulch between October 2006 and August 2007 and May 2009. Estimated rainfall at Dublin Gulch (Potato Hills) is derived from the ratio of the Potato Hills: Mayo monthly rainfall.

[4] Total annual snowfall at Potato Hills is estimated using data from Calumet and distributing the total snowfall according to the monthly snowfall distribution at Keno Hill.

**Table A-2.1: Regional Monthly Precipitation**

Station	Years of Record		Month											
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mayo	1925-2009	Maximum	99.6	36.3	39.4	44.7	46.1	81.3	108.7	100.3	81.4	67.3	52.6	66.8
		Minimum	0.0	0.0	0.0	0.0	4.2	6.9	9.9	4.8	1.5	3.8	0.0	2.0
		Mean	18.5	13.6	10.6	8.5	21.3	36.3	48.2	43.7	32.8	25.9	21.9	20.5
		% Distribution	6.1	4.5	3.5	2.8	7.1	12.0	16.0	14.5	10.9	8.6	7.3	6.8
Dawson	1976-2007	Maximum	41.1	34.1	41.4	25.2	61.4	84.6	99.0	83.4	71.9	71.5	54.8	56.0
		Minimum	4.6	1.4	0.0	0.0	10.3	9.4	10.7	8.2	6.4	7.1	4.8	0.0
		Mean	19.4	12.9	11.0	8.5	28.8	39.2	50.0	43.3	34.0	30.4	25.8	23.4
		% Distribution	5.9	3.9	3.4	2.6	8.8	12.0	15.3	13.3	10.4	9.3	7.9	7.2
Klondike	1966-2007	Maximum	78.7	73.2	69.1	84.1	46.5	101.4	149.6	126.1	120.6	92.8	84.0	82.0
		Minimum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Mean	24.1	22.0	23.6	20.5	17.8	46.8	62.3	57.6	47.6	35.5	30.4	32.8
		% Distribution	5.7	5.2	5.6	4.9	4.2	11.1	14.8	13.7	11.3	8.4	7.2	7.8
Elsa	1948-1965; 1974-1989	Maximum	57.3	51.0	45.4	40.6	56.8	119.8	121.1	99.1	132.1	143.0	105.2	82.6
		Minimum	2.3	7.6	1.4	0.5	4.8	12.2	29.7	8.7	5.8	9.7	16.0	7.0
		Mean	24.3	18.3	14.4	14.2	25.2	32.8	46.9	37.6	32.3	37.3	31.8	31.3
		% Distribution	7.0	5.3	4.1	4.1	7.3	9.5	13.5	10.9	9.3	10.8	9.2	9.0
Keno Hill	1974-1982	Maximum	86.3	45.0	65.9	61.7	59.9	117.0	113.7	109.0	103.4	111.2	70.0	97.8
		Minimum	11.0	5.6	11.8	8.1	3.4	31.5	35.5	20.3	14.2	31.6	27.2	6.4
		Mean	28.1	22.1	28.9	25.2	24.5	60.9	69.6	51.1	51.2	53.7	39.4	39.2
		% Distribution	5.7	4.5	5.8	5.1	5.0	12.3	14.1	10.3	10.4	10.9	8.0	7.9

**NOTES:**

All values in millimeters  
Data from Environment Canada

**Table A-2.2: Regional Monthly Rainfall**

Station		Month											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mayo	Maximum	6.8	0.3	16.0	39.6	46.1	81.3	108.7	100.3	81.4	32.2	6.6	5.2
	Minimum	0.0	0.0	0.0	0.0	3.0	6.9	9.9	4.8	0.0	0.0	0.0	0.0
	Mean	0.1	0.0	0.4	2.9	20.2	36.3	48.2	43.6	30.1	8.5	0.7	0.1
	% Distribution	0.1	0.0	0.2	1.5	10.6	19.0	25.2	22.8	15.8	4.5	0.4	0.1
Dawson	Maximum	1.2	1.0	4.4	12.4	61.4	84.6	99.0	83.4	61.4	39.0	2.0	7.7
	Minimum	0.0	0.0	0.0	0.0	10.3	9.4	10.7	8.2	3.2	0.0	0.0	0.0
	Mean	0.1	0.0	0.3	2.6	26.8	39.2	50.0	43.0	30.3	9.0	0.1	0.4
	% Distribution	0.0	0.0	0.1	1.3	13.3	19.4	24.8	21.3	15.0	4.5	0.0	0.2
Klondike	Maximum	0.0	1.0	0.0	4.0	46.5	101.4	149.6	126.1	104.9	33.1	7.0	0.0
	Minimum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Mean	0.0	0.0	0.0	0.2	13.4	46.3	62.3	56.9	41.0	4.9	0.3	0.0
	% Distribution	0.0	0.0	0.0	0.1	5.9	20.5	27.6	25.3	18.2	2.2	0.1	0.0
Elsa	Maximum	12.0	1.0	0.0	10.0	56.8	119.8	121.1	99.1	132.1	26.7	20.3	8.0
	Minimum	0.0	0.0	0.0	0.0	0.0	12.2	29.7	8.7	5.8	0.0	0.0	0.0
	Mean	0.4	0.0	0.0	1.0	21.4	32.8	46.9	35.1	29.4	8.1	0.8	0.5
	% Distribution	0.2	0.0	0.0	0.6	12.2	18.6	26.6	19.9	16.7	4.6	0.5	0.3
Keno Hill	Maximum	0.0	0.0	0.0	1.0	36.4	117.0	113.7	106.2	70.9	13.0	0.0	0.0
	Minimum	0.0	0.0	0.0	0.0	0.8	23.4	35.5	20.3	12.2	0.0	0.0	0.0
	Mean	0.0	0.0	0.0	0.1	16.2	58.6	69.6	50.5	36.5	3.0	0.0	0.0
	% Distribution	0.0	0.0	0.0	0.1	6.9	25.0	29.7	21.5	15.6	1.3	0.0	0.0

**NOTES:**

All values in millimeters  
 Data from Environment Canada



**Table A-2.3: Regional Monthly Snowfall**

Station		Month											
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mayo	Maximum	99.6	51.6	44.2	35.6	22.6	2.8	0.0	7.6	33.5	58.5	73.4	66.8
	Minimum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
	Mean	22.4	16.7	12.1	6.4	1.1	0.0	0.0	0.1	2.7	19.6	25.3	24.4
	% Distribution	17.1	12.7	9.3	4.9	0.9	0.0	0.0	0.1	2.1	15.0	19.3	18.6
Dawson	Maximum	65.4	37.8	42.6	28.2	22.5	0.0	0.0	9.4	25.4	62.7	71.9	56.2
	Minimum	5.2	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0	5.8	0.0
	Mean	27.1	18.0	13.1	7.7	2.1	0.0	0.0	0.3	3.9	25.5	35.6	30.9
	% Distribution	16.5	11.0	8.0	4.7	1.3	0.0	0.0	0.2	2.4	15.5	21.7	18.8
Klondike	Maximum	24.1	21.9	23.6	20.3	5.0	0.6	0.0	0.6	6.6	30.9	30.6	33.8
	Minimum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Mean	24.1	21.9	23.6	20.3	5.0	0.6	0.0	0.6	6.6	30.9	30.1	32.8
	% Distribution	12.3	11.1	12.0	10.3	2.5	0.3	0.0	0.3	3.4	15.7	15.3	16.7
Elsa	Maximum	57.3	51.0	45.4	36.8	24.9	0.0	0.0	14.5	15.8	124.2	84.8	82.6
	Minimum	2.3	7.6	1.4	0.5	0.0	0.0	0.0	0.0	0.0	1.3	16.0	7.0
	Mean	24.0	18.3	14.2	13.2	3.8	0.0	0.0	0.5	2.9	29.2	31.0	30.8
	% Distribution	14.3	10.9	8.4	7.9	2.3	0.0	0.0	0.3	1.7	17.4	18.5	18.4
Keno Hill	Maximum	86.3	45.0	65.9	60.7	27.4	10.2	0.0	2.8	32.5	106.9	70.0	97.8
	Minimum	11.0	5.6	11.8	8.1	0.0	0.0	0.0	0.0	0.0	31.6	27.2	6.4
	Mean	28.1	22.1	28.9	25.1	8.3	2.3	0.0	0.6	14.7	50.7	39.4	39.2
	% Distribution	10.8	8.5	11.1	9.7	3.2	0.9	0.0	0.2	5.7	19.5	15.2	15.1

**NOTES:**

All values in centimeters

Data from Environment Canada

**Table A-3.1: Summary of Synthesized Monthly Mean and 7-day Monthly Minimum Streamflows for Dublin Gulch, Eagle Creek and Haggart Creek Basin Streams**

**Dublin Gulch Basin**

<b>Drainage Basin</b>	<b>Dublin Gulch Basin (all flows in L/S)</b>							
<b>Watercourse</b>	<b>Upper Dublin Gulch (W1)</b>		<b>Stewart Gulch (W26)</b>		<b>Ann Gulch (W32)</b>		<b>Dublin Gulch U/S Haggart Creek (W21)</b>	
<b>Month – Year</b>	<b>Monthly Mean</b>	<b>7-Day Monthly Minimum</b>	<b>Monthly Mean</b>	<b>7-Day Monthly Minimum</b>	<b>Monthly Mean</b>	<b>7-Day Monthly Minimum</b>	<b>Monthly Mean</b>	<b>7-Day Monthly Minimum</b>
Aug-07	62.3	56.6	8.2	4.8	2.03	1.38	59.0	51.0
Sep-07	75.2	55.8	5.8	4.3	1.59	1.29	81.2	49.1
Oct-07	73.6	52.4	6.8	3.0	1.74	1.00	73.5	49.5
Nov-07	48.5	35.1	3.6	0.6	1.06	0.28	29.2	17.3
Dec-07	26.5	23.3	0.0	0.0	0.00	0.00	12.7	11.0
Jan-08	15.1	12.6	0.0	0.0	0.00	0.00	6.9	5.6
Feb-08	12.0	12.0	0.0	0.0	0.00	0.00	5.3	5.2
Mar-08	11.9	11.8	0.0	0.0	0.00	0.00	5.0	4.9
Apr-08	13.5	11.7	0.0	0.0	0.00	0.00	5.8	4.7
May-08	80.1	22.2	10.9	0.2	2.36	0.08	72.8	10.8
Jun-08	75.8	64.7	9.9	7.4	2.32	1.89	76.3	63.9
Jul-08	112.1	78.2	18.3	10.5	3.57	2.41	93.3	64.9
Aug-08	154.4	131.1	25.5	18.6	4.50	3.62	201.7	132.6
Sep-08	132.6	122.9	12.0	10.9	2.66	2.49	157.9	147.2
Oct-08	118.6	88.0	7.3	4.3	1.85	1.30	122.4	78.9
Nov-08	70.7	61.2	2.9	2.2	0.99	0.81	48.7	35.6
Dec-08	48.9	42.0	1.2	0.7	0.54	0.37	24.7	20.3
Jan-09	33.6	28.9	0.1	0.0	0.10	0.00	15.7	13.2
Feb-09	22.7	20.6	0.0	0.0	0.00	0.00	10.0	8.9
Mar-09	16.5	14.2	0.0	0.0	0.00	0.00	6.9	5.8
Apr-09	15.5	11.0	0.3	0.0	0.08	0.00	7.9	4.9
May-09	171.1	62.2	32.0	6.8	5.08	1.75	170.0	58.2
Jun-09	86.8	68.9	12.5	8.3	2.71	2.05	88.1	61.4
Jul-09	50.5	30.1	4.9	3.2	1.41	1.04	20.4	7.6
Aug-09	39.8	17.1	4.2	1.4	1.18	0.58	16.8	4.7
Sep-09	71.6	66.6	15.6	11.6	3.18	2.60	58.0	47.4

## Eagle Creek Basin

Drainage Basin	Eagle Creek Basin (all flows in L/s)							
Watercourse	Eagle Pup (W9)		Stuttle Gulch (W10)		Eagle Creek (W27)		Platinum Gulch (W34)	
Month – Year	Monthly Mean	7-Day Monthly Minimum	Monthly Mean	7-Day Monthly Minimum	Monthly Mean	7-Day Monthly Minimum	Monthly Mean	7-Day Monthly Minimum
Aug-07	5.95	4.30	1.19	0.86	28.6	20.7	3.30	2.25
Sep-07	4.11	3.40	0.82	0.68	19.8	16.4	2.59	2.10
Oct-07	3.22	2.93	0.64	0.59	15.5	14.1	2.82	1.62
Nov-07	1.17	0.72	0.23	0.14	5.6	3.5	1.72	0.45
Dec-07	0.48	0.39	0.10	0.08	2.3	1.9	0.00	0.00
Jan-08	0.24	0.19	0.05	0.04	1.1	0.9	0.00	0.00
Feb-08	0.17	0.16	0.03	0.03	0.8	0.8	0.00	0.00
Mar-08	0.15	0.15	0.03	0.03	0.7	0.7	0.00	0.00
Apr-08	0.21	0.14	0.04	0.03	1.0	0.7	0.00	0.00
May-08	3.11	0.49	0.62	0.10	15.0	2.4	3.84	0.12
Jun-08	4.99	4.39	1.00	0.88	24.0	21.1	3.77	3.08
Jul-08	4.99	4.48	1.00	0.90	24.0	21.5	5.80	3.92
Aug-08	6.97	4.28	1.39	0.86	33.5	20.6	7.32	5.89
Sep-08	5.81	4.91	1.16	0.98	28.0	23.6	4.33	4.06
Oct-08	6.64	3.48	1.33	0.70	31.9	16.7	3.02	2.12
Nov-08	1.76	1.28	0.35	0.26	8.5	6.2	1.62	1.32
Dec-08	0.90	0.72	0.18	0.14	4.3	3.4	0.88	0.60
Jan-09	0.53	0.43	0.11	0.09	2.5	2.1	0.16	0.00
Feb-09	0.32	0.28	0.06	0.06	1.6	1.4	0.00	0.00
Mar-09	0.22	0.18	0.04	0.04	1.0	0.9	0.00	0.00
Apr-09	0.25	0.13	0.05	0.03	1.2	0.6	0.13	0.00
May-09	7.47	2.75	1.49	0.55	35.9	13.2	8.27	2.84
Jun-09	7.13	6.96	1.43	1.39	34.3	33.5	4.41	3.34
Jul-09	6.69	6.08	1.34	1.22	32.2	29.3	2.01	0.43
Aug-09	5.85	5.12	1.17	1.02	28.1	24.6	1.32	0.00
Sep-09	6.98	5.31	1.40	1.06	33.6	25.5	5.78	4.22
Oct-09	7.16	4.52	1.43	0.90	34.4	21.7	7.42	4.86

## Haggart Creek Basin

Drainage Basin Haggart Creek Basin (all flows in L/s)										
Watercourse	Haggart Creek U/S DG (W22)		Haggart Creek D/S DG (W4)		Gil Gulch (W33)		15 Pup (W35)		Haggart Creek U/S Lynx (W5)	
Month – Year	Monthly Mean	7-Day Monthly Minimum	Monthly Mean	7-Day Monthly Minimum	Monthly Mean	7-Day Monthly Minimum	Monthly Mean	7-Day Monthly Minimum	Monthly Mean	7-Day Monthly Minimum
Aug-07	602	536	722	653	30.3	25.1	48.2	39.9	769	684
Sep-07	678	531	854	644	30.7	25.8	48.8	41.0	911	684
Oct-07	472	367	603	463	29.2	21.4	46.5	34.0	912	771
Nov-07	418	302	472	347	17.6	11.8	28.0	18.8	555	409
Dec-07	228	201	262	231	8.6	7.6	13.7	12.0	309	272
Jan-08	130	108	150	124	4.9	4.0	7.8	6.4	176	146
Feb-08	104	103	119	119	3.8	3.8	6.1	6.1	140	140
Mar-08	102	102	118	117	3.8	3.8	6.0	6.0	138	138
Apr-08	116	101	134	116	4.3	3.7	6.9	5.9	157	137
May-08	690	191	793	220	32.5	7.4	51.7	11.8	933	259
Jun-08	593	444	647	463	33.6	28.9	53.4	46.0	714	527
Jul-08	760	468	859	478	47.3	34.3	75.3	54.5	1,029	546
Aug-08	1,014	648	1,369	697	65.3	53.8	103.9	85.6	1,525	731
Sep-08	779	674	1,032	850	52.5	48.3	83.5	76.8	1,178	1,044
Oct-08	930	758	1,260	872	47.8	33.1	76.1	52.6	1,399	1,025
Nov-08	609	527	700	606	24.9	21.1	39.6	33.5	823	713
Dec-08	421	362	484	416	16.5	13.9	26.2	22.2	569	490
Jan-09	289	249	333	286	10.9	9.3	17.3	14.8	391	337
Feb-09	196	178	225	204	7.3	6.6	11.6	10.5	264	240
Mar-09	142	122	163	141	5.3	4.5	8.4	7.2	192	166
Apr-09	134	95	154	109	5.1	3.5	8.2	5.6	181	129
May-09	1,798	661	1,999	734	73.1	31.0	116.3	49.4	2,351	864
Jun-09	833	541	1,109	796	40.8	33.8	64.9	53.7	1,411	1,094
Jul-09	307	254	410	263	26.5	18.2	42.1	28.9	586	423
Aug-09	401	220	445	225	21.6	12.6	34.3	20.0	552	302
Sep-09	591	474	770	596	38.1	32.3	60.6	51.3	813	619
Oct-09	407	317	490	364	33.7	23.9	53.6	38.0	834	428

### NOTES:

± 5% error: Continuous Flow Data Developed from Continuous Stage Data and Stage-Discharge Relationships

± 10% error: Continuous Flow Data Developed from a Partial Month of Continuous Stage Data, Stage-Discharge Relationships and Estimated based on Water Balance Calculations and/or Stream vs Stream Regressions

± 10-20% error: Estimated Based on Water Balance Calculations and Stream vs Stream Regressions

± 20-30% error: Estimated Based on Water Balance Calculations and Basin Area - Discharge Relationships

± 30-100% error:

**Table A-4: Calibration Table**

Month - Year	Hydroclimatic Condition	Precipitation Factor	Net Precipitation		Evapotranspiration		Recharge		Streamflow		Runoff		Baseflow	
			Synth	Pred	Synth	Pred	Synth	Pred	Synth	Pred	Synth	Pred	Synth	Pred
Aug-07	DRY	1.00	371953	184282	291740	170089	-86638	-39235	166851	53428	15149	7505	151702	45922
Sep-07	AVERAGE	1.40	797593	475727	183469	203149	419247	15760	194877	256818	50275	44943	144602	211875
Oct-07	DRY	1.00	105861	70049	0	0	-91261	-97579	197122	167629	56726	27232	140396	140396
Nov-07	AVERAGE	1.40	0	0	0	0	-125762	-124751	125762	124751	34833	0	90930	124751
Dec-07	AVERAGE	1.40	0	0	0	0	-70993	-87542	70993	87542	8495	0	62498	87542
Jan-08	AVERAGE	1.40	0	0	0	0	-40524	-55539	40524	55539	6874	0	33650	55539
Feb-08	AVERAGE	1.40	0	0	0	0	-30154	-40860	30154	40860	132	0	30021	40860
Mar-08	AVERAGE	1.40	23774	0	0	0	-8075	-34889	31849	34889	153	0	31697	34889
Apr-08	AVERAGE	1.40	110019	136381	0	0	74984	99598	35035	36782	4605	7255	30430	29527
May-08	AVERAGE	1.40	1044892	1293532	312053	184080	518185	773276	214654	336175	155149	223139	59505	113036
Jun-08	DRY	1.00	454879	290052	339284	200576	-80800	-96545	196395	186021	28630	18256	167765	167765
Jul-08	AVERAGE	1.40	1406865	715381	453679	452542	652891	-126967	300295	389806	90794	244790	209501	145016
Aug-08	WET	1.55	911258	847520	326871	391886	170863	7734	413524	447900	62391	96766	351134	351134
Sep-08	DRY	1.00	133174	167606	111042	134523	-321637	-116578	343769	149661	25329	5059	318440	144602
Oct-08	WET	1.55	210518	318135	0	0	-107136	-88152	317654	406287	81841	170474	235813	235813
Nov-08	AVERAGE	1.40	0	0	0	0	-183260	-124751	183260	124751	24688	0	158572	124751
Dec-08	AVERAGE	1.40	0	0	0	0	-130904	-87542	130904	87542	18320	0	112585	87542
Jan-09	AVERAGE	1.40	0	0	0	0	-89992	-55539	89992	55539	12563	0	77429	55539
Feb-09	AVERAGE	1.55	0	0	0	0	-56893	-40860	56893	40860	5195	0	51698	40860
Mar-09	AVERAGE	1.40	0	0	0	0	-44224	-34889	44224	34889	6142	0	38082	34889
Apr-09	AVERAGE	1.40	179390	144599	0	0	139188	107379	40202	37220	11578	7693	28624	29527
May-09	WET	1.55	1484012	2009591	301872	241401	723928	1206689	458212	561501	291645	394934	166567	166567
Jun-09	AVERAGE	1.40	554620	774085	368270	395684	-38613	148481	224963	229920	46478	56795	178485	173125
Jul-09	DRY	1.00	88104	252039	87275	231428	-134312	-76186	135141	96798	54609	16266	80532	80532
Aug-09	AVERAGE	1.40	532174	523060	309881	337592	115610	100600	106684	84867	60761	38945	45922	45922
Sep-09	AVERAGE	1.40	431152	475727	196742	203149	48811	15760	185598	256818	13015	44943	172583	211875
<b>2007-2009 Totals</b>			<b>8840237</b>	<b>8677764</b>	<b>3282177</b>	<b>3146100</b>	<b>1222528</b>	<b>1146873</b>	<b>4335532</b>	<b>4384792</b>	<b>1166370</b>	<b>1404996</b>	<b>3169163</b>	<b>2979796</b>
<b>2007-2008 Totals</b>			<b>4190722</b>	<b>3520520</b>	<b>1542929</b>	<b>1363607</b>	<b>647717</b>	<b>99358</b>	<b>2000076</b>	<b>2057555</b>	<b>474110</b>	<b>622498</b>	<b>1525966</b>	<b>1435057</b>
<b>2008-2009 Totals</b>			<b>3479970</b>	<b>4497236</b>	<b>1542929</b>	<b>1363607</b>	<b>242202</b>	<b>1070990</b>	<b>1973728</b>	<b>2016992</b>	<b>626835</b>	<b>730050</b>	<b>1346892</b>	<b>1286942</b>
<b>2007-2009 Coefficients</b>			<b>0.98</b>		<b>0.37</b>	<b>0.36</b>	<b>0.14</b>	<b>0.13</b>	<b>0.49</b>	<b>0.51</b>	<b>0.13</b>	<b>0.16</b>	<b>0.36</b>	<b>0.34</b>
<b>2007-2008 Coefficients</b>			<b>0.84</b>		<b>0.37</b>	<b>0.39</b>	<b>0.15</b>	<b>0.03</b>	<b>0.48</b>	<b>0.58</b>	<b>0.11</b>	<b>0.18</b>	<b>0.36</b>	<b>0.41</b>
<b>2008-2009 Coefficients</b>			<b>1.29</b>		<b>0.44</b>	<b>0.30</b>	<b>0.07</b>	<b>0.24</b>	<b>0.57</b>	<b>0.45</b>	<b>0.18</b>	<b>0.16</b>	<b>0.39</b>	<b>0.29</b>



# **APPENDIX B**

## **Water Balance Input Data for Project Facilities**





**Table B-1: Major Activities Affecting Water Balance Model during Construction**

Year	Month	Activities Affecting Inputs to Water Balance Model
Year 1	April	<ul style="list-style-type: none"> <li>• Construct the LDG SCP in the lower Dublin Gulch valley area</li> <li>• Construct a temporary sediment control pond (SCP) within the footprint of future Events Ponds</li> <li>• Construct upper DGDC, including upper velocity reduction pond and energy dissipater</li> </ul>
	May- June	<ul style="list-style-type: none"> <li>• Route upper Dublin Gulch through upper DGDC and temporary SCP to LDG SCP (at freshet)</li> <li>• Construct Platinum Gulch WRSA (PG WRSA) sediment control pond – discharge to Platinum Gulch when complete (post freshet)</li> <li>• Construct Ann Gulch east sediment control pond and diversion ditch (May – June; post freshet); water routed to upper DGDC</li> <li>• Construct Ann Gulch west diversion ditch and route to the LDG SCP</li> </ul>
	June	<ul style="list-style-type: none"> <li>• Begin drilling/installing and developing perimeter wells and horizontal drains for development of the Open Pit</li> <li>• Construct additional temporary (earthworks) sediment control ponds as required.</li> </ul>
	Late September – October	<ul style="list-style-type: none"> <li>• Upper DG diversion channel connected to lower DG diversion channel</li> <li>• Reconfigure temporary SCP into the Events Ponds</li> <li>• Open pit drains operational.</li> </ul>
Year 2	May (post freshet):	<ul style="list-style-type: none"> <li>• Entire DG diversion channel operational including Eagle Creek connector (freshet); and discharge into Eagle Creek (no more discharge to Dublin Gulch)</li> <li>• Construct Eagle Pup WRSA (EP WRSA) sediment control pond and route to MWTP feed pond</li> <li>• Construct initial temporary sump pond at Open Pit</li> </ul>
	June	<ul style="list-style-type: none"> <li>• Construct Platinum Gulch WRSA (PG WRSA) drainage ditch to Open Pit sump, and convey surface water from the PG WRSA to the Open Pit sump</li> <li>• Drill/Install groundwater wells for fresh water make-up for crushing (June – July).</li> </ul>
	August	<ul style="list-style-type: none"> <li>• Complete all construction activities and water management infrastructure</li> </ul>

**Table B-2: Construction Sequence by Facility**

Facility	Structure/Feature	Construction Conditions/Process	Begin Date	End Date	Comments
<b>Eagle Pup Waste Rock Storage Area</b>					
	Sediment Control Pond	Construct before freshet	Apr-13	Apr-13	Routed to MWTP feed pond at freshet
	Rock Drain and Starter Embankment	Construct once EP SCP is complete		Jun-13	
<b>Platinum Gulch Waste Rock Storage Area</b>					
	Sediment Control Pond	Construct and discharge to Platinum Gulch when completed	May-12	May-12	Post freshet
	Starter Embankment and Rock Drain	Construct once PG SCP is complete		May-13	Post freshet
	Drainage Ditch to Open Pit	Construct and then convey water to the Open Pit sump		Jun-13	
<b>Open Pit</b>					
	Perimeter Wells	Drill, install and develop	May-12	Jun-12	Wells operational by July 2012
	Horizontal Drains	Drill and install	Jun-12	Oct-12	Drains operational by October 2012
	Sump Pond	Develop Sump Pond		May-13	Post freshet
	Groundwater Wells	Drill and install as needed for use for fresh water make-up for crushing	Jun-13	Jul-13	May be able to use water from perimeter wells or drains depending on water quality
<b>Heap Leach Facility</b>					
	Ann Gulch East Diversion Ditch	Construct post freshet	May-12	Jun-12	
	Ann Gulch East Sediment Control Pond	Construct post freshet	May-12	Jun-12	
	Ann Gulch West Diversion Ditch	Construct post freshet and then connect to the LDG SCP	May-12	Jun-12	
	Ann Gulch East Diversion Ditch	Construct and then connect to the Upper DG velocity reduction pond	May-12	Jun-12	
	Groundwater Drainage System		Apr-13	Sep-13	
	LDRS		May-13	Oct-13	

Facility	Structure/Feature	Construction Conditions/Process	Begin Date	End Date	Comments
<b>Lower Dublin Gulch Infrastructure</b>					
	Sediment Control Ponds	Construct before freshet	Mar-12	Apr-12	
	MWTP Feed and Product Ponds	Construct	Aug-12	Oct-12	
	Secondary Heap Leach Storage Facility	Construct two-stage SCPs in the footprint of the EP, to be used initially while receiving flow from upper DG diversion channel (Year 1); reconfigure to EP once the diversion channel is complete	Apr-12	Sep-12	Begin late April
	Reconfigure Events Pond		Sep-12	Oct-12	
<b>Dublin Gulch Diversion Channel</b>					
	Upper Diversion Channel	Construct channel around HLF footprint – including upper velocity reduction pond and energy dissipater	Apr-12	May-12	Prior to freshet
	Upper Diversion Channel Routing	DG through upper diversion channel and into SHLLSF which will feed LDG SCP and to lower DG		May-12	At freshet
	Lower Dublin Gulch Diversion Channel	Construct channel – including lower velocity reduction ponds and Eagle Creek connector, while continuing to route through LDG SCP and into Lower DG	May-12	Jun-12	
	Eagle Gold Fish Enhancement Channel	Construct during first year	Jun-12	Oct-12	
	DG Diversion Channel Operation	Begin full DG diversion channel operation, using Eagle Creek connector and discharge into Eagle Creek (no more discharge to Dublin Gulch)	May-13		At freshet during second year; no more discharge to Dublin Gulch
<b>Main Camp</b>					
	Groundwater Production Well	Drill, install and develop	Feb-12	Mar-12	
	Sediment Control Features	Associated with construction/installation of main camp	Mar-12	Apr-12	As needed
	Sewage Treatment Facility	Discharge into Haggart Creek via Dublin Gulch channel when completed	Mar-12	Apr-12	

**B-3 Master Water Management Schedule**

PROJECT PHASE
CONSTRUCTION
OPERATIONAL
CLOSURE & RECLAMATION (AU RECOVERY)
CLOSURE & RECLAMATION (HLF RINSE)
CLOSURE & RECLAMATION (DRAINDOWN)
ENVIRONMENTAL MONITORING

Stage	Month-Year	Year	Master Water Management Schedule
Existing Conditions	Oct-11	0	Ann Gulch flows through existing channel; Dublin Gulch flows through existing channel; EP flows through existing channel; Platinum Gulch flows through existing channel; Stuttle Gulch flows through existing channel;
Existing Conditions	Nov-11	0	
Existing Conditions	Dec-11	0	
Construction	Jan-12	1	
Construction	Feb-12	1	
Construction	Mar-12	1	Drill/install groundwater productions well for camp; Roads and ditches in camp and lower DG area; Start stockpiles
Construction	Apr-12	1	Construct LDGSCP; Construct SHLSF temporary SCP structure; Temp. SHLSF online; Construct Upper DGDC, upper velocity reduction pond and energy dissipater; Construct sewage treatment facility with discharge to LDG; Temporary (earthworks) sediment control ponds as required;
Construction	May-12	1	LDGSCP online (conveys DG flow via DGDC); Construct Ann Gulch east SCP and route to upper DGDC; Construct Ann Gulch west diversion ditch and route to the LDGSCP; DG flows through DGDC to LDGSCP; Construct lower DGDC and lower velocity reduction pond; Construct PG WRSA SCP; Discharge to PG channel post-freshet; Temporary (earthworks) sediment control ponds as required;
Construction	Jun-12	1	Construct Ann Gulch east SCP and route to upper DGDC; Construct Ann Gulch west diversion ditch and route to the LDGSCP; DG flows through DGDC to LDGSCP; Construct lower DGDC and lower velocity reduction pond; Construct PG WRSA SCP; Discharge to PG channel post-freshet; Begin drilling/installing perimeter wells and horizontal wells for dewatering; Temporary (earthworks) sediment control ponds as required;

Stage	Month-Year	Year	Master Water Management Schedule
Construction	Jul-12	1	Construct MWTP Feed and Product Ponds; Drill/install additional groundwater production wells for process make-up and crushing requirements; Construct water distribution infrastructure;
Construction	Aug-12	1	Construct MWTP Feed and Product Ponds; Drill/install additional groundwater production wells for process make-up and crushing requirements; Construct water distribution infrastructure;
Construction	Sep-12	1	Construct MWTP Feed and Product Ponds; Reconfigure temporary SCP to SHLSF; Upper DGDC connected to lower DGDC;OP dewatering starts; Drill/install additional groundwater production wells for process make-up and crushing requirements; Construct water distribution infrastructure;
Construction	Oct-12	1	Reconfigure temporary SCP to SHLSF; Upper DGDC connected to lower DGDC;OP dewatering starts;
Construction	Nov-12	1	
Construction	Dec-12	1	
Construction	Jan-13	2	
Construction	Feb-13	2	
Construction	Mar-13	2	
Construction	Apr-13	2	Construct HLF groundwater drainage system and LDRS;
Construction	May-13	2	LDGSCP online with operational flow inputs; MWTP online; SHLSF online; Construct HLF groundwater drainage system and LDRS;DGDC online; Construct EP WRSA SCP; Route flows to MWTP Feed Pond; Construct PG WRSA starter embankment and rock drain; Construct initial OP sump;
Construction	Jun-13	2	Construct HLF groundwater drainage system and LDRS; Construct EP WRSA starter embankment and rock drain; Construct PG WRSA drainage ditch to OP sump; Convey PG WRSA surface water to OP sump; Drill/ Install groundwater wells for freshwater make-up for crushing;
Construction	Jul-13	2	Construct HLF groundwater drainage system and LDRS; Drill/ Install groundwater wells for freshwater make-up for crushing;
Construction	Aug-13	2	Construct HLF groundwater drainage system and LDRS; Complete all construction activities and water management infrastructure;
Operational	Sep-13	2	LDGSCP linked with MWTP product pond; MWTP online; HLF stacking and irrigation starts; EP WRSA stacking starts; PLAT WRSA Stacking Starts; Mining starts;
Operational	Oct-13	2	
Operational	Nov-13	2	
Operational	Dec-13	2	
Operational	Jan-14	3	

Stage	Month-Year	Year	Master Water Management Schedule
Operational	Feb-14	3	
Operational	Mar-14	3	
Operational	Apr-14	3	
Operational	May-14	3	
Operational	Jun-14	3	
Operational	Jul-14	3	
Operational	Aug-14	3	
Operational	Sep-14	3	
Operational	Oct-14	3	
Operational	Nov-14	3	
Operational	Dec-14	3	
Operational	Jan-15	4	
Operational	Feb-15	4	
Operational	Mar-15	4	
Operational	Apr-15	4	
Operational	May-15	4	
Operational	Jun-15	4	
Operational	Jul-15	4	
Operational	Aug-15	4	
Operational	Sep-15	4	
Operational	Oct-15	4	
Operational	Nov-15	4	
Operational	Dec-15	4	
Operational	Jan-16	5	
Operational	Feb-16	5	
Operational	Mar-16	5	
Operational	Apr-16	5	
Operational	May-16	5	
Operational	Jun-16	5	

Stage	Month-Year	Year	Master Water Management Schedule
Operational	Jul-16	5	
Operational	Aug-16	5	
Operational	Sep-16	5	PLAT WRSA stacking stops;
Operational	Oct-16	5	PLAT WRSA recontouring and cover construction; Water routing from rock drain will continue to OP sump as long as water supply is needed and treatment is required;
Operational	Nov-16	5	
Operational	Dec-16	5	
Operational	Jan-17	6	
Operational	Feb-17	6	
Operational	Mar-17	6	
Operational	Apr-17	6	
Operational	May-17	6	
Operational	Jun-17	6	
Operational	Jul-17	6	
Operational	Aug-17	6	
Operational	Sep-17	6	PLAT WRSA cover functional;
Operational	Oct-17	6	
Operational	Nov-17	6	
Operational	Dec-17	6	
Operational	Jan-18	7	
Operational	Feb-18	7	
Operational	Mar-18	7	
Operational	Apr-18	7	
Operational	May-18	7	
Operational	Jun-18	7	
Operational	Jul-18	7	
Operational	Aug-18	7	
Operational	Sep-18	7	
Operational	Oct-18	7	

Stage	Month-Year	Year	Master Water Management Schedule
Operational	Nov-18	7	
Operational	Dec-18	7	
Operational	Jan-19	8	
Operational	Feb-19	8	
Operational	Mar-19	8	
Operational	Apr-19	8	
Operational	May-19	8	
Operational	Jun-19	8	
Operational	Jul-19	8	
Operational	Aug-19	8	
Operational	Sep-19	8	
Operational	Oct-19	8	
Operational	Nov-19	8	
Operational	Dec-19	8	
Operational	Jan-20	9	
Operational	Feb-20	9	
Operational	Mar-20	9	
Operational	Apr-20	9	
Operational	May-20	9	
Operational	Jun-20	9	
Operational	Jul-20	9	
Operational	Aug-20	9	
Operational	Sep-20	9	
Operational	Oct-20	9	
Operational	Nov-20	9	
Operational	Dec-20	9	EP WRSA stacking stops; OP mining stops; Active depressurization stops; Passive OP drains remain in place and flow rates assumed to continue at the same rate as final year 'No Wells Scenario'



Stage	Month-Year	Year	Master Water Management Schedule
Closure & Reclamation (au recovery)	Jan-21	10	LDGSCP will receive all water until WQ standards are met; Final gold recovery from HLF; Recycle solution with no additives; Stabilize DGDC; EPW RSA recontouring and cap construction; PG W RSA collection pond continues to route to OP until WQ standards met; PG W RSA SCP remains in place until WQ standards are met; OP backfilled with stockpile material; OP lake formation starts; Horizontal drains remain open to flow to pit sump; Groundwater wells sealed at crusher; Stabilize long term SCPs and diversion ditches; WQ monitoring
Closure & Reclamation (au recovery)	Feb-21	10	
Closure & Reclamation (au recovery)	Mar-21	10	
Closure & Reclamation (au recovery)	Apr-21	10	
Closure & Reclamation (au recovery)	May-21	10	
Closure & Reclamation (au recovery)	Jun-21	10	
Closure & Reclamation (au recovery)	Jul-21	10	
Closure & Reclamation (au recovery)	Aug-21	10	
Closure & Reclamation (au recovery)	Sep-21	10	
Closure & Reclamation (au recovery)	Oct-21	10	Reconfigure lower DGDC for stream habitat enhancement;
Closure & Reclamation (au recovery)	Nov-21	10	
Closure & Reclamation (au recovery)	Dec-21	10	
Closure & Reclamation (hlf rinse)	Jan-22	11	Begin rinsing and detoxification of HLF; Maximum raw water additions to HLF rinse cycle; OP lake drains to PG channel; WQ monitoring;
Closure & Reclamation (hlf rinse)	Feb-22	11	
Closure & Reclamation (hlf rinse)	Mar-22	11	
Closure & Reclamation (hlf rinse)	Apr-22	11	
Closure & Reclamation (hlf rinse)	May-22	11	
Closure & Reclamation (hlf rinse)	Jun-22	11	
Closure & Reclamation (hlf rinse)	Jul-22	11	
Closure & Reclamation (hlf rinse)	Aug-22	11	
Closure & Reclamation (hlf rinse)	Sep-22	11	EP W RSA cap complete and functional;
Closure & Reclamation (hlf rinse)	Oct-22	11	
Closure & Reclamation (hlf rinse)	Nov-22	11	
Closure & Reclamation (hlf rinse)	Dec-22	11	
Closure & Reclamation (hlf rinse)	Jan-23	12	

Stage	Month-Year	Year	Master Water Management Schedule
Closure & Reclamation (hlf rinse)	Feb-23	12	
Closure & Reclamation (hlf rinse)	Mar-23	12	
Closure & Reclamation (hlf rinse)	Apr-23	12	
Closure & Reclamation (hlf rinse)	May-23	12	
Closure & Reclamation (hlf rinse)	Jun-23	12	
Closure & Reclamation (hlf rinse)	Jul-23	12	
Closure & Reclamation (hlf rinse)	Aug-23	12	
Closure & Reclamation (hlf rinse)	Sep-23	12	
Closure & Reclamation (hlf rinse)	Oct-23	12	
Closure & Reclamation (hlf rinse)	Nov-23	12	
Closure & Reclamation (hlf rinse)	Dec-23	12	
Closure & Reclamation (hlf rinse)	Jan-24	13	
Closure & Reclamation (hlf rinse)	Feb-24	13	
Closure & Reclamation (hlf rinse)	Mar-24	13	
Closure & Reclamation (hlf rinse)	Apr-24	13	
Closure & Reclamation (hlf rinse)	May-24	13	
Closure & Reclamation (hlf rinse)	Jun-24	13	
Closure & Reclamation (draindown)	Jul-24	13	LDGSCP receives all runoff until WQ criteria met; MWTP receives HLF runoff; MWTP maintained until WQ criteria met; SHLSF maintained until HLF capped; Construct cap on HLF; Start HLF drain down; Runoff routed to MWTP Feed Pond; Groundwater wells at Process Plant sealed after HLF rinsing complete; WQ monitoring;
Closure & Reclamation (draindown)	Aug-24	13	
Closure & Reclamation (draindown)	Sep-24	13	
Closure & Reclamation (draindown)	Oct-24	13	
Closure & Reclamation (draindown)	Nov-24	13	
Closure & Reclamation (draindown)	Dec-24	13	
Closure & Reclamation (draindown)	Jan-25	14	
Closure & Reclamation (draindown)	Feb-25	14	
Closure & Reclamation (draindown)	Mar-25	14	
Closure & Reclamation (draindown)	Apr-25	14	

Stage	Month-Year	Year	Master Water Management Schedule
Closure & Reclamation (draindown)	May-25	14	
Closure & Reclamation (draindown)	Jun-25	14	
Closure & Reclamation (draindown)	Jul-25	14	
Closure & Reclamation (draindown)	Aug-25	14	
Closure & Reclamation (draindown)	Sep-25	14	
Closure & Reclamation (draindown)	Oct-25	14	Estimated removal of PG WRSA SCP and collection pond;
Closure & Reclamation (draindown)	Nov-25	14	
Closure & Reclamation (draindown)	Dec-25	14	
Closure & Reclamation (draindown)	Jan-26	15	
Closure & Reclamation (draindown)	Feb-26	15	
Closure & Reclamation (draindown)	Mar-26	15	
Closure & Reclamation (draindown)	Apr-26	15	
Closure & Reclamation (draindown)	May-26	15	
Closure & Reclamation (draindown)	Jun-26	15	
Closure & Reclamation (draindown)	Jul-26	15	
Closure & Reclamation (draindown)	Aug-26	15	
Closure & Reclamation (draindown)	Sep-26	15	
Closure & Reclamation (draindown)	Oct-26	15	Estimated removal of EP WRSA SCP; EP water routed to DGDC; STUTT stockpile runoff channel re-connected to DGDC;
Closure & Reclamation (draindown)	Nov-26	15	
Closure & Reclamation (draindown)	Dec-26	15	
Closure & Reclamation (draindown)	Jan-27	16	
Closure & Reclamation (draindown)	Feb-27	16	
Closure & Reclamation (draindown)	Mar-27	16	
Closure & Reclamation (draindown)	Apr-27	16	
Closure & Reclamation (draindown)	May-27	16	
Closure & Reclamation (draindown)	Jun-27	16	
Closure & Reclamation (draindown)	Jul-27	16	
Closure & Reclamation (draindown)	Aug-27	16	

Stage	Month-Year	Year	Master Water Management Schedule
Closure & Reclamation (draindown)	Sep-27	16	
Closure & Reclamation (draindown)	Oct-27	16	
Closure & Reclamation (draindown)	Nov-27	16	
Closure & Reclamation (draindown)	Dec-27	16	
Closure & Reclamation (draindown)	Jan-28	17	
Closure & Reclamation (draindown)	Feb-28	17	
Closure & Reclamation (draindown)	Mar-28	17	
Closure & Reclamation (draindown)	Apr-28	17	
Closure & Reclamation (draindown)	May-28	17	
Closure & Reclamation (draindown)	Jun-28	17	
Closure & Reclamation (draindown)	Jul-28	17	
Closure & Reclamation (draindown)	Aug-28	17	
Closure & Reclamation (draindown)	Sep-28	17	
Closure & Reclamation (draindown)	Oct-28	17	
Closure & Reclamation (draindown)	Nov-28	17	
Closure & Reclamation (draindown)	Dec-28	17	
Closure & Reclamation (draindown)	Jan-29	18	
Closure & Reclamation (draindown)	Feb-29	18	
Closure & Reclamation (draindown)	Mar-29	18	
Closure & Reclamation (draindown)	Apr-29	18	
Closure & Reclamation (draindown)	May-29	18	
Closure & Reclamation (draindown)	Jun-29	18	
Closure & Reclamation (draindown)	Jul-29	18	
Closure & Reclamation (draindown)	Aug-29	18	
Closure & Reclamation (draindown)	Sep-29	18	
Closure & Reclamation (draindown)	Oct-29	18	
Closure & Reclamation (draindown)	Nov-29	18	
Closure & Reclamation (draindown)	Dec-29	18	
Closure & Reclamation (draindown)	Jan-30	19	

Stage	Month-Year	Year	Master Water Management Schedule
Closure & Reclamation (draindown)	Feb-30	19	
Closure & Reclamation (draindown)	Mar-30	19	
Closure & Reclamation (draindown)	Apr-30	19	
Closure & Reclamation (draindown)	May-30	19	
Closure & Reclamation (draindown)	Jun-30	19	
Closure & Reclamation (draindown)	Jul-30	19	
Closure & Reclamation (draindown)	Aug-30	19	
Closure & Reclamation (draindown)	Sep-30	19	
Closure & Reclamation (draindown)	Oct-30	19	
Closure & Reclamation (draindown)	Nov-30	19	
Closure & Reclamation (draindown)	Dec-30	19	LDGSCP Decommissioned; MWTP Decommissioned; HLF drain down complete; Closure;
Post-closure Environmental Monitoring	Jan-31	20	
Post-closure Environmental Monitoring	Feb-31	20	
Post-closure Environmental Monitoring	Mar-31	20	
Post-closure Environmental Monitoring	Apr-31	20	
Post-closure Environmental Monitoring	May-31	20	
Post-closure Environmental Monitoring	Jun-31	20	
Post-closure Environmental Monitoring	Jul-31	20	
Post-closure Environmental Monitoring	Aug-31	20	
Post-closure Environmental Monitoring	Sep-31	20	
Post-closure Environmental Monitoring	Oct-31	20	
Post-closure Environmental Monitoring	Nov-31	20	
Post-closure Environmental Monitoring	Dec-31	20	
Post-closure Environmental Monitoring	Jan-32	21	
Post-closure Environmental Monitoring	Feb-32	21	
Post-closure Environmental Monitoring	Mar-32	21	
Post-closure Environmental Monitoring	Apr-32	21	
Post-closure Environmental Monitoring	May-32	21	
Post-closure Environmental Monitoring	Jun-32	21	

Stage	Month-Year	Year	Master Water Management Schedule
Post-closure Environmental Monitoring	Jul-32	21	
Post-closure Environmental Monitoring	Aug-32	21	
Post-closure Environmental Monitoring	Sep-32	21	
Post-closure Environmental Monitoring	Oct-32	21	
Post-closure Environmental Monitoring	Nov-32	21	
Post-closure Environmental Monitoring	Dec-32	21	
Post-closure Environmental Monitoring	Jan-33	22	
Post-closure Environmental Monitoring	Feb-33	22	
Post-closure Environmental Monitoring	Mar-33	22	
Post-closure Environmental Monitoring	Apr-33	22	
Post-closure Environmental Monitoring	May-33	22	
Post-closure Environmental Monitoring	Jun-33	22	
Post-closure Environmental Monitoring	Jul-33	22	
Post-closure Environmental Monitoring	Aug-33	22	
Post-closure Environmental Monitoring	Sep-33	22	
Post-closure Environmental Monitoring	Oct-33	22	
Post-closure Environmental Monitoring	Nov-33	22	
Post-closure Environmental Monitoring	Dec-33	22	
Post-closure Environmental Monitoring	Jan-34	23	
Post-closure Environmental Monitoring	Feb-34	23	
Post-closure Environmental Monitoring	Mar-34	23	
Post-closure Environmental Monitoring	Apr-34	23	
Post-closure Environmental Monitoring	May-34	23	
Post-closure Environmental Monitoring	Jun-34	23	
Post-closure Environmental Monitoring	Jul-34	23	
Post-closure Environmental Monitoring	Aug-34	23	
Post-closure Environmental Monitoring	Sep-34	23	
Post-closure Environmental Monitoring	Oct-34	23	
Post-closure Environmental Monitoring	Nov-34	23	
Post-closure Environmental Monitoring	Dec-34	23	
Post-closure Environmental Monitoring	Jan-35	24	

**Table B-4: Operation Sequence by Facility**

Facility	Structure/Feature	Operational Conditions	Begin Date	End Date
<b>Eagle Pup Waste Rock Storage Area</b>				
	WRSA	Meteoric water input/outputs	Sep-13	
	EP Sediment Control Pond	Surface runoff from basin; routed to MTWP Feed Pond or DGDC if WQ criteria are met	Sep-13	
<b>Platinum Gulch Waste Rock Storage Area</b>				
	WRSA	Meteoric water input/outputs	Sep-13	
	PG SCP	Water routed to Platinum Gulch if WQ criteria are met	Sep-13	
	PG to Open Pit Drainage Ditch	Water routed to Open Pit Sump from Collection Pond	Sep-13	
<b>Open Pit</b>				
	Pit Sump	Pit receives water from PG Collection Pond, and Perimeter wells	Sep-13	
	Crusher Pad	Make-up water supply from groundwater wells or Perimeter wells	Sep-13	Dec-20
	Perimeter Wells	Will be abandoned or destroyed as mine pit expands; Water to sump/Crusher	Sep-13	Dec-20
	Horizontal Drains	Will remain in place	Sep-13	
	Groundwater Wells	Will be abandoned when crushing has stopped		Dec-20
<b>Heap Leach Facility</b>				
	HLF Surface	Irrigated with solution from Process Plant	Sep-13	Dec-21
	HLF Primary Storage	In-heap solution storage; recycled to Process Plant; optional routing to Cyanide detox facility and EP	Sep-13	
	HLF Groundwater Drainage System	Groundwater drained and routed to LDG SCP if WQ criteria are met	Sep-13	
	Ann Gulch East Diversion Ditch	Divert water to SCP; configuration changes with HLF footprint	Sep-13	
	Ann Gulch East Sediment Control Pond	Receives water from AG EDD, water routed to DG velocity reduction pond	Sep-13	
	Ann Gulch West Diversion Ditch	Divert water to LDG SCP; configuration changes with HLF footprint	Sep-13	

Facility	Structure/Feature	Operational Conditions	Begin Date	End Date
<b>Lower Dublin Gulch Infrastructure</b>				
	EP	Receives solution routed from HLF and Feed Pond; Solution routed to Process Plant Cyanide Detox facility as required. Additional storage during wet scenarios available	Sep-13	
	MWTP Feed Pond	Receives water from Open Pit sump and Cyanide detox facility, water routed to MWTP and EP if required	Sep-13	
	MWTP Product Pond	Receives treated water from MWTP; water routed to LDG SCP	Sep-13	
	LDG Sediment Control Pond	Receives treated water from MWTP Product pond and diverted runoff from AG WDD; will also receive non-contact water from Open Pit and groundwater from HLF if WQ criteria are met. Will drain to DGDC via overflow channel. WQ monitored at overflow channel	Sep-13	
	Process Plant Groundwater Wells	Supply make up water to Process Plant	Sep-13	Dec-20
<b>Dublin Gulch Diversion Channel</b>				
	Upper Velocity Reduction Pond	Receives water from Dublin Gulch and AG WDD	Sep-13	
	Upper Channel	Receives water from upper velocity reduction pond; optional discharge from EP SCP if WQ criteria are met	Sep-13	
	Energy Dissipater		Sep-13	
	Lower Velocity Reduction Pond	Receives water from DGDC	Sep-13	
	Lower Channel	Receives water from lower velocity reduction pond; discharges to Eagle Creek connector	Sep-13	
	Eagle Creek Connector	Receives water from Eagle Creek connector	Sep-13	
<b>Main Camp</b>				
	Sewage Treatment Facility	Discharges to rockdrain and Haggart Creek	Sep-13	
	Groundwater Well	Supply water to camp	Sep-13	



**Table B-5: Open Pit Geometry Assumptions**

Year	Parameter	Value	Units	Notes – Data Source
	Mining Rate	9,100,000	tonnes/Year	[7]
	Mining Days/Year	350	days/Year	Confirmation required
Baseline	Stuttle Gulch Basin Area	933,290	m <sup>2</sup>	[1]
	Stuttle Gulch Basin Reference Elevation	994	m asl	[1]
	Platinum Gulch Area	1,395,500	m <sup>2</sup>	[1]
	Platinum Gulch Basin Reference Elevation	1,070	m asl	[1]
	Eagle Pup Basin Area	1,273,300	m <sup>2</sup>	[1]
	Eagle Pup Basin Reference Elevation	1,116	m asl	[1]
	Average Basin Reference Elevation	1,060	m asl	[1]
Construction	Open Pit Footprint Area -Construction	0	m <sup>2</sup>	Estimated
	STUTT Area – Construction	3.9%	%	Estimated
	PLAT Area – Construction	7.8%	%	Estimated
	EP Area – Construction	1.7%	%	Estimated
	Open Pit Reference Elevation – Construction	1,060	m asl	[3]
	Open Pit Dewatering Rate – Constructon-2 NDW	0	m <sup>3</sup> /day	[6]
	Open Pit Dewatering Rate – Construction-2 AD	90.8	m <sup>3</sup> /day	[6]
	Open Pit Potential Sump Volume – Construction 1	25,000	m <sup>3</sup> /day	[6] Estimated
	Open Pit Potential Sump Surface Area	5,000	m <sup>2</sup>	[6] Estimated
	Open Pit Dewatering Volume – Constructon-1 NDW	0	m <sup>3</sup> /day	[6]
	Open Pit Dewatering Volume – Construction-1 AD	172.8	m <sup>3</sup> /day	[6]
	Open Pit Potential Sump Volume – Construction 2	25,000.0	m <sup>3</sup> /day	[6] Estimated
	Open Pit Potential Sump Surface Area	5,000	m <sup>2</sup>	[6] Estimated

Year	Parameter	Value	Units	Notes – Data Source
1	Open Pit Footprint Area – Year 1	166,231	m <sup>2</sup>	[1]
	STUTT Area – Year 1	3.9%	% of Basin	[1]
	PLAT Area – Year 1	7.8%	% of Basin	[1]
	EP Area – Year 1	1.7%	% of Basin	[1]
	Open Pit Reference Elevation – Year 1	1,230	m asl	[3]
	Open Pit Potential Sump Volume	25,000	m <sup>3</sup>	[6] Estimated
	Open Pit Potential Sump Surface Area	5,000	m <sup>2</sup>	[6] Estimated
	Open Pit Dewatering Volume – Year 1 NDW	105.2	m <sup>3</sup> /day	[6]
	Open Pit Dewatering Volume – Year 1 AD	115.0	m <sup>3</sup> /day	[6]
2	Open Pit Dewatering Volume – Year 2 NDW	361.1	m <sup>3</sup> /day	[6]
	Open Pit Dewatering Volume – Year 2 AD	299.8	m <sup>3</sup> /day	[6]
	Open Pit Potential Sump Volume	25,000	m <sup>3</sup>	[6] Estimated
	Open Pit Potential Sump Surface Area	5,000	m <sup>2</sup>	[6] Estimated
3	Open Pit Footprint Area – Year 3	476,801	m <sup>2</sup>	[1]
	STUTT Area – Year 3	11.0%	% of Basin	[1]
	PLAT Area – Year 3	16.1%	% of Basin	[1]
	EP Area – Year 3	11.8%	% of Basin	[1]
	Open Pit Reference Elevation – Year 3	1,215	m asl	[3]
	Open Pit Potential Sump Volume (PIT)	48,375	m <sup>3</sup>	[1]/[6] Pit depression
	Open Pit Potential Sump Surface Area	10,301	m <sup>2</sup>	[1]/[6] Pit depression
	Open Pit Dewatering Volume – Year 3 NDW	37.0	m <sup>3</sup> /day	[6]
	Open Pit Dewatering Volume – Year 3 AD	66.2	m <sup>3</sup> /day	[6]
4	Open Pit Dewatering Volume – Year 4 NDW	405.1	m <sup>3</sup> /day	[6]
	Open Pit Dewatering Volume – Year 4 AD	428.9	m <sup>3</sup> /day	[6]
	Open Pit Potential Sump Volume	25,000	m <sup>3</sup>	Estimated
	Open Pit Potential Sump Surface Area	5,000	m <sup>2</sup>	Estimated

Year	Parameter	Value	Units	Notes – Data Source
5	Open Pit Footprint Area – Year 5	588,237	m <sup>2</sup>	[1]
	STUTT Area – Year 5	14.3%	m <sup>2</sup>	[1]
	PLAT Area – Year 5	20.7%	m <sup>2</sup>	[1]
	EP Area – Year 5	13.0%	m <sup>2</sup>	[1]
	Open Pit Reference Elevation – Year 5	1,200	m asl	[3]
	Open Pit Potential Sump Volume	25,000	m <sup>3</sup>	Estimated
	Open Pit Potential Sump Surface Area	5,000	m <sup>2</sup>	Estimated
	Open Pit Dewatering Volume – Year 5 NDW	41.2	m <sup>3</sup> /day	[6]
	Open Pit Dewatering Volume – Year 5 AD	77.8	m <sup>3</sup> /day	[6]
6	Open Pit Dewatering Volume – Year 6 NDW	467.7	m <sup>3</sup> /day	[6]
	Open Pit Dewatering Volume – Year 6 AD	400.0	m <sup>3</sup> /day	[6]
	Open Pit Potential Sump Volume	25,000	m <sup>3</sup>	Estimated
	Open Pit Potential Sump Surface Area	5,000	m <sup>2</sup>	estimated
7	Open Pit Dewatering Volume – Year 7 NDW	52.8	m <sup>3</sup> /day	[6]
	Open Pit Dewatering Volume – Year 7 AD	45.9	m <sup>3</sup> /day	[6]
	Open Pit Potential Sump Volume (PIT)	279,793	m <sup>3</sup>	[1]/[6] Pit depression
	Open Pit Potential Sump Surface Area	25,235	m <sup>2</sup>	[1]/[6] Pit depression
Final and Closure	Open Pit Footprint Area – Year 8 Final*	640,548	m <sup>2</sup>	[1]
	STUTT Area – Year 8 Final	14.5%	m <sup>2</sup>	[1]
	PLAT Area – Year 8 Final	23.7%	m <sup>2</sup>	[1]
	EP Area – Year 8 Final	13.7%	m <sup>2</sup>	[1]
	Open Pit Reference Elevation – Year 8 Final	1,163	m asl	[3]
	Open Pit Potential Sump Volume (PIT)	279,793	m <sup>3</sup>	[1]/[6] Pit depression
	Open Pit Potential Sump Volume after backfill	249,793	m <sup>3</sup>	[1]/[6] Pit depression
	Open Pit Potential Sump Surface Area	25,235	m <sup>2</sup>	[1]/[6] Pit depression
	Open Pit Dewatering Volume – Year 8 NDW	42	m <sup>3</sup> /day	[6]**
	Open Pit Dewatering Volume – Year 8 AD	38	m <sup>3</sup> /day	[6]**

Year	Parameter	Value	Units	Notes – Data Source
Reclamation	Pit Backfill Area at Closure	30,000	m <sup>3</sup>	[2]/[7]
	Pit Backfill Volume at Closure	0.3	Mt	[2]/[7]
All Operational	Drilling Water Requirements (per drill)	48.96	m <sup>3</sup> /day	[8]
	Number of Drills (per Year)	3	–	[7]

**NOTES – DATA SOURCE:**

[1] Stantec (GIS)

[2] Scott Wilson – Vancouver – file name = ge\_edit3-Eagle Gold Ore and Waste Production Plan by Type and Year.xls

[3] Open pit shell pre-feasibility draft drawings (and associated dwg files) from BGC (C1, C2); Elevation = mean pit elevation

[4] Annual average daily rates of groundwater inflows (160-180m<sup>3</sup>/s for year 2-11) are estimates from BGC Engineering email from T. Crozier dated February 25, 2010

[5] Data received from T. Crozier , BGC Engineering, June 9, 2010 via email

[6] Data in BGC Engineering Depressurization Report report dated May 31, 2010

The BGC report did not include design for any open pit water storage areas, therefore sump volumes are estimated or for the Year 3 and final the pit itself is used as the sump.

[7] Project Description

[8] A web search yielded a “water injection” rate of 34L/min (48960L/day; 146880L/30days) for the Reichdrill C-700 drill

\* Final pit shell implemented in Year 6

\*\*Closure and Post-Closure dewatering rates were not included in the BGC Report however BGC provided guidance on conservative flow rates based on pre-feasibility report data. (Pers comm. T. Crozier, August, 2010 via email.)

**Table B-6 Open Pit Monthly Input Assumptions**

Stage	Month-Year	# Days/ Month	Operational Elevation (m asl)	Facility Footprint Total Area	Facility Footprint Stuttle Gulch Area	Facility Footprint Platinum Gulch Area	Facility Footprint Eagle Pup Area	Rate of Dewatering (npw) (lower bound of dewatering)	Rate of Dewatering (ad)	Drilling Water Requirements
			(m asl)	(m <sup>2</sup> )	(m <sup>2</sup> )	(m <sup>2</sup> )	(m <sup>2</sup> )	Volume (m <sup>3</sup> )	Volume (m <sup>3</sup> )	3 Drills
										Volume (m <sup>3</sup> )
Existing Conditions	Oct-11	31	1,060	0.00	0.00	0.00	0.00	0	0	0
Existing Conditions	Nov-11	30	1,060	0.00	0.00	0.00	0.00	0	0	0
Existing Conditions	Dec-11	31	1,060	0.00	0.00	0.00	0.00	0	0	0
Construction	Jan-12	31	1,060	0	0	0	0	0	0	0
Construction	Feb-12	29	1,060	0	0	0	0	0	0	0
Construction	Mar-12	31	1,060	0	0	0	0	0	0	0
Construction	Apr-12	30	1,060	0	0	0	0	0	0	0
Construction	May-12	31	1,060	0	0	0	0	0	0	0
Construction	Jun-12	30	1,060	0	0	0	0	0	0	0
Construction	Jul-12	31	1,060	0	0	0	0	0	0	0
Construction	Aug-12	31	1,060	0	0	0	0	0	0	0
Construction	Sep-12	30	1,060	0	0	0	0	0	2,725	1,469
Construction	Oct-12	31	1,060	0	0	0	0	0	2,816	1,518
Construction	Nov-12	30	1,060	0	0	0	0	0	2,725	1,469
Construction	Dec-12	31	1,060	0	0	0	0	0	2,816	1,518
Construction	Jan-13	31	1,060	0	0	0	0	0	5,355	1,518
Construction	Feb-13	28	1,060	0	0	0	0	0	4,837	1,371
Construction	Mar-13	31	1,060	0	0	0	0	0	5,355	1,518
Construction	Apr-13	30	1,060	0	0	0	0	0	5,183	1,469
Construction	May-13	31	1,060	0	0	0	0	0	5,355	1,518
Construction	Jun-13	30	1,060	166,231	36,043	108,187	22,000	0	5,183	1,469
Construction	Jul-13	31	1,060	166,231	36,043	108,187	22,000	0	5,355	1,518
Construction	Aug-13	31	1,060	166,231	36,043	108,187	22,000	0	5,355	1,518
Operational	Sep-13	30	1,230	166,231	36,043	108,187	22,000	3,155	3,451	1,469
Operational	Oct-13	31	1,230	166,231	36,043	108,187	22,000	3,260	3,566	1,518

Stage	Month-Year	# Days/ Month	Operational Elevation (m asl)	Facility Footprint Total Area	Facility Footprint Stuttle Gulch Area	Facility Footprint Platinum Gulch Area	Facility Footprint Eagle Pup Area	Rate of Dewatering (npw) (lower bound of dewatering)	Rate of Dewatering (ad)	Drilling Water Requirements
			(m asl)	(m <sup>2</sup> )	(m <sup>2</sup> )	(m <sup>2</sup> )	(m <sup>2</sup> )	Volume (m <sup>3</sup> )	Volume (m <sup>3</sup> )	3 Drills
										Volume (m <sup>3</sup> )
Operational	Nov-13	30	1,230	166,231	36,043	108,187	22,000	3,155	3,451	1,469
Operational	Dec-13	31	1,230	166,231	36,043	108,187	22,000	3,260	3,566	1,518
Operational	Jan-14	31	1,230	166,231	36,043	108,187	22,000	3,260	3,566	1,518
Operational	Feb-14	28	1,230	166,231	36,043	108,187	22,000	2,944	3,221	1,371
Operational	Mar-14	31	1,230	166,231	36,043	108,187	22,000	3,260	3,566	1,518
Operational	Apr-14	30	1,230	166,231	36,043	108,187	22,000	3,155	3,451	1,469
Operational	May-14	31	1,230	166,231	36,043	108,187	22,000	3,260	3,566	1,518
Operational	Jun-14	30	1,230	166,231	36,043	108,187	22,000	3,155	3,451	1,469
Operational	Jul-14	31	1,230	166,231	36,043	108,187	22,000	3,260	3,566	1,518
Operational	Aug-14	31	1,230	166,231	36,043	108,187	22,000	3,260	3,566	1,518
Operational	Sep-14	30	1,230	166,231	36,043	108,187	22,000	3,155	3,451	1,469
Operational	Oct-14	31	1,230	166,231	36,043	108,187	22,000	11,195	9,295	1,518
Operational	Nov-14	30	1,230	166,231	36,043	108,187	22,000	10,834	8,995	1,469
Operational	Dec-14	31	1,230	166,231	36,043	108,187	22,000	11,195	9,295	1,518
Operational	Jan-15	31	1,230	166,231	36,043	108,187	22,000	11,195	9,295	1,518
Operational	Feb-15	28	1,230	166,231	36,043	108,187	22,000	10,112	8,396	1,371
Operational	Mar-15	31	1,230	166,231	36,043	108,187	22,000	11,195	9,295	1,518
Operational	Apr-15	30	1,230	166,231	36,043	108,187	22,000	10,834	8,995	1,469
Operational	May-15	31	1,230	166,231	36,043	108,187	22,000	11,195	9,295	1,518
Operational	Jun-15	30	1,230	166,231	36,043	108,187	22,000	10,834	8,995	1,469
Operational	Jul-15	31	1,230	166,231	36,043	108,187	22,000	11,195	9,295	1,518
Operational	Aug-15	31	1,230	166,231	36,043	108,187	22,000	11,195	9,295	1,518
Operational	Sep-15	30	1,230	166,231	36,043	108,187	22,000	10,834	8,995	1,469
Operational	Oct-15	31	1,215	476,801	102,357	224,800	149,644	1,147	2,051	1,518
Operational	Nov-15	30	1,215	476,801	102,357	224,800	149,644	1,110	1,985	1,469
Operational	Dec-15	31	1,215	476,801	102,357	224,800	149,644	1,147	2,051	1,518

Stage	Month-Year	# Days/ Month	Operational Elevation (m asl)	Facility Footprint Total Area	Facility Footprint Stuttle Gulch Area	Facility Footprint Platinum Gulch Area	Facility Footprint Eagle Pup Area	Rate of Dewatering (npw) (lower bound of dewatering)	Rate of Dewatering (ad)	Drilling Water Requirements
			(m asl)	(m <sup>2</sup> )	(m <sup>2</sup> )	(m <sup>2</sup> )	(m <sup>2</sup> )	Volume (m <sup>3</sup> )	Volume (m <sup>3</sup> )	3 Drills
										Volume (m <sup>3</sup> )
Operational	Jan-16	31	1,215	476,801	102,357	224,800	149,644	1,147	2,051	1,518
Operational	Feb-16	29	1,215	476,801	102,357	224,800	149,644	1,073	1,919	1,420
Operational	Mar-16	31	1,215	476,801	102,357	224,800	149,644	1,147	2,051	1,518
Operational	Apr-16	30	1,215	476,801	102,357	224,800	149,644	1,110	1,985	1,469
Operational	May-16	31	1,215	476,801	102,357	224,800	149,644	1,147	2,051	1,518
Operational	Jun-16	30	1,215	476,801	102,357	224,800	149,644	1,110	1,985	1,469
Operational	Jul-16	31	1,215	476,801	102,357	224,800	149,644	1,147	2,051	1,518
Operational	Aug-16	31	1,215	476,801	102,357	224,800	149,644	1,147	2,051	1,518
Operational	Sep-16	30	1,215	476,801	102,357	224,800	149,644	1,110	1,985	1,469
Operational	Oct-16	31	1,215	476,801	102,357	224,800	149,644	12,559	13,295	1,518
Operational	Nov-16	30	1,215	476,801	102,357	224,800	149,644	12,154	12,866	1,469
Operational	Dec-16	31	1,215	476,801	102,357	224,800	149,644	12,559	13,295	1,518
Operational	Jan-17	31	1,215	476,801	102,357	224,800	149,644	12,559	13,295	1,518
Operational	Feb-17	28	1,215	476,801	102,357	224,800	149,644	11,344	12,009	1,371
Operational	Mar-17	31	1,215	476,801	102,357	224,800	149,644	12,559	13,295	1,518
Operational	Apr-17	30	1,215	476,801	102,357	224,800	149,644	12,154	12,866	1,469
Operational	May-17	31	1,215	476,801	102,357	224,800	149,644	12,559	13,295	1,518
Operational	Jun-17	30	1,215	476,801	102,357	224,800	149,644	12,154	12,866	1,469
Operational	Jul-17	31	1,215	476,801	102,357	224,800	149,644	12,559	13,295	1,518
Operational	Aug-17	31	1,215	476,801	102,357	224,800	149,644	12,559	13,295	1,518
Operational	Sep-17	30	1,215	476,801	102,357	224,800	149,644	12,154	12,866	1,469
Operational	Oct-17	31	1,200	588,237	133,593	330,751	174,167	1,276	2,410	1,518
Operational	Nov-17	30	1,200	588,237	133,593	330,751	174,167	1,235	2,333	1,469
Operational	Dec-17	31	1,200	588,237	133,593	330,751	174,167	1,276	2,410	1,518
Operational	Jan-18	31	1,200	588,237	133,593	330,751	174,167	1,276	2,410	1,518
Operational	Feb-18	28	1,200	588,237	133,593	330,751	174,167	1,153	2,177	1,371

Stage	Month-Year	# Days/ Month	Operational Elevation (m asl)	Facility Footprint Total Area	Facility Footprint Stuttle Gulch Area	Facility Footprint Platinum Gulch Area	Facility Footprint Eagle Pup Area	Rate of Dewatering (npw) (lower bound of dewatering)	Rate of Dewatering (ad)	Drilling Water Requirements
			(m asl)	(m <sup>2</sup> )	(m <sup>2</sup> )	(m <sup>2</sup> )	(m <sup>2</sup> )	Volume (m <sup>3</sup> )	Volume (m <sup>3</sup> )	3 Drills
										Volume (m <sup>3</sup> )
Operational	Mar-18	31	1,200	588,237	133,593	330,751	174,167	1,276	2,410	1,518
Operational	Apr-18	30	1,200	588,237	133,593	330,751	174,167	1,235	2,333	1,469
Operational	May-18	31	1,200	588,237	133,593	330,751	174,167	1,276	2,410	1,518
Operational	Jun-18	30	1,200	588,237	133,593	330,751	174,167	1,235	2,333	1,469
Operational	Jul-18	31	1,200	588,237	133,593	330,751	174,167	1,276	2,410	1,518
Operational	Aug-18	31	1,200	588,237	133,593	330,751	174,167	1,276	2,410	1,518
Operational	Sep-18	30	1,200	588,237	133,593	330,751	174,167	1,235	2,333	1,469
Operational	Oct-18	31	1,163	640,548	133,593	330,751	174,167	14,498	12,400	1,518
Operational	Nov-18	30	1,163	640,548	133,593	330,751	174,167	14,030	12,000	1,469
Operational	Dec-18	31	1,163	640,548	133,593	330,751	174,167	14,498	12,400	1,518
Operational	Jan-19	31	1,163	640,548	133,593	330,751	174,167	14,498	12,400	1,518
Operational	Feb-19	28	1,163	640,548	133,593	330,751	174,167	13,095	11,200	1,371
Operational	Mar-19	31	1,163	640,548	133,593	330,751	174,167	14,498	12,400	1,518
Operational	Apr-19	30	1,163	640,548	133,593	330,751	174,167	14,030	12,000	1,469
Operational	May-19	31	1,163	640,548	133,593	330,751	174,167	14,498	12,400	1,518
Operational	Jun-19	30	1,163	640,548	133,593	330,751	174,167	14,030	12,000	1,469
Operational	Jul-19	31	1,163	640,548	133,593	330,751	174,167	14,498	12,400	1,518
Operational	Aug-19	31	1,163	640,548	133,593	330,751	174,167	14,498	12,400	1,518
Operational	Sep-19	30	1,163	640,548	133,593	330,751	174,167	14,030	12,000	1,469
Operational	Oct-19	31	1,163	640,548	133,593	330,751	174,167	1,294	0	1,518
Operational	Nov-19	30	1,163	640,548	133,593	330,751	174,167	1,252	0	1,469
Operational	Dec-19	31	1,163	640,548	133,593	330,751	174,167	1,294	0	1,518
Operational	Jan-20	31	1,163	640,548	133,593	330,751	174,167	1,294	0	1,518
Operational	Feb-20	29	1,163	640,548	133,593	330,751	174,167	1,210	0	1,420
Operational	Mar-20	31	1,163	640,548	133,593	330,751	174,167	1,294	0	1,518
Operational	Apr-20	30	1,163	640,548	133,593	330,751	174,167	1,252	0	1,469



Stage	Month-Year	# Days/ Month	Operational Elevation (m asl)	Facility Footprint Total Area	Facility Footprint Stuttle Gulch Area	Facility Footprint Platinum Gulch Area	Facility Footprint Eagle Pup Area	Rate of Dewatering (npw) (lower bound of dewatering)	Rate of Dewatering (ad)	Drilling Water Requirements
			(m asl)	(m <sup>2</sup> )	(m <sup>2</sup> )	(m <sup>2</sup> )	(m <sup>2</sup> )	Volume (m <sup>3</sup> )	Volume (m <sup>3</sup> )	3 Drills
										Volume (m <sup>3</sup> )
Operational	May-20	31	1,163	640,548	133,593	330,751	174,167	1,294	0	1,518
Operational	Jun-20	30	1,163	640,548	133,593	330,751	174,167	1,252	0	1,469
Operational	Jul-20	31	1,163	640,548	133,593	330,751	174,167	1,294	0	1,518
Operational	Aug-20	31	1,163	640,548	133,593	330,751	174,167	1,294	0	1,518
Operational	Sep-20	30	1,163	640,548	133,593	330,751	174,167	1,252	0	1,469
Operational	Oct-20	31	1,163	640,548	133,593	330,751	174,167	1,294	0	1,518
Operational	Nov-20	30	1,163	640,548	133,593	330,751	174,167	1,252	0	1,469
Operational	Dec-20	31	1,163	640,548	133,593	330,751	174,167	1,294	0	1,518
Closure & Reclamation (au recovery)	Jan-21	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (au recovery)	Feb-21	28	1,163	640,548	133,593	330,751	174,167	1,168	0	0
Closure & Reclamation (au recovery)	Mar-21	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (au recovery)	Apr-21	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (au recovery)	May-21	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (au recovery)	Jun-21	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (au recovery)	Jul-21	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (au recovery)	Aug-21	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (au recovery)	Sep-21	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (au recovery)	Oct-21	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (au recovery)	Nov-21	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (au recovery)	Dec-21	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (hlf rinse)	Jan-22	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (hlf rinse)	Feb-22	28	1,163	640,548	133,593	330,751	174,167	1,168	0	0
Closure & Reclamation (hlf rinse)	Mar-22	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (hlf rinse)	Apr-22	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (hlf rinse)	May-22	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (hlf rinse)	Jun-22	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0

Stage	Month-Year	# Days/ Month	Operational Elevation (m asl)	Facility Footprint Total Area	Facility Footprint Stuttle Gulch Area	Facility Footprint Platinum Gulch Area	Facility Footprint Eagle Pup Area	Rate of Dewatering (npw) (lower bound of dewatering)	Rate of Dewatering (ad)	Drilling Water Requirements
			(m asl)	(m <sup>2</sup> )	(m <sup>2</sup> )	(m <sup>2</sup> )	(m <sup>2</sup> )	Volume (m <sup>3</sup> )	Volume (m <sup>3</sup> )	3 Drills
										Volume (m <sup>3</sup> )
Closure & Reclamation (hlf rinse)	Jul-22	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (hlf rinse)	Aug-22	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (hlf rinse)	Sep-22	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (hlf rinse)	Oct-22	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (hlf rinse)	Nov-22	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (hlf rinse)	Dec-22	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (hlf rinse)	Jan-23	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (hlf rinse)	Feb-23	28	1,163	640,548	133,593	330,751	174,167	1,168	0	0
Closure & Reclamation (hlf rinse)	Mar-23	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (hlf rinse)	Apr-23	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (hlf rinse)	May-23	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (hlf rinse)	Jun-23	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (hlf rinse)	Jul-23	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (hlf rinse)	Aug-23	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (hlf rinse)	Sep-23	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (hlf rinse)	Oct-23	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (hlf rinse)	Nov-23	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (hlf rinse)	Dec-23	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (hlf rinse)	Jan-24	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (hlf rinse)	Feb-24	29	1,163	640,548	133,593	330,751	174,167	1,210	0	0
Closure & Reclamation (hlf rinse)	Mar-24	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (hlf rinse)	Apr-24	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (hlf rinse)	May-24	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (hlf rinse)	Jun-24	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (draindown)	Jul-24	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Aug-24	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0

Stage	Month-Year	# Days/ Month	Operational Elevation (m asl)	Facility Footprint Total Area	Facility Footprint Stuttle Gulch Area	Facility Footprint Platinum Gulch Area	Facility Footprint Eagle Pup Area	Rate of Dewatering (npw) (lower bound of dewatering)	Rate of Dewatering (ad)	Drilling Water Requirements
			(m asl)	(m <sup>2</sup> )	(m <sup>2</sup> )	(m <sup>2</sup> )	(m <sup>2</sup> )	Volume (m <sup>3</sup> )	Volume (m <sup>3</sup> )	3 Drills
										Volume (m <sup>3</sup> )
Closure & Reclamation (draindown)	Sep-24	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (draindown)	Oct-24	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Nov-24	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (draindown)	Dec-24	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Jan-25	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Feb-25	28	1,163	640,548	133,593	330,751	174,167	1,168	0	0
Closure & Reclamation (draindown)	Mar-25	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Apr-25	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (draindown)	May-25	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Jun-25	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (draindown)	Jul-25	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Aug-25	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Sep-25	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (draindown)	Oct-25	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Nov-25	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (draindown)	Dec-25	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Jan-26	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Feb-26	28	1,163	640,548	133,593	330,751	174,167	1,168	0	0
Closure & Reclamation (draindown)	Mar-26	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Apr-26	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (draindown)	May-26	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Jun-26	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (draindown)	Jul-26	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Aug-26	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Sep-26	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (draindown)	Oct-26	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0

Stage	Month-Year	# Days/ Month	Operational Elevation (m asl)	Facility Footprint Total Area	Facility Footprint Stuttle Gulch Area	Facility Footprint Platinum Gulch Area	Facility Footprint Eagle Pup Area	Rate of Dewatering (npw) (lower bound of dewatering)	Rate of Dewatering (ad)	Drilling Water Requirements
			(m asl)	(m <sup>2</sup> )	(m <sup>2</sup> )	(m <sup>2</sup> )	(m <sup>2</sup> )	Volume (m <sup>3</sup> )	Volume (m <sup>3</sup> )	3 Drills
										Volume (m <sup>3</sup> )
Closure & Reclamation (draindown)	Nov-26	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (draindown)	Dec-26	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Jan-27	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Feb-27	28	1,163	640,548	133,593	330,751	174,167	1,168	0	0
Closure & Reclamation (draindown)	Mar-27	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Apr-27	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (draindown)	May-27	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Jun-27	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (draindown)	Jul-27	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Aug-27	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Sep-27	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (draindown)	Oct-27	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Nov-27	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (draindown)	Dec-27	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Jan-28	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Feb-28	29	1,163	640,548	133,593	330,751	174,167	1,210	0	0
Closure & Reclamation (draindown)	Mar-28	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Apr-28	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (draindown)	May-28	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Jun-28	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (draindown)	Jul-28	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Aug-28	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Sep-28	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (draindown)	Oct-28	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Nov-28	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (draindown)	Dec-28	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0

Stage	Month-Year	# Days/ Month	Operational Elevation (m asl)	Facility Footprint Total Area	Facility Footprint Stuttle Gulch Area	Facility Footprint Platinum Gulch Area	Facility Footprint Eagle Pup Area	Rate of Dewatering (npw) (lower bound of dewatering)	Rate of Dewatering (ad)	Drilling Water Requirements
			(m asl)	(m <sup>2</sup> )	(m <sup>2</sup> )	(m <sup>2</sup> )	(m <sup>2</sup> )	Volume (m <sup>3</sup> )	Volume (m <sup>3</sup> )	3 Drills
										Volume (m <sup>3</sup> )
Closure & Reclamation (draindown)	Jan-29	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Feb-29	28	1,163	640,548	133,593	330,751	174,167	1,168	0	0
Closure & Reclamation (draindown)	Mar-29	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Apr-29	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (draindown)	May-29	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Jun-29	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (draindown)	Jul-29	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Aug-29	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Sep-29	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (draindown)	Oct-29	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Nov-29	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (draindown)	Dec-29	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Jan-30	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Feb-30	28	1,163	640,548	133,593	330,751	174,167	1,168	0	0
Closure & Reclamation (draindown)	Mar-30	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Apr-30	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (draindown)	May-30	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Jun-30	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (draindown)	Jul-30	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Aug-30	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Sep-30	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (draindown)	Oct-30	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Closure & Reclamation (draindown)	Nov-30	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Closure & Reclamation (draindown)	Dec-30	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Post-closure Environmental Monitoring	Jan-31	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Post-closure Environmental Monitoring	Feb-31	28	1,163	640,548	133,593	330,751	174,167	1,168	0	0

Stage	Month-Year	# Days/ Month	Operational Elevation (m asl)	Facility Footprint Total Area	Facility Footprint Stuttle Gulch Area	Facility Footprint Platinum Gulch Area	Facility Footprint Eagle Pup Area	Rate of Dewatering (npw) (lower bound of dewatering)	Rate of Dewatering (ad)	Drilling Water Requirements
			(m asl)	(m <sup>2</sup> )	(m <sup>2</sup> )	(m <sup>2</sup> )	(m <sup>2</sup> )	Volume (m <sup>3</sup> )	Volume (m <sup>3</sup> )	3 Drills
										Volume (m <sup>3</sup> )
Post-closure Environmental Monitoring	Mar-31	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Post-closure Environmental Monitoring	Apr-31	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Post-closure Environmental Monitoring	May-31	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Post-closure Environmental Monitoring	Jun-31	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Post-closure Environmental Monitoring	Jul-31	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Post-closure Environmental Monitoring	Aug-31	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Post-closure Environmental Monitoring	Sep-31	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Post-closure Environmental Monitoring	Oct-31	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Post-closure Environmental Monitoring	Nov-31	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Post-closure Environmental Monitoring	Dec-31	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Post-closure Environmental Monitoring	Jan-32	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Post-closure Environmental Monitoring	Feb-32	29	1,163	640,548	133,593	330,751	174,167	1,210	0	0
Post-closure Environmental Monitoring	Mar-32	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Post-closure Environmental Monitoring	Apr-32	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Post-closure Environmental Monitoring	May-32	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Post-closure Environmental Monitoring	Jun-32	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Post-closure Environmental Monitoring	Jul-32	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Post-closure Environmental Monitoring	Aug-32	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Post-closure Environmental Monitoring	Sep-32	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Post-closure Environmental Monitoring	Oct-32	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Post-closure Environmental Monitoring	Nov-32	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Post-closure Environmental Monitoring	Dec-32	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Post-closure Environmental Monitoring	Jan-33	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Post-closure Environmental Monitoring	Feb-33	28	1,163	640,548	133,593	330,751	174,167	1,168	0	0
Post-closure Environmental Monitoring	Mar-33	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Post-closure Environmental Monitoring	Apr-33	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0

Stage	Month-Year	# Days/ Month	Operational Elevation (m asl)	Facility Footprint Total Area	Facility Footprint Stuttle Gulch Area	Facility Footprint Platinum Gulch Area	Facility Footprint Eagle Pup Area	Rate of Dewatering (npw) (lower bound of dewatering)	Rate of Dewatering (ad)	Drilling Water Requirements
			(m asl)	(m <sup>2</sup> )	(m <sup>2</sup> )	(m <sup>2</sup> )	(m <sup>2</sup> )	Volume (m <sup>3</sup> )	Volume (m <sup>3</sup> )	3 Drills
										Volume (m <sup>3</sup> )
Post-closure Environmental Monitoring	May-33	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Post-closure Environmental Monitoring	Jun-33	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Post-closure Environmental Monitoring	Jul-33	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Post-closure Environmental Monitoring	Aug-33	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Post-closure Environmental Monitoring	Sep-33	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Post-closure Environmental Monitoring	Oct-33	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Post-closure Environmental Monitoring	Nov-33	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Post-closure Environmental Monitoring	Dec-33	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Post-closure Environmental Monitoring	Jan-34	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Post-closure Environmental Monitoring	Feb-34	28	1,163	640,548	133,593	330,751	174,167	1,168	0	0
Post-closure Environmental Monitoring	Mar-34	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Post-closure Environmental Monitoring	Apr-34	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Post-closure Environmental Monitoring	May-34	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Post-closure Environmental Monitoring	Jun-34	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Post-closure Environmental Monitoring	Jul-34	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Post-closure Environmental Monitoring	Aug-34	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Post-closure Environmental Monitoring	Sep-34	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Post-closure Environmental Monitoring	Oct-34	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Post-closure Environmental Monitoring	Nov-34	30	1,163	640,548	133,593	330,751	174,167	1,252	0	0
Post-closure Environmental Monitoring	Dec-34	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0
Post-closure Environmental Monitoring	Jan-35	31	1,163	640,548	133,593	330,751	174,167	1,294	0	0

**Table B-7: Platinum Gulch WRSA Geometry Assumptions**

Year	Parameter	Value	Units	Data Source
Baseline	Platinum Gulch Total Basin Area	1,395,500	m <sup>2</sup>	[1]
	Platinum Gulch Reference Elevation	1,070	m asl	[1]
Construction	Platinum Gulch Footprint Area – Construction	0	m <sup>2</sup>	[2]
	Platinum Gulch Reference Elevation – Construction	1,070	m asl	[3]
1	Platinum Gulch Footprint Area – Year 1	60,000	m <sup>2</sup>	[2]
	Platinum Gulch Reference Elevation – Year 1	1,135	m asl	[3]
	Platinum Gulch Waste Rock Tonnage	1	Mt	[2]
	Platinum Gulch Waste Rock Volume – Year 1	500,000	m <sup>3</sup>	[2]
2*	Platinum Gulch Footprint Area – Year 2*	250,000	m <sup>2</sup>	[2]
	Platinum Gulch Reference Elevation – Year 2*	1,160	m asl	–
	Platinum Gulch Waste Rock Tonnage	2.8	Mt	[2]
	Platinum Gulch Waste Rock Volume – Year 2	1,400,000	m <sup>3</sup>	[2]
3	Platinum Gulch Footprint Area – Year 3	330,000	m <sup>2</sup>	[2]
	Platinum Gulch Reference Elevation – Year 3	1,185	m asl	[3]
	Platinum Gulch Waste Rock Tonnage	5.8	Mt	[2]
	Platinum Gulch Waste Rock Volume – Year 3	2,900,000	m <sup>3</sup>	[2]
4*	Platinum Gulch Footprint Area – Year 4*	330,000	m <sup>2</sup>	[2]
	Platinum Gulch Reference Elevation – Year 4*	1,185	m asl	
	Platinum Gulch Waste Rock Tonnage	5.8	Mt	[2]
	Platinum Gulch Waste Rock Volume – Year 4	0	m <sup>3</sup>	[2]
5	Platinum Gulch Footprint Area – Year 5	330,000	m <sup>2</sup>	[2]
	Platinum Gulch Reference Elevation – Year 5	1,185	m asl	[3]
	Platinum Gulch Waste Rock Tonnage	5.8	Mt	[2]
	Platinum Gulch Waste Rock Volume – Year 5	0	m <sup>3</sup>	[2]
6*	Platinum Gulch Footprint Area – Year 6*	330,000	m <sup>2</sup>	[2]
	Platinum Gulch Reference Elevation – Year 6*	1,185	m asl	–
	Platinum Gulch Waste Rock Tonnage	5.8	Mt	[2]
	Platinum Gulch Waste Rock Volume – Year 6	0	m <sup>3</sup>	[2]



Year	Parameter	Value	Units	Data Source
7*	Platinum Gulch Footprint Area – Year 7	330,000	m <sup>2</sup>	[2]
	Platinum Gulch Reference Elevation – Year 7*	1,185	m asl	–
	Platinum Gulch Waste Rock Tonnage	5.8	Mt	[2]
	Platinum Gulch Waste Rock Volume – Year 7	0	m <sup>3</sup>	[2]
8 (Closure/ Reclamation)	Platinum Gulch Footprint Area – Year Final	330,000	m <sup>2</sup>	[2]
	Platinum Gulch Reference Elevation – Year Final	1185	m asl	[2]
	Platinum Gulch Waste Rock Tonnage	5.8	Mt	[2]
	Platinum Gulch Waste Rock Volume – Year Final	0	m <sup>3</sup>	[2]
WRSA Properties	Total EP WRSA Weight	9.6	Mt	[2]
	Total EP WRSA Volume	4,800,000	m <sup>3</sup>	[2]
	Waste Rock Density	2.00	s.g.	[2]
	Swell Factor	1.35	35%	[2]
	Porosity	tbd	–	–
	Initial Moisture Content at Deposition %	1%	%	Estimate
	Insitu Rock Density	2.66	s.g.	[2]
Sediment Control Pond	Maximum Volume of SCP	37,546	m <sup>3</sup>	[6]
	Maximum SCP Water Surface Area	8,537	m <sup>2</sup>	[6]
Diversion Pond	Maximum Water Surface Area	37,546	m <sup>2</sup>	[1]
	Density Water	1000	kg/m <sup>3</sup>	–

**NOTES:**

[1] Stantec (GIS) Reference elevations represent the median footprint elevation for each year.

[2] Scott Wilson – Vancouver - file name = ge\_edit3-Eagle Gold Ore and Waste Production Plan by Type and Year.xls

[3] Scott Wilson – Vancouver email to G. Barr from G. Ehasoo, May 18, 2010 (Elevation = surface centroid elevation estimate)

[4] Project Description

[5] Interpolated

[6] Source: Dublin Gulch - pond storage capacities.xls - via email from Jason Cox: Mon 7/12/2010 6:20 am

\* Not mapped, interpolated values

\*\* Assume that the entire facility pad is prepared rather than a stepped clearing process.

Assumes that there is no recharge to the local groundwater aquifer in the footprint area

**Table B-8: Platinum Gulch Waste Rock Storage Area Monthly Input Assumptions**

Stage	Month-Year	Operational Reference Elevation	Facility Footprint (disturbed area)	Monthly Volume	Cumulative Facility Volume (m <sup>3</sup> )	Initial Moisture Content on Deposit	Cumulative Moisture Content
		m asl	m <sup>2</sup>	= Annual Vol/12 (mths)		M <sub>i</sub>	
				m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	
Existing Conditions	Oct-11	1,070	0	0	0	0	0
Existing Conditions	Nov-11	1,070	0	0	0	0	0
Existing Conditions	Dec-11	1,070	0	0	0	0	0
Construction	Jan-12	1,070	0	0	0	0	0
Construction	Feb-12	1,070	0	0	0	0	0
Construction	Mar-12	1,070	0	0	0	0	0
Construction	Apr-12	1,070	0	0	0	0	0
Construction	May-12	1,070	0	0	0	0	0
Construction	Jun-12	1,070	0	0	0	0	0
Construction	Jul-12	1,070	0	0	0	0	0
Construction	Aug-12	1,070	0	0	0	0	0
Construction	Sep-12	1,070	0	0	0	0	0
Construction	Oct-12	1,070	0	0	0	0	0
Construction	Nov-12	1,070	0	0	0	0	0
Construction	Dec-12	1,070	0	0	0	0	0
Construction	Jan-13	1,070	0	0	0	0	0
Construction	Feb-13	1,070	0	0	0	0	0
Construction	Mar-13	1,070	0	0	0	0	0
Construction	Apr-13	1,070	0	0	0	0	0
Construction	May-13	1,070	0	0	0	0	0
Construction	Jun-13	1,070	0	0	0	0	0
Construction	Jul-13	1,070	0	0	0	0	0
Construction	Aug-13	1,070	0	0	0	0	0
Operational	Sep-13	1,135	250,000	38,462	38,462	385	385
Operational	Oct-13	1,135	250,000	38,462	76,923	385	769
Operational	Nov-13	1,135	250,000	38,462	115,385	385	1,154

Stage	Month-Year	Operational Reference Elevation	Facility Footprint (disturbed area)	Monthly Volume	Cumulative Facility Volume (m <sup>3</sup> )	Initial Moisture Content on Deposit	Cumulative Moisture Content
		m asl	m <sup>2</sup>	= Annual Vol/12 (mths)		M <sub>i</sub>	
				m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	
Operational	Dec-13	1,135	250,000	38,462	153,846	385	1,538
Operational	Jan-14	1,135	250,000	38,462	192,308	385	1,923
Operational	Feb-14	1,135	250,000	38,462	230,769	385	2,308
Operational	Mar-14	1,135	250,000	38,462	269,231	385	2,692
Operational	Apr-14	1,135	250,000	38,462	307,692	385	3,077
Operational	May-14	1,135	250,000	38,462	346,154	385	3,462
Operational	Jun-14	1,135	250,000	38,462	384,615	385	3,846
Operational	Jul-14	1,135	250,000	38,462	423,077	385	4,231
Operational	Aug-14	1,135	330,000	38,462	461,538	385	4,615
Operational	Sep-14	1,160	330,000	38,462	500,000	385	5,000
Operational	Oct-14	1,160	330,000	116,667	616,667	1,167	6,167
Operational	Nov-14	1,160	330,000	116,667	733,333	1,167	7,333
Operational	Dec-14	1,160	330,000	116,667	850,000	1,167	8,500
Operational	Jan-15	1,160	330,000	116,667	966,667	1,167	9,667
Operational	Feb-15	1,160	330,000	116,667	1,083,333	1,167	10,833
Operational	Mar-15	1,160	330,000	116,667	1,200,000	1,167	12,000
Operational	Apr-15	1,160	330,000	116,667	1,316,667	1,167	13,167
Operational	May-15	1,160	330,000	116,667	1,433,333	1,167	14,333
Operational	Jun-15	1,160	330,000	116,667	1,550,000	1,167	15,500
Operational	Jul-15	1,160	330,000	116,667	1,666,667	1,167	16,667
Operational	Aug-15	1,160	330,000	116,667	1,783,333	1,167	17,833
Operational	Sep-15	1,185	330,000	116,667	1,900,000	1,167	19,000
Operational	Oct-15	1,185	330,000	241,667	2,141,667	2,417	21,417
Operational	Nov-15	1,185	330,000	241,667	2,383,333	2,417	23,833
Operational	Dec-15	1,185	330,000	241,667	2,625,000	2,417	26,250
Operational	Jan-16	1,185	330,000	241,667	2,866,667	2,417	28,667
Operational	Feb-16	1,185	330,000	241,667	3,108,333	2,417	31,083

Stage	Month-Year	Operational Reference Elevation	Facility Footprint (disturbed area)	Monthly Volume	Cumulative Facility Volume (m <sup>3</sup> )	Initial Moisture Content on Deposit	Cumulative Moisture Content
				= Annual Vol/12 (mths)		M <sub>i</sub>	
				m <sup>3</sup>		m <sup>3</sup>	
		m asl	m <sup>2</sup>	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>
Operational	Mar-16	1,185	330,000	241,667	3,350,000	2,417	33,500
Operational	Apr-16	1,185	330,000	241,667	3,591,667	2,417	35,917
Operational	May-16	1,185	330,000	241,667	3,833,333	2,417	38,333
Operational	Jun-16	1,185	330,000	241,667	4,075,000	2,417	40,750
Operational	Jul-16	1,185	330,000	241,667	4,316,667	2,417	43,167
Operational	Aug-16	1,185	330,000	241,667	4,558,333	2,417	45,583
Operational	Sep-16	1,185	330,000	241,667	4,800,000	2,417	48,000
Operational	Oct-16	1,185	330,000	0	4,800,000	0	48,000
Operational	Nov-16	1,185	330,000	0	4,800,000	0	48,000
Operational	Dec-16	1,185	330,000	0	4,800,000	0	48,000
Operational	Jan-17	1,185	330,000	0	4,800,000	0	48,000
Operational	Feb-17	1,185	330,000	0	4,800,000	0	48,000
Operational	Mar-17	1,185	330,000	0	4,800,000	0	48,000
Operational	Apr-17	1,185	330,000	0	4,800,000	0	48,000
Operational	May-17	1,185	330,000	0	4,800,000	0	48,000
Operational	Jun-17	1,185	330,000	0	4,800,000	0	48,000
Operational	Jul-17	1,185	330,000	0	4,800,000	0	48,000
Operational	Aug-17	1,185	330,000	0	4,800,000	0	48,000
Operational	Sep-17	1,185	330,000	0	4,800,000	0	48,000
Operational	Oct-17	1,185	330,000	0	4,800,000	0	48,000
Operational	Nov-17	1,185	330,000	0	4,800,000	0	48,000
Operational	Dec-17	1,185	330,000	0	4,800,000	0	48,000
Operational	Jan-18	1,185	330,000	0	4,800,000	0	48,000
Operational	Feb-18	1,185	330,000	0	4,800,000	0	48,000
Operational	Mar-18	1,185	330,000	0	4,800,000	0	48,000
Operational	Apr-18	1,185	330,000	0	4,800,000	0	48,000
Operational	May-18	1,185	330,000	0	4,800,000	0	48,000

Stage	Month-Year	Operational Reference Elevation	Facility Footprint (disturbed area)	Monthly Volume	Cumulative Facility Volume (m <sup>3</sup> )	Initial Moisture Content on Deposit	Cumulative Moisture Content
				= Annual Vol/12 (mths)		M <sub>i</sub>	
				m <sup>3</sup>		m <sup>3</sup>	
		m asl	m <sup>2</sup>	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>
Operational	Jun-18	1,185	330,000	0	4,800,000	0	48,000
Operational	Jul-18	1,185	330,000	0	4,800,000	0	48,000
Operational	Aug-18	1,185	330,000	0	4,800,000	0	48,000
Operational	Sep-18	1,185	330,000	0	4,800,000	0	48,000
Operational	Oct-18	1,185	330,000	0	4,800,000	0	48,000
Operational	Nov-18	1,185	330,000	0	4,800,000	0	48,000
Operational	Dec-18	1,185	330,000	0	4,800,000	0	48,000
Operational	Jan-19	1,185	330,000	0	4,800,000	0	48,000
Operational	Feb-19	1,185	330,000	0	4,800,000	0	48,000
Operational	Mar-19	1,185	330,000	0	4,800,000	0	48,000
Operational	Apr-19	1,185	330,000	0	4,800,000	0	48,000
Operational	May-19	1,185	330,000	0	4,800,000	0	48,000
Operational	Jun-19	1,185	330,000	0	4,800,000	0	48,000
Operational	Jul-19	1,185	330,000	0	4,800,000	0	48,000
Operational	Aug-19	1,185	330,000	0	4,800,000	0	48,000
Operational	Sep-19	1,185	330,000	0	4,800,000	0	48,000
Operational	Oct-19	1,185	330,000	0	4,800,000	0	48,000
Operational	Nov-19	1,185	330,000	0	4,800,000	0	48,000
Operational	Dec-19	1,185	330,000	0	4,800,000	0	48,000
Operational	Jan-20	1,185	330,000	0	4,800,000	0	48,000
Operational	Feb-20	1,185	330,000	0	4,800,000	0	48,000
Operational	Mar-20	1,185	330,000	0	4,800,000	0	48,000
Operational	Apr-20	1,185	330,000	0	4,800,000	0	48,000
Operational	May-20	1,185	330,000	0	4,800,000	0	48,000
Operational	Jun-20	1,185	330,000	0	4,800,000	0	48,000
Operational	Jul-20	1,185	330,000	0	4,800,000	0	48,000
Operational	Aug-20	1,185	330,000	0	4,800,000	0	48,000

Stage	Month-Year	Operational Reference Elevation	Facility Footprint (disturbed area)	Monthly Volume	Cumulative Facility Volume (m <sup>3</sup> )	Initial Moisture Content on Deposit	Cumulative Moisture Content
				= Annual Vol/12 (mths)		M <sub>i</sub>	
				m <sup>3</sup>		m <sup>3</sup>	
		m asl	m <sup>2</sup>	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>
Operational	Sep-20	1,185	330,000	0	4,800,000	0	48,000
Operational	Oct-20	1,185	330,000	0	4,800,000	0	48,000
Operational	Nov-20	1,185	330,000	0	4,800,000	0	48,000
Operational	Dec-20	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (au recovery)	Jan-21	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (au recovery)	Feb-21	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (au recovery)	Mar-21	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (au recovery)	Apr-21	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (au recovery)	May-21	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (au recovery)	Jun-21	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (au recovery)	Jul-21	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (au recovery)	Aug-21	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (au recovery)	Sep-21	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (au recovery)	Oct-21	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (au recovery)	Nov-21	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (au recovery)	Dec-21	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (hlf rinse)	Jan-22	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (hlf rinse)	Feb-22	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (hlf rinse)	Mar-22	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (hlf rinse)	Apr-22	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (hlf rinse)	May-22	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (hlf rinse)	Jun-22	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (hlf rinse)	Jul-22	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (hlf rinse)	Aug-22	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (hlf rinse)	Sep-22	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (hlf rinse)	Oct-22	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (hlf rinse)	Nov-22	1,185	330,000	0	4,800,000	0	48,000

Stage	Month-Year	Operational Reference Elevation	Facility Footprint (disturbed area)	Monthly Volume	Cumulative Facility Volume (m <sup>3</sup> )	Initial Moisture Content on Deposit	Cumulative Moisture Content
				= Annual Vol/12 (mths)		M <sub>i</sub>	
				m <sup>3</sup>		m <sup>3</sup>	
		m asl	m <sup>2</sup>	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>
Closure & Reclamation (hlf rinse)	Dec-22	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (hlf rinse)	Jan-23	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (hlf rinse)	Feb-23	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (hlf rinse)	Mar-23	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (hlf rinse)	Apr-23	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (hlf rinse)	May-23	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (hlf rinse)	Jun-23	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (hlf rinse)	Jul-23	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (hlf rinse)	Aug-23	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (hlf rinse)	Sep-23	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (hlf rinse)	Oct-23	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (hlf rinse)	Nov-23	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (hlf rinse)	Dec-23	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (hlf rinse)	Jan-24	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (hlf rinse)	Feb-24	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (hlf rinse)	Mar-24	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (hlf rinse)	Apr-24	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (hlf rinse)	May-24	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (hlf rinse)	Jun-24	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Jul-24	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Aug-24	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Sep-24	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Oct-24	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Nov-24	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Dec-24	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Jan-25	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Feb-25	1,185	330,000	0	4,800,000	0	48,000

Stage	Month-Year	Operational Reference Elevation	Facility Footprint (disturbed area)	Monthly Volume	Cumulative Facility Volume (m <sup>3</sup> )	Initial Moisture Content on Deposit	Cumulative Moisture Content
				= Annual Vol/12 (mths)		M <sub>i</sub>	
				m <sup>3</sup>		m <sup>3</sup>	
Closure & Reclamation (draindown)	Mar-25	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Apr-25	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	May-25	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Jun-25	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Jul-25	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Aug-25	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Sep-25	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Oct-25	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Nov-25	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Dec-25	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Jan-26	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Feb-26	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Mar-26	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Apr-26	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	May-26	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Jun-26	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Jul-26	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Aug-26	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Sep-26	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Oct-26	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Nov-26	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Dec-26	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Jan-27	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Feb-27	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Mar-27	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Apr-27	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	May-27	1,185	330,000	0	4,800,000	0	48,000



Stage	Month-Year	Operational Reference Elevation	Facility Footprint (disturbed area)	Monthly Volume	Cumulative Facility Volume (m <sup>3</sup> )	Initial Moisture Content on Deposit	Cumulative Moisture Content
				= Annual Vol/12 (mths)		M <sub>i</sub>	
				m <sup>3</sup>		m <sup>3</sup>	
Closure & Reclamation (draindown)	Jun-27	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Jul-27	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Aug-27	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Sep-27	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Oct-27	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Nov-27	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Dec-27	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Jan-28	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Feb-28	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Mar-28	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Apr-28	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	May-28	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Jun-28	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Jul-28	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Aug-28	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Sep-28	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Oct-28	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Nov-28	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Dec-28	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Jan-29	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Feb-29	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Mar-29	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Apr-29	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	May-29	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Jun-29	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Jul-29	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Aug-29	1,185	330,000	0	4,800,000	0	48,000

Stage	Month-Year	Operational Reference Elevation	Facility Footprint (disturbed area)	Monthly Volume	Cumulative Facility Volume (m <sup>3</sup> )	Initial Moisture Content on Deposit	Cumulative Moisture Content
				= Annual Vol/12 (mths)		M <sub>i</sub>	
				m <sup>3</sup>		m <sup>3</sup>	
Closure & Reclamation (draindown)	Sep-29	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Oct-29	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Nov-29	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Dec-29	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Jan-30	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Feb-30	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Mar-30	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Apr-30	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	May-30	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Jun-30	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Jul-30	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Aug-30	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Sep-30	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Oct-30	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Nov-30	1,185	330,000	0	4,800,000	0	48,000
Closure & Reclamation (draindown)	Dec-30	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Jan-31	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Feb-31	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Mar-31	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Apr-31	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	May-31	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Jun-31	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Jul-31	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Aug-31	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Sep-31	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Oct-31	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Nov-31	1,185	330,000	0	4,800,000	0	48,000

Stage	Month-Year	Operational Reference Elevation	Facility Footprint (disturbed area)	Monthly Volume	Cumulative Facility Volume (m <sup>3</sup> )	Initial Moisture Content on Deposit	Cumulative Moisture Content
				= Annual Vol/12 (mths)		M <sub>i</sub>	
				m <sup>3</sup>		m <sup>3</sup>	
Post-closure environmental monitoring	Dec-31	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Jan-32	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Feb-32	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Mar-32	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Apr-32	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	May-32	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Jun-32	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Jul-32	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Aug-32	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Sep-32	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Oct-32	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Nov-32	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Dec-32	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Jan-33	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Feb-33	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Mar-33	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Apr-33	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	May-33	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Jun-33	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Jul-33	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Aug-33	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Sep-33	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Oct-33	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Nov-33	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Dec-33	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Jan-34	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Feb-34	1,185	330,000	0	4,800,000	0	48,000

Stage	Month-Year	Operational Reference Elevation	Facility Footprint (disturbed area)	Monthly Volume	Cumulative Facility Volume (m <sup>3</sup> )	Initial Moisture Content on Deposit	Cumulative Moisture Content
		m asl	m <sup>2</sup>	= Annual Vol/12 (mths)		M <sub>i</sub>	
				m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	
Post-closure Environmental Monitoring	Mar-34	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Apr-34	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	May-34	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Jun-34	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Jul-34	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Aug-34	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Sep-34	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Oct-34	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Nov-34	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Dec-34	1,185	330,000	0	4,800,000	0	48,000
Post-closure Environmental Monitoring	Jan-35	1,185	330,000	0	4,800,000	0	48,000

**Table B-9: Eagle Pup WRSA Geometry Assumptions**

Year	Parameter	Value	Units	Data Source
Baseline	Eagle Pup Total Basin Area	1,273,300	m <sup>2</sup>	[1]
	Eagle Pup Reference Elevation	1,116	m asl	[1]
Construction	Eagle Pup Footprint Area – Construction	120,000	m <sup>2</sup>	[2]
	Eagle Pup Reference Elevation – Construction	1,116	m asl	[3]
1	Eagle Pup Footprint Area – Year 1	120,000	m <sup>2</sup>	[2]
	Eagle Pup Reference Elevation – Year 1	1,155	m asl	[3]
	Eagle Pup Waste Rock Tonnage	2	Mt	[2]
	Eagle Pup Waste Rock Volume – Year 1	1,000,000	m <sup>3</sup>	[2]
2*	Eagle Pup Footprint Area – Year 2*	250,000	m <sup>2</sup>	[2]
	Eagle Pup Reference Elevation – Year 2*	1,165	m asl	[5]
	Eagle Pup Waste Rock Tonnage	2.8	Mt	[2]
	Eagle Pup Waste Rock Volume – Year 2	1,400,000	m <sup>3</sup>	[2]
3	Eagle Pup Footprint Area – Year 3	430,000	m <sup>2</sup>	[2]
	Eagle Pup Reference Elevation - Yar 3	1,175	m asl	[3]
	Eagle Pup Waste Rock Tonnage	7.9	Mt	[2]
	Eagle Pup Waste Rock Volume – Year 3	3,950,000	m <sup>3</sup>	[2]
4*	Eagle Pup Footprint Area - Yer 4*	530,000	m <sup>2</sup>	[2]
	Eagle Pup Reference Elevation – Year 4*	1,173	m asl	–
	Eagle Pup Waste Rock Tonnage	8.8	Mt	[2]
	Eagle Pup Waste Rock Volume – Year 4	4,400,000	m <sup>3</sup>	[2]
5	Eagle Pup Footprint Area – Year 5	620,000	m <sup>2</sup>	[2]
	Eagle Pup Reference Elevation – Year 5	1,170	m asl	[3]
	Eagle Pup Waste Rock Tonnage	12.8	Mt	[2]
	Eagle Pup Waste Rock Volume – Year 5	6,400,000	m <sup>3</sup>	[2]

Year	Parameter	Value	Units	Data Source
6*	Eagle Pup Footprint Area – Year 6*	680,000	m <sup>2</sup>	[2]
	Eagle Pup Reference Elevation – Year 6*	1,160	m asl	–
	Eagle Pup Waste Rock Tonnage	9.5	Mt	[2]
	Eagle Pup Waste Rock Volume – Year 6	4,750,000	m <sup>3</sup>	[2]
7*	Eagle Pup Footprint Area – Year 7*	740,000	m <sup>2</sup>	[2]
	Eagle Pup Reference Elevation – Year 7*	1,160	m asl	–
	Eagle Pup Waste Rock Tonnage	4.0	Mt	[2]
	Eagle Pup Waste Rock Volume – Year 7*	2,000,000	m <sup>3</sup>	[2]
8 (Closure/ Reclamation)	Eagle Pup Footprint Area – Year Final	800,000	m <sup>2</sup>	[2]
	Eagle Pup Reference Elevation – Year Final	Feb-03	m asl	[2]
	Eagle Pup Waste Rock Tonnage	3.4	Mt	[2]
	Eagle Pup Waste Rock Volume – Year Final	1,700,000	m <sup>3</sup>	[2]
WRSA Properties	Total EP WRSA Weight	51.20	Mt	[2]
	Total EP WRSA Volume	25,600,000	m <sup>3</sup>	[2]
	Waste Rock Density	2.00	s.g.	[2]
	Swell Factor	1.35	35%	[2]
	Porosity	tbd	–	–
	Initial Moisture Content at Deposition %	1%	%	Estimate
	<i>In-situ</i> Rock Density	2.66	s.g.	[2]
Sediment Control Pond	Maximum Volume of SCP	26,559	m <sup>3</sup>	[6]
	Maximum SCP Water Surface Area	n/a	m <sup>2</sup>	[6]
	Density Water	1000	kg/m <sup>3</sup>	–

**NOTES:**

[1] Stantec (GIS) Reference elevations represent the median footprint elevation for each year.

[2] Scott Wilson – Vancouver - file name = ge\_edit3-Eagle Gold Ore and Waste Production Plan by Type and Year.xls

[3] Scott Wilson – Vancouver email to G. Barr from G. Ehasoo, May 18, 2010 (Elevation = surface centroid elevation estimate)

[4] Project Description

[5] Interpolated

[6] Source: Dublin Gulch - pond storage capacities.xls - via email from Jason Cox: Mon 7/12/2010 6:20 am

\* Not mapped, interpolated values

\*\* Assume that the entire facility pad is prepared rather than a stepped clearing process.

Assumes that there is no recharge to the local groundwater aquifer in the footprint area

**Table B-10: Eagle Pup Waste Rock Storage Area Monthly Assumptions**

Stage	Month-Year	Operational Reference Elevation	Facility Footprint (disturbed area)	Incremental WRSA Monthly Volume = Annual Vol/12 (mths)	Cumulative Facility Volume (m <sup>3</sup> )	Initial moisture Content on Deposit M <sub>i</sub>	Cumulative Moisture Content
		m asl	m <sup>2</sup>	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	
Existing Conditions	Oct-11	1,116	0	0	0	0	0
Existing Conditions	Nov-11	1,116	0	0	0	0	0
Existing Conditions	Dec-11	1,116	0	0	0	0	0
Construction	Jan-12	1,116	0	0	0	0	0
Construction	Feb-12	1,116	0	0	0	0	0
Construction	Mar-12	1,116	0	0	0	0	0
Construction	Apr-12	1,116	0	0	0	0	0
Construction	May-12	1,116	0	0	0	0	0
Construction	Jun-12	1,116	0	0	0	0	0
Construction	Jul-12	1,116	0	0	0	0	0
Construction	Aug-12	1,116	0	0	0	0	0
Construction	Sep-12	1,116	0	0	0	0	0
Construction	Oct-12	1,116	0	0	0	0	0
Construction	Nov-12	1,116	0	0	0	0	0
Construction	Dec-12	1,116	0	0	0	0	0
Construction	Jan-13	1,116	0	0	0	0	0
Construction	Feb-13	1,116	0	0	0	0	0
Construction	Mar-13	1,116	0	0	0	0	0
Construction	Apr-13	1,116	0	0	0	0	0
Construction	May-13	1,116	0	0	0	0	0
Construction	Jun-13	1,116	120,000	0	0	0	0
Construction	Jul-13	1,116	120,000	0	0	0	0
Construction	Aug-13	1,116	120,000	0	0	0	0
Operational	Sep-13	1,155	120,000	76,923	76,923	769	769
Operational	Oct-13	1,155	120,000	76,923	153,846	769	1,538
Operational	Nov-13	1,155	120,000	76,923	230,769	769	2,308

Stage	Month-Year	Operational Reference Elevation	Facility Footprint (disturbed area)	Incremental WRSA Monthly Volume	Cumulative Facility Volume (m <sup>3</sup> )	Initial moisture Content on Deposit	Cumulative Moisture Content
		m asl	m <sup>2</sup>	= Annual Vol/12 (mths)		m <sup>3</sup>	
				m <sup>3</sup>	m <sup>3</sup>		
Operational	Dec-13	1,155	120,000	76,923	307,692	769	3,077
Operational	Jan-14	1,155	120,000	76,923	384,615	769	3,846
Operational	Feb-14	1,155	120,000	76,923	461,538	769	4,615
Operational	Mar-14	1,155	120,000	76,923	538,462	769	5,385
Operational	Apr-14	1,155	120,000	76,923	615,385	769	6,154
Operational	May-14	1,155	120,000	76,923	692,308	769	6,923
Operational	Jun-14	1,155	120,000	76,923	769,231	769	7,692
Operational	Jul-14	1,155	120,000	76,923	846,154	769	8,462
Operational	Aug-14	1,155	120,000	76,923	923,077	769	9,231
Operational	Sep-14	1,165	250,000	76,923	1,000,000	769	10,000
Operational	Oct-14	1,165	250,000	116,667	1,116,667	1,167	11,167
Operational	Nov-14	1,165	250,000	116,667	1,233,333	1,167	12,333
Operational	Dec-14	1,165	250,000	116,667	1,350,000	1,167	13,500
Operational	Jan-15	1,165	250,000	116,667	1,466,667	1,167	14,667
Operational	Feb-15	1,165	250,000	116,667	1,583,333	1,167	15,833
Operational	Mar-15	1,165	250,000	116,667	1,700,000	1,167	17,000
Operational	Apr-15	1,165	250,000	116,667	1,816,667	1,167	18,167
Operational	May-15	1,165	250,000	116,667	1,933,333	1,167	19,333
Operational	Jun-15	1,165	250,000	116,667	2,050,000	1,167	20,500
Operational	Jul-15	1,165	250,000	116,667	2,166,667	1,167	21,667
Operational	Aug-15	1,165	250,000	116,667	2,283,333	1,167	22,833
Operational	Sep-15	1,175	430,000	116,667	2,400,000	1,167	24,000
Operational	Oct-15	1,175	430,000	329,167	2,729,167	3,292	27,292
Operational	Nov-15	1,175	430,000	329,167	3,058,333	3,292	30,583
Operational	Dec-15	1,175	430,000	329,167	3,387,500	3,292	33,875
Operational	Jan-16	1,175	430,000	329,167	3,716,667	3,292	37,167
Operational	Feb-16	1,175	430,000	329,167	4,045,833	3,292	40,458



Stage	Month-Year	Operational Reference Elevation	Facility Footprint (disturbed area)	Incremental WRSA Monthly Volume	Cumulative Facility Volume (m <sup>3</sup> )	Initial moisture Content on Deposit	Cumulative Moisture Content
		m asl	m <sup>2</sup>	= Annual Vol/12 (mths)		m <sup>3</sup>	
				m <sup>3</sup>	m <sup>3</sup>		
Operational	Mar-16	1,175	430,000	329,167	4,375,000	3,292	43,750
Operational	Apr-16	1,175	430,000	329,167	4,704,167	3,292	47,042
Operational	May-16	1,175	430,000	329,167	5,033,333	3,292	50,333
Operational	Jun-16	1,175	430,000	329,167	5,362,500	3,292	53,625
Operational	Jul-16	1,175	430,000	329,167	5,691,667	3,292	56,917
Operational	Aug-16	1,175	430,000	329,167	6,020,833	3,292	60,208
Operational	Sep-16	1,173	530,000	329,167	6,350,000	3,292	63,500
Operational	Oct-16	1,173	530,000	366,667	6,716,667	3,667	67,167
Operational	Nov-16	1,173	530,000	366,667	7,083,333	3,667	70,833
Operational	Dec-16	1,173	530,000	366,667	7,450,000	3,667	74,500
Operational	Jan-17	1,173	530,000	366,667	7,816,667	3,667	78,167
Operational	Feb-17	1,173	530,000	366,667	8,183,333	3,667	81,833
Operational	Mar-17	1,173	530,000	366,667	8,550,000	3,667	85,500
Operational	Apr-17	1,173	530,000	366,667	8,916,667	3,667	89,167
Operational	May-17	1,173	530,000	366,667	9,283,333	3,667	92,833
Operational	Jun-17	1,173	530,000	366,667	9,650,000	3,667	96,500
Operational	Jul-17	1,173	530,000	366,667	10,016,667	3,667	100,167
Operational	Aug-17	1,173	530,000	366,667	10,383,333	3,667	103,833
Operational	Sep-17	1,170	620,000	366,667	10,750,000	3,667	107,500
Operational	Oct-17	1,170	620,000	533,333	11,283,333	5,333	112,833
Operational	Nov-17	1,170	620,000	533,333	11,816,667	5,333	118,167
Operational	Dec-17	1,170	620,000	533,333	12,350,000	5,333	123,500
Operational	Jan-18	1,170	620,000	533,333	12,883,333	5,333	128,833
Operational	Feb-18	1,170	620,000	533,333	13,416,667	5,333	134,167
Operational	Mar-18	1,170	620,000	533,333	13,950,000	5,333	139,500
Operational	Apr-18	1,170	620,000	533,333	14,483,333	5,333	144,833
Operational	May-18	1,170	620,000	533,333	15,016,667	5,333	150,167

Stage	Month-Year	Operational Reference Elevation	Facility Footprint (disturbed area)	Incremental WRSA Monthly Volume	Cumulative Facility Volume (m <sup>3</sup> )	Initial moisture Content on Deposit	Cumulative Moisture Content
		m asl	m <sup>2</sup>	= Annual Vol/12 (mths)		m <sup>3</sup>	
				m <sup>3</sup>	m <sup>3</sup>		
Operational	Jun-18	1,170	620,000	533,333	15,550,000	5,333	155,500
Operational	Jul-18	1,170	620,000	533,333	16,083,333	5,333	160,833
Operational	Aug-18	1,170	620,000	533,333	16,616,667	5,333	166,167
Operational	Sep-18	1,160	680,000	395,833	17,012,500	3,958	170,125
Operational	Oct-18	1,160	680,000	395,833	17,408,333	3,958	174,083
Operational	Nov-18	1,160	680,000	395,833	17,804,167	3,958	178,042
Operational	Dec-18	1,160	680,000	395,833	18,200,000	3,958	182,000
Operational	Jan-19	1,160	680,000	395,833	18,595,833	3,958	185,958
Operational	Feb-19	1,160	680,000	395,833	18,991,667	3,958	189,917
Operational	Mar-19	1,160	680,000	395,833	19,387,500	3,958	193,875
Operational	Apr-19	1,160	680,000	395,833	19,783,333	3,958	197,833
Operational	May-19	1,160	680,000	395,833	20,179,167	3,958	201,792
Operational	Jun-19	1,160	680,000	395,833	20,575,000	3,958	205,750
Operational	Jul-19	1,160	680,000	395,833	20,970,833	3,958	209,708
Operational	Aug-19	1,160	680,000	395,833	21,366,667	3,958	213,667
Operational	Sep-19	1,160	740,000	395,833	21,762,500	3,958	217,625
Operational	Oct-19	1,160	740,000	133,333	21,895,833	1,333	218,958
Operational	Nov-19	1,160	740,000	133,333	22,029,167	1,333	220,292
Operational	Dec-19	1,160	740,000	133,333	22,162,500	1,333	221,625
Operational	Jan-20	1,160	740,000	133,333	22,295,833	1,333	222,958
Operational	Feb-20	1,160	740,000	133,333	22,429,167	1,333	224,292
Operational	Mar-20	1,160	740,000	133,333	22,562,500	1,333	225,625
Operational	Apr-20	1,160	740,000	133,333	22,695,833	1,333	226,958
Operational	May-20	1,160	740,000	133,333	22,829,167	1,333	228,292
Operational	Jun-20	1,160	740,000	133,333	22,962,500	1,333	229,625
Operational	Jul-20	1,160	740,000	133,333	23,095,833	1,333	230,958
Operational	Aug-20	1,160	740,000	133,333	23,229,167	1,333	232,292

Stage	Month-Year	Operational Reference Elevation	Facility Footprint (disturbed area)	Incremental WRSA Monthly Volume	Cumulative Facility Volume (m <sup>3</sup> )	Initial moisture Content on Deposit	Cumulative Moisture Content
		m asl	m <sup>2</sup>	= Annual Vol/12 (mths)		m <sup>3</sup>	
				m <sup>3</sup>	m <sup>3</sup>		
Operational	Sep-20	1,160	740,000	133,333	23,362,500	1,333	233,625
Operational	Oct-20	1,160	740,000	133,333	23,495,833	1,333	234,958
Operational	Nov-20	1,160	740,000	133,333	23,629,167	1,333	236,292
Operational	Dec-20	1,160	800,000	133,333	23,762,500	1,333	237,625
Closure & Reclamation (au recovery)	Jan-21	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (au recovery)	Feb-21	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (au recovery)	Mar-21	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (au recovery)	Apr-21	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (au recovery)	May-21	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (au recovery)	Jun-21	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (au recovery)	Jul-21	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (au recovery)	Aug-21	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (au recovery)	Sep-21	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (au recovery)	Oct-21	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (au recovery)	Nov-21	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (au recovery)	Dec-21	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (hlf rinse)	Jan-22	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (hlf rinse)	Feb-22	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (hlf rinse)	Mar-22	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (hlf rinse)	Apr-22	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (hlf rinse)	May-22	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (hlf rinse)	Jun-22	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (hlf rinse)	Jul-22	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (hlf rinse)	Aug-22	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (hlf rinse)	Sep-22	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (hlf rinse)	Oct-22	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (hlf rinse)	Nov-22	1,160	800,000	0	23,762,500	0	237,625

Stage	Month-Year	Operational Reference Elevation	Facility Footprint (disturbed area)	Incremental WRSA Monthly Volume	Cumulative Facility Volume (m <sup>3</sup> )	Initial moisture Content on Deposit	Cumulative Moisture Content
		m asl	m <sup>2</sup>	= Annual Vol/12 (mths)		m <sup>3</sup>	
				m <sup>3</sup>	m <sup>3</sup>		
Closure & Reclamation (hlf rinse)	Dec-22	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (hlf rinse)	Jan-23	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (hlf rinse)	Feb-23	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (hlf rinse)	Mar-23	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (hlf rinse)	Apr-23	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (hlf rinse)	May-23	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (hlf rinse)	Jun-23	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (hlf rinse)	Jul-23	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (hlf rinse)	Aug-23	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (hlf rinse)	Sep-23	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (hlf rinse)	Oct-23	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (hlf rinse)	Nov-23	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (hlf rinse)	Dec-23	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (hlf rinse)	Jan-24	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (hlf rinse)	Feb-24	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (hlf rinse)	Mar-24	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (hlf rinse)	Apr-24	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (hlf rinse)	May-24	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (hlf rinse)	Jun-24	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Jul-24	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Aug-24	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Sep-24	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Oct-24	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Nov-24	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Dec-24	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Jan-25	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Feb-25	1,160	800,000	0	23,762,500	0	237,625

Stage	Month-Year	Operational Reference Elevation	Facility Footprint (disturbed area)	Incremental WRSA Monthly Volume	Cumulative Facility Volume (m <sup>3</sup> )	Initial moisture Content on Deposit	Cumulative Moisture Content
		m asl	m <sup>2</sup>	= Annual Vol/12 (mths)		m <sup>3</sup>	
				m <sup>3</sup>	m <sup>3</sup>		
Closure & Reclamation (draindown)	Mar-25	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Apr-25	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	May-25	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Jun-25	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Jul-25	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Aug-25	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Sep-25	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Oct-25	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Nov-25	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Dec-25	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Jan-26	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Feb-26	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Mar-26	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Apr-26	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	May-26	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Jun-26	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Jul-26	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Aug-26	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Sep-26	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Oct-26	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Nov-26	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Dec-26	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Jan-27	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Feb-27	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Mar-27	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Apr-27	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	May-27	1,160	800,000	0	23,762,500	0	237,625

Stage	Month-Year	Operational Reference Elevation	Facility Footprint (disturbed area)	Incremental WRSA Monthly Volume	Cumulative Facility Volume (m <sup>3</sup> )	Initial moisture Content on Deposit	Cumulative Moisture Content
		m asl	m <sup>2</sup>	= Annual Vol/12 (mths)		m <sup>3</sup>	
				m <sup>3</sup>	m <sup>3</sup>		
Closure & Reclamation (draindown)	Jun-27	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Jul-27	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Aug-27	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Sep-27	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Oct-27	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Nov-27	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Dec-27	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Jan-28	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Feb-28	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Mar-28	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Apr-28	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	May-28	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Jun-28	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Jul-28	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Aug-28	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Sep-28	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Oct-28	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Nov-28	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Dec-28	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Jan-29	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Feb-29	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Mar-29	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Apr-29	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	May-29	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Jun-29	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Jul-29	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Aug-29	1,160	800,000	0	23,762,500	0	237,625

Stage	Month-Year	Operational Reference Elevation	Facility Footprint (disturbed area)	Incremental WRSA Monthly Volume	Cumulative Facility Volume (m <sup>3</sup> )	Initial moisture Content on Deposit	Cumulative Moisture Content
		m asl	m <sup>2</sup>	= Annual Vol/12 (mths)		m <sup>3</sup>	
				m <sup>3</sup>	m <sup>3</sup>		
Closure & Reclamation (draindown)	Sep-29	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Oct-29	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Nov-29	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Dec-29	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Jan-30	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Feb-30	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Mar-30	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Apr-30	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	May-30	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Jun-30	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Jul-30	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Aug-30	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Sep-30	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Oct-30	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Nov-30	1,160	800,000	0	23,762,500	0	237,625
Closure & Reclamation (draindown)	Dec-30	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Jan-31	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Feb-31	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Mar-31	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Apr-31	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	May-31	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Jun-31	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Jul-31	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Aug-31	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Sep-31	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Oct-31	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Nov-31	1,160	800,000	0	23,762,500	0	237,625

Stage	Month-Year	Operational Reference Elevation	Facility Footprint (disturbed area)	Incremental WRSA Monthly Volume	Cumulative Facility Volume (m <sup>3</sup> )	Initial moisture Content on Deposit	Cumulative Moisture Content
		m asl	m <sup>2</sup>	= Annual Vol/12 (mths)		m <sup>3</sup>	
				m <sup>3</sup>	m <sup>3</sup>		
Post-closure Environmental Monitoring	Dec-31	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Jan-32	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Feb-32	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Mar-32	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Apr-32	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	May-32	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Jun-32	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Jul-32	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Aug-32	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Sep-32	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Oct-32	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Nov-32	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Dec-32	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Jan-33	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Feb-33	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Mar-33	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Apr-33	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	May-33	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Jun-33	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Jul-33	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Aug-33	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Sep-33	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Oct-33	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Nov-33	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Dec-33	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Jan-34	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Feb-34	1,160	800,000	0	23,762,500	0	237,625



Stage	Month-Year	Operational Reference Elevation	Facility Footprint (disturbed area)	Incremental WRSA Monthly Volume = Annual Vol/12 (mths)	Cumulative Facility Volume (m <sup>3</sup> )	Initial moisture Content on Deposit	Cumulative Moisture Content
		m asl	m <sup>2</sup>	m <sup>3</sup>		M <sub>i</sub>	
Post-closure Environmental Monitoring	Mar-34	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Apr-34	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	May-34	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Jun-34	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Jul-34	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Aug-34	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Sep-34	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Oct-34	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Nov-34	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Dec-34	1,160	800,000	0	23,762,500	0	237,625
Post-closure Environmental Monitoring	Jan-35	1,160	800,000	0	23,762,500	0	237,625

**Table B-11: Ann Gulch Heap Leach Facility Geometry Assumptions**

Year	Parameter	Value	Units	Data Source
Baseline	Ann Gulch Total Basin Area	857,633	m <sup>2</sup>	[1]
	Ann Gulch Reference Elevation	1,029	m asl	[1]
HLF Geometry	Ultimate HLF Footprint Area in Ann Gulch Basin	638,301	m <sup>2</sup>	[1]
	Ultimate HLF Footprint Area in Dublin Gulch Basin	94,317	m <sup>2</sup>	[1]
	Ultimate HLF Footprint Area in Eagle Creek Basin	84,058	m <sup>2</sup>	[1]
	Ultimate HLF Footprint Area Outside (NW) Ann Gulch Basin	88,143	m <sup>2</sup>	[1]
	Total Facility Footprint Area from Stantec GIS	904,819	m <sup>2</sup>	[1]
Construction	HLF Footprint Area (Lined Pad)	283,000	m <sup>2</sup>	Assumed
	HLF Primary Storage Area – Construction	0	m <sup>2</sup>	Assumed
	HLF Reference Elevation – Construction	1,029	m asl	Assumed
	Total Leach Flow to Heap	0	m <sup>3</sup> /hr	[2]
1	HLF Footprint Area (Lined Pad)	283,000	m <sup>2</sup>	[2]
	HLF Reference Elevation	900	m asl	No available data
	Total Leach Flow to Heap	1,188	m <sup>3</sup> /hr	[2]
	Fresh Water For Additional Plant Use	45	m <sup>3</sup> /day	[2]
	Average Feed Moisture %	3.7	%	
2	HLF Footprint Area (Lined Pad)	283,000	m <sup>2</sup>	[2]
	HLF Reference Elevation	980	m asl	[1]
	Total Leach Flow to Heap	1,950	m <sup>3</sup> /hr	[2]
	Fresh Water For Additional Plant Use	80	m <sup>3</sup> /day	[2]
	Average Feed Moisture %	3.9	%	[2]
3*	HLF Footprint Area (Lined Pad)	362,250	m <sup>2</sup>	[2]
	HLF Reference Elevation	1,030	m asl	No available data
	Total Leach Flow to Heap	1,950	m <sup>3</sup> /hr	[2]
	Fresh Water For Additional Plant Use	80	m <sup>3</sup> /day	[2]
	Average Feed Moisture %	3.7	%	[2]

Year	Parameter	Value	Units	Data Source
4*	HLF Footprint Area (Lined Pad)	441,500	m <sup>2</sup>	[2]
	HLF Reference Elevation	1,030	m asl	[1]
	Total Leach Flow to Heap	1,950	m <sup>3</sup> /hr	[2]
	Fresh Water For Additional Plant Use	80	m <sup>3</sup> /day	[2]
	Average Feed Moisture %	3.9	%	[2]
5*	HLF Footprint Area (Lined Pad)	520,750	m <sup>2</sup>	[2]
	HLF Reference Elevation	1,030	m asl	No available data
	Total Leach Flow to Heap	1,950	m <sup>3</sup> /hr	[2]
	Fresh Water For Additional Plant Use	80	m <sup>3</sup> /day	[2]
	Average Feed Moisture %	3.7	%	[2]
6*	HLF Footprint Area (Lined Pad)	520,750	m <sup>2</sup>	[2]
	HLF Reference Elevation	1,030	m asl	[1]
	Total Leach Flow to Heap	1,950	m <sup>3</sup> /hr	[2]
	Fresh Water For Additional Plant Use	80	m <sup>3</sup> /day	[2]
	Average Feed Moisture %	3.9	%	[2]
7*	HLF Footprint Area (Lined Pad)	600,000	m <sup>2</sup>	[2]
	HLF Reference Elevation	1,080	m asl	Maximum elevation
	Total Leach Flow to Heap	1,950	m <sup>3</sup> /hr	[2]
	Fresh Water For Additional Plant Use	80	m <sup>3</sup> /day	[2]
	Average Feed Moisture %	3.9	%	[2]
7.3 (Closure/ Draindown/ Reclamation)	HLF Footprint Area (Lined Pad)	785,530	m <sup>2</sup>	[2]
	HLF Reference Elevation	1,080	m asl	Maximum elevation
	Total Leach Flow to Heap	1,950	m <sup>3</sup> /hr	[2]
	Fresh Water For Additional Plant Use	80.0	m <sup>3</sup> /day	[2]
	Average Feed Moisture %	3.70	%	[2]

Year	Parameter	Value	Units	Data Source
Primary and Secondary Storage	Primary Storage (Heap Pond) Volume – All Years	435,000	m <sup>3</sup>	[2]
	Events Pond Area	68,625	m <sup>2</sup>	[2]
	Secondary Storage 1 (Events Pond 1) Volume – All Years	112,502	m <sup>3</sup>	[2]
	Secondary Storage 2 (Events Pond 2) Volume – All Years	116,550	m <sup>3</sup>	[2]
	Total Secondary Storage	229,052	m <sup>3</sup>	[2]
	Maximum Allowable Volume	175,000	m <sup>3</sup>	[2]
	%	76.4%	m <sup>3</sup>	[2]
	Minimum Allowable Volume	1,580	m <sup>3</sup>	Estimated based on vol. el. Curves
	%	0.7%	m <sup>3</sup>	[2]
Mining Rates	End of Month Secondary Storage Drained each Year	October	Month	[4]
	Total Drain Down Volume	613,000	m <sup>3</sup>	[2]
	Total Drain Down Volume per Year	87,571	m <sup>3</sup>	Assumed linear rate
	7-Day Drain Down Volume	189,200	m <sup>3</sup>	[3]
	7 Day Drain Down = Percent Full of Total Storage	82.6%		[2]
	Total Ore Added to HLF	6.64E+07	Tonnes	[2]
	Total Material Added/Year	9,100,100	Tonnes	[2] (Year 1 = 6,055,003 tonnes)
	Total Material Mined/month	758,342	Tonnes	[2]

**NOTES:**

[1] Stantec (GIS) with Engineering CAD data

[2] KCA, Eagle Gold Water Balance 9.1 million tpa Rev C.xls and Project Description

[3] KCA, Calculations by C. Delfilippi, via email dated May 25, 2010

[4] DRAFT Project Description

Assumes that the HLF is covered with an impermeable cover during drain down and onwards

Assumes that the primary HLF (in-heap saturated storage) is fully saturated year round

**Table B-12: Ann Gulch Heap Leach Facility Monthly Assumptions**

Stage	Month-Year	Operational Reference Elevation (m asl)	Operational Area (lined pad+primary storage) (m <sup>2</sup> )	Ore Added (under leach) (tonnes)	Moisture Added After Crushing (from fresh water source)	Target Leach Flow Rate (irrigation)	Emitter Evaporation (m <sup>3</sup> )	Idle Heap Evap Area	Water For Plant Use	P <sub>dro ann west</sub> Portion	P <sub>dro ann east</sub> Portion	Eagle Gold	
					Crush	Irrig	Emitter evap.	Evap area	Plant H <sub>2</sub> O	P <sub>dro ann-w</sub>	P <sub>dro ann-e</sub>		
					M <sup>3</sup>	M <sup>3</sup>	M <sup>3</sup>	M <sup>2</sup>	M <sup>3</sup>	Proportion	Proportion	M <sup>3</sup> /mo	M <sup>3</sup> /hr
Existing Conditions	Oct-11	1,029	0	0.00	0.00	0.00	0.0	0.0	0.0	0.00	0.00		
Existing Conditions	Nov-11	1,029	0	0.00	0.00	0.00	0.0	0.0	0.0	0.00	0.00		
Existing Conditions	Dec-11	1,029	0	0.00	0.00	0.00	0.0	0.0	0.0	0.00	0.00		
Construction	Jan-12	1,029	0	0.00	0.00	0.00	0.0	0.0	0.0	0.00	0.00		
Construction	Feb-12	1,029	0	0.00	0.00	0.00	0.0	0.0	0.0	0.00	0.00		
Construction	Mar-12	1,029	0	0.00	0.00	0.00	0.0	0.0	0.0	0.00	0.00		
Construction	Apr-12	1,029	0	0.00	0.00	0.00	0.0	0.0	0.0	0.00	0.00		
Construction	May-12	1,029	0	0.00	0.00	0.00	0.0	0.0	0.0	0.90	0.10		
Construction	Jun-12	1,029	0	0.00	0.00	0.00	0.0	0.0	0.0	0.90	0.10		
Construction	Jul-12	1,029	0	0.00	0.00	0.00	0.0	0.0	0.0	0.90	0.10		
Construction	Aug-12	1,029	0	0.00	0.00	0.00	0.0	0.0	0.0	0.90	0.10		
Construction	Sep-12	1,029	0	0.00	0.00	0.00	0.0	0.0	0.0	0.90	0.10		
Construction	Oct-12	1,029	0	0.00	0.00	0.00	0.0	0.0	0.0	0.90	0.10		
Construction	Nov-12	1,029	0	0.00	0.00	0.00	0.0	0.0	0.0	0.90	0.10		
Construction	Dec-12	1,029	0	0.00	0.00	0.00	0.0	0.0	0.0	0.90	0.10		
Construction	Jan-13	1,029	0	0.00	0.00	0.00	0.0	0.0	0.0	0.90	0.10		
Construction	Feb-13	1,029	0	0.00	0.00	0.00	0.0	0.0	0.0	0.90	0.10		
Construction	Mar-13	1,029	0	0.00	0.00	0.00	0.0	0.0	0.0	0.90	0.10		
Construction	Apr-13	1,029	283,000	0.00	0.00	0.00	0.0	0.0	0.0	0.90	0.10		
Construction	May-13	1,029	283,000	0.00	0.00	0.00	0.0	0.0	0.0	0.90	0.10		
Construction	Jun-13	1,029	283,000	0.00	0.00	0.00	0.0	0.0	0.0	0.90	0.10		
Construction	Jul-13	1,029	283,000	0.00	0.00	0.00	0.0	0.0	0.0	0.90	0.10		
Construction	Aug-13	1,029	283,000	0.00	0.00	0.00	0.0	0.0	0.0	0.90	0.10		
Operational	Sep-13	900	351,625	340,000	3,400	1,188	5,132	10,000	1,350	0.90	0.10		

Stage	Month-Year	Operational Reference Elevation (m asl)	Operational Area (lined pad+primary storage) (m <sup>2</sup> )	Ore Added (under leach) (tonnes)	Moisture Added After Crushing (from fresh water source)	Target Leach Flow Rate (irrigation)	Emitter Evaporation (m <sup>3</sup> )	Idle Heap Evap Area	Water For Plant Use	P <sub>dro ann west</sub> Portion	P <sub>dro ann east</sub> Portion	Eagle Gold	
					Crush	Irrig	Emitter evap.	Evap area	Plant H <sub>2</sub> O	P <sub>dro ann-w</sub>	P <sub>dro ann-e</sub>		
					M <sup>3</sup>	M <sup>3</sup>	M <sup>3</sup>	M <sup>2</sup>	M <sup>3</sup>	Proportion	Proportion	M <sup>3</sup> /mo	M <sup>3</sup> /hr
Operational	Oct-13	900	351,625	420,000	4,200	1,188	0	15,000	1,395	0.90	0.10		
Operational	Nov-13	900	351,625	420,000	4,200	1,188	0	20,000	1,350	0.90	0.10		
Operational	Dec-13	900	351,625	541,667	5,417	1,188	0	20,000	1,395	0.90	0.10		
Operational	Jan-14	900	351,625	541,667	5,417	1,188	0	46,250	1,395	0.90	0.10		
Operational	Feb-14	900	351,625	541,667	5,417	1,188	0	77,500	1,260	0.90	0.10		
Operational	Mar-14	900	351,625	541,667	5,417	1,188	0	108,750	1,395	0.90	0.10		
Operational	Apr-14	900	351,625	541,667	5,417	1,188	0	140,000	1,350	0.90	0.10		
Operational	May-14	900	351,625	541,667	5,417	1,188	8,839	148,750	1,395	0.90	0.10		
Operational	Jun-14	900	351,625	541,667	5,417	1,188	11,120	150,500	1,350	0.90	0.10		
Operational	Jul-14	900	351,625	541,667	5,417	1,188	10,606	150,500	1,395	0.90	0.10		
Operational	Aug-14	900	351,625	541,667	5,417	1,188	8,839	150,500	1,395	0.90	0.10		
Operational	Sep-14	980	351,625	541,667	5,417	1,188	8,424	75,000	2,400	0.90	0.10		
Operational	Oct-14	980	351,625	758,333	7,583	1,950	0	75,000	2,480	0.90	0.10		
Operational	Nov-14	980	351,625	758,333	7,583	1,950	0	75,000	2,400	0.90	0.10		
Operational	Dec-14	980	351,625	758,333	7,583	1,950	0	75,000	2,480	0.90	0.10		
Operational	Jan-15	980	351,625	758,333	7,583	1,950	0	75,000	2,480	0.90	0.10		
Operational	Feb-15	980	351,625	758,333	7,583	1,950	0	75,000	2,240	0.90	0.10		
Operational	Mar-15	980	351,625	758,333	7,583	1,950	0	75,000	2,480	0.90	0.10		
Operational	Apr-15	980	351,625	758,333	7,583	1,950	0	75,000	2,400	0.90	0.10		
Operational	May-15	980	351,625	758,333	7,583	1,950	14,508	75,000	2,480	0.90	0.10		
Operational	Jun-15	980	351,625	758,333	7,583	1,950	18,252	75,000	2,400	0.90	0.10		
Operational	Jul-15	980	351,625	758,333	7,583	1,950	17,410	75,000	2,480	0.90	0.10		
Operational	Aug-15	980	351,625	758,333	7,583	1,950	14,508	75,000	2,480	0.90	0.10		
Operational	Sep-15	980	430,875	758,333	7,583	1,950	8,424	75,000	2,400	0.90	0.10		
Operational	Oct-15	1,030	430,875	758,333	7,583	1,950	0	75,000	2,480	0.60	0.40		

Stage	Month-Year	Operational Reference Elevation (m asl)	Operational Area (lined pad+primary storage) (m <sup>2</sup> )	Ore Added (under leach) (tonnes)	Moisture Added After Crushing (from fresh water source)	Target Leach Flow Rate (irrigation)	Emitter Evaporation (m <sup>3</sup> )	Idle Heap Evap Area	Water For Plant Use	P <sub>dro ann west</sub> Portion	P <sub>dro ann east</sub> Portion	Eagle Gold	
					Crush	Irrig	Emitter evap.	Evap area	Plant H <sub>2</sub> O	P <sub>dro ann-w</sub>	P <sub>dro ann-e</sub>		
					M <sup>3</sup>	M <sup>3</sup>	M <sup>3</sup>	M <sup>2</sup>	M <sup>3</sup>	Proportion	Proportion	M <sup>3</sup> /mo	M <sup>3</sup> /hr
Operational	Nov-15	1,030	430,875	758,333	7,583	1,950	0	75,000	2,400	0.60	0.40		
Operational	Dec-15	1,030	430,875	758,333	7,583	1,950	0	75,000	2,480	0.60	0.40		
Operational	Jan-16	1,030	430,875	758,333	7,583	1,950	0	75,000	2,480	0.60	0.40		
Operational	Feb-16	1,030	430,875	758,333	7,583	1,950	0	75,000	2,320	0.60	0.40		
Operational	Mar-16	1,030	430,875	758,333	7,583	1,950	0	75,000	2,480	0.60	0.40		
Operational	Apr-16	1,030	430,875	758,333	7,583	1,950	0	75,000	2,400	0.60	0.40		
Operational	May-16	1,030	430,875	758,333	7,583	1,950	14,508	75,000	2,480	0.60	0.40		
Operational	Jun-16	1,030	430,875	758,333	7,583	1,950	18,252	75,000	2,400	0.60	0.40		
Operational	Jul-16	1,030	430,875	758,333	7,583	1,950	17,410	75,000	2,480	0.60	0.40		
Operational	Aug-16	1,030	430,875	758,333	7,583	1,950	14,508	75,000	2,480	0.60	0.40		
Operational	Sep-16	1,030	510,125	758,333	7,583	1,950	8,424	75,000	2,400	0.60	0.40		
Operational	Oct-16	1,030	510,125	758,333	7,583	1,950	0	75,000	2,480	0.60	0.40		
Operational	Nov-16	1,030	510,125	758,333	7,583	1,950	0	75,000	2,400	0.60	0.40		
Operational	Dec-16	1,030	510,125	758,333	7,583	1,950	0	75,000	2,480	0.60	0.40		
Operational	Jan-17	1,030	510,125	758,333	7,583	1,950	0	75,000	2,480	0.60	0.40		
Operational	Feb-17	1,030	510,125	758,333	7,583	1,950	0	75,000	2,240	0.60	0.40		
Operational	Mar-17	1,030	510,125	758,333	7,583	1,950	0	75,000	2,480	0.60	0.40		
Operational	Apr-17	1,030	510,125	758,333	7,583	1,950	0	75,000	2,400	0.60	0.40		
Operational	May-17	1,030	510,125	758,333	7,583	1,950	14,508	75,000	2,480	0.60	0.40		
Operational	Jun-17	1,030	510,125	758,333	7,583	1,950	18,252	75,000	2,400	0.60	0.40		
Operational	Jul-17	1,030	510,125	758,333	7,583	1,950	17,410	75,000	2,480	0.60	0.40		
Operational	Aug-17	1,030	510,125	758,333	7,583	1,950	14,508	75,000	2,480	0.60	0.40		
Operational	Sep-17	1,030	589,375	758,333	7,583	1,950	8,424	75,000	2,400	0.60	0.40		
Operational	Oct-17	1,030	589,375	758,333	7,583	1,950	0	75,000	2,480	0.60	0.40		
Operational	Nov-17	1,030	589,375	758,333	7,583	1,950	0	75,000	2,400	0.60	0.40		

Stage	Month-Year	Operational Reference Elevation (m asl)	Operational Area (lined pad+primary storage) (m <sup>2</sup> )	Ore Added (under leach) (tonnes)	Moisture Added After Crushing (from fresh water source)	Target Leach Flow Rate (irrigation)	Emitter Evaporation (m <sup>3</sup> )	Idle Heap Evap Area	Water For Plant Use	P <sub>dro ann west</sub> Portion	P <sub>dro ann east</sub> Portion	Eagle Gold	
					Crush	Irrig	Emitter evap.	Evap area	Plant H <sub>2</sub> O	P <sub>dro ann-w</sub>	P <sub>dro ann-e</sub>		
					M <sup>3</sup>	M <sup>3</sup>	M <sup>3</sup>	M <sup>2</sup>	M <sup>3</sup>	Proportion	Proportion	M <sup>3</sup> /mo	M <sup>3</sup> /hr
Operational	Dec-17	1,030	589,375	758,333	7,583	1,950	0	75,000	2,480	0.60	0.40		
Operational	Jan-18	1,030	589,375	758,333	7,583	1,950	0	75,000	2,480	0.60	0.40		
Operational	Feb-18	1,030	589,375	758,333	7,583	1,950	0	75,000	2,240	0.60	0.40		
Operational	Mar-18	1,030	589,375	758,333	7,583	1,950	0	75,000	2,480	0.60	0.40		
Operational	Apr-18	1,030	589,375	758,333	7,583	1,950	0	75,000	2,400	0.60	0.40		
Operational	May-18	1,030	589,375	758,333	7,583	1,950	14,508	75,000	2,480	0.60	0.40		
Operational	Jun-18	1,030	589,375	758,333	7,583	1,950	18,252	75,000	2,400	0.60	0.40		
Operational	Jul-18	1,030	589,375	758,333	7,583	1,950	17,410	75,000	2,480	0.60	0.40		
Operational	Aug-18	1,030	589,375	758,333	7,583	1,950	14,508	75,000	2,480	0.60	0.40		
Operational	Sep-18	1,030	589,375	758,333	7,583	1,950	8,424	75,000	2,400	0.60	0.40		
Operational	Oct-18	1,030	589,375	758,333	7,583	1,950	0	75,000	2,480	0.60	0.40		
Operational	Nov-18	1,030	589,375	758,333	7,583	1,950	0	75,000	2,400	0.60	0.40		
Operational	Dec-18	1,030	589,375	758,333	7,583	1,950	0	75,000	2,480	0.60	0.40		
Operational	Jan-19	1,030	589,375	758,333	7,583	1,950	0	75,000	2,480	0.60	0.40		
Operational	Feb-19	1,030	589,375	758,333	7,583	1,950	0	75,000	2,240	0.60	0.40		
Operational	Mar-19	1,030	589,375	758,333	7,583	1,950	0	75,000	2,480	0.60	0.40		
Operational	Apr-19	1,030	589,375	758,333	7,583	1,950	0	75,000	2,400	0.60	0.40		
Operational	May-19	1,030	589,375	758,333	7,583	1,950	14,508	75,000	2,480	0.60	0.40		
Operational	Jun-19	1,030	589,375	758,333	7,583	1,950	18,252	75,000	2,400	0.60	0.40		
Operational	Jul-19	1,030	589,375	758,333	7,583	1,950	17,410	75,000	2,480	0.60	0.40		
Operational	Aug-19	1,030	589,375	758,333	7,583	1,950	14,508	75,000	2,480	0.60	0.40		
Operational	Sep-19	1,030	668,625	758,333	7,583	1,950	8,424	300,000	2,400	0.60	0.40		
Operational	Oct-19	1,080	668,625	758,333	7,583	1,950	0	300,000	2,480	0.60	0.40		
Operational	Nov-19	1,080	668,625	758,333	7,583	1,950	0	300,000	2,400	0.60	0.40		
Operational	Dec-19	1,080	668,625	758,333	7,583	1,950	0	300,000	2,480	0.60	0.40		



Stage	Month-Year	Operational Reference Elevation (m asl)	Operational Area (lined pad+primary storage) (m <sup>2</sup> )	Ore Added (under leach) (tonnes)	Moisture Added After Crushing (from fresh water source)	Target Leach Flow Rate (irrigation)	Emitter Evaporation (m <sup>3</sup> )	Idle Heap Evap Area	Water For Plant Use	P <sub>dro ann west</sub> Portion	P <sub>dro ann east</sub> Portion	Eagle Gold	
					Crush	Irrig	Emitter evap.	Evap area	Plant H <sub>2</sub> O	P <sub>dro ann-w</sub>	P <sub>dro ann-e</sub>		
					M <sup>3</sup>	M <sup>3</sup>	M <sup>3</sup>	M <sup>2</sup>	M <sup>3</sup>	Proportion	Proportion	M <sup>3</sup> /mo	M <sup>3</sup> /hr
Operational	Jan-20	1,080	668,625	758,333	7,583	1,950	0	300,000	2,480	0.60	0.40		
Operational	Feb-20	1,080	668,625	758,333	7,583	1,950	0	300,000	2,320	0.60	0.40		
Operational	Mar-20	1,080	668,625	758,333	7,583	1,950	0	300,000	2,480	0.60	0.40		
Operational	Apr-20	1,080	668,625	758,333	7,583	1,950	0	300,000	2,400	0.60	0.40		
Operational	May-20	1,080	668,625	758,333	7,583	1,950	14,508	300,000	2,480	0.60	0.40		
Operational	Jun-20	1,080	668,625	758,333	7,583	1,950	18,252	300,000	2,400	0.60	0.40		
Operational	Jul-20	1,080	668,625	758,333	7,583	1,950	17,410	300,000	2,480	0.60	0.40		
Operational	Aug-20	1,080	668,625	758,333	7,583	1,950	14,508	300,000	2,480	0.60	0.40		
Operational	Sep-20	1,080	854,155	758,333	7,583	1,950	8,424	497,500	2,400	0.60	0.40		
Operational	Oct-20	1,080	854,155	758,333	7,583	1,950	0	497,500	2,480	0.60	0.40		
Operational	Nov-20	1,080	854,155	758,333	7,583	1,950	0	497,500	2,400	0.60	0.40		
Operational	Dec-20	1,080	854,155	758,333	7,583	1,950	0	497,500	2,480	0.60	0.40		
Closure & Reclamation (au recovery)	Jan-21	1,080	854,155	0	0	1,950	0	497,500	0	0.60	0.40		
Closure & Reclamation (au recovery)	Feb-21	1,080	854,155	0	0	1,950	0	497,500	0	0.60	0.40		
Closure & Reclamation (au recovery)	Mar-21	1,080	854,155	0	0	1,950	0	497,500	0	0.60	0.40		
Closure & Reclamation (au recovery)	Apr-21	1,080	854,155	0	0	1,950	0	497,500	0	0.60	0.40		
Closure & Reclamation (au recovery)	May-21	1,080	854,155	0	0	1,950	14,508	497,500	0	0.60	0.40		
Closure & Reclamation (au recovery)	Jun-21	1,080	854,155	0	0	1,950	18,252	497,500	0	0.60	0.40		
Closure & Reclamation (au recovery)	Jul-21	1,080	854,155	0	0	1,950	17,410	497,500	0	0.60	0.40		

Stage	Month-Year	Operational Reference Elevation (m asl)	Operational Area (lined pad+primary storage) (m <sup>2</sup> )	Ore Added (under leach) (tonnes)	Moisture Added After Crushing (from fresh water source)	Target Leach Flow Rate (irrigation)	Emitter Evaporation (m <sup>3</sup> )	Idle Heap Evap Area	Water For Plant Use	P <sub>dro ann west</sub> Portion	P <sub>dro ann east</sub> Portion	Eagle Gold	
					Crush	Irrig	Emitter evap.	Evap area	Plant H <sub>2</sub> O	P <sub>dro ann-w</sub>	P <sub>dro ann-e</sub>		
					M <sup>3</sup>	M <sup>3</sup>	M <sup>3</sup>	M <sup>2</sup>	M <sup>3</sup>	Proportion	Proportion	M <sup>3</sup> /mo	M <sup>3</sup> /hr
Closure & Reclamation (au recovery)	Aug-21	1,080	854,155	0	0	1,950	14,508	497,500	0	0.60	0.40		
Closure & Reclamation (au recovery)	Sep-21	1,080	854,155	0	0	1,950	8,424	497,500	0	0.60	0.40		
Closure & Reclamation (au recovery)	Oct-21	1,080	854,155	0	0	1,950	0	497,500	0	0.60	0.40		
Closure & Reclamation (au recovery)	Nov-21	1,080	854,155	0	0	1,950	0	497,500	0	0.60	0.40		
Closure & Reclamation (au recovery)	Dec-21	1,080	854,155	0	0	1,950	0	497,500	0	0.60	0.40		
Closure & Reclamation (hlf rinse)	Jan-22	1,080	854,155	0	0	1,950	0	497,500	0	0.60	0.40		
Closure & Reclamation (hlf rinse)	Feb-22	1,080	854,155	0	0	1,950	0	497,500	0	0.60	0.40		
Closure & Reclamation (hlf rinse)	Mar-22	1,080	854,155	0	0	1,950	0	497,500	0	0.60	0.40		
Closure & Reclamation (hlf rinse)	Apr-22	1,080	854,155	0	0	1,950	0	497,500	0	0.60	0.40		
Closure & Reclamation (hlf rinse)	May-22	1,080	854,155	0	0	1,950	14,508	497,500	0	0.60	0.40		
Closure & Reclamation (hlf rinse)	Jun-22	1,080	854,155	0	0	1,950	18,252	497,500	0	0.60	0.40		
Closure & Reclamation (hlf rinse)	Jul-22	1,080	854,155	0	0	1,950	17,410	497,500	0	0.60	0.40		
Closure & Reclamation (hlf rinse)	Aug-22	1,080	854,155	0	0	1,950	14,508	497,500	0	0.60	0.40		
Closure & Reclamation (hlf rinse)	Sep-22	1,080	854,155	0	0	1,950	8,424	497,500	0	0.60	0.40		
Closure & Reclamation (hlf rinse)	Oct-22	1,080	854,155	0	0	1,950	0	497,500	0	0.60	0.40		

Stage	Month-Year	Operational Reference Elevation (m asl)	Operational Area (lined pad+primary storage) (m <sup>2</sup> )	Ore Added (under leach) (tonnes)	Moisture Added After Crushing (from fresh water source)	Target Leach Flow Rate (irrigation)	Emitter Evaporation (m <sup>3</sup> )	Idle Heap Evap Area	Water For Plant Use	P <sub>dro ann west</sub> Portion	P <sub>dro ann east</sub> Portion	Eagle Gold	
					Crush	Irrig	Emitter evap.	Evap area	Plant H <sub>2</sub> O	P <sub>dro ann-w</sub>	P <sub>dro ann-e</sub>		
					M <sup>3</sup>	M <sup>3</sup>	M <sup>3</sup>	M <sup>2</sup>	M <sup>3</sup>	Proportion	Proportion	M <sup>3</sup> /mo	M <sup>3</sup> /hr
Closure & Reclamation (hlf rinse)	Nov-22	1,080	854,155	0	0	1,950	0	497,500	0	0.60	0.40		
Closure & Reclamation (hlf rinse)	Dec-22	1,080	854,155	0	0	1,950	0	497,500	0	0.60	0.40		
Closure & Reclamation (hlf rinse)	Jan-23	1,080	854,155	0	0	1,950	0	497,500	0	0.60	0.40		
Closure & Reclamation (hlf rinse)	Feb-23	1,080	854,155	0	0	1,950	0	497,500	0	0.60	0.40		
Closure & Reclamation (hlf rinse)	Mar-23	1,080	854,155	0	0	1,950	0	497,500	0	0.60	0.40		
Closure & Reclamation (hlf rinse)	Apr-23	1,080	854,155	0	0	1,950	0	497,500	0	0.60	0.40		
Closure & Reclamation (hlf rinse)	May-23	1,080	854,155	0	0	1,950	14,508	497,500	0	0.60	0.40		
Closure & Reclamation (hlf rinse)	Jun-23	1,080	854,155	0	0	1,950	18,252	497,500	0	0.60	0.40		
Closure & Reclamation (hlf rinse)	Jul-23	1,080	854,155	0	0	1,950	17,410	497,500	0	0.60	0.40		
Closure & Reclamation (hlf rinse)	Aug-23	1,080	854,155	0	0	1,950	14,508	497,500	0	0.60	0.40		
Closure & Reclamation (hlf rinse)	Sep-23	1,080	854,155	0	0	1,950	8,424	497,500	0	0.60	0.40		
Closure & Reclamation (hlf rinse)	Oct-23	1,080	854,155	0	0	1,950	0	497,500	0	0.60	0.40		
Closure & Reclamation (hlf rinse)	Nov-23	1,080	854,155	0	0	1,950	0	497,500	0	0.60	0.40		
Closure & Reclamation (hlf rinse)	Dec-23	1,080	854,155	0	0	1,950	0	497,500	0	0.60	0.40		
Closure & Reclamation (hlf rinse)	Jan-24	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		

Stage	Month-Year	Operational Reference Elevation (m asl)	Operational Area (lined pad+primary storage) (m <sup>2</sup> )	Ore Added (under leach) (tonnes)	Moisture Added After Crushing (from fresh water source)	Target Leach Flow Rate (irrigation)	Emitter Evaporation (m <sup>3</sup> )	Idle Heap Evap Area	Water For Plant Use	P <sub>dro ann west</sub> Portion	P <sub>dro ann east</sub> Portion	Eagle Gold	
					Crush	Irrig	Emitter evap.	Evap area	Plant H <sub>2</sub> O	P <sub>dro ann-w</sub>	P <sub>dro ann-e</sub>		
					M <sup>3</sup>	M <sup>3</sup>	M <sup>3</sup>	M <sup>2</sup>	M <sup>3</sup>	Proportion	Proportion	M <sup>3</sup> /mo	M <sup>3</sup> /hr
Closure & Reclamation (hlf rinse)	Feb-24	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Closure & Reclamation (hlf rinse)	Mar-24	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Closure & Reclamation (hlf rinse)	Apr-24	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Closure & Reclamation (hlf rinse)	May-24	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Closure & Reclamation (hlf rinse)	Jun-24	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Closure & Reclamation (draindown)	Jul-24	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	259450	360.3
Closure & Reclamation (draindown)	Aug-24	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	129725	180.2
Closure & Reclamation (draindown)	Sep-24	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	63865	88.7
Closure & Reclamation (draindown)	Oct-24	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	31932	44.4
Closure & Reclamation (draindown)	Nov-24	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	15966	22.2
Closure & Reclamation (draindown)	Dec-24	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	7983	11.1
Closure & Reclamation (draindown)	Jan-25	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	6386	8.9
Closure & Reclamation (draindown)	Feb-25	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	4790	6.7
Closure & Reclamation (draindown)	Mar-25	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	4568	6.3
Closure & Reclamation (draindown)	Apr-25	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	4346	6.0

Stage	Month-Year	Operational Reference Elevation (m asl)	Operational Area (lined pad+primary storage) (m <sup>2</sup> )	Ore Added (under leach) (tonnes)	Moisture Added After Crushing (from fresh water source)	Target Leach Flow Rate (irrigation)	Emitter Evaporation (m <sup>3</sup> )	Idle Heap Evap Area	Water For Plant Use	P <sub>dro ann west</sub> Portion	P <sub>dro ann east</sub> Portion	Eagle Gold	
					Crush	Irrig	Emitter evap.	Evap area	Plant H <sub>2</sub> O	P <sub>dro ann-w</sub>	P <sub>dro ann-e</sub>		
					M <sup>3</sup>	M <sup>3</sup>	M <sup>3</sup>	M <sup>2</sup>	M <sup>3</sup>	Proportion	Proportion	M <sup>3</sup> /mo	M <sup>3</sup> /hr
Closure & Reclamation (draindown)	May-25	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	4125	5.7
Closure & Reclamation (draindown)	Jun-25	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	3903	5.4
Closure & Reclamation (draindown)	Jul-25	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	3681	5.1
Closure & Reclamation (draindown)	Aug-25	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	3459	4.8
Closure & Reclamation (draindown)	Sep-25	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	3238	4.5
Closure & Reclamation (draindown)	Oct-25	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	3016	4.2
Closure & Reclamation (draindown)	Nov-25	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	2794	3.9
Closure & Reclamation (draindown)	Dec-25	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	2628	3.6
Closure & Reclamation (draindown)	Jan-26	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	2461	3.4
Closure & Reclamation (draindown)	Feb-26	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	2295	3.2
Closure & Reclamation (draindown)	Mar-26	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	2129	3.0
Closure & Reclamation (draindown)	Apr-26	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	1963	2.7
Closure & Reclamation (draindown)	May-26	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	1796	2.5
Closure & Reclamation (draindown)	Jun-26	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	1746	2.4
Closure & Reclamation (draindown)	Jul-26	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	1696	2.4

Stage	Month-Year	Operational Reference Elevation (m asl)	Operational Area (lined pad+primary storage) (m <sup>2</sup> )	Ore Added (under leach) (tonnes)	Moisture Added After Crushing (from fresh water source)	Target Leach Flow Rate (irrigation)	Emitter Evaporation (m <sup>3</sup> )	Idle Heap Evap Area	Water For Plant Use	P <sub>dro ann west</sub> Portion	P <sub>dro ann east</sub> Portion	Eagle Gold	
					Crush	Irrig	Emitter evap.	Evap area	Plant H <sub>2</sub> O	P <sub>dro ann-w</sub>	P <sub>dro ann-e</sub>		
					M <sup>3</sup>	M <sup>3</sup>	M <sup>3</sup>	M <sup>2</sup>	M <sup>3</sup>	Proportion	Proportion	M <sup>3</sup> /mo	M <sup>3</sup> /hr
Closure & Reclamation (draindown)	Aug-26	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	1647	2.3
Closure & Reclamation (draindown)	Sep-26	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	1597	2.2
Closure & Reclamation (draindown)	Oct-26	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	1547	2.1
Closure & Reclamation (draindown)	Nov-26	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	1497	2.1
Closure & Reclamation (draindown)	Dec-26	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	1447	2.0
Closure & Reclamation (draindown)	Jan-27	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	1397	1.9
Closure & Reclamation (draindown)	Feb-27	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	1347	1.9
Closure & Reclamation (draindown)	Mar-27	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	1297	1.8
Closure & Reclamation (draindown)	Apr-27	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	1247	1.7
Closure & Reclamation (draindown)	May-27	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	1197	1.7
Closure & Reclamation (draindown)	Jun-27	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	1174	1.6
Closure & Reclamation (draindown)	Jul-27	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	1151	1.6
Closure & Reclamation (draindown)	Aug-27	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	1128	1.6
Closure & Reclamation (draindown)	Sep-27	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	1105	1.5
Closure & Reclamation (draindown)	Oct-27	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	1082	1.5

Stage	Month-Year	Operational Reference Elevation (m asl)	Operational Area (lined pad+primary storage) (m <sup>2</sup> )	Ore Added (under leach) (tonnes)	Moisture Added After Crushing (from fresh water source)	Target Leach Flow Rate (irrigation)	Emitter Evaporation (m <sup>3</sup> )	Idle Heap Evap Area	Water For Plant Use	P <sub>dro ann west</sub> Portion	P <sub>dro ann east</sub> Portion	Eagle Gold	
					Crush	Irrig	Emitter evap.	Evap area	Plant H <sub>2</sub> O	P <sub>dro ann-w</sub>	P <sub>dro ann-e</sub>		
					M <sup>3</sup>	M <sup>3</sup>	M <sup>3</sup>	M <sup>2</sup>	M <sup>3</sup>	Proportion	Proportion	M <sup>3</sup> /mo	M <sup>3</sup> /hr
Closure & Reclamation (draindown)	Nov-27	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	1059	1.5
Closure & Reclamation (draindown)	Dec-27	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	1036	1.4
Closure & Reclamation (draindown)	Jan-28	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	1013	1.4
Closure & Reclamation (draindown)	Feb-28	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	990	1.4
Closure & Reclamation (draindown)	Mar-28	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	967	1.3
Closure & Reclamation (draindown)	Apr-28	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	944	1.3
Closure & Reclamation (draindown)	May-28	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	921	1.3
Closure & Reclamation (draindown)	Jun-28	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	898	1.2
Closure & Reclamation (draindown)	Jul-28	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	873	1.2
Closure & Reclamation (draindown)	Aug-28	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	848	1.2
Closure & Reclamation (draindown)	Sep-28	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	823	1.1
Closure & Reclamation (draindown)	Oct-28	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	798	1.1
Closure & Reclamation (draindown)	Nov-28	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	773	1.1
Closure & Reclamation (draindown)	Dec-28	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	748	1.0
Closure & Reclamation (draindown)	Jan-29	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	723	1.0

Stage	Month-Year	Operational Reference Elevation (m asl)	Operational Area (lined pad+primary storage) (m <sup>2</sup> )	Ore Added (under leach) (tonnes)	Moisture Added After Crushing (from fresh water source)	Target Leach Flow Rate (irrigation)	Emitter Evaporation (m <sup>3</sup> )	Idle Heap Evap Area	Water For Plant Use	P <sub>dro ann west</sub> Portion	P <sub>dro ann east</sub> Portion	Eagle Gold	
					Crush	Irrig	Emitter evap.	Evap area	Plant H <sub>2</sub> O	P <sub>dro ann-w</sub>	P <sub>dro ann-e</sub>		
					M <sup>3</sup>	M <sup>3</sup>	M <sup>3</sup>	M <sup>2</sup>	M <sup>3</sup>	Proportion	Proportion	M <sup>3</sup> /mo	M <sup>3</sup> /hr
Closure & Reclamation (draindown)	Feb-29	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	699	1.0
Closure & Reclamation (draindown)	Mar-29	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	674	0.9
Closure & Reclamation (draindown)	Apr-29	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	649	0.9
Closure & Reclamation (draindown)	May-29	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	624	0.9
Closure & Reclamation (draindown)	Jun-29	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	599	0.8
Closure & Reclamation (draindown)	Jul-29	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	590	0.8
Closure & Reclamation (draindown)	Aug-29	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	582	0.8
Closure & Reclamation (draindown)	Sep-29	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	574	0.8
Closure & Reclamation (draindown)	Oct-29	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	565	0.8
Closure & Reclamation (draindown)	Nov-29	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	557	0.8
Closure & Reclamation (draindown)	Dec-29	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	549	0.8
Closure & Reclamation (draindown)	Jan-30	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	541	0.8
Closure & Reclamation (draindown)	Feb-30	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	532	0.7
Closure & Reclamation (draindown)	Mar-30	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	524	0.7
Closure & Reclamation (draindown)	Apr-30	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	516	0.7



Stage	Month-Year	Operational Reference Elevation (m asl)	Operational Area (lined pad+primary storage) (m <sup>2</sup> )	Ore Added (under leach) (tonnes)	Moisture Added After Crushing (from fresh water source)	Target Leach Flow Rate (irrigation)	Emitter Evaporation (m <sup>3</sup> )	Idle Heap Evap Area	Water For Plant Use	P <sub>dro ann west</sub> Portion	P <sub>dro ann east</sub> Portion	Eagle Gold	
					Crush	Irrig	Emitter evap.	Evap area	Plant H <sub>2</sub> O	P <sub>dro ann-w</sub>	P <sub>dro ann-e</sub>		
					M <sup>3</sup>	M <sup>3</sup>	M <sup>3</sup>	M <sup>2</sup>	M <sup>3</sup>	Proportion	Proportion	M <sup>3</sup> /mo	M <sup>3</sup> /hr
Closure & Reclamation (draindown)	May-30	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	507	0.7
Closure & Reclamation (draindown)	Jun-30	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	499	0.7
Closure & Reclamation (draindown)	Jul-30	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	467	0.6
Closure & Reclamation (draindown)	Aug-30	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	373	0.5
Closure & Reclamation (draindown)	Sep-30	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	280	0.4
Closure & Reclamation (draindown)	Oct-30	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	210	0.3
Closure & Reclamation (draindown)	Nov-30	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40	163	0.2
Closure & Reclamation (draindown)	Dec-30	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Jan-31	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Feb-31	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Mar-31	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Apr-31	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	May-31	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Jun-31	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Jul-31	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		

Stage	Month-Year	Operational Reference Elevation (m asl)	Operational Area (lined pad+primary storage) (m <sup>2</sup> )	Ore Added (under leach) (tonnes)	Moisture Added After Crushing (from fresh water source)	Target Leach Flow Rate (irrigation)	Emitter Evaporation (m <sup>3</sup> )	Idle Heap Evap Area	Water For Plant Use	P <sub>dro ann west</sub> Portion	P <sub>dro ann east</sub> Portion	Eagle Gold	
					Crush	Irrig	Emitter evap.	Evap area	Plant H <sub>2</sub> O	P <sub>dro ann-w</sub>	P <sub>dro ann-e</sub>		
					M <sup>3</sup>	M <sup>3</sup>	M <sup>3</sup>	M <sup>2</sup>	M <sup>3</sup>	Proportion	Proportion	M <sup>3</sup> /mo	M <sup>3</sup> /hr
Post-closure Environmental Monitoring	Aug-31	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Sep-31	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Oct-31	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Nov-31	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Dec-31	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Jan-32	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Feb-32	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Mar-32	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Apr-32	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	May-32	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Jun-32	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Jul-32	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Aug-32	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Sep-32	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Oct-32	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		

Stage	Month-Year	Operational Reference Elevation (m asl)	Operational Area (lined pad+primary storage) (m <sup>2</sup> )	Ore Added (under leach) (tonnes)	Moisture Added After Crushing (from fresh water source)	Target Leach Flow Rate (irrigation)	Emitter Evaporation (m <sup>3</sup> )	Idle Heap Evap Area	Water For Plant Use	P <sub>dro ann west</sub> Portion	P <sub>dro ann east</sub> Portion	Eagle Gold	
					Crush	Irrig	Emitter evap.	Evap area	Plant H <sub>2</sub> O	P <sub>dro ann-w</sub>	P <sub>dro ann-e</sub>		
					M <sup>3</sup>	M <sup>3</sup>	M <sup>3</sup>	M <sup>2</sup>	M <sup>3</sup>	Proportion	Proportion	M <sup>3</sup> /mo	M <sup>3</sup> /hr
Post-closure Environmental Monitoring	Nov-32	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Dec-32	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Jan-33	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Feb-33	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Mar-33	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Apr-33	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	May-33	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Jun-33	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Jul-33	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Aug-33	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Sep-33	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Oct-33	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Nov-33	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Dec-33	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Jan-34	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		

Stage	Month-Year	Operational Reference Elevation (m asl)	Operational Area (lined pad+primary storage) (m <sup>2</sup> )	Ore Added (under leach) (tonnes)	Moisture Added After Crushing (from fresh water source)	Target Leach Flow Rate (irrigation)	Emitter Evaporation (m <sup>3</sup> )	Idle Heap Evap Area	Water For Plant Use	P <sub>dro ann west</sub> Portion	P <sub>dro ann east</sub> Portion	Eagle Gold	
					Crush	Irrig	Emitter evap.	Evap area	Plant H <sub>2</sub> O	P <sub>dro ann-w</sub>	P <sub>dro ann-e</sub>		
					M <sup>3</sup>	M <sup>3</sup>	M <sup>3</sup>	M <sup>2</sup>	M <sup>3</sup>	Proportion	Proportion	M <sup>3</sup> /mo	M <sup>3</sup> /hr
Post-closure Environmental Monitoring	Feb-34	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Mar-34	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Apr-34	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	May-34	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Jun-34	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Jul-34	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Aug-34	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Sep-34	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Oct-34	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Nov-34	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Dec-34	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		
Post-closure Environmental Monitoring	Jan-35	1,080	854,155	0	0	0	0	497,500	0	0.60	0.40		

**Table B-13: Closure and Reclamation Sequence by Facility**

Facility	Structure/Feature	Closure Conditions/Process	Begin Date	End Date	Comments
<b>Eagle Pup Waste Rock Storage Area</b>					
	WRSA cover	Recontour and cap as per WQ criteria	e	Sep-22	
	EP Sediment Control Pond	Maintain until WQ criteria are met and sustained for five years	Sep-22	Sep-27	
<b>Platinum Gulch Waste Rock Storage Area</b>					
	WRSA cover	Recontour and cap as per WQ criteria	Sep-16	Sep-17	
	PG SCP	Maintain until water is not required for make-up and meeting WQ criteria are met and sustained for five years	Jan-21	Jun-26	
	PG to Open Pit Drainage Ditch	Maintain until water is not required for make-up and WQ criteria are met and sustained for five years	Jan-21	Jun-26	
<b>Open Pit</b>					
	Pit Sump	Pit will be backfilled as geochemical conditions allow, small Pit Lake will form (2.5 ha) and drain to Platinum Gulch	Jan-21		Model will calculate time period for Pit filling and flow to Platinum Gulch
	Crusher Pad	Will be reclaimed when mining stops	Jan-21	Sep-21	
	Perimeter Wells	Will be abandoned or destroyed as mine pit expands		Sep-21	
	Horizontal Drains	Will remain in place		n/a	
	Groundwater Wells	Will be abandoned when crushing has stopped		Sep-21	
<b>Heap Leach Facility</b>					
	HLF Surface	Stop cyanide addition; begin recycle leach solutions with no chemical additions	Jan-21	Dec-21	
		Start detoxification/recycle/continuous discharge/maximum raw water addition	Jan-22	Dec-23	
		Cap heap	Jan-24	Sep-24	
	HLF Primary Pond	Drain down heap to be treated on an as needed basis	Jan-24	Sep-27	Draindown period estimated at three years after maximum raw water additions (rinsing)
	Ann Gulch East Diversion Ditch	Stabilize for long-term – maintain drainage to Dublin Gulch	Jan-21	Sep-22	Likely to stabilize prior to end date
	Ann Gulch East Sediment Control Pond	Maintain SCP until AG EDD stabilized and WQ criteria met	Sep-21	Sep-26	
	Ann Gulch West Diversion Ditch	Stabilize for long-term, route drainage to Haggart Creek when stabilized and WQ criteria met	Sep-21	Sep-26	will likely stabilize before end date

Facility	Structure/Feature	Closure Conditions/Process	Begin Date	End Date	Comments
<b>Lower Dublin Gulch Infrastructure</b>					
	Secondary Heap Leach Storage Facility	Will keep until HLF cover built; afterwards runoff conveyed to MWTP Feed Pond or directly to LDG SCP depending on WQ		Sep-24	
	MWTP Feed Pond	Will maintain until draindown water meets WQ criteria	Sep-28	Jul-29	
	MWTP Product Pond	Will maintain until draindown water meets WQ criteria	Sep-28	Jul-29	
	LDG Sediment Control Pond	Will receive all discharge water until WQ criteria are met		Sep-35	Will be primary discharge point during post-closure monitoring period
	Process Plant Groundwater Wells	Will abandon after HLF rinsing completed	Jan-23	Sep-23	
<b>Dublin Gulch Diversion Channel</b>					
	Upper Velocity Reduction Pond	Will be stabilized for long-term	Jan-21	Sep-21	
	Upper Channel	Will be stabilized for long-term	Jan-21	Sep-21	
	Energy Dissipater		Jan-22	Sep-23	Consider re-aligning upper to lower channel for long-term stability and fish enhancement
	Lower Velocity Reduction Pond	Will either stabilize for long-term or be eliminated based on fish enhancement options	Jan-22	Sep-23	
	Lower Channel	Will be stabilized and enhanced for fish habitat	Jan-22	Sep-23	
	Eagle Creek Connector	will be stabilized and enhanced for fish habitat	Jan-22	Sep-23	
<b>Main Camp</b>					
	Sewage Treatment Facility	Reclaim at end of post-closure monitoring period		Sep-35	
	Groundwater Well	Abandon at end of post-closure monitoring period		Sep-35	







# APPENDIX C

## Detailed Model Results



## Tables



**Table C1-1: Open Pit – Scenario 1 Model Results**

Hydroclimatic Scenario	1				Open Pit										
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Net Precipitation (Rain +Snowmelt)	Evaporation from Pit Walls	Runoff from Pit Walls	Dewatering/Depressurization Volume	Diverted Drainage from Platinum Gulch WRSA	Drilling Water Demand	Net Precip on Open Pit Sump	Evaporation from Open Pit Sump	Total Open Pit Sump Inputs (to MWTP or Pit Lake)	Net Open Pit Lake Volume (at Closure)	Open Pit Lake Overflow to Platinum Gulch
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Existing Conditions	Average	None	None	Oct-11	0	0	0	0	0	0	0	0	0	0	0
Existing Conditions	Average	None	None	Nov-11	0	0	0	0	0	0	0	0	0	0	0
Existing Conditions	Average	None	None	Dec-11	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Jan-12	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Feb-12	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Mar-12	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Apr-12	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	May-12	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Jun-12	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Jul-12	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Aug-12	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Sep-12	0	0	0	2,725	0	1,469	301	199	1,359	0	0
Construction	Average	None	None	Oct-12	0	0	0	2,816	0	1,518	106	0	1,404	0	0
Construction	Average	None	None	Nov-12	0	0	0	2,725	0	1,469	0	0	1,257	0	0
Construction	Average	None	None	Dec-12	0	0	0	2,816	0	1,518	0	0	1,298	0	0
Construction	Average	None	None	Jan-13	0	0	0	5,355	0	1,518	0	0	3,838	0	0
Construction	Average	None	None	Feb-13	0	0	0	4,837	0	1,371	0	0	3,466	0	0
Construction	Average	None	None	Mar-13	0	0	0	5,355	0	1,518	0	0	3,838	0	0
Construction	Average	None	None	Apr-13	0	0	0	5,183	0	1,469	71	0	3,784	0	0
Construction	Average	None	None	May-13	0	0	0	5,355	0	1,518	692	477	4,053	0	0
Construction	Average	None	None	Jun-13	16,207	7,200	9,007	5,183	0	1,469	487	541	12,667	0	0
Construction	Average	None	None	Jul-13	15,972	8,479	7,494	5,355	0	1,518	480	510	11,302	0	0
Construction	Average	None	None	Aug-13	11,653	4,837	6,816	5,355	0	1,518	351	364	10,640	0	0
Operation	Average	None	None	Sep-13	10,599	1,873	8,726	3,451	867	1,469	319	188	11,706	0	0
Operation	Average	None	None	Oct-13	3,882	0	3,882	3,566	5,857	1,518	117	0	11,905	0	0
Operation	Average	None	None	Nov-13	0	0	0	3,451	3,469	1,469	0	0	5,451	0	0
Operation	Average	None	None	Dec-13	0	0	0	3,566	0	1,518	0	0	2,049	0	0
Operation	Average	None	None	Jan-14	0	0	0	3,566	0	1,518	0	0	2,049	0	0
Operation	Average	None	None	Feb-14	0	0	0	3,221	0	1,371	0	0	1,850	0	0
Operation	Average	None	None	Mar-14	0	0	0	3,566	0	1,518	0	0	2,049	0	0
Operation	Average	None	None	Apr-14	2,630	0	2,630	3,451	0	1,469	79	0	4,691	0	0
Operation	Average	None	None	May-14	25,531	2,997	22,533	3,566	4,712	1,518	768	451	29,611	0	0
Operation	Average	None	None	Jun-14	17,156	6,810	10,346	3,451	13,632	1,469	516	512	25,964	0	0
Operation	Average	None	None	Jul-14	16,700	8,019	8,681	3,566	6,572	1,518	502	482	17,321	0	0
Operation	Average	None	None	Aug-14	12,189	4,575	7,614	3,566	7,104	1,518	367	344	16,789	0	0
Operation	Average	None	None	Sep-14	10,599	1,873	8,726	3,451	7,660	1,469	319	188	18,499	0	0
Operation	Average	None	None	Oct-14	3,882	0	3,882	9,295	8,761	1,518	117	0	20,537	0	0
Operation	Average	None	None	Nov-14	0	0	0	8,995	2,457	1,469	0	0	9,984	0	0
Operation	Average	None	None	Dec-14	0	0	0	9,295	0	1,518	0	0	7,778	0	0
Operation	Average	None	None	Jan-15	0	0	0	9,295	0	1,518	0	0	7,778	0	0

Hydroclimatic Scenario	1				Open Pit											
	Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Net Precipitation (Rain + Snowmelt)	Evaporation from Pit Walls	Runoff from Pit Walls	Dewatering/Depressurization Volume	Diverted Drainage from Platinum Gulch WRSA	Drilling Water Demand	Net Precip on Open Pit Sump	Evaporation from Open Pit Sump	Total Open Pit Sump Inputs (to MWTP or Pit Lake)	Net Open Pit Lake Volume (at Closure)	Open Pit Lake Overflow to Platinum Gulch
						m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Operation	Average	None	None	Feb-15	0	0	0	8,396	0	1,371	0	0	7,025	0	0	
Operation	Average	None	None	Mar-15	0	0	0	9,295	0	1,518	0	0	7,778	0	0	
Operation	Average	None	None	Apr-15	2,630	0	2,630	8,995	0	1,469	79	0	10,235	0	0	
Operation	Average	None	None	May-15	25,531	2,997	22,533	9,295	4,913	1,518	768	451	35,541	0	0	
Operation	Average	None	None	Jun-15	17,156	6,810	10,346	8,995	11,461	1,469	516	512	29,337	0	0	
Operation	Average	None	None	Jul-15	16,700	8,019	8,681	9,295	9,144	1,518	502	482	25,622	0	0	
Operation	Average	None	None	Aug-15	12,189	4,575	7,614	9,295	9,535	1,518	367	344	24,949	0	0	
Operation	Average	None	None	Sep-15	10,599	1,873	8,726	8,995	7,945	1,469	657	387	24,467	0	0	
Operation	Average	None	None	Oct-15	11,039	0	11,039	2,051	4,489	1,518	238	0	16,300	0	0	
Operation	Average	None	None	Nov-15	0	0	0	1,985	0	1,469	0	0	516	0	0	
Operation	Average	None	None	Dec-15	0	0	0	2,051	0	1,518	0	0	533	0	0	
Operation	Average	None	None	Jan-16	0	0	0	2,051	0	1,518	0	0	533	0	0	
Operation	Average	None	None	Feb-16	0	0	0	1,919	0	1,420	0	0	499	0	0	
Operation	Average	None	None	Mar-16	0	0	0	2,051	0	1,518	0	0	533	0	0	
Operation	Average	None	None	Apr-16	7,469	0	7,469	1,985	0	1,469	161	0	8,147	0	0	
Operation	Average	None	None	May-16	72,580	8,641	63,939	2,051	2,820	1,518	1,568	933	67,927	0	0	
Operation	Average	None	None	Jun-16	48,972	19,632	29,340	1,985	955	1,469	1,058	1,060	30,809	0	0	
Operation	Average	None	None	Jul-16	47,725	23,118	24,606	2,051	9,610	1,518	1,031	999	34,782	0	0	
Operation	Average	None	None	Aug-16	34,831	13,189	21,642	2,051	9,921	1,518	753	712	32,137	0	0	
Operation	Average	None	None	Sep-16	30,257	5,401	24,857	1,985	8,204	1,469	317	189	33,705	0	0	
Operation	Average	None	None	Oct-16	11,039	0	11,039	13,295	751	1,518	116	0	23,683	0	0	
Operation	Average	None	None	Nov-16	0	0	0	12,866	6,756	1,469	0	0	18,154	0	0	
Operation	Average	None	None	Dec-16	0	0	0	13,295	0	1,518	0	0	11,778	0	0	
Operation	Average	None	None	Jan-17	0	0	0	13,295	0	1,518	0	0	11,778	0	0	
Operation	Average	None	None	Feb-17	0	0	0	12,009	0	1,371	0	0	10,638	0	0	
Operation	Average	None	None	Mar-17	0	0	0	13,295	0	1,518	0	0	11,778	0	0	
Operation	Average	None	None	Apr-17	7,469	0	7,469	12,866	0	1,469	78	0	18,945	0	0	
Operation	Average	None	None	May-17	72,580	8,641	63,939	13,295	7,888	1,518	761	453	83,913	0	0	
Operation	Average	None	None	Jun-17	48,972	19,632	29,340	12,866	26,332	1,469	514	515	67,069	0	0	
Operation	Average	None	None	Jul-17	47,725	23,118	24,606	13,295	9,610	1,518	500	485	46,010	0	0	
Operation	Average	None	None	Aug-17	34,831	13,189	21,642	13,295	9,921	1,518	365	346	43,361	0	0	
Operation	Average	None	None	Sep-17	30,257	5,401	24,857	12,866	15,809	1,469	317	189	52,192	0	0	
Operation	Average	None	None	Oct-17	13,500	0	13,500	2,410	8,205	1,518	115	0	22,713	0	0	
Operation	Average	None	None	Nov-17	0	0	0	2,333	1,501	1,469	0	0	2,365	0	0	
Operation	Average	None	None	Dec-17	0	0	0	2,410	0	1,518	0	0	893	0	0	
Operation	Average	None	None	Jan-18	0	0	0	2,410	0	1,518	0	0	893	0	0	
Operation	Average	None	None	Feb-18	0	0	0	2,177	0	1,371	0	0	806	0	0	
Operation	Average	None	None	Mar-18	0	0	0	2,410	0	1,518	0	0	893	0	0	
Operation	Average	None	None	Apr-18	9,125	0	9,125	2,333	4,055	1,469	78	0	14,121	0	0	
Operation	Average	None	None	May-18	88,745	10,714	78,031	2,410	33,632	1,518	754	455	112,855	0	0	
Operation	Average	None	None	Jun-18	60,126	24,342	35,784	2,333	19,864	1,469	511	517	56,506	0	0	
Operation	Average	None	None	Jul-18	58,659	28,665	29,994	2,410	11,888	1,518	499	487	42,786	0	0	

Hydroclimatic Scenario	1				Open Pit										
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Net Precipitation (Rain + Snowmelt)	Evaporation from Pit Walls	Runoff from Pit Walls	Dewatering/Depressurization Volume	Diverted Drainage from Platinum Gulch WRSA	Drilling Water Demand	Net Precip on Open Pit Sump	Evaporation from Open Pit Sump	Total Open Pit Sump Inputs (to MWTP or Pit Lake)	Net Open Pit Lake Volume (at Closure)	Open Pit Lake Overflow to Platinum Gulch
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Operation	Average	None	None	Aug-18	42,810	16,353	26,457	2,410	8,601	1,518	364	348	35,967	0	0
Operation	Average	None	None	Sep-18	37,150	6,696	30,454	2,333	10,388	1,469	316	190	41,832	0	0
Operation	Average	None	None	Oct-18	14,384	0	14,384	12,400	8,205	1,518	112	0	33,583	0	0
Operation	Average	None	None	Nov-18	0	0	0	12,000	1,501	1,469	0	0	12,033	0	0
Operation	Average	None	None	Dec-18	0	0	0	12,400	0	1,518	0	0	10,882	0	0
Operation	Average	None	None	Jan-19	0	0	0	12,400	0	1,518	0	0	10,882	0	0
Operation	Average	None	None	Feb-19	0	0	0	11,200	0	1,371	0	0	9,829	0	0
Operation	Average	None	None	Mar-19	0	0	0	12,400	0	1,518	0	0	10,882	0	0
Operation	Average	None	None	Apr-19	9,696	0	9,696	12,000	4,055	1,469	76	0	24,358	0	0
Operation	Average	None	None	May-19	94,506	11,811	82,695	12,400	33,632	1,518	738	461	127,487	0	0
Operation	Average	None	None	Jun-19	64,685	26,833	37,851	12,000	19,864	1,469	505	524	68,228	0	0
Operation	Average	None	None	Jul-19	63,278	31,599	31,679	12,400	11,888	1,518	494	493	54,450	0	0
Operation	Average	None	None	Aug-19	46,177	18,027	28,150	12,400	8,601	1,518	360	352	47,642	0	0
Operation	Average	None	None	Sep-19	39,971	7,382	32,590	12,000	10,388	1,469	1,575	969	54,115	0	0
Operation	Average	None	None	Oct-19	14,384	0	14,384	1,294	8,205	1,518	567	0	22,931	0	0
Operation	Average	None	None	Nov-19	0	0	0	1,252	1,501	1,469	0	0	1,284	0	0
Operation	Average	None	None	Dec-19	0	0	0	1,294	0	1,518	0	0	0	0	0
Operation	Average	None	None	Jan-20	0	0	0	1,294	0	1,518	0	0	0	0	0
Operation	Average	None	None	Feb-20	0	0	0	1,210	0	1,420	0	0	0	0	0
Operation	Average	None	None	Mar-20	0	0	0	1,294	0	1,518	0	0	0	0	0
Operation	Average	None	None	Apr-20	9,696	0	9,696	1,252	4,055	1,469	382	0	13,916	0	0
Operation	Average	None	None	May-20	94,506	11,811	82,695	1,294	33,632	1,518	3,723	2,326	117,500	0	0
Operation	Average	None	None	Jun-20	64,685	26,833	37,851	1,252	19,864	1,469	2,548	2,643	57,404	0	0
Operation	Average	None	None	Jul-20	63,278	31,599	31,679	1,294	11,888	1,518	2,493	2,490	43,346	0	0
Operation	Average	None	None	Aug-20	46,177	18,027	28,150	1,294	8,601	1,518	1,819	1,775	36,570	0	0
Operation	Average	None	None	Sep-20	39,971	7,382	32,590	1,252	10,388	1,469	1,575	969	43,366	0	0
Operation	Average	None	None	Oct-20	14,384	0	14,384	1,294	8,205	1,518	567	0	22,931	0	0
Operation	Average	None	None	Nov-20	0	0	0	1,252	1,501	1,469	0	0	1,284	0	0
Operation	Average	None	None	Dec-20	0	0	0	1,294	0	1,518	0	0	0	0	0
Closure & Reclamation (au recovery)	Average	None	None	Jan-21	0	0	0	1,294	0	0	0	0	1,294	0	0
Closure & Reclamation (au recovery)	Average	None	None	Feb-21	0	0	0	1,168	0	0	0	0	1,168	0	0
Closure & Reclamation (au recovery)	Average	None	None	Mar-21	0	0	0	1,294	0	0	0	0	1,294	0	0
Closure & Reclamation (au recovery)	Average	None	None	Apr-21	9,696	0	9,696	1,252	4,055	0	382	0	15,385	0	0
Closure & Reclamation (au recovery)	Average	None	None	May-21	94,506	11,811	82,695	1,294	33,632	0	3,723	2,326	119,018	0	0
Closure & Reclamation (au recovery)	Average	None	None	Jun-21	64,685	26,833	37,851	1,252	19,864	0	2,548	2,643	58,873	0	0
Closure & Reclamation (au recovery)	Average	None	None	Jul-21	63,278	31,599	31,679	1,294	11,888	0	2,493	2,490	44,864	0	0
Closure & Reclamation (au recovery)	Average	None	None	Aug-21	46,177	18,027	28,150	1,294	8,601	0	1,819	1,775	38,088	0	0
Closure & Reclamation (au recovery)	Average	None	None	Sep-21	39,971	7,382	32,590	1,252	10,388	0	1,575	969	44,835	0	0
Closure & Reclamation (au recovery)	Average	None	None	Oct-21	14,384	0	14,384	1,294	8,205	0	567	0	24,449	0	0
Closure & Reclamation (au recovery)	Average	None	None	Nov-21	0	0	0	1,252	1,501	0	0	0	2,753	0	0

Hydroclimatic Scenario	1				Open Pit											
	Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Net Precipitation (Rain + Snowmelt)	Evaporation from Pit Walls	Runoff from Pit Walls	Dewatering/Depressurization Volume	Diverted Drainage from Platinum Gulch WRSA	Drilling Water Demand	Net Precip on Open Pit Sump	Evaporation from Open Pit Sump	Total Open Pit Sump Inputs (to MWTP or Pit Lake)	Net Open Pit Lake Volume (at Closure)	Open Pit Lake Overflow to Platinum Gulch
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
recovery)																
Closure & Reclamation (au recovery)	Average	None	None	Dec-21	0	0	0	1,294	0	0	0	0	1,294	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-22	0	0	0	1,294	0	0	0	0	1,294	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-22	0	0	0	1,168	0	0	0	0	1,168	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-22	0	0	0	1,294	0	0	0	0	1,294	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-22	9,696	0	9,696	1,252	4,055	0	382	0	15,385	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	May-22	94,506	11,811	82,695	1,294	33,632	0	3,723	2,326	119,018	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Jun-22	64,685	26,833	37,851	1,252	19,864	0	2,548	2,643	58,873	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Jul-22	63,278	31,599	31,679	1,294	11,888	0	2,493	2,490	44,864	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Aug-22	46,177	18,027	28,150	1,294	8,601	0	1,819	1,775	38,088	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Sep-22	39,971	7,382	32,590	1,252	10,388	0	1,575	969	44,835	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Oct-22	14,384	0	14,384	1,294	8,205	0	567	0	24,449	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Nov-22	0	0	0	1,252	1,501	0	0	0	2,753	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Dec-22	0	0	0	1,294	0	0	0	0	1,294	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-23	0	0	0	1,294	0	0	0	0	1,294	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-23	0	0	0	1,168	0	0	0	0	1,168	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-23	0	0	0	1,294	0	0	0	0	1,294	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-23	9,696	0	9,696	1,252	4,055	0	382	0	15,385	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	May-23	94,506	11,811	82,695	1,294	33,632	0	3,723	2,326	119,018	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Jun-23	64,685	26,833	37,851	1,252	19,864	0	2,548	2,643	58,873	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Jul-23	63,278	31,599	31,679	1,294	11,888	0	2,493	2,490	44,864	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Aug-23	46,177	18,027	28,150	1,294	8,601	0	1,819	1,775	38,088	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Sep-23	39,971	7,382	32,590	1,252	10,388	0	1,575	969	44,835	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Oct-23	14,384	0	14,384	1,294	8,205	0	567	0	24,449	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Nov-23	0	0	0	1,252	1,501	0	0	0	2,753	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Dec-23	0	0	0	1,294	0	0	0	0	1,294	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-24	0	0	0	1,294	0	0	0	0	1,294	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-24	0	0	0	1,210	0	0	0	0	1,210	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-24	0	0	0	1,294	0	0	0	0	1,294	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-24	9,696	0	9,696	1,252	4,055	0	382	0	15,385	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	May-24	94,506	11,811	82,695	1,294	33,632	0	3,723	2,326	119,018	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Jun-24	64,685	26,833	37,851	1,252	19,864	0	2,548	2,643	58,873	0	0	
Closure & Reclamation (draindown)	Average	None	None	Jul-24	63,278	31,599	31,679	1,294	11,888	0	2,493	2,490	44,864	0	0	
Closure & Reclamation (draindown)	Average	None	None	Aug-24	46,177	18,027	28,150	1,294	8,601	0	1,819	1,775	38,088	0	0	
Closure & Reclamation (draindown)	Average	None	None	Sep-24	39,971	7,382	32,590	1,252	10,388	0	1,575	969	44,835	0	0	
Closure & Reclamation (draindown)	Average	None	None	Oct-24	14,384	0	14,384	1,294	8,205	0	567	0	24,449	0	0	
Closure & Reclamation (draindown)	Average	None	None	Nov-24	0	0	0	1,252	1,501	0	0	0	2,753	0	0	
Closure & Reclamation (draindown)	Average	None	None	Dec-24	0	0	0	1,294	0	0	0	0	1,294	0	0	
Closure & Reclamation (draindown)	Average	None	None	Jan-25	0	0	0	1,294	0	0	0	0	1,294	0	0	
Closure & Reclamation (draindown)	Average	None	None	Feb-25	0	0	0	1,168	0	0	0	0	1,168	0	0	
Closure & Reclamation (draindown)	Average	None	None	Mar-25	0	0	0	1,294	0	0	0	0	1,294	0	0	
Closure & Reclamation (draindown)	Average	None	None	Apr-25	9,696	0	9,696	1,252	4,055	0	382	0	15,385	0	0	



Hydroclimatic Scenario	1				Open Pit											
	Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Net Precipitation (Rain + Snowmelt)	Evaporation from Pit Walls	Runoff from Pit Walls	Dewatering/Depressurization Volume	Diverted Drainage from Platinum Gulch WRSA	Drilling Water Demand	Net Precip on Open Pit Sump	Evaporation from Open Pit Sump	Total Open Pit Sump Inputs (to MWTP or Pit Lake)	Net Open Pit Lake Volume (at Closure)	Open Pit Lake Overflow to Platinum Gulch
						m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Closure & Reclamation (draindown)	Average	None	None	May-25	94,506	11,811	82,695	1,294	33,632	0	3,723	2,326	119,018	0	0	
Closure & Reclamation (draindown)	Average	None	None	Jun-25	64,685	26,833	37,851	1,252	19,864	0	2,548	2,643	58,873	0	0	
Closure & Reclamation (draindown)	Average	None	None	Jul-25	63,278	31,599	31,679	1,294	11,888	0	2,493	2,490	44,864	0	0	
Closure & Reclamation (draindown)	Average	None	None	Aug-25	46,177	18,027	28,150	1,294	8,601	0	1,819	1,775	38,088	0	0	
Closure & Reclamation (draindown)	Average	None	None	Sep-25	39,971	7,382	32,590	1,252	10,388	0	1,575	969	44,835	0	0	
Closure & Reclamation (draindown)	Average	None	None	Oct-25	14,384	0	14,384	1,294	0	0	567	0	16,244	0	0	
Closure & Reclamation (draindown)	Average	None	None	Nov-25	0	0	0	1,252	0	0	0	0	1,252	0	0	
Closure & Reclamation (draindown)	Average	None	None	Dec-25	0	0	0	1,294	0	0	0	0	1,294	0	0	
Closure & Reclamation (draindown)	Average	None	None	Jan-26	0	0	0	1,294	0	0	0	0	1,294	0	0	
Closure & Reclamation (draindown)	Average	None	None	Feb-26	0	0	0	1,168	0	0	0	0	1,168	0	0	
Closure & Reclamation (draindown)	Average	None	None	Mar-26	0	0	0	1,294	0	0	0	0	1,294	0	0	
Closure & Reclamation (draindown)	Average	None	None	Apr-26	9,696	0	9,696	1,252	0	0	382	0	11,330	0	0	
Closure & Reclamation (draindown)	Average	None	None	May-26	94,506	11,811	82,695	1,294	0	0	3,723	2,326	85,386	0	0	
Closure & Reclamation (draindown)	Average	None	None	Jun-26	64,685	26,833	37,851	1,252	0	0	2,548	2,643	39,009	0	0	
Closure & Reclamation (draindown)	Average	None	None	Jul-26	63,278	31,599	31,679	1,294	0	0	2,493	2,490	32,975	0	0	
Closure & Reclamation (draindown)	Average	None	None	Aug-26	46,177	18,027	28,150	1,294	0	0	1,819	1,775	29,487	0	0	
Closure & Reclamation (draindown)	Average	None	None	Sep-26	39,971	7,382	32,590	1,252	0	0	1,575	969	34,447	0	0	
Closure & Reclamation (draindown)	Average	None	None	Oct-26	14,384	0	14,384	1,294	0	0	567	0	16,244	0	0	
Closure & Reclamation (draindown)	Average	None	None	Nov-26	0	0	0	1,252	0	0	0	0	1,252	0	0	
Closure & Reclamation (draindown)	Average	None	None	Dec-26	0	0	0	1,294	0	0	0	0	1,294	0	0	
Closure & Reclamation (draindown)	Average	None	None	Jan-27	0	0	0	1,294	0	0	0	0	1,294	0	0	
Closure & Reclamation (draindown)	Average	None	None	Feb-27	0	0	0	1,168	0	0	0	0	1,168	0	0	
Closure & Reclamation (draindown)	Average	None	None	Mar-27	0	0	0	1,294	0	0	0	0	1,294	0	0	
Closure & Reclamation (draindown)	Average	None	None	Apr-27	9,696	0	9,696	1,252	0	0	382	0	11,330	0	0	
Closure & Reclamation (draindown)	Average	None	None	May-27	94,506	11,811	82,695	1,294	0	0	3,723	2,326	85,386	0	0	
Closure & Reclamation (draindown)	Average	None	None	Jun-27	64,685	26,833	37,851	1,252	0	0	2,548	2,643	39,009	55,469	0	
Closure & Reclamation (draindown)	Average	None	None	Jul-27	63,278	31,599	31,679	1,294	0	0	2,493	2,490	32,975	88,444	0	
Closure & Reclamation (draindown)	Average	None	None	Aug-27	46,177	18,027	28,150	1,294	0	0	1,819	1,775	29,487	117,931	0	
Closure & Reclamation (draindown)	Average	None	None	Sep-27	39,971	7,382	32,590	1,252	0	0	1,575	969	34,447	129,793	34,447	
Closure & Reclamation (draindown)	Average	None	None	Oct-27	14,384	0	14,384	1,294	0	0	567	0	16,244	129,793	16,244	
Closure & Reclamation (draindown)	Average	None	None	Nov-27	0	0	0	1,252	0	0	0	0	1,252	129,793	1,252	
Closure & Reclamation (draindown)	Average	None	None	Dec-27	0	0	0	1,294	0	0	0	0	1,294	129,793	1,294	
Closure & Reclamation (draindown)	Average	None	None	Jan-28	0	0	0	1,294	0	0	0	0	1,294	129,793	1,294	
Closure & Reclamation (draindown)	Average	None	None	Feb-28	0	0	0	1,210	0	0	0	0	1,210	129,793	1,210	
Closure & Reclamation (draindown)	Average	None	None	Mar-28	0	0	0	1,294	0	0	0	0	1,294	129,793	1,294	
Closure & Reclamation (draindown)	Average	None	None	Apr-28	9,696	0	9,696	1,252	0	0	382	0	11,330	129,793	11,330	
Closure & Reclamation (draindown)	Average	None	None	May-28	94,506	11,811	82,695	1,294	0	0	3,723	2,326	85,386	129,793	85,386	
Closure & Reclamation (draindown)	Average	None	None	Jun-28	64,685	26,833	37,851	1,252	0	0	2,548	2,643	39,009	129,793	39,009	
Closure & Reclamation (draindown)	Average	None	None	Jul-28	63,278	31,599	31,679	1,294	0	0	2,493	2,490	32,975	129,793	32,975	
Closure & Reclamation (draindown)	Average	None	None	Aug-28	46,177	18,027	28,150	1,294	0	0	1,819	1,775	29,487	129,793	29,487	
Closure & Reclamation (draindown)	Average	None	None	Sep-28	39,971	7,382	32,590	1,252	0	0	1,575	969	34,447	129,793	34,447	
Closure & Reclamation (draindown)	Average	None	None	Oct-28	14,384	0	14,384	1,294	0	0	567	0	16,244	129,793	16,244	

Hydroclimatic Scenario	1				Open Pit											
	Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Net Precipitation (Rain + Snowmelt)	Evaporation from Pit Walls	Runoff from Pit Walls	Dewatering/Depressurization Volume	Diverted Drainage from Platinum Gulch WRSA	Drilling Water Demand	Net Precip on Open Pit Sump	Evaporation from Open Pit Sump	Total Open Pit Sump Inputs (to MWTP or Pit Lake)	Net Open Pit Lake Volume (at Closure)	Open Pit Lake Overflow to Platinum Gulch
						m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Closure & Reclamation (draindown)	Average	None	None	Nov-28	0	0	0	1,252	0	0	0	0	1,252	129,793	1,252	
Closure & Reclamation (draindown)	Average	None	None	Dec-28	0	0	0	1,294	0	0	0	0	1,294	129,793	1,294	
Closure & Reclamation (draindown)	Average	None	None	Jan-29	0	0	0	1,294	0	0	0	0	1,294	129,793	1,294	
Closure & Reclamation (draindown)	Average	None	None	Feb-29	0	0	0	1,168	0	0	0	0	1,168	129,793	1,168	
Closure & Reclamation (draindown)	Average	None	None	Mar-29	0	0	0	1,294	0	0	0	0	1,294	129,793	1,294	
Closure & Reclamation (draindown)	Average	None	None	Apr-29	9,696	0	9,696	1,252	0	0	382	0	11,330	129,793	11,330	
Closure & Reclamation (draindown)	Average	None	None	May-29	94,506	11,811	82,695	1,294	0	0	3,723	2,326	85,386	129,793	85,386	
Closure & Reclamation (draindown)	Average	None	None	Jun-29	64,685	26,833	37,851	1,252	0	0	2,548	2,643	39,009	129,793	39,009	
Closure & Reclamation (draindown)	Average	None	None	Jul-29	63,278	31,599	31,679	1,294	0	0	2,493	2,490	32,975	129,793	32,975	
Closure & Reclamation (draindown)	Average	None	None	Aug-29	46,177	18,027	28,150	1,294	0	0	1,819	1,775	29,487	129,793	29,487	
Closure & Reclamation (draindown)	Average	None	None	Sep-29	39,971	7,382	32,590	1,252	0	0	1,575	969	34,447	129,793	34,447	
Closure & Reclamation (draindown)	Average	None	None	Oct-29	14,384	0	14,384	1,294	0	0	567	0	16,244	129,793	16,244	
Closure & Reclamation (draindown)	Average	None	None	Nov-29	0	0	0	1,252	0	0	0	0	1,252	129,793	1,252	
Closure & Reclamation (draindown)	Average	None	None	Dec-29	0	0	0	1,294	0	0	0	0	1,294	129,793	1,294	
Closure & Reclamation (draindown)	Average	None	None	Jan-30	0	0	0	1,294	0	0	0	0	1,294	129,793	1,294	
Closure & Reclamation (draindown)	Average	None	None	Feb-30	0	0	0	1,168	0	0	0	0	1,168	129,793	1,168	
Closure & Reclamation (draindown)	Average	None	None	Mar-30	0	0	0	1,294	0	0	0	0	1,294	129,793	1,294	
Closure & Reclamation (draindown)	Average	None	None	Apr-30	9,696	0	9,696	1,252	0	0	382	0	11,330	129,793	11,330	
Closure & Reclamation (draindown)	Average	None	None	May-30	94,506	11,811	82,695	1,294	0	0	3,723	2,326	85,386	129,793	85,386	
Closure & Reclamation (draindown)	Average	None	None	Jun-30	64,685	26,833	37,851	1,252	0	0	2,548	2,643	39,009	129,793	39,009	
Closure & Reclamation (draindown)	Average	None	None	Jul-30	63,278	31,599	31,679	1,294	0	0	2,493	2,490	32,975	129,793	32,975	
Closure & Reclamation (draindown)	Average	None	None	Aug-30	46,177	18,027	28,150	1,294	0	0	1,819	1,775	29,487	129,793	29,487	
Closure & Reclamation (draindown)	Average	None	None	Sep-30	39,971	7,382	32,590	1,252	0	0	1,575	969	34,447	129,793	34,447	
Closure & Reclamation (draindown)	Average	None	None	Oct-30	14,384	0	14,384	1,294	0	0	567	0	16,244	129,793	16,244	
Closure & Reclamation (draindown)	Average	None	None	Nov-30	0	0	0	1,252	0	0	0	0	1,252	129,793	1,252	
Closure & Reclamation (draindown)	Average	None	None	Dec-30	0	0	0	1,294	0	0	0	0	1,294	129,793	1,294	
Post-closure Monitoring	Average	None	None	Jan-31	0	0	0	1,294	0	0	0	0	1,294	129,793	1,294	
Post-closure Monitoring	Average	None	None	Feb-31	0	0	0	1,168	0	0	0	0	1,168	129,793	1,168	
Post-closure Monitoring	Average	None	None	Mar-31	0	0	0	1,294	0	0	0	0	1,294	129,793	1,294	
Post-closure Monitoring	Average	None	None	Apr-31	9,696	0	9,696	1,252	0	0	382	0	11,330	129,793	11,330	
Post-closure Monitoring	Average	None	None	May-31	94,506	11,811	82,695	1,294	0	0	3,723	2,326	85,386	129,793	85,386	
Post-closure Monitoring	Average	None	None	Jun-31	64,685	26,833	37,851	1,252	0	0	2,548	2,643	39,009	129,793	39,009	
Post-closure Monitoring	Average	None	None	Jul-31	63,278	31,599	31,679	1,294	0	0	2,493	2,490	32,975	129,793	32,975	
Post-closure Monitoring	Average	None	None	Aug-31	46,177	18,027	28,150	1,294	0	0	1,819	1,775	29,487	129,793	29,487	
Post-closure Monitoring	Average	None	None	Sep-31	39,971	7,382	32,590	1,252	0	0	1,575	969	34,447	129,793	34,447	
Post-closure Monitoring	Average	None	None	Oct-31	14,384	0	14,384	1,294	0	0	567	0	16,244	129,793	16,244	
Post-closure Monitoring	Average	None	None	Nov-31	0	0	0	1,252	0	0	0	0	1,252	129,793	1,252	
Post-closure Monitoring	Average	None	None	Dec-31	0	0	0	1,294	0	0	0	0	1,294	129,793	1,294	
Post-closure Monitoring	Average	None	None	Jan-32	0	0	0	1,294	0	0	0	0	1,294	129,793	1,294	
Post-closure Monitoring	Average	None	None	Feb-32	0	0	0	1,210	0	0	0	0	1,210	129,793	1,210	
Post-closure Monitoring	Average	None	None	Mar-32	0	0	0	1,294	0	0	0	0	1,294	129,793	1,294	
Post-closure Monitoring	Average	None	None	Apr-32	9,696	0	9,696	1,252	0	0	382	0	11,330	129,793	11,330	

Hydroclimatic Scenario	1				Open Pit											
	Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Net Precipitation (Rain +Snowmelt)	Evaporation from Pit Walls	Runoff from Pit Walls	Dewatering/Depressurization Volume	Diverted Drainage from Platinum Gulch WRSA	Drilling Water Demand	Net Precip on Open Pit Sump	Evaporation from Open Pit Sump	Total Open Pit Sump Inputs (to MWTP or Pit Lake)	Net Open Pit Lake Volume (at Closure)	Open Pit Lake Overflow to Platinum Gulch
						m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Post-closure Monitoring	Average	None	None	May-32	94,506	11,811	82,695	1,294	0	0	3,723	2,326	85,386	129,793	85,386	
Post-closure Monitoring	Average	None	None	Jun-32	64,685	26,833	37,851	1,252	0	0	2,548	2,643	39,009	129,793	39,009	
Post-closure Monitoring	Average	None	None	Jul-32	63,278	31,599	31,679	1,294	0	0	2,493	2,490	32,975	129,793	32,975	
Post-closure Monitoring	Average	None	None	Aug-32	46,177	18,027	28,150	1,294	0	0	1,819	1,775	29,487	129,793	29,487	
Post-closure Monitoring	Average	None	None	Sep-32	39,971	7,382	32,590	1,252	0	0	1,575	969	34,447	129,793	34,447	
Post-closure Monitoring	Average	None	None	Oct-32	14,384	0	14,384	1,294	0	0	567	0	16,244	129,793	16,244	
Post-closure Monitoring	Average	None	None	Nov-32	0	0	0	1,252	0	0	0	0	1,252	129,793	1,252	
Post-closure Monitoring	Average	None	None	Dec-32	0	0	0	1,294	0	0	0	0	1,294	129,793	1,294	
Post-closure Monitoring	Average	None	None	Jan-33	0	0	0	1,294	0	0	0	0	1,294	129,793	1,294	
Post-closure Monitoring	Average	None	None	Feb-33	0	0	0	1,168	0	0	0	0	1,168	129,793	1,168	
Post-closure Monitoring	Average	None	None	Mar-33	0	0	0	1,294	0	0	0	0	1,294	129,793	1,294	
Post-closure Monitoring	Average	None	None	Apr-33	9,696	0	9,696	1,252	0	0	382	0	11,330	129,793	11,330	
Post-closure Monitoring	Average	None	None	May-33	94,506	11,811	82,695	1,294	0	0	3,723	2,326	85,386	129,793	85,386	
Post-closure Monitoring	Average	None	None	Jun-33	64,685	26,833	37,851	1,252	0	0	2,548	2,643	39,009	129,793	39,009	
Post-closure Monitoring	Average	None	None	Jul-33	63,278	31,599	31,679	1,294	0	0	2,493	2,490	32,975	129,793	32,975	
Post-closure Monitoring	Average	None	None	Aug-33	46,177	18,027	28,150	1,294	0	0	1,819	1,775	29,487	129,793	29,487	
Post-closure Monitoring	Average	None	None	Sep-33	39,971	7,382	32,590	1,252	0	0	1,575	969	34,447	129,793	34,447	
Post-closure Monitoring	Average	None	None	Oct-33	14,384	0	14,384	1,294	0	0	567	0	16,244	129,793	16,244	
Post-closure Monitoring	Average	None	None	Nov-33	0	0	0	1,252	0	0	0	0	1,252	129,793	1,252	
Post-closure Monitoring	Average	None	None	Dec-33	0	0	0	1,294	0	0	0	0	1,294	129,793	1,294	
Post-closure Monitoring	Average	None	None	Jan-34	0	0	0	1,294	0	0	0	0	1,294	129,793	1,294	
Post-closure Monitoring	Average	None	None	Feb-34	0	0	0	1,168	0	0	0	0	1,168	129,793	1,168	
Post-closure Monitoring	Average	None	None	Mar-34	0	0	0	1,294	0	0	0	0	1,294	129,793	1,294	
Post-closure Monitoring	Average	None	None	Apr-34	9,696	0	9,696	1,252	0	0	382	0	11,330	129,793	11,330	
Post-closure Monitoring	Average	None	None	May-34	94,506	11,811	82,695	1,294	0	0	3,723	2,326	85,386	129,793	85,386	
Post-closure Monitoring	Average	None	None	Jun-34	64,685	26,833	37,851	1,252	0	0	2,548	2,643	39,009	129,793	39,009	
Post-closure Monitoring	Average	None	None	Jul-34	63,278	31,599	31,679	1,294	0	0	2,493	2,490	32,975	129,793	32,975	
Post-closure Monitoring	Average	None	None	Aug-34	46,177	18,027	28,150	1,294	0	0	1,819	1,775	29,487	129,793	29,487	
Post-closure Monitoring	Average	None	None	Sep-34	39,971	7,382	32,590	1,252	0	0	1,575	969	34,447	129,793	34,447	
Post-closure Monitoring	Average	None	None	Oct-34	14,384	0	14,384	1,294	0	0	567	0	16,244	129,793	16,244	
Post-closure Monitoring	Average	None	None	Nov-34	0	0	0	1,252	0	0	0	0	1,252	129,793	1,252	
Post-closure Monitoring	Average	None	None	Dec-34	0	0	0	1,294	0	0	0	0	1,294	129,793	1,294	
Post-closure Monitoring	Average	None	None	Jan-35	0	0	0	1,294	0	0	0	0	1,294	129,793	1,294	

**Table C1-2: Open Pit – Scenario 2 Model Results – Selected Years**

Hydroclimatic Scenario	2				Open Pit											
	Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Net Precipitation (Rain + Snowmelt)	Evaporation from Pit Walls	Runoff from Pit Walls	Dewatering/Depressurization Volume	Diverted Drainage from Platinum Gulch WRSA	Drilling Water Demand	Net Precip on Open Pit Sump	Evaporation from Open Pit Sump	Total Open Pit Sump Inputs (to MWTP or Pit Lake)	Net Open Pit Lake Volume (at Closure)	Open Pit Lake Overflow to Platinum Gulch
						m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Construction	Wet	None	None	None	Oct-12	0	0	0	2,816	0	1,518	198	0	1,496	0	0
Construction	Wet	None	None	None	Nov-12	0	0	0	2,725	0	1,469	0	0	1,257	0	0
Construction	Wet	None	None	None	Dec-12	0	0	0	2,816	0	1,518	0	0	1,298	0	0
Construction	Wet	None	None	None	Jan-13	0	0	0	5,355	0	1,518	0	0	3,838	0	0
Construction	Wet	None	None	None	Feb-13	0	0	0	4,837	0	1,371	0	0	3,466	0	0
Construction	Wet	None	None	None	Mar-13	0	0	0	5,355	0	1,518	0	0	3,838	0	0
Construction	Wet	None	None	None	Apr-13	0	0	0	5,183	0	1,469	138	0	3,852	0	0
Construction	Wet	None	None	None	May-13	0	0	0	5,355	0	1,518	1,319	477	4,680	0	0
Construction	Wet	None	None	None	Jun-13	27,029	7,200	19,829	5,183	0	1,469	813	541	23,814	0	0
Construction	Wet	None	None	None	Jul-13	25,653	8,479	17,175	5,355	0	1,518	772	510	21,274	0	0
Construction	Wet	None	None	None	Aug-13	18,742	4,837	13,906	5,355	0	1,518	564	364	17,943	0	0
Operation	Wet	None	None	None	Sep-13	17,832	1,873	15,959	3,451	1,910	1,469	536	188	20,200	0	0
Operation	Wet	None	None	None	Oct-19	27,041	0	27,041	1,294	13,496	1,518	1,065	0	41,378	0	0
Operation	Wet	None	None	None	Nov-19	0	0	0	1,252	2,824	1,469	0	0	2,607	0	0
Operation	Wet	None	None	None	Dec-19	0	0	0	1,294	0	1,518	0	0	0	0	0
Operation	Wet	None	None	None	Jan-20	0	0	0	1,294	0	1,518	0	0	0	0	0
Operation	Wet	None	None	None	Feb-20	0	0	0	1,210	0	1,420	0	0	0	0	0
Operation	Wet	None	None	None	Mar-20	0	0	0	1,294	0	1,518	0	0	0	0	0
Operation	Wet	None	None	None	Apr-20	19,024	0	19,024	1,252	7,959	1,469	749	0	27,516	0	0
Operation	Wet	None	None	None	May-20	180,700	11,811	168,889	1,294	68,353	1,518	7,119	2,326	241,810	0	0
Operation	Wet	None	None	None	Jun-20	108,407	26,833	81,574	1,252	43,845	1,469	4,271	2,643	126,831	0	0
Operation	Wet	None	None	None	Jul-20	102,029	31,599	70,430	1,294	28,969	1,518	4,020	2,490	100,705	0	0
Operation	Wet	None	None	None	Aug-20	74,566	18,027	56,539	1,294	21,475	1,518	2,938	1,775	78,952	0	0
Operation	Wet	None	None	None	Sep-20	67,037	7,382	59,655	1,252	23,508	1,469	2,641	969	84,618	0	0
Closure & Reclamation (draindown)	Wet	None	None	None	Jul-24	102,029	31,599	70,430	1,294	25,082	0	4,020	2,490	98,336	0	0
Closure & Reclamation (draindown)	Wet	None	None	None	Aug-24	74,566	18,027	56,539	1,294	21,475	0	2,938	1,775	80,470	0	0
Closure & Reclamation (draindown)	Wet	None	None	None	Sep-24	67,037	7,382	59,655	1,252	23,508	0	2,641	969	86,087	0	0
Closure & Reclamation (draindown)	Wet	None	None	None	Oct-24	27,041	0	27,041	1,294	16,178	0	1,065	0	45,578	0	0
Closure & Reclamation (draindown)	Wet	None	None	None	Nov-24	0	0	0	1,252	2,824	0	0	0	4,076	0	0
Closure & Reclamation (draindown)	Wet	None	None	None	Dec-24	0	0	0	1,294	0	0	0	0	1,294	0	0
Closure & Reclamation (draindown)	Wet	None	None	None	Jan-25	0	0	0	1,294	0	0	0	0	1,294	0	0
Closure & Reclamation (draindown)	Wet	None	None	None	Feb-25	0	0	0	1,168	0	0	0	0	1,168	0	0
Closure & Reclamation (draindown)	Wet	None	None	None	Mar-25	0	0	0	1,294	0	0	0	0	1,294	0	0
Closure & Reclamation (draindown)	Wet	None	None	None	Apr-25	19,024	0	19,024	1,252	7,959	0	749	0	28,985	0	0
Closure & Reclamation (draindown)	Wet	None	None	None	May-25	180,700	11,811	168,889	1,294	68,353	0	7,119	2,326	243,328	0	0
Closure & Reclamation (draindown)	Wet	None	None	None	Jun-25	108,407	26,833	81,574	1,252	43,845	0	4,271	2,643	128,299	0	0

Hydroclimatic Scenario	2				Open Pit											
	Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Net Precipitation (Rain + Snowmelt)	Evaporation from Pit Walls	Runoff from Pit Walls	Dewatering/Depressurization Volume	Diverted Drainage from Platinum Gulch WRSA	Drilling Water Demand	Net Precip on Open Pit Sump	Evaporation from Open Pit Sump	Total Open Pit Sump Inputs (to MWTP or Pit Lake)	Net Open Pit Lake Volume (at Closure)	Open Pit Lake Overflow to Platinum Gulch
						m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Post-closure Monitoring	Wet	None	None	None	Oct-31	27,041	0	27,041	1,294	0	0	1,065	0	29,400	129,793	29,400
Post-closure Monitoring	Wet	None	None	None	Nov-31	0	0	0	1,252	0	0	0	0	1,252	129,793	1,252
Post-closure Monitoring	Wet	None	None	None	Dec-31	0	0	0	1,294	0	0	0	0	1,294	129,793	1,294
Post-closure Monitoring	Wet	None	None	None	Jan-32	0	0	0	1,294	0	0	0	0	1,294	129,793	1,294
Post-closure Monitoring	Wet	None	None	None	Feb-32	0	0	0	1,210	0	0	0	0	1,210	129,793	1,210
Post-closure Monitoring	Wet	None	None	None	Mar-32	0	0	0	1,294	0	0	0	0	1,294	129,793	1,294
Post-closure Monitoring	Wet	None	None	None	Apr-32	19,024	0	19,024	1,252	0	0	749	0	21,025	129,793	21,025
Post-closure Monitoring	Wet	None	None	None	May-32	180,700	11,811	168,889	1,294	0	0	7,119	2,326	174,975	129,793	174,975
Post-closure Monitoring	Wet	None	None	None	Jun-32	108,407	26,833	81,574	1,252	0	0	4,271	2,643	84,454	129,793	84,454
Post-closure Monitoring	Wet	None	None	None	Jul-32	102,029	31,599	70,430	1,294	0	0	4,020	2,490	73,254	129,793	73,254
Post-closure Monitoring	Wet	None	None	None	Aug-32	74,566	18,027	56,539	1,294	0	0	2,938	1,775	58,995	129,793	58,995
Post-closure Monitoring	Wet	None	None	None	Sep-32	67,037	7,382	59,655	1,252	0	0	2,641	969	62,579	129,793	62,579

**Table C1-3: Open Pit – Scenario 3 Model Results – Selected Years**

Hydroclimatic Scenario	3				Open Pit											
	Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Net Precipitation (Rain +Snowmelt)	Evaporation from Pit Walls	Runoff from Pit Walls	Dewatering/Depressurization Volume	Diverted Drainage from Platinum Gulch WRSA	Drilling Water Demand	Net Precip on Open Pit Sump	Evaporation from Open Pit Sump	Total Open Pit Sump Inputs (to MWTP or Pit Lake)	Net Open Pit Lake Volume (at Closure)	Open Pit Lake Overflow to Platinum Gulch
						m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Construction	Dry	None	None	None	Oct-12	0	0	0	2,816	0	1,518	41	0	1,339	0	0
Construction	Dry	None	None	None	Nov-12	0	0	0	2,725	0	1,469	0	0	1,257	0	0
Construction	Dry	None	None	None	Dec-12	0	0	0	2,816	0	1,518	0	0	1,298	0	0
Construction	Dry	None	None	None	Jan-13	0	0	0	5,355	0	1,518	0	0	3,838	0	0
Construction	Dry	None	None	None	Feb-13	0	0	0	4,837	0	1,371	0	0	3,466	0	0
Construction	Dry	None	None	None	Mar-13	0	0	0	5,355	0	1,518	0	0	3,838	0	0
Construction	Dry	None	None	None	Apr-13	0	0	0	5,183	0	1,469	27	0	3,741	0	0
Construction	Dry	None	None	None	May-13	0	0	0	5,355	0	1,518	267	477	3,628	0	0
Construction	Dry	None	None	None	Jun-13	6,242	958	5,284	5,183	0	1,469	188	541	8,644	0	0
Construction	Dry	None	None	None	Jul-13	6,151	2,327	3,824	5,355	0	1,518	185	510	7,337	0	0
Construction	Dry	None	None	None	Aug-13	4,488	349	4,139	5,355	0	1,518	135	364	7,748	0	0
Operation	Dry	None	None	None	Sep-13	3,835	1,873	1,962	3,451	479	1,469	115	188	4,351	0	0
Operation	Dry	None	None	None	Oct-19	5,331	0	5,331	1,294	4,408	1,518	210	0	9,724	0	0
Operation	Dry	None	None	None	Nov-19	0	0	0	1,252	552	1,469	0	0	335	0	0
Operation	Dry	None	None	None	Dec-19	0	0	0	1,294	0	1,518	0	0	0	0	0
Operation	Dry	None	None	None	Jan-20	0	0	0	1,294	0	1,518	0	0	0	0	0
Operation	Dry	None	None	None	Feb-20	0	0	0	1,210	0	1,420	0	0	0	0	0
Operation	Dry	None	None	None	Mar-20	0	0	0	1,294	0	1,518	0	0	0	0	0
Operation	Dry	None	None	None	Apr-20	3,593	0	3,593	1,252	1,491	1,469	142	0	5,009	0	0
Operation	Dry	None	None	None	May-20	35,024	11,811	23,213	1,294	11,982	1,518	1,380	2,326	34,024	0	0
Operation	Dry	None	None	None	Jun-20	23,972	2,861	21,111	1,252	5,072	1,469	944	2,643	24,267	0	0
Operation	Dry	None	None	None	Jul-20	23,451	8,148	15,303	1,294	1,296	1,518	924	2,490	14,808	0	0
Operation	Dry	None	None	None	Aug-20	17,113	914	16,199	1,294	707	1,518	674	1,775	15,581	0	0
Operation	Dry	None	None	None	Sep-20	14,813	7,382	7,432	1,252	1,089	1,469	584	969	7,918	0	0
Closure & Reclamation (draindown)	Dry	None	None	None	Jul-24	23,451	8,148	15,303	1,294	3,681	0	924	2,490	18,711	0	0
Closure & Reclamation (draindown)	Dry	None	None	None	Aug-24	17,113	914	16,199	1,294	707	0	674	1,775	17,099	0	0
Closure & Reclamation (draindown)	Dry	None	None	None	Sep-24	14,813	7,382	7,432	1,252	1,089	0	584	969	9,387	0	0
Closure & Reclamation (draindown)	Dry	None	None	None	Oct-24	5,331	0	5,331	1,294	2,448	0	210	0	9,282	0	0
Closure & Reclamation (draindown)	Dry	None	None	None	Nov-24	0	0	0	1,252	552	0	0	0	1,804	0	0
Closure & Reclamation (draindown)	Dry	None	None	None	Dec-24	0	0	0	1,294	0	0	0	0	1,294	0	0
Closure & Reclamation (draindown)	Dry	None	None	None	Jan-25	0	0	0	1,294	0	0	0	0	1,294	0	0
Closure & Reclamation (draindown)	Dry	None	None	None	Feb-25	0	0	0	1,168	0	0	0	0	1,168	0	0
Closure & Reclamation (draindown)	Dry	None	None	None	Mar-25	0	0	0	1,294	0	0	0	0	1,294	0	0
Closure & Reclamation (draindown)	Dry	None	None	None	Apr-25	3,593	0	3,593	1,252	1,491	0	142	0	6,478	0	0
Closure & Reclamation (draindown)	Dry	None	None	None	May-25	35,024	11,811	23,213	1,294	11,982	0	1,380	2,326	35,542	0	0
Closure & Reclamation (Draindown)	Dry	None	None	None	Jun-25	23,972	2,861	21,111	1,252	5,072	0	944	2,643	25,736	0	0

Hydroclimatic Scenario	3				Open Pit										
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Net Precipitation (Rain +Snowmelt)	Evaporation from Pit Walls	Runoff from Pit Walls	Dewatering/Depressurization Volume	Diverted Drainage from Platinum Gulch WRSA	Drilling Water Demand	Net Precip on Open Pit Sump	Evaporation from Open Pit Sump	Total Open Pit Sump Inputs (to MWTP or Pit Lake)	Net Open Pit Lake Volume (at Closure)	Open Pit Lake Overflow to Platinum Gulch
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Post-closure Monitoring	Dry	None	None	Oct-31	5,331	0	5,331	1,294	0	0	210	0	6,834	129,793	6,834
Post-closure Monitoring	Dry	None	None	Nov-31	0	0	0	1,252	0	0	0	0	1,252	129,793	1,252
Post-closure Monitoring	Dry	None	None	Dec-31	0	0	0	1,294	0	0	0	0	1,294	129,793	1,294
Post-closure Monitoring	Dry	None	None	Jan-32	0	0	0	1,294	0	0	0	0	1,294	129,793	1,294
Post-closure Monitoring	Dry	None	None	Feb-32	0	0	0	1,210	0	0	0	0	1,210	129,793	1,210
Post-closure Monitoring	Dry	None	None	Mar-32	0	0	0	1,294	0	0	0	0	1,294	129,793	1,294
Post-closure Monitoring	Dry	None	None	Apr-32	3,593	0	3,593	1,252	0	0	142	0	4,987	129,793	4,987
Post-closure Monitoring	Dry	None	None	May-32	35,024	11,811	23,213	1,294	0	0	1,380	2,326	23,560	129,793	23,560
Post-closure Monitoring	Dry	None	None	Jun-32	23,972	2,861	21,111	1,252	0	0	944	2,643	20,664	129,793	20,664
Post-closure Monitoring	Dry	None	None	Jul-32	23,451	8,148	15,303	1,294	0	0	924	2,490	15,030	129,793	15,030
Post-closure Monitoring	Dry	None	None	Aug-32	17,113	914	16,199	1,294	0	0	674	1,775	16,392	129,793	16,392
Post-closure Monitoring	Dry	None	None	Sep-32	14,813	7,382	7,432	1,252	0	0	584	969	8,298	129,793	8,298





**Table C2-1: Platinum Gulch Waste Rock Storage Area – Scenario 1 Model Results**

Hydroclimatic Scenario	1				Platinum Gulch Waste Rock Storage Area														
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain +Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Undisturbed Basin Runoff	Undisturbed Basin (GW <sub>OUT</sub> )	Non-Contact Sediment Control Pond Inputs	Total Non-Contact Platinum Gulch	WRSA Net Precipitation (Rain +Snowmelt)	WRSA Evapor-ation	WRSA Evapo-transpiration (Cover)	WRSA Infiltration (GW <sub>IN</sub> )	WRSA Runoff	Waste Rock Moisture Content	Rock Drain Seepage (GW <sub>OUT</sub> )	To Open Pit Sump
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Existing Conditions	Average	None	None	Oct-11	29,627	0	21,986	2,636	5,005	7,641	7,641	0	0	0	0	0	0	0	0
Existing Conditions	Average	None	None	Nov-11	0	0	(2,301)	0	2,301	2,301	2,301	0	0	0	0	0	0	0	0
Existing Conditions	Average	None	None	Dec-11	0	0	(799)	0	799	799	799	0	0	0	0	0	0	0	0
Construction	Average	None	None	Jan-12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Feb-12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Mar-12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Apr-12	18,097	0	18,007	89	0	89	89	0	0	0	0	0	0	0	0
Construction	Average	None	None	May-12	177,390	32,453	132,813	8,498	3,626	12,124	12,124	0	0	0	0	0	0	0	0
Construction	Average	None	None	Jun-12	124,579	73,669	40,432	2,890	7,588	10,478	10,478	0	0	0	0	0	0	0	0
Construction	Average	None	None	Jul-12	122,688	83,808	17,723	15,840	5,316	21,156	21,156	0	0	0	0	0	0	0	0
Construction	Average	None	None	Aug-12	89,511	61,614	18,514	2,756	6,627	9,383	9,383	0	0	0	0	0	0	0	0
Construction	Average	None	None	Sep-12	77,003	38,089	28,560	2,170	8,184	10,354	10,354	0	0	0	0	0	0	0	0
Construction	Average	None	None	Oct-12	27,032	0	20,060	2,405	4,567	6,972	6,972	0	0	0	0	0	0	0	0
Construction	Average	None	None	Nov-12	0	0	(2,099)	0	2,099	2,099	2,099	0	0	0	0	0	0	0	0
Construction	Average	None	None	Dec-12	0	0	(729)	0	729	729	729	0	0	0	0	0	0	0	0
Construction	Average	None	None	Jan-13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Feb-13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Mar-13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Apr-13	18,097	0	18,007	89	0	89	89	0	0	0	0	0	0	0	0
Construction	Average	None	None	May-13	177,390	32,453	132,813	8,498	3,626	12,124	12,124	0	0	0	0	0	0	0	0
Construction	Average	None	None	Jun-13	110,686	65,454	35,923	2,568	6,741	9,309	9,223	0	0	0	0	0	0	0	0
Construction	Average	None	None	Jul-13	109,005	74,462	15,747	14,073	4,723	18,797	18,751	0	0	0	0	0	0	0	0
Construction	Average	None	None	Aug-13	79,529	54,742	16,449	2,449	5,888	8,337	8,318	0	0	0	0	0	0	0	0
Operation	Average	None	None	Sep-13	68,415	33,841	25,375	1,928	7,271	9,199	9,396	15,457	6,784	0	7,805	867	2,885	0	867
Operation	Average	None	None	Oct-13	24,018	0	17,823	2,137	4,058	6,195	6,383	5,521	0	0	4,969	552	1,885	5,305	5,857
Operation	Average	None	None	Nov-13	0	0	(1,865)	0	1,865	1,865	1,865	0	0	0	0	0	385	3,469	3,469
Operation	Average	None	None	Dec-13	0	0	(648)	0	648	648	648	0	0	0	0	0	385	0	0
Operation	Average	None	None	Jan-14	0	0	0	0	0	0	0	0	0	0	0	0	385	0	0
Operation	Average	None	None	Feb-14	0	0	0	0	0	0	0	0	0	0	0	0	385	0	0
Operation	Average	None	None	Mar-14	0	0	0	0	0	0	0	0	0	0	0	0	385	0	0
Operation	Average	None	None	Apr-14	16,078	0	15,999	79	0	79	206	3,714	0	0	3,714	0	1,385	0	0
Operation	Average	None	None	May-14	157,608	28,834	118,001	7,550	3,222	10,772	11,216	36,261	16,283	0	17,980	1,998	5,385	2,714	4,712
Operation	Average	None	None	Jun-14	110,686	65,454	35,923	2,568	6,741	9,309	9,261	25,011	18,496	0	5,863	651	385	12,980	13,632
Operation	Average	None	None	Jul-14	109,005	74,462	15,747	14,073	4,723	18,797	18,784	24,517	17,425	0	6,383	709	385	5,863	6,572
Operation	Average	None	None	Aug-14	79,529	54,742	16,449	2,449	5,888	8,337	8,342	23,615	16,402	0	6,491	721	385	6,383	7,104
Operation	Average	None	None	Sep-14	60,554	29,952	22,459	1,706	6,436	8,142	8,346	20,572	8,882	0	10,521	1,169	2,885	6,491	7,660

Hydroclimatic Scenario		1			Platinum Gulch Waste Rock Storage Area														
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain + Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Undisturbed Basin Runoff	Undisturbed Basin (GW <sub>OUT</sub> )	Non-Contact Sediment Control Pond Inputs	Total Non-Contact Platinum Gulch	WRSA Net Precipitation (Rain + Snowmelt)	WRSA Evaporation	WRSA Evapo-transpiration (Cover)	WRSA Infiltration (GW <sub>IN</sub> )	WRSA Runoff	Waste Rock Moisture Content	Rock Drain Seepage (GW <sub>OUT</sub> )	To Open Pit Sump
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Operation	Average	None	None	Oct-14	21,258	0	15,775	1,891	3,591	5,483	5,674	7,397	0	0	6,657	740	5,367	8,021	8,761
Operation	Average	None	None	Nov-14	0	0	(1,651)	0	1,651	1,651	1,651	0	0	0	0	0	1,167	2,457	2,457
Operation	Average	None	None	Dec-14	0	0	(574)	0	574	574	574	0	0	0	0	0	1,167	0	0
Operation	Average	None	None	Jan-15	0	0	0	0	0	0	0	0	0	0	0	0	1,167	0	0
Operation	Average	None	None	Feb-15	0	0	0	0	0	0	0	0	0	0	0	0	1,167	0	0
Operation	Average	None	None	Mar-15	0	0	0	0	0	0	0	0	0	0	0	0	1,167	0	0
Operation	Average	None	None	Apr-15	14,231	0	14,161	70	0	70	199	4,985	0	0	4,985	0	3,967	0	0
Operation	Average	None	None	May-15	139,497	25,521	104,441	6,683	2,852	9,534	10,004	48,600	21,318	0	24,554	2,728	15,167	2,185	4,913
Operation	Average	None	None	Jun-15	97,967	57,932	31,795	2,273	5,967	8,240	8,206	33,291	24,216	0	8,168	908	1,167	10,554	11,461
Operation	Average	None	None	Jul-15	96,479	65,905	13,937	12,456	4,181	16,637	16,636	32,574	22,814	0	8,785	976	1,167	8,168	9,144
Operation	Average	None	None	Aug-15	70,390	48,452	14,559	2,167	5,212	7,379	7,393	23,771	16,269	0	6,752	750	1,167	8,785	9,535
Operation	Average	None	None	Sep-15	49,668	24,568	18,422	1,400	5,279	6,679	6,890	20,741	8,809	0	10,738	1,193	8,167	6,752	7,945
Operation	Average	None	None	Oct-15	14,726	0	10,928	1,310	2,488	3,798	3,992	7,507	0	0	6,756	751	9,173	3,738	4,489
Operation	Average	None	None	Nov-15	0	0	(1,144)	0	1,144	1,144	1,144	0	0	0	0	0	2,417	0	0
Operation	Average	None	None	Dec-15	0	0	(397)	0	397	397	397	0	0	0	0	0	2,417	0	0
Operation	Average	None	None	Jan-16	0	0	0	0	0	0	0	0	0	0	0	0	2,417	0	0
Operation	Average	None	None	Feb-16	0	0	0	0	0	0	0	0	0	0	0	0	2,417	0	0
Operation	Average	None	None	Mar-16	0	0	0	0	0	0	0	0	0	0	0	0	2,417	0	0
Operation	Average	None	None	Apr-16	9,858	0	9,810	49	0	49	180	5,069	0	0	5,069	0	7,485	0	0
Operation	Average	None	None	May-16	96,637	17,680	72,352	4,630	1,975	6,605	7,100	49,340	21,142	0	25,378	2,820	27,794	0	2,820
Operation	Average	None	None	Jun-16	67,867	40,133	22,026	1,575	4,133	5,708	5,689	33,566	24,017	0	8,595	955	2,417	0	955
Operation	Average	None	None	Jul-16	66,837	45,656	9,655	8,629	2,896	11,525	11,537	32,784	22,626	0	9,142	1,016	2,417	8,595	9,610
Operation	Average	None	None	Aug-16	48,763	33,565	10,086	1,501	3,610	5,112	5,134	23,925	16,135	0	7,011	779	2,417	9,142	9,921
Operation	Average	None	None	Sep-16	35,901	17,758	13,316	1,012	3,816	4,827	5,038	20,741	8,809	0	10,738	1,193	13,155	7,011	8,204
Operation	Average	None	None	Oct-16	12,603	0	9,353	1,121	2,129	3,251	3,445	7,507	0	0	6,756	751	0	0	751
Operation	Average	None	None	Nov-16	0	0	(979)	0	979	979	979	0	0	0	0	0	6,756	6,756	6,756
Operation	Average	None	None	Dec-16	0	0	(340)	0	340	340	340	0	0	0	0	0	0	0	0
Operation	Average	None	None	Jan-17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operation	Average	None	None	Feb-17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operation	Average	None	None	Mar-17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operation	Average	None	None	Apr-17	8,437	0	8,396	42	0	42	173	5,069	0	0	5,069	0	0	0	0
Operation	Average	None	None	May-17	82,705	15,131	61,922	3,962	1,691	5,653	6,148	49,340	21,142	0	25,378	2,820	0	5,069	7,888
Operation	Average	None	None	Jun-17	58,083	34,347	18,851	1,348	3,538	4,885	4,866	33,566	24,017	0	8,595	955	0	25,378	26,332
Operation	Average	None	None	Jul-17	57,201	39,074	8,263	7,385	2,479	9,864	9,875	32,784	22,626	0	9,142	1,016	0	8,595	9,610
Operation	Average	None	None	Aug-17	41,733	28,726	8,632	1,285	3,090	4,375	4,398	23,925	16,135	0	7,011	779	0	9,142	9,921
Operation	Average	None	None	Sep-17	30,459	15,066	11,297	858	3,237	4,096	4,307	20,741	0	9,743	2,200	8,798	0	7,011	15,809

Hydroclimatic Scenario		1			Platinum Gulch Waste Rock Storage Area														
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain + Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Undisturbed Basin Runoff	Undisturbed Basin (GW <sub>OUT</sub> )	Non-Contact Sediment Control Pond Inputs	Total Non-Contact Platinum Gulch	WRSA Net Precipitation (Rain + Snowmelt)	WRSA Evaporation	WRSA Evapo-transpiration (Cover)	WRSA Infiltration (GW <sub>IN</sub> )	WRSA Runoff	Waste Rock Moisture Content	Rock Drain Seepage (GW <sub>OUT</sub> )	To Open Pit Sump
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Operation	Average	None	None	Oct-17	10,172	0	7,549	905	1,719	2,624	2,818	7,507	0	0	1,501	6,006	0	2,200	8,205
Operation	Average	None	None	Nov-17	0	0	(790)	0	790	790	790	0	0	0	0	0	0	1,501	1,501
Operation	Average	None	None	Dec-17	0	0	(274)	0	274	274	274	0	0	0	0	0	0	0	0
Operation	Average	None	None	Jan-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operation	Average	None	None	Feb-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operation	Average	None	None	Mar-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operation	Average	None	None	Apr-18	6,810	0	6,776	34	0	34	165	5,069	0	0	1,014	4,055	0	0	4,055
Operation	Average	None	None	May-18	66,751	12,212	49,976	3,198	1,364	4,562	5,057	49,340	0	8,567	8,155	32,618	0	1,014	33,632
Operation	Average	None	None	Jun-18	46,878	27,721	15,214	1,088	2,855	3,943	3,924	33,566	0	18,929	2,927	11,710	0	8,155	19,864
Operation	Average	None	None	Jul-18	46,166	31,536	6,669	5,960	2,000	7,961	7,973	32,784	0	21,583	2,240	8,961	0	2,927	11,888
Operation	Average	None	None	Aug-18	33,682	23,185	6,967	1,037	2,494	3,531	3,554	23,925	0	15,974	1,590	6,361	0	2,240	8,601
Operation	Average	None	None	Sep-18	25,347	12,538	9,401	714	2,694	3,408	3,619	20,741	0	9,743	2,200	8,798	0	1,590	10,388
Operation	Average	None	None	Oct-18	8,898	0	6,603	792	1,503	2,295	2,489	7,507	0	0	1,501	6,006	0	2,200	8,205
Operation	Average	None	None	Nov-18	0	0	(691)	0	691	691	691	0	0	0	0	0	0	1,501	1,501
Operation	Average	None	None	Dec-18	0	0	(240)	0	240	240	240	0	0	0	0	0	0	0	0
Operation	Average	None	None	Jan-19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operation	Average	None	None	Feb-19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operation	Average	None	None	Mar-19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operation	Average	None	None	Apr-19	5,957	0	5,928	29	0	29	160	5,069	0	0	1,014	4,055	0	0	4,055
Operation	Average	None	None	May-19	58,392	10,683	43,718	2,797	1,194	3,991	4,486	49,340	0	8,567	8,155	32,618	0	1,014	33,632
Operation	Average	None	None	Jun-19	41,008	24,250	13,309	951	2,498	3,449	3,430	33,566	0	18,929	2,927	11,710	0	8,155	19,864
Operation	Average	None	None	Jul-19	40,385	27,587	5,834	5,214	1,750	6,964	6,976	32,784	0	21,583	2,240	8,961	0	2,927	11,888
Operation	Average	None	None	Aug-19	29,464	20,281	6,094	907	2,182	3,089	3,111	23,925	0	15,974	1,590	6,361	0	2,240	8,601
Operation	Average	None	None	Sep-19	21,719	10,743	8,055	612	2,308	2,920	3,131	20,741	0	9,743	2,200	8,798	0	1,590	10,388
Operation	Average	None	None	Oct-19	7,624	0	5,658	678	1,288	1,966	2,161	7,507	0	0	1,501	6,006	0	2,200	8,205
Operation	Average	None	None	Nov-19	0	0	(592)	0	592	592	592	0	0	0	0	0	0	1,501	1,501
Operation	Average	None	None	Dec-19	0	0	(206)	0	206	206	206	0	0	0	0	0	0	0	0
Operation	Average	None	None	Jan-20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operation	Average	None	None	Feb-20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operation	Average	None	None	Mar-20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operation	Average	None	None	Apr-20	5,104	0	5,079	25	0	25	156	5,069	0	0	1,014	4,055	0	0	4,055
Operation	Average	None	None	May-20	50,033	9,153	37,460	2,397	1,023	3,420	3,915	49,340	0	8,567	8,155	32,618	0	1,014	33,632
Operation	Average	None	None	Jun-20	35,138	20,778	11,404	815	2,140	2,955	2,936	33,566	0	18,929	2,927	11,710	0	8,155	19,864
Operation	Average	None	None	Jul-20	34,604	23,638	4,999	4,468	1,499	5,967	5,979	32,784	0	21,583	2,240	8,961	0	2,927	11,888
Operation	Average	None	None	Aug-20	25,246	17,378	5,222	777	1,869	2,647	2,669	23,925	0	15,974	1,590	6,361	0	2,240	8,601
Operation	Average	None	None	Sep-20	21,719	10,743	8,055	612	2,308	2,920	3,131	20,741	0	9,743	2,200	8,798	0	1,590	10,388

Hydroclimatic Scenario		1			Platinum Gulch Waste Rock Storage Area														
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain + Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Undisturbed Basin Runoff	Undisturbed Basin (GW <sub>OUT</sub> )	Non-Contact Sediment Control Pond Inputs	Total Non-Contact Platinum Gulch	WRSA Net Precipitation (Rain + Snowmelt)	WRSA Evaporation	WRSA Evapo-transpiration (Cover)	WRSA Infiltration (GW <sub>IN</sub> )	WRSA Runoff	Waste Rock Moisture Content	Rock Drain Seepage (GW <sub>OUT</sub> )	To Open Pit Sump
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Operation	Average	None	None	Oct-20	7,624	0	5,658	678	1,288	1,966	2,161	7,507	0	0	1,501	6,006	0	2,200	8,205
Operation	Average	None	None	Nov-20	0	0	(592)	0	592	592	592	0	0	0	0	0	0	1,501	1,501
Operation	Average	None	None	Dec-20	0	0	(171)	0	171	171	171	0	0	0	0	0	0	0	0
Closure & Reclamation (au recovery)	Average	None	None	Jan-21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (au recovery)	Average	None	None	Feb-21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (au recovery)	Average	None	None	Mar-21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (au recovery)	Average	None	None	Apr-21	4,251	0	4,230	21	0	21	152	5,069	0	0	1,014	4,055	0	0	4,055
Closure & Reclamation (au recovery)	Average	None	None	May-21	41,674	7,624	31,201	1,996	852	2,848	3,343	49,340	0	8,567	8,155	32,618	0	1,014	33,632
Closure & Reclamation (au recovery)	Average	None	None	Jun-21	29,267	17,307	9,499	679	1,783	2,462	2,442	33,566	0	18,929	2,927	11,710	0	8,155	19,864
Closure & Reclamation (au recovery)	Average	None	None	Jul-21	28,823	19,689	4,164	3,721	1,249	4,970	4,982	32,784	0	21,583	2,240	8,961	0	2,927	11,888
Closure & Reclamation (au recovery)	Average	None	None	Aug-21	21,029	14,475	4,349	647	1,557	2,204	2,227	23,925	0	15,974	1,590	6,361	0	2,240	8,601
Closure & Reclamation (au recovery)	Average	None	None	Sep-21	18,090	8,948	6,710	510	1,923	2,432	2,643	20,741	0	9,743	2,200	8,798	0	1,590	10,388
Closure & Reclamation (au recovery)	Average	None	None	Oct-21	6,351	0	4,713	565	1,073	1,638	1,832	7,507	0	0	1,501	6,006	0	2,200	8,205
Closure & Reclamation (au recovery)	Average	None	None	Nov-21	0	0	(493)	0	493	493	493	0	0	0	0	0	0	1,501	1,501
Closure & Reclamation (au recovery)	Average	None	None	Dec-21	0	0	(171)	0	171	171	171	0	0	0	0	0	0	0	0
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-22	4,251	0	4,230	21	0	21	152	5,069	0	0	1,014	4,055	0	0	4,055
Closure & Reclamation (hlf rinse)	Average	None	None	May-22	41,674	7,624	31,201	1,996	852	2,848	3,343	49,340	0	8,567	8,155	32,618	0	1,014	33,632
Closure & Reclamation (hlf rinse)	Average	None	None	Jun-22	29,267	17,307	9,499	679	1,783	2,462	2,442	33,566	0	18,929	2,927	11,710	0	8,155	19,864
Closure & Reclamation (hlf rinse)	Average	None	None	Jul-22	28,823	19,689	4,164	3,721	1,249	4,970	4,982	32,784	0	21,583	2,240	8,961	0	2,927	11,888
Closure & Reclamation (hlf rinse)	Average	None	None	Aug-22	21,029	14,475	4,349	647	1,557	2,204	2,227	23,925	0	15,974	1,590	6,361	0	2,240	8,601
Closure & Reclamation (hlf rinse)	Average	None	None	Sep-22	18,090	8,948	6,710	510	1,923	2,432	2,643	20,741	0	9,743	2,200	8,798	0	1,590	10,388
Closure & Reclamation (hlf rinse)	Average	None	None	Oct-22	6,351	0	4,713	565	1,073	1,638	1,832	7,507	0	0	1,501	6,006	0	2,200	8,205
Closure & Reclamation (hlf rinse)	Average	None	None	Nov-22	0	0	(493)	0	493	493	493	0	0	0	0	0	0	1,501	1,501
Closure & Reclamation (hlf rinse)	Average	None	None	Dec-22	0	0	(171)	0	171	171	171	0	0	0	0	0	0	0	0
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-23	4,251	0	4,230	21	0	21	152	5,069	0	0	1,014	4,055	0	0	4,055
Closure & Reclamation (hlf rinse)	Average	None	None	May-23	41,674	7,624	31,201	1,996	852	2,848	3,343	49,340	0	8,567	8,155	32,618	0	1,014	33,632
Closure & Reclamation (hlf rinse)	Average	None	None	Jun-23	29,267	17,307	9,499	679	1,783	2,462	2,442	33,566	0	18,929	2,927	11,710	0	8,155	19,864
Closure & Reclamation (hlf rinse)	Average	None	None	Jul-23	28,823	19,689	4,164	3,721	1,249	4,970	4,982	32,784	0	21,583	2,240	8,961	0	2,927	11,888
Closure & Reclamation (hlf rinse)	Average	None	None	Aug-23	21,029	14,475	4,349	647	1,557	2,204	2,227	23,925	0	15,974	1,590	6,361	0	2,240	8,601
Closure & Reclamation (hlf rinse)	Average	None	None	Sep-23	18,090	8,948	6,710	510	1,923	2,432	2,643	20,741	0	9,743	2,200	8,798	0	1,590	10,388

Hydroclimatic Scenario		1			Platinum Gulch Waste Rock Storage Area														
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain + Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Undisturbed Basin Runoff	Undisturbed Basin (GW <sub>OUT</sub> )	Non-Contact Sediment Control Pond Inputs	Total Non-Contact Platinum Gulch	WRSA Net Precipitation (Rain + Snowmelt)	WRSA Evaporation	WRSA Evapo-transpiration (Cover)	WRSA Infiltration (GW <sub>IN</sub> )	WRSA Runoff	Waste Rock Moisture Content	Rock Drain Seepage (GW <sub>OUT</sub> )	To Open Pit Sump
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Closure & Reclamation (hlf rinse)	Average	None	None	Oct-23	6,351	0	4,713	565	1,073	1,638	1,832	7,507	0	0	1,501	6,006	0	2,200	8,205
Closure & Reclamation (hlf rinse)	Average	None	None	Nov-23	0	0	(493)	0	493	493	493	0	0	0	0	0	0	1,501	1,501
Closure & Reclamation (hlf rinse)	Average	None	None	Dec-23	0	0	(171)	0	171	171	171	0	0	0	0	0	0	0	0
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-24	4,251	0	4,230	21	0	21	152	5,069	0	0	1,014	4,055	0	0	4,055
Closure & Reclamation (hlf rinse)	Average	None	None	May-24	41,674	7,624	31,201	1,996	852	2,848	3,343	49,340	0	8,567	8,155	32,618	0	1,014	33,632
Closure & #Reclamation (hlf rinse)	Average	None	None	Jun-24	29,267	17,307	9,499	679	1,783	2,462	2,442	33,566	0	18,929	2,927	11,710	0	8,155	19,864
Closure & Reclamation (draindown)	Average	None	None	Jul-24	28,823	19,689	4,164	3,721	1,249	4,970	4,982	32,784	0	21,583	2,240	8,961	0	2,927	11,888
Closure & Reclamation (draindown)	Average	None	None	Aug-24	21,029	14,475	4,349	647	1,557	2,204	2,227	23,925	0	15,974	1,590	6,361	0	2,240	8,601
Closure & Reclamation (draindown)	Average	None	None	Sep-24	18,090	8,948	6,710	510	1,923	2,432	2,643	20,741	0	9,743	2,200	8,798	0	1,590	10,388
Closure & Reclamation (draindown)	Average	None	None	Oct-24	6,351	0	4,713	565	1,073	1,638	1,832	7,507	0	0	1,501	6,006	0	2,200	8,205
Closure & Reclamation (draindown)	Average	None	None	Nov-24	0	0	(493)	0	493	493	493	0	0	0	0	0	0	1,501	1,501
Closure & Reclamation (draindown)	Average	None	None	Dec-24	0	0	(171)	0	171	171	171	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Average	None	None	Jan-25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Average	None	None	Feb-25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Average	None	None	Mar-25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Average	None	None	Apr-25	4,251	0	4,230	21	0	21	152	5,069	0	0	1,014	4,055	0	0	4,055
Closure & Reclamation (draindown)	Average	None	None	May-25	41,674	7,624	31,201	1,996	852	2,848	3,343	49,340	0	8,567	8,155	32,618	0	1,014	33,632
Closure & Reclamation (draindown)	Average	None	None	Jun-25	29,267	17,307	9,499	679	1,783	2,462	2,442	33,566	0	18,929	2,927	11,710	0	8,155	19,864
Closure & Reclamation (draindown)	Average	None	None	Jul-25	28,823	19,689	4,164	3,721	1,249	4,970	4,982	32,784	0	21,583	2,240	8,961	0	2,927	11,888
Closure & Reclamation (draindown)	Average	None	None	Aug-25	21,029	14,475	4,349	647	1,557	2,204	2,227	23,925	0	15,974	1,590	6,361	0	2,240	8,601
Closure & Reclamation (draindown)	Average	None	None	Sep-25	18,090	8,948	6,710	510	1,923	2,432	2,643	20,741	0	9,743	2,200	8,798	0	1,590	10,388
Closure & Reclamation (draindown)	Average	None	None	Oct-25	6,351	0	4,713	565	1,073	1,638	1,832	7,507	0	0	1,501	6,006	0	2,200	0
Closure & Reclamation (draindown)	Average	None	None	Nov-25	0	0	(493)	0	493	493	493	0	0	0	0	0	0	1,501	0
Closure & Reclamation (draindown)	Average	None	None	Dec-25	0	0	(171)	0	171	171	171	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Average	None	None	Jan-26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Average	None	None	Feb-26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Average	None	None	Mar-26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Average	None	None	Apr-26	4,251	0	4,230	21	0	21	21	5,069	0	0	1,014	4,055	0	0	0
Closure & Reclamation (draindown)	Average	None	None	May-26	41,674	7,624	31,201	1,996	852	2,848	2,848	49,340	0	8,567	8,155	32,618	0	1,014	0
Closure & Reclamation (draindown)	Average	None	None	Jun-26	29,267	17,307	9,499	679	1,783	2,462	2,462	33,566	0	18,929	2,927	11,710	0	8,155	0
Closure & Reclamation (draindown)	Average	None	None	Jul-26	28,823	19,689	4,164	3,721	1,249	4,970	4,970	32,784	0	21,583	2,240	8,961	0	2,927	0
Closure & Reclamation (draindown)	Average	None	None	Aug-26	21,029	14,475	4,349	647	1,557	2,204	2,204	23,925	0	15,974	1,590	6,361	0	2,240	0
Closure & Reclamation (draindown)	Average	None	None	Sep-26	18,090	8,948	6,710	510	1,923	2,432	2,432	20,741	0	9,743	2,200	8,798	0	1,590	0

Hydroclimatic Scenario		1			Platinum Gulch Waste Rock Storage Area														
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain + Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Undisturbed Basin Runoff	Undisturbed Basin (GW <sub>OUT</sub> )	Non-Contact Sediment Control Pond Inputs	Total Non-Contact Platinum Gulch	WRSA Net Precipitation (Rain + Snowmelt)	WRSA Evaporation	WRSA Evapo-transpiration (Cover)	WRSA Infiltration (GW <sub>IN</sub> )	WRSA Runoff	Waste Rock Moisture Content	Rock Drain Seepage (GW <sub>OUT</sub> )	To Open Pit Sump
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Closure & Reclamation (draindown)	Average	None	None	Oct-26	6,351	0	4,713	565	1,073	1,638	1,638	7,507	0	0	1,501	6,006	0	2,200	0
Closure & Reclamation (draindown)	Average	None	None	Nov-26	0	0	(493)	0	493	493	493	0	0	0	0	0	0	1,501	0
Closure & Reclamation (draindown)	Average	None	None	Dec-26	0	0	(171)	0	171	171	171	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Average	None	None	Jan-27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Average	None	None	Feb-27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Average	None	None	Mar-27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Average	None	None	Apr-27	4,251	0	4,230	21	0	21	21	5,069	0	0	1,014	4,055	0	0	0
Closure & Reclamation (draindown)	Average	None	None	May-27	41,674	7,624	31,201	1,996	852	2,848	2,848	49,340	0	8,567	8,155	32,618	0	1,014	0
Closure & Reclamation (draindown)	Average	None	None	Jun-27	29,267	17,307	9,499	679	1,783	2,462	2,462	33,566	0	18,929	2,927	11,710	0	8,155	0
Closure & Reclamation (draindown)	Average	None	None	Jul-27	28,823	19,689	4,164	3,721	1,249	4,970	4,970	32,784	0	21,583	2,240	8,961	0	2,927	0
Closure & Reclamation (draindown)	Average	None	None	Aug-27	21,029	14,475	4,349	647	1,557	2,204	2,204	23,925	0	15,974	1,590	6,361	0	2,240	0
Closure & Reclamation (draindown)	Average	None	None	Sep-27	18,090	8,948	6,710	510	1,923	2,432	2,432	20,741	0	9,743	2,200	8,798	0	1,590	0
Closure & Reclamation (draindown)	Average	None	None	Oct-27	6,351	0	4,713	565	1,073	1,638	1,638	7,507	0	0	1,501	6,006	0	2,200	0
Closure & Reclamation (draindown)	Average	None	None	Nov-27	0	0	(493)	0	493	493	493	0	0	0	0	0	0	1,501	0
Closure & Reclamation (draindown)	Average	None	None	Dec-27	0	0	(171)	0	171	171	171	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Average	None	None	Jan-28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Average	None	None	Feb-28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Average	None	None	Mar-28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Average	None	None	Apr-28	4,251	0	4,230	21	0	21	21	5,069	0	0	1,014	4,055	0	0	0
Closure & Reclamation (draindown)	Average	None	None	May-28	41,674	7,624	31,201	1,996	852	2,848	2,848	49,340	0	8,567	8,155	32,618	0	1,014	0
Closure & Reclamation (draindown)	Average	None	None	Jun-28	29,267	17,307	9,499	679	1,783	2,462	2,462	33,566	0	18,929	2,927	11,710	0	8,155	0
Closure & Reclamation (draindown)	Average	None	None	Jul-28	28,823	19,689	4,164	3,721	1,249	4,970	4,970	32,784	0	21,583	2,240	8,961	0	2,927	0
Closure & Reclamation (draindown)	Average	None	None	Aug-28	21,029	14,475	4,349	647	1,557	2,204	2,204	23,925	0	15,974	1,590	6,361	0	2,240	0
Closure & Reclamation (draindown)	Average	None	None	Sep-28	18,090	8,948	6,710	510	1,923	2,432	2,432	20,741	0	9,743	2,200	8,798	0	1,590	0
Closure & Reclamation (draindown)	Average	None	None	Oct-28	6,351	0	4,713	565	1,073	1,638	1,638	7,507	0	0	1,501	6,006	0	2,200	0
Closure & Reclamation (draindown)	Average	None	None	Nov-28	0	0	(493)	0	493	493	493	0	0	0	0	0	0	1,501	0
Closure & Reclamation (draindown)	Average	None	None	Dec-28	0	0	(171)	0	171	171	171	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Average	None	None	Jan-29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Average	None	None	Feb-29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Average	None	None	Mar-29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Average	None	None	Apr-29	4,251	0	4,230	21	0	21	21	5,069	0	0	1,014	4,055	0	0	0
Closure & Reclamation (draindown)	Average	None	None	May-29	41,674	7,624	31,201	1,996	852	2,848	2,848	49,340	0	8,567	8,155	32,618	0	1,014	0
Closure & Reclamation (draindown)	Average	None	None	Jun-29	29,267	17,307	9,499	679	1,783	2,462	2,462	33,566	0	18,929	2,927	11,710	0	8,155	0
Closure & Reclamation (draindown)	Average	None	None	Jul-29	28,823	19,689	4,164	3,721	1,249	4,970	4,970	32,784	0	21,583	2,240	8,961	0	2,927	0
Closure & Reclamation (draindown)	Average	None	None	Aug-29	21,029	14,475	4,349	647	1,557	2,204	2,204	23,925	0	15,974	1,590	6,361	0	2,240	0
Closure & Reclamation (draindown)	Average	None	None	Sep-29	18,090	8,948	6,710	510	1,923	2,432	2,432	20,741	0	9,743	2,200	8,798	0	1,590	0

Hydroclimatic Scenario		1			Platinum Gulch Waste Rock Storage Area														
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain + Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Undisturbed Basin Runoff	Undisturbed Basin (GW <sub>OUT</sub> )	Non-Contact Sediment Control Pond Inputs	Total Non-Contact Platinum Gulch	WRSA Net Precipitation (Rain + Snowmelt)	WRSA Evaporation	WRSA Evapo-transpiration (Cover)	WRSA Infiltration (GW <sub>IN</sub> )	WRSA Runoff	Waste Rock Moisture Content	Rock Drain Seepage (GW <sub>OUT</sub> )	To Open Pit Sump
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Closure & Reclamation (draindown)	Average	None	None	Oct-29	6,351	0	4,713	565	1,073	1,638	1,638	7,507	0	0	1,501	6,006	0	2,200	0
Closure & Reclamation (draindown)	Average	None	None	Nov-29	0	0	(493)	0	493	493	493	0	0	0	0	0	0	1,501	0
Closure & Reclamation (draindown)	Average	None	None	Dec-29	0	0	(171)	0	171	171	171	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Average	None	None	Jan-30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Average	None	None	Feb-30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Average	None	None	Mar-30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Average	None	None	Apr-30	4,251	0	4,230	21	0	21	21	5,069	0	0	1,014	4,055	0	0	0
Closure & Reclamation (draindown)	Average	None	None	May-30	41,674	7,624	31,201	1,996	852	2,848	2,848	49,340	0	8,567	8,155	32,618	0	1,014	0
Closure & Reclamation (draindown)	Average	None	None	Jun-30	29,267	17,307	9,499	679	1,783	2,462	2,462	33,566	0	18,929	2,927	11,710	0	8,155	0
Closure & Reclamation (draindown)	Average	None	None	Jul-30	28,823	19,689	4,164	3,721	1,249	4,970	4,970	32,784	0	21,583	2,240	8,961	0	2,927	0
Closure & Reclamation (draindown)	Average	None	None	Aug-30	21,029	14,475	4,349	647	1,557	2,204	2,204	23,925	0	15,974	1,590	6,361	0	2,240	0
Closure & Reclamation (draindown)	Average	None	None	Sep-30	18,090	8,948	6,710	510	1,923	2,432	2,432	20,741	0	9,743	2,200	8,798	0	1,590	0
Closure & Reclamation (draindown)	Average	None	None	Oct-30	6,351	0	4,713	565	1,073	1,638	1,638	7,507	0	0	1,501	6,006	0	2,200	0
Closure & Reclamation (draindown)	Average	None	None	Nov-30	0	0	(493)	0	493	493	493	0	0	0	0	0	0	1,501	0
Closure & Reclamation (draindown)	Average	None	None	Dec-30	0	0	(171)	0	171	171	171	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Jan-31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Feb-31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Mar-31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Apr-31	4,251	0	4,230	21	0	21	21	5,069	0	0	1,014	4,055	0	0	0
Post-closure Monitoring	Average	None	None	May-31	41,674	7,624	31,201	1,996	852	2,848	2,848	49,340	0	8,567	8,155	32,618	0	1,014	0
Post-closure Monitoring	Average	None	None	Jun-31	29,267	17,307	9,499	679	1,783	2,462	2,462	33,566	0	18,929	2,927	11,710	0	8,155	0
Post-closure Monitoring	Average	None	None	Jul-31	28,823	19,689	4,164	3,721	1,249	4,970	4,970	32,784	0	21,583	2,240	8,961	0	2,927	0
Post-closure Monitoring	Average	None	None	Aug-31	21,029	14,475	4,349	647	1,557	2,204	2,204	23,925	0	15,974	1,590	6,361	0	2,240	0
Post-closure Monitoring	Average	None	None	Sep-31	18,090	8,948	6,710	510	1,923	2,432	2,432	20,741	0	9,743	2,200	8,798	0	1,590	0
Post-closure Monitoring	Average	None	None	Oct-31	6,351	0	4,713	565	1,073	1,638	1,638	7,507	0	0	1,501	6,006	0	2,200	0
Post-closure Monitoring	Average	None	None	Nov-31	0	0	(493)	0	493	493	493	0	0	0	0	0	0	1,501	0
Post-closure Monitoring	Average	None	None	Dec-31	0	0	(171)	0	171	171	171	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Jan-32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Feb-32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Mar-32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Apr-32	4,251	0	4,230	21	0	21	21	5,069	0	0	1,014	4,055	0	0	0
Post-closure Monitoring	Average	None	None	May-32	41,674	7,624	31,201	1,996	852	2,848	2,848	49,340	0	8,567	8,155	32,618	0	1,014	0
Post-closure Monitoring	Average	None	None	Jun-32	29,267	17,307	9,499	679	1,783	2,462	2,462	33,566	0	18,929	2,927	11,710	0	8,155	0
Post-closure Monitoring	Average	None	None	Jul-32	28,823	19,689	4,164	3,721	1,249	4,970	4,970	32,784	0	21,583	2,240	8,961	0	2,927	0
Post-closure Monitoring	Average	None	None	Aug-32	21,029	14,475	4,349	647	1,557	2,204	2,204	23,925	0	15,974	1,590	6,361	0	2,240	0
Post-closure Monitoring	Average	None	None	Sep-32	18,090	8,948	6,710	510	1,923	2,432	2,432	20,741	0	9,743	2,200	8,798	0	1,590	0

Hydroclimatic Scenario		1			Platinum Gulch Waste Rock Storage Area														
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain + Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Undisturbed Basin Runoff	Undisturbed Basin (GW <sub>OUT</sub> )	Non-Contact Sediment Control Pond Inputs	Total Non-Contact Platinum Gulch	WRSA Net Precipitation (Rain + Snowmelt)	WRSA Evaporation	WRSA Evapo-transpiration (Cover)	WRSA Infiltration (GW <sub>IN</sub> )	WRSA Runoff	Waste Rock Moisture Content	Rock Drain Seepage (GW <sub>OUT</sub> )	To Open Pit Sump
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Post-closure Monitoring	Average	None	None	Oct-32	6,351	0	4,713	565	1,073	1,638	1,638	7,507	0	0	1,501	6,006	0	2,200	0
Post-closure Monitoring	Average	None	None	Nov-32	0	0	(493)	0	493	493	493	0	0	0	0	0	0	1,501	0
Post-closure Monitoring	Average	None	None	Dec-32	0	0	(171)	0	171	171	171	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Jan-33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Feb-33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Mar-33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Apr-33	4,251	0	4,230	21	0	21	21	5,069	0	0	1,014	4,055	0	0	0
Post-closure Monitoring	Average	None	None	May-33	41,674	7,624	31,201	1,996	852	2,848	2,848	49,340	0	8,567	8,155	32,618	0	1,014	0
Post-closure Monitoring	Average	None	None	Jun-33	29,267	17,307	9,499	679	1,783	2,462	2,462	33,566	0	18,929	2,927	11,710	0	8,155	0
Post-closure Monitoring	Average	None	None	Jul-33	28,823	19,689	4,164	3,721	1,249	4,970	4,970	32,784	0	21,583	2,240	8,961	0	2,927	0
Post-closure Monitoring	Average	None	None	Aug-33	21,029	14,475	4,349	647	1,557	2,204	2,204	23,925	0	15,974	1,590	6,361	0	2,240	0
Post-closure Monitoring	Average	None	None	Sep-33	18,090	8,948	6,710	510	1,923	2,432	2,432	20,741	0	9,743	2,200	8,798	0	1,590	0
Post-closure Monitoring	Average	None	None	Oct-33	6,351	0	4,713	565	1,073	1,638	1,638	7,507	0	0	1,501	6,006	0	2,200	0
Post-closure Monitoring	Average	None	None	Nov-33	0	0	(493)	0	493	493	493	0	0	0	0	0	0	1,501	0
Post-closure Monitoring	Average	None	None	Dec-33	0	0	(171)	0	171	171	171	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Jan-34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Feb-34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Mar-34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Apr-34	4,251	0	4,230	21	0	21	21	5,069	0	0	1,014	4,055	0	0	0
Post-closure Monitoring	Average	None	None	May-34	41,674	7,624	31,201	1,996	852	2,848	2,848	49,340	0	8,567	8,155	32,618	0	1,014	0
Post-closure Monitoring	Average	None	None	Jun-34	29,267	17,307	9,499	679	1,783	2,462	2,462	33,566	0	18,929	2,927	11,710	0	8,155	0
Post-closure Monitoring	Average	None	None	Jul-34	28,823	19,689	4,164	3,721	1,249	4,970	4,970	32,784	0	21,583	2,240	8,961	0	2,927	0
Post-closure Monitoring	Average	None	None	Aug-34	21,029	14,475	4,349	647	1,557	2,204	2,204	23,925	0	15,974	1,590	6,361	0	2,240	0
Post-closure Monitoring	Average	None	None	Sep-34	18,090	8,948	6,710	510	1,923	2,432	2,432	20,741	0	9,743	2,200	8,798	0	1,590	0
Post-closure Monitoring	Average	None	None	Oct-34	6,351	0	4,713	565	1,073	1,638	1,638	7,507	0	0	1,501	6,006	0	2,200	0
Post-closure Monitoring	Average	None	None	Nov-34	0	0	(493)	0	493	493	493	0	0	0	0	0	0	1,501	0
Post-closure Monitoring	Average	None	None	Dec-34	0	0	(171)	0	171	171	171	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Jan-35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



**Table C2-2: Platinum Gulch Waste Rock Storage Area – Scenario 2 model results – Selected Years**

Hydroclimatic Scenario	2				Platinum Gulch Waste Rock Storage Area														
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain +Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>in</sub> )	Undisturbed Basin Runoff	Undisturbed Basin (GW <sub>out</sub> )	Non-Contact Sediment Control Pond Inputs	Total Non-Contact Platinum Gulch	WRSA Net Precipitation (Rain +Snowmelt)	WRSA Evaporation	WRSA Evapo-transpiration (Cover)	WRSA Infiltration (GW <sub>in</sub> )	WRSA Runoff	Waste Rock Moisture Content	Rock Drain Seepage (GW <sub>out</sub> )	To Open Pit Sump
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Construction	Wet	None	None	Oct-12	50,687	0	39,439	6,078	5,170	11,248	11,248	0	0	0	0	0	0	0	0
Construction	Wet	None	None	Nov-12	0	0	(3,131)	0	3,131	3,131	3,131	0	0	0	0	0	0	0	0
Construction	Wet	None	None	Dec-12	0	0	(1,459)	0	1,459	1,459	1,459	0	0	0	0	0	0	0	0
Construction	Wet	None	None	Jan-13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Wet	None	None	Feb-13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Wet	None	None	Mar-13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Wet	None	None	Apr-13	35,434	0	35,084	349	0	349	349	0	0	0	0	0	0	0	0
Construction	Wet	None	None	May-13	338,106	44,135	270,182	16,838	6,951	23,789	23,789	0	0	0	0	0	0	0	0
Construction	Wet	None	None	Jun-13	184,683	78,082	94,734	4,855	7,013	11,867	12,339	0	0	0	0	0	0	0	0
Construction	Wet	None	None	Jul-13	175,145	88,115	36,447	42,075	8,508	50,583	51,037	0	0	0	0	0	0	0	0
Construction	Wet	None	None	Aug-13	127,965	64,942	45,388	4,854	12,781	17,636	17,982	0	0	0	0	0	0	0	0
Operation	Wet	None	None	Sep-13	114,214	36,456	63,334	5,548	8,876	14,425	14,978	25,888	6,784	0	17,193	1,910	2,885	0	1,910
Operation	Wet	None	None	Oct-19	14,296	0	11,124	1,714	1,458	3,173	3,538	14,121	0	0	2,824	11,297	0	2,200	13,496
Operation	Wet	None	None	Nov-19	0	0	(883)	0	883	883	883	0	0	0	0	0	0	2,824	2,824
Operation	Wet	None	None	Dec-19	0	0	(411)	0	411	411	411	0	0	0	0	0	0	0	0
Operation	Wet	None	None	Jan-20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operation	Wet	None	None	Feb-20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operation	Wet	None	None	Mar-20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operation	Wet	None	None	Apr-20	9,994	0	9,896	98	0	98	356	9,949	0	0	1,990	7,959	0	0	7,959
Operation	Wet	None	None	May-20	95,362	12,448	76,204	4,749	1,960	6,710	8,371	94,405	0	11,451	16,591	66,363	0	1,990	68,353
Operation	Wet	None	None	Jun-20	58,628	24,787	30,073	1,541	2,226	3,767	4,336	56,312	0	22,243	6,814	27,255	0	16,591	43,845
Operation	Wet	None	None	Jul-20	55,600	27,972	11,570	13,357	2,701	16,058	16,590	52,902	0	25,208	5,539	22,155	0	6,814	28,969
Operation	Wet	None	None	Aug-20	40,623	20,616	14,408	1,541	4,057	5,598	6,002	38,665	0	18,745	3,984	15,936	0	5,539	21,475
Operation	Wet	None	None	Sep-20	36,258	11,573	20,105	1,761	2,818	4,579	5,154	34,821	0	10,416	4,881	19,524	0	3,984	23,508
Closure & Reclamation (draindown)	Wet	None	None	Jul-24	46,311	23,299	9,637	11,125	2,250	13,375	13,907	52,902	0	25,208	5,539	22,155	0	2,927	25,082
Closure & Reclamation (draindown)	Wet	None	None	Aug-24	33,836	17,172	12,001	1,284	3,380	4,663	5,067	38,665	0	18,745	3,984	15,936	0	5,539	21,475
Closure & Reclamation (draindown)	Wet	None	None	Sep-24	30,200	9,639	16,746	1,467	2,347	3,814	4,389	34,821	0	10,416	4,881	19,524	0	3,984	23,508
Closure & Reclamation (draindown)	Wet	None	None	Oct-24	11,908	0	9,265	1,428	1,215	2,643	3,008	14,121	0	0	2,824	11,297	0	4,881	16,178
Closure & Reclamation (draindown)	Wet	None	None	Nov-24	0	0	(736)	0	736	736	736	0	0	0	0	0	0	2,824	2,824
Closure & Reclamation (draindown)	Wet	None	None	Dec-24	0	0	(343)	0	343	343	343	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Wet	None	None	Jan-25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Wet	None	None	Feb-25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Wet	None	None	Mar-25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Wet	None	None	Apr-25	8,324	0	8,242	82	0	82	339	9,949	0	0	1,990	7,959	0	0	7,959
Closure & Reclamation (draindown)	Wet	None	None	May-25	79,430	10,368	63,473	3,956	1,633	5,589	7,250	94,405	0	11,451	16,591	66,363	0	1,990	68,353
Closure & Reclamation (draindown)	Wet	None	None	Jun-25	48,833	20,646	25,049	1,284	1,854	3,138	3,707	56,312	0	22,243	6,814	27,255	0	16,591	43,845

Hydroclimatic Scenario	2				Platinum Gulch Waste Rock Storage Area														
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain +Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Undisturbed Basin Runoff	Undisturbed Basin (GW <sub>OUT</sub> )	Non-Contact Sediment Control Pond Inputs	Total Non-Contact Platinum Gulch	WRSA Net Precipitation (Rain +Snowmelt)	WRSA Evapo-ration	WRSA Evapo-transpiration (Cover)	WRSA Infiltration (GW <sub>IN</sub> )	WRSA Runoff	Waste Rock Moisture Content	Rock Drain Seepage (GW <sub>OUT</sub> )	To Open Pit Sump
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Post-closure Monitoring	Wet	None	None	Oct-31	11,908	0	9,265	1,428	1,215	2,643	2,643	14,121	0	0	2,824	11,297	0	2,200	0
Post-closure Monitoring	Wet	None	None	Nov-31	0	0	(736)	0	736	736	736	0	0	0	0	0	0	2,824	0
Post-closure Monitoring	Wet	None	None	Dec-31	0	0	(343)	0	343	343	343	0	0	0	0	0	0	0	0
Post-closure Monitoring	Wet	None	None	Jan-32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Wet	None	None	Feb-32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Wet	None	None	Mar-32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Wet	None	None	Apr-32	8,324	0	8,242	82	0	82	82	9,949	0	0	1,990	7,959	0	0	0
Post-closure Monitoring	Wet	None	None	May-32	79,430	10,368	63,473	3,956	1,633	5,589	5,589	94,405	0	11,451	16,591	66,363	0	1,990	0
Post-closure Monitoring	Wet	None	None	Jun-32	48,833	20,646	25,049	1,284	1,854	3,138	3,138	56,312	0	22,243	6,814	27,255	0	16,591	0
Post-closure Monitoring	Wet	None	None	Jul-32	46,311	23,299	9,637	11,125	2,250	13,375	13,375	52,902	0	25,208	5,539	22,155	0	6,814	0
Post-closure Monitoring	Wet	None	None	Aug-32	33,836	17,172	12,001	1,284	3,380	4,663	4,663	38,665	0	18,745	3,984	15,936	0	5,539	0
Post-closure Monitoring	Wet	None	None	Sep-32	30,200	9,639	16,746	1,467	2,347	3,814	3,814	34,821	0	10,416	4,881	19,524	0	3,984	0

**Table C2-3: Platinum Gulch Waste Rock Storage Area – Scenario 3 Model Results – Selected Years**

Hydroclimatic Scenario	3				Platinum Gulch Waste Rock Storage Area														
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain +Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Undisturbed Basin Runoff	Undisturbed Basin (GW <sub>OUT</sub> )	Non-Contact Sediment Control Pond Inputs	Total Non-Contact Platinum Gulch	WRSA Net Precipitation (Rain +Snowmelt)	WRSA Evapo-ration	WRSA Evapo-transpiration (Cover)	WRSA Infiltration (GW <sub>IN</sub> )	WRSA Runoff	Waste Rock Moisture Content	Rock Drain Seepage (GW <sub>OUT</sub> )	To Open Pit Sump
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Construction	Dry	None	None	Oct-12	10,371	0	5,806	602	3,964	4,566	4,566	0	0	0	0	0	0	0	0
Construction	Dry	None	None	Nov-12	0	0	(1,068)	0	1,068	1,068	1,068	0	0	0	0	0	0	0	0
Construction	Dry	None	None	Dec-12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Dry	None	None	Jan-13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Dry	None	None	Feb-13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Dry	None	None	Mar-13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Dry	None	None	Apr-13	6,943	0	6,943	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Dry	None	None	May-13	68,057	14,039	50,585	3,131	301	3,433	3,433	0	0	0	0	0	0	0	0
Construction	Dry	None	None	Jun-13	42,466	33,526	1,615	854	6,470	7,324	6,723	0	0	0	0	0	0	0	0
Construction	Dry	None	None	Jul-13	41,821	38,692	1,437	752	939	1,691	1,138	0	0	0	0	0	0	0	0
Construction	Dry	None	None	Aug-13	30,512	28,317	1,551	644	0	644	255	0	0	0	0	0	0	0	0
Operation	Dry	None	None	Sep-13	26,248	22,275	(650)	210	4,412	4,623	4,489	5,787	997	0	4,311	479	2,885	0	479
Operation	Dry	None	None	Oct-19	2,925	0	1,637	170	1,118	1,288	1,359	2,760	0	0	552	2,208	0	2,200	4,408
Operation	Dry	None	None	Nov-19	0	0	(301)	0	301	301	301	0	0	0	0	0	0	552	552
Operation	Dry	None	None	Dec-19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operation	Dry	None	None	Jan-20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operation	Dry	None	None	Feb-20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operation	Dry	None	None	Mar-20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operation	Dry	None	None	Apr-20	1,958	0	1,958	0	0	0	48	1,864	0	0	373	1,491	0	0	1,491
Operation	Dry	None	None	May-20	19,195	3,960	14,267	883	85	968	656	18,140	0	3,629	2,902	11,609	0	373	11,982
Operation	Dry	None	None	Jun-20	13,481	10,643	513	271	2,054	2,325	1,757	12,341	0	9,629	542	2,169	0	2,902	5,072
Operation	Dry	None	None	Jul-20	13,276	12,283	456	239	298	537	12	12,053	0	11,111	188	753	0	542	1,296
Operation	Dry	None	None	Aug-20	9,686	8,989	492	204	0	204	0	8,796	0	8,148	130	519	0	188	707
Operation	Dry	None	None	Sep-20	8,333	7,071	(206)	67	1,401	1,467	1,339	7,626	0	6,426	240	959	0	130	1,089
Closure & Reclamation (draindown)	Dry	None	None	Jul-24	11,058	10,231	380	199	248	447	0	12,053	0	11,111	188	753	0	2,927	3,681
Closure & Reclamation (draindown)	Dry	None	None	Aug-24	8,068	7,487	410	170	0	170	0	8,796	0	8,148	130	519	0	188	707
Closure & Reclamation (draindown)	Dry	None	None	Sep-24	6,940	5,890	(172)	56	1,167	1,222	1,094	7,626	0	6,426	240	959	0	130	1,089
Closure & Reclamation (draindown)	Dry	None	None	Oct-24	2,436	0	1,364	141	931	1,073	1,144	2,760	0	0	552	2,208	0	240	2,448
Closure & Reclamation (draindown)	Dry	None	None	Nov-24	0	0	(251)	0	251	251	251	0	0	0	0	0	0	552	552
Closure & Reclamation (draindown)	Dry	None	None	Dec-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Dry	None	None	Jan-25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Dry	None	None	Feb-25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Dry	None	None	Mar-25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Dry	None	None	Apr-25	1,631	0	1,631	0	0	0	48	1,864	0	0	373	1,491	0	0	1,491
Closure & Reclamation (draindown)	Dry	None	None	May-25	15,989	3,298	11,884	736	71	806	494	18,140	0	3,629	2,902	11,609	0	373	11,982
Closure & Reclamation (draindown)	Dry	None	None	Jun-25	11,229	8,865	427	226	1,711	1,937	1,368	12,341	0	9,629	542	2,169	0	2,902	5,072

Hydroclimatic Scenario	3				Platinum Gulch Waste Rock Storage Area														
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain +Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Undisturbed Basin Runoff	Undisturbed Basin (GW <sub>OUT</sub> )	Non-Contact Sediment Control Pond Inputs	Total Non-ContactP latinum Gulch	WRSA Net Precipitation (Rain +Snowmelt)	WRSA Evapo-ration	WRSA Evapo-transpiration (Cover)	WRSA Infiltration (GW <sub>IN</sub> )	WRSA Runoff	Waste Rock Moisture Content	Rock Drain Seepage (GW <sub>OUT</sub> )	To Open Pit Sump
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Post-closure Monitoring	Dry	None	None	Oct-31	2,436	0	1,364	141	931	1,073	1,073	2,760	0	0	552	2,208	0	2,200	0
Post-closure Monitoring	Dry	None	None	Nov-31	0	0	(251)	0	251	251	251	0	0	0	0	0	0	552	0
Post-closure Monitoring	Dry	None	None	Dec-31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Dry	None	None	Jan-32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Dry	None	None	Feb-32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Dry	None	None	Mar-32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Dry	None	None	Apr-32	1,631	0	1,631	0	0	0	0	1,864	0	0	373	1,491	0	0	0
Post-closure Monitoring	Dry	None	None	May-32	15,989	3,298	11,884	736	71	806	806	18,140	0	3,629	2,902	11,609	0	373	0
Post-closure Monitoring	Dry	None	None	Jun-32	11,229	8,865	427	226	1,711	1,937	1,937	12,341	0	9,629	542	2,169	0	2,902	0
Post-closure Monitoring	Dry	None	None	Jul-32	11,058	10,231	380	199	248	447	447	12,053	0	11,111	188	753	0	542	0
Post-closure Monitoring	Dry	None	None	Aug-32	8,068	7,487	410	170	0	170	170	8,796	0	8,148	130	519	0	188	0
Post-closure Monitoring	Dry	None	None	Sep-32	6,940	5,890	(172)	56	1,167	1,222	1,222	7,626	0	6,426	240	959	0	130	0

**Table C3-1: Eagle Pup Waste Rock Storage Area – Scenario 1 Model Results**

Hydroclimatic Scenario	1				Eagle Pup Waste Rock Storage Area														
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain +Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Undisturbed Basin Runoff	Undisturbed Basin (GW <sub>OUT</sub> )	Non-Contact to Sediment Control Pond	WRSA Net Precipitation (Rain +Snowmelt)	WRSA Evap-oration	WRSA Evapo-transpiration (Cover)	WRSA Recharge (GW <sub>IN</sub> )	WRSA Runoff	Waste Rock Moisture Content	Rock Drain Seepage (GW <sub>OUT</sub> )	Total EP WRSA SCP Volume (to MWTP)	Total DGDC (at closure)
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Existing Conditions	Average	None	None	Oct-11	27,800	0	15,669	3,546	8,585	12,131	0	0	0	0	0	0	0	0	0
Existing Conditions	Average	None	None	Nov-11	0	0	0	0	2,591	2,591	0	0	0	0	0	0	0	0	0
Existing Conditions	Average	None	None	Dec-11	0	0	0	0	1,485	1,485	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Jan-12	0	0	0	0	830	830	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Feb-12	0	0	0	0	560	560	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Mar-12	0	0	0	0	444	444	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Apr-12	18,675	0	18,155	159	360	519	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	May-12	182,539	32,712	137,903	7,585	4,339	11,924	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Jun-12	126,571	73,454	36,895	1,517	14,705	16,222	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Jul-12	124,240	83,632	19,837	6,628	14,143	20,771	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Aug-12	90,653	61,645	12,881	3,894	12,233	16,128	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Sep-12	78,224	37,900	24,079	4,477	11,768	16,245	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Oct-12	27,800	0	15,669	3,546	8,585	12,131	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Nov-12	0	0	0	0	2,591	2,591	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Dec-12	0	0	0	0	1,485	1,485	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Jan-13	0	0	0	0	830	830	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Feb-13	0	0	0	0	560	560	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Mar-13	0	0	0	0	444	444	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Apr-13	18,675	0	18,155	159	360	519	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	May-13	182,539	32,712	137,903	7,585	4,339	11,924	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Jun-13	112,455	65,263	32,780	1,347	13,065	14,413	11,928	8,933	0	2,696	300	0	0	14,666	0
Construction	Average	None	None	Jul-13	110,384	74,305	17,625	5,889	12,565	18,455	11,709	8,416	0	2,964	329	0	0	18,767	0
Construction	Average	None	None	Aug-13	80,544	54,770	11,445	3,460	10,869	14,329	8,543	6,002	0	2,288	254	0	0	14,582	0
Operation	Average	None	None	Sep-13	69,500	33,673	21,394	3,978	10,456	14,433	7,469	3,235	0	3,810	423	4,579	0	15,013	0
Operation	Average	None	None	Oct-13	24,699	0	13,921	3,151	7,627	10,778	2,682	0	0	2,414	268	3,183	0	11,193	0
Operation	Average	None	None	Nov-13	0	0	0	0	2,302	2,302	0	0	0	0	0	769	0	2,302	0
Operation	Average	None	None	Dec-13	0	0	0	0	1,320	1,320	0	0	0	0	0	769	0	1,320	0
Operation	Average	None	None	Jan-14	0	0	0	0	738	738	0	0	0	0	0	769	0	738	0
Operation	Average	None	None	Feb-14	0	0	0	0	498	498	0	0	0	0	0	769	0	498	0
Operation	Average	None	None	Mar-14	0	0	0	0	395	395	0	0	0	0	0	769	0	395	0
Operation	Average	None	None	Apr-14	16,592	0	16,130	142	320	462	1,807	0	0	1,807	0	2,576	0	561	0
Operation	Average	None	None	May-14	162,182	29,064	122,524	6,739	3,855	10,594	17,619	7,765	0	8,869	985	9,638	0	11,938	0
Operation	Average	None	None	Jun-14	112,455	65,263	32,780	1,347	13,065	14,413	12,086	8,820	0	2,939	327	769	0	14,711	0
Operation	Average	None	None	Jul-14	110,384	74,305	17,625	5,889	12,565	18,455	11,830	8,309	0	3,168	352	769	2,939	21,743	0
Operation	Average	None	None	Aug-14	80,544	54,770	11,445	3,460	10,869	14,329	8,633	5,926	0	2,436	271	769	3,168	17,777	0
Operation	Average	None	None	Sep-14	61,514	29,804	18,935	3,521	9,254	12,775	15,611	6,718	0	8,003	889	5,769	2,436	16,259	0

Hydroclimatic Scenario		1				Eagle Pup Waste Rock Storage Area													
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain +Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Undisturbed Basin Runoff	Undisturbed Basin (GW <sub>OUT</sub> )	Non-Contact to Sediment Control Pond	WRSA Net Precipitation (Rain +Snowmelt)	WRSA Evap-oration	WRSA Evapo-transpiration (Cover)	WRSA Recharge (GW <sub>IN</sub> )	WRSA Runoff	Waste Rock Moisture Content	Rock Drain Seepage (GW <sub>OUT</sub> )	Total EP WRSA SCP Volume (to MWTP)	Total DGDC (at closure)
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Operation	Average	None	None	Oct-14	21,861	0	12,322	2,789	6,751	9,539	5,620	0	0	5,058	562	5,367	3,003	13,253	0
Operation	Average	None	None	Nov-14	0	0	0	0	2,037	2,037	0	0	0	0	0	1,167	858	2,896	0
Operation	Average	None	None	Dec-14	0	0	0	0	1,168	1,168	0	0	0	0	0	1,167	0	1,168	0
Operation	Average	None	None	Jan-15	0	0	0	0	653	653	0	0	0	0	0	1,167	0	653	0
Operation	Average	None	None	Feb-15	0	0	0	0	441	441	0	0	0	0	0	1,167	0	441	0
Operation	Average	None	None	Mar-15	0	0	0	0	349	349	0	0	0	0	0	1,167	0	349	0
Operation	Average	None	None	Apr-15	14,685	0	14,277	125	283	409	3,789	0	0	3,789	0	3,967	0	508	0
Operation	Average	None	None	May-15	143,545	25,724	108,445	5,965	3,412	9,377	36,930	16,123	0	18,726	2,081	15,167	989	12,813	0
Operation	Average	None	None	Jun-15	99,533	57,763	29,013	1,193	11,564	12,756	25,263	18,315	0	6,252	695	1,167	4,726	18,153	0
Operation	Average	None	None	Jul-15	97,700	65,766	15,600	5,212	11,121	16,334	24,710	17,255	0	6,709	745	1,167	6,252	23,333	0
Operation	Average	None	None	Aug-15	71,288	48,476	10,129	3,062	9,620	12,682	18,032	12,304	0	5,155	573	1,167	6,709	19,977	0
Operation	Average	None	None	Sep-15	50,456	24,446	15,531	2,888	7,591	10,478	26,938	11,517	0	13,879	1,542	8,167	5,155	17,336	0
Operation	Average	None	None	Oct-15	15,144	0	8,536	1,932	4,677	6,609	9,725	0	0	8,752	972	12,044	6,879	14,609	0
Operation	Average	None	None	Nov-15	0	0	0	0	1,411	1,411	0	0	0	0	0	3,292	0	1,411	0
Operation	Average	None	None	Dec-15	0	0	0	0	809	809	0	0	0	0	0	3,292	0	809	0
Operation	Average	None	None	Jan-16	0	0	0	0	452	452	0	0	0	0	0	3,292	0	452	0
Operation	Average	None	None	Feb-16	0	0	0	0	305	305	0	0	0	0	0	3,292	0	305	0
Operation	Average	None	None	Mar-16	0	0	0	0	242	242	0	0	0	0	0	3,292	0	242	0
Operation	Average	None	None	Apr-16	10,173	0	9,890	87	196	283	6,561	0	0	6,561	0	9,853	0	384	0
Operation	Average	None	None	May-16	99,442	17,821	75,126	4,132	2,364	6,496	63,905	27,640	0	32,638	3,626	35,929	0	10,496	0
Operation	Average	None	None	Jun-16	68,952	40,016	20,099	826	8,011	8,837	43,595	31,399	0	10,977	1,220	3,292	0	10,037	0
Operation	Average	None	None	Jul-16	67,682	45,560	10,807	3,611	7,704	11,315	42,610	29,580	0	11,727	1,303	3,292	10,977	23,600	0
Operation	Average	None	None	Aug-16	49,385	33,582	7,017	2,121	6,664	8,786	31,095	21,094	0	9,001	1,000	3,292	11,727	21,527	0
Operation	Average	None	None	Sep-16	36,471	17,670	11,226	2,087	5,487	7,574	33,176	14,207	0	17,072	1,897	20,364	9,001	18,632	0
Operation	Average	None	None	Oct-16	12,961	0	7,305	1,653	4,002	5,656	11,968	0	0	10,772	1,197	14,438	0	7,001	0
Operation	Average	None	None	Nov-16	0	0	0	0	1,208	1,208	0	0	0	0	0	3,667	0	1,208	0
Operation	Average	None	None	Dec-16	0	0	0	0	693	693	0	0	0	0	0	3,667	0	693	0
Operation	Average	None	None	Jan-17	0	0	0	0	387	387	0	0	0	0	0	3,667	0	387	0
Operation	Average	None	None	Feb-17	0	0	0	0	261	261	0	0	0	0	0	3,667	0	261	0
Operation	Average	None	None	Mar-17	0	0	0	0	207	207	0	0	0	0	0	3,667	0	207	0
Operation	Average	None	None	Apr-17	8,707	0	8,465	74	168	242	8,073	0	0	8,073	0	11,740	0	343	0
Operation	Average	None	None	May-17	85,106	15,252	64,295	3,536	2,023	5,559	78,647	34,097	0	40,096	4,455	43,762	0	10,386	0
Operation	Average	None	None	Jun-17	59,012	34,247	17,202	707	6,856	7,563	53,689	38,733	0	13,461	1,496	3,667	0	9,038	0
Operation	Average	None	None	Jul-17	57,925	38,992	9,249	3,090	6,594	9,684	52,485	36,489	0	14,396	1,600	3,667	13,461	24,749	0
Operation	Average	None	None	Aug-17	42,266	28,741	6,006	1,816	5,704	7,519	38,302	26,021	0	11,053	1,228	3,667	14,396	23,158	0
Operation	Average	None	None	Sep-17	30,942	14,991	9,524	1,771	4,655	6,426	38,778	16,633	0	19,930	2,214	23,597	11,053	19,853	0

Hydroclimatic Scenario	1				Eagle Pup Waste Rock Storage Area														
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain +Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Undisturbed Basin Runoff	Undisturbed Basin (GW <sub>OUT</sub> )	Non-Contact to Sediment Control Pond	WRSA Net Precipitation (Rain +Snowmelt)	WRSA Evap-oration	WRSA Evapo-transpiration (Cover)	WRSA Recharge (GW <sub>IN</sub> )	WRSA Runoff	Waste Rock Moisture Content	Rock Drain Seepage (GW <sub>OUT</sub> )	Total EP WRSA SCP Volume (to MWTP)	Total DGDC (at closure)
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Operation	Average	None	None	Oct-17	10,461	0	5,896	1,334	3,230	4,565	13,980	0	0	12,582	1,398	17,915	0	6,111	0
Operation	Average	None	None	Nov-17	0	0	0	0	975	975	0	0	0	0	0	5,333	0	975	0
Operation	Average	None	None	Dec-17	0	0	0	0	559	559	0	0	0	0	0	5,333	0	559	0
Operation	Average	None	None	Jan-18	0	0	0	0	312	312	0	0	0	0	0	5,333	0	312	0
Operation	Average	None	None	Feb-18	0	0	0	0	211	211	0	0	0	0	0	5,333	0	211	0
Operation	Average	None	None	Mar-18	0	0	0	0	167	167	0	0	0	0	0	5,333	0	167	0
Operation	Average	None	None	Apr-18	7,027	0	6,832	60	136	195	9,429	0	0	9,429	0	14,762	0	296	0
Operation	Average	None	None	May-18	68,688	12,309	51,892	2,854	1,633	4,487	91,863	39,919	0	46,749	5,194	52,083	0	10,051	0
Operation	Average	None	None	Jun-18	47,628	27,640	13,883	571	5,533	6,104	62,755	45,347	0	15,667	1,741	5,333	0	7,823	0
Operation	Average	None	None	Jul-18	46,750	31,470	7,465	2,494	5,322	7,816	61,358	42,721	0	16,774	1,864	5,333	15,667	25,350	0
Operation	Average	None	None	Aug-18	34,112	23,196	4,847	1,465	4,603	6,069	44,777	30,465	0	12,881	1,431	5,333	16,774	24,287	0
Operation	Average	None	None	Sep-18	25,749	12,475	7,926	1,474	3,874	5,347	42,392	18,303	0	21,680	2,409	25,638	12,881	20,795	0
Operation	Average	None	None	Oct-18	9,151	0	5,158	1,167	2,826	3,993	15,242	0	0	13,718	1,524	17,676	0	5,665	0
Operation	Average	None	None	Nov-18	0	0	0	0	853	853	0	0	0	0	0	3,958	0	853	0
Operation	Average	None	None	Dec-18	0	0	0	0	489	489	0	0	0	0	0	3,958	0	489	0
Operation	Average	None	None	Jan-19	0	0	0	0	273	273	0	0	0	0	0	3,958	0	273	0
Operation	Average	None	None	Feb-19	0	0	0	0	184	184	0	0	0	0	0	3,958	0	184	0
Operation	Average	None	None	Mar-19	0	0	0	0	146	146	0	0	0	0	0	3,958	0	146	0
Operation	Average	None	None	Apr-19	6,147	0	5,976	52	119	171	10,273	0	0	10,273	0	13,458	0	271	0
Operation	Average	None	None	May-19	60,086	10,768	45,394	2,497	1,428	3,925	100,145	43,927	0	50,596	5,622	51,458	773	10,682	0
Operation	Average	None	None	Jun-19	41,663	24,179	12,145	499	4,840	5,340	68,600	49,900	0	16,831	1,870	3,958	3,096	10,279	0
Operation	Average	None	None	Jul-19	40,896	27,529	6,530	2,182	4,655	6,837	67,123	47,010	0	18,102	2,011	3,958	16,831	25,679	0
Operation	Average	None	None	Aug-19	29,840	20,292	4,240	1,282	4,027	5,309	48,983	33,523	0	13,913	1,546	3,958	18,102	24,967	0
Operation	Average	None	None	Sep-19	22,063	10,690	6,791	1,263	3,319	4,582	46,132	19,918	0	23,593	2,621	27,551	13,913	21,274	0
Operation	Average	None	None	Oct-19	7,841	0	4,419	1,000	2,421	3,421	16,587	0	0	14,929	1,659	7,333	0	5,228	0
Operation	Average	None	None	Nov-19	0	0	0	0	731	731	0	0	0	0	0	1,333	8,929	9,659	0
Operation	Average	None	None	Dec-19	0	0	0	0	419	419	0	0	0	0	0	1,333	0	419	0
Operation	Average	None	None	Jan-20	0	0	0	0	234	234	0	0	0	0	0	1,333	0	234	0
Operation	Average	None	None	Feb-20	0	0	0	0	158	158	0	0	0	0	0	1,333	0	158	0
Operation	Average	None	None	Mar-20	0	0	0	0	125	125	0	0	0	0	0	1,333	0	125	0
Operation	Average	None	None	Apr-20	5,267	0	5,121	45	102	147	11,179	0	0	11,179	0	5,333	0	246	0
Operation	Average	None	None	May-20	51,485	9,226	38,895	2,139	1,224	3,363	108,981	47,803	0	55,060	6,118	21,333	7,179	17,022	0
Operation	Average	None	None	Jun-20	35,699	20,718	10,406	428	4,148	4,575	74,653	54,303	0	18,316	2,035	1,333	35,060	41,644	0
Operation	Average	None	None	Jul-20	35,042	23,588	5,595	1,870	3,989	5,858	73,046	51,158	0	19,699	2,189	1,333	18,316	26,363	0
Operation	Average	None	None	Aug-20	25,569	17,387	3,633	1,098	3,450	4,549	53,305	36,481	0	15,141	1,682	1,333	19,699	25,941	0
Operation	Average	None	None	Sep-20	22,063	10,690	6,791	1,263	3,319	4,582	46,132	19,918	0	23,593	2,621	11,333	15,141	22,502	0

Hydroclimatic Scenario	1				Eagle Pup Waste Rock Storage Area														
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain +Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Undisturbed Basin Runoff	Undisturbed Basin (GW <sub>OUT</sub> )	Non-Contact to Sediment Control Pond	WRSA Net Precipitation (Rain +Snowmelt)	WRSA Evap-oration	WRSA Evapo-transpiration (Cover)	WRSA Recharge (GW <sub>IN</sub> )	WRSA Runoff	Waste Rock Moisture Content	Rock Drain Seepage (GW <sub>OUT</sub> )	Total EP WRSA SCP Volume (to MWTP)	Total DGDC (at closure)
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Operation	Average	None	None	Oct-20	7,841	0	4,419	1,000	2,421	3,421	16,587	0	0	14,929	1,659	6,433	13,593	18,820	0
Operation	Average	None	None	Nov-20	0	0	0	0	731	731	0	0	0	0	0	1,333	9,829	10,559	0
Operation	Average	None	None	Dec-20	0	0	0	0	349	349	0	0	0	0	0	1,333	0	349	0
Closure & Reclamation (au recovery)	Average	None	None	Jan-21	0	0	0	0	195	195	0	0	0	0	0	0	0	195	0
Closure & Reclamation (au recovery)	Average	None	None	Feb-21	0	0	0	0	132	132	0	0	0	0	0	0	0	132	0
Closure & Reclamation (au recovery)	Average	None	None	Mar-21	0	0	0	0	104	104	0	0	0	0	0	0	0	104	0
Closure & Reclamation (au recovery)	Average	None	None	Apr-21	4,387	0	4,265	37	85	122	12,085	0	0	12,085	0	0	0	222	0
Closure & Reclamation (au recovery)	Average	None	None	May-21	42,883	7,685	32,397	1,782	1,019	2,801	117,817	51,679	0	59,524	6,614	0	12,085	21,863	0
Closure & Reclamation (au recovery)	Average	None	None	Jun-21	29,735	17,256	8,668	356	3,455	3,811	80,706	58,706	0	19,801	2,200	0	59,524	65,509	0
Closure & Reclamation (au recovery)	Average	None	None	Jul-21	29,187	19,647	4,660	1,557	3,322	4,880	78,968	55,306	0	21,297	2,366	0	19,801	27,046	0
Closure & Reclamation (au recovery)	Average	None	None	Aug-21	21,297	14,482	3,026	915	2,874	3,789	57,627	39,439	0	16,369	1,819	0	21,297	26,915	0
Closure & Reclamation (au recovery)	Average	None	None	Sep-21	18,377	8,904	5,657	1,052	2,765	3,816	49,872	21,533	0	25,506	2,834	0	16,369	23,176	0
Closure & Reclamation (au recovery)	Average	None	None	Oct-21	6,531	0	3,681	833	2,017	2,850	17,932	0	0	16,139	1,793	0	25,506	30,296	0
Closure & Reclamation (au recovery)	Average	None	None	Nov-21	0	0	0	0	609	609	0	0	0	0	0	0	16,139	16,748	0
Closure & Reclamation (au recovery)	Average	None	None	Dec-21	0	0	0	0	349	349	0	0	0	0	0	0	0	349	0
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-22	0	0	0	0	195	195	0	0	0	0	0	0	0	195	0
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-22	0	0	0	0	132	132	0	0	0	0	0	0	0	132	0
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-22	0	0	0	0	104	104	0	0	0	0	0	0	0	104	0
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-22	4,387	0	4,265	37	85	122	12,085	0	0	12,085	0	0	0	222	0
Closure & Reclamation (hlf rinse)	Average	None	None	May-22	42,883	7,685	32,397	1,782	1,019	2,801	117,817	51,679	0	59,524	6,614	0	12,085	21,863	0
Closure & Reclamation (hlf rinse)	Average	None	None	Jun-22	29,735	17,256	8,668	356	3,455	3,811	80,706	58,706	0	19,801	2,200	0	59,524	65,509	0
Closure & Reclamation (hlf rinse)	Average	None	None	Jul-22	29,187	19,647	4,660	1,557	3,322	4,880	78,968	55,306	0	21,297	2,366	0	19,801	27,046	0
Closure & Reclamation (hlf rinse)	Average	None	None	Aug-22	21,297	14,482	3,026	915	2,874	3,789	57,627	39,439	0	16,369	1,819	0	21,297	26,915	0
Closure & Reclamation (hlf rinse)	Average	None	None	Sep-22	18,377	8,904	5,657	1,052	2,765	3,816	49,872	0	8,904	8,194	32,775	0	16,369	53,117	0
Closure & Reclamation (hlf rinse)	Average	None	None	Oct-22	6,531	0	3,681	833	2,017	2,850	17,932	0	0	3,586	14,346	0	8,194	25,537	0
Closure & Reclamation (hlf rinse)	Average	None	None	Nov-22	0	0	0	0	609	609	0	0	0	0	0	0	3,586	4,195	0
Closure & Reclamation (hlf rinse)	Average	None	None	Dec-22	0	0	0	0	349	349	0	0	0	0	0	0	0	349	0
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-23	0	0	0	0	195	195	0	0	0	0	0	0	0	195	0
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-23	0	0	0	0	132	132	0	0	0	0	0	0	0	132	0
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-23	0	0	0	0	104	104	0	0	0	0	0	0	0	104	0
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-23	4,387	0	4,265	37	85	122	12,085	0	0	2,417	9,668	0	0	9,890	0
Closure & Reclamation (hlf rinse)	Average	None	None	May-23	42,883	7,685	32,397	1,782	1,019	2,801	117,817	0	7,685	22,026	88,106	0	2,417	93,686	0
Closure & Reclamation (hlf rinse)	Average	None	None	Jun-23	29,735	17,256	8,668	356	3,455	3,811	80,706	0	17,256	12,690	50,760	0	22,026	76,571	0
Closure & Reclamation (hlf rinse)	Average	None	None	Jul-23	29,187	19,647	4,660	1,557	3,322	4,880	78,968	0	19,647	11,864	47,457	0	12,690	65,026	0
Closure & Reclamation (hlf rinse)	Average	None	None	Aug-23	21,297	14,482	3,026	915	2,874	3,789	57,627	0	14,482	8,629	34,516	0	11,864	50,179	0
Closure & Reclamation (hlf rinse)	Average	None	None	Sep-23	18,377	8,904	5,657	1,052	2,765	3,816	49,872	0	8,904	8,194	32,775	0	8,629	45,378	0



Hydroclimatic Scenario	1				Eagle Pup Waste Rock Storage Area														
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain +Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Undisturbed Basin Runoff	Undisturbed Basin (GW <sub>OUT</sub> )	Non-Contact to Sediment Control Pond	WRSA Net Precipitation (Rain +Snowmelt)	WRSA Evap-oration	WRSA Evapo-transpiration (Cover)	WRSA Recharge (GW <sub>IN</sub> )	WRSA Runoff	Waste Rock Moisture Content	Rock Drain Seepage (GW <sub>OUT</sub> )	Total EP WRSA SCP Volume (to MWTP)	Total DGDC (at closure)
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Closure & Reclamation (hlf rinse)	Average	None	None	Oct-23	6,531	0	3,681	833	2,017	2,850	17,932	0	0	3,586	14,346	0	8,194	25,537	0
Closure & Reclamation (hlf rinse)	Average	None	None	Nov-23	0	0	0	0	609	609	0	0	0	0	0	0	3,586	4,195	0
Closure & Reclamation (hlf rinse)	Average	None	None	Dec-23	0	0	0	0	349	349	0	0	0	0	0	0	0	349	0
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-24	0	0	0	0	195	195	0	0	0	0	0	0	0	195	0
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-24	0	0	0	0	132	132	0	0	0	0	0	0	0	132	0
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-24	0	0	0	0	104	104	0	0	0	0	0	0	0	104	0
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-24	4,387	0	4,265	37	85	122	12,085	0	0	2,417	9,668	0	0	9,890	0
Closure & Reclamation (hlf rinse)	Average	None	None	May-24	42,883	7,685	32,397	1,782	1,019	2,801	117,817	0	7,685	22,026	88,106	0	2,417	93,686	0
Closure & Reclamation (hlf rinse)	Average	None	None	Jun-24	29,735	17,256	8,668	356	3,455	3,811	80,706	0	17,256	12,690	50,760	0	22,026	76,571	0
Closure & Reclamation (draindown)	Average	None	None	Jul-24	29,187	19,647	4,660	1,557	3,322	4,880	78,968	0	19,647	11,864	47,457	0	12,690	65,026	0
Closure & Reclamation (draindown)	Average	None	None	Aug-24	21,297	14,482	3,026	915	2,874	3,789	57,627	0	14,482	8,629	34,516	0	11,864	50,179	0
Closure & Reclamation (draindown)	Average	None	None	Sep-24	18,377	8,904	5,657	1,052	2,765	3,816	49,872	0	8,904	8,194	32,775	0	8,629	45,378	0
Closure & Reclamation (draindown)	Average	None	None	Oct-24	6,531	0	3,681	833	2,017	2,850	17,932	0	0	3,586	14,346	0	8,194	25,537	0
Closure & Reclamation (draindown)	Average	None	None	Nov-24	0	0	0	0	609	609	0	0	0	0	0	0	3,586	4,195	0
Closure & Reclamation (draindown)	Average	None	None	Dec-24	0	0	0	0	349	349	0	0	0	0	0	0	0	349	0
Closure & Reclamation (draindown)	Average	None	None	Jan-25	0	0	0	0	195	195	0	0	0	0	0	0	0	195	0
Closure & Reclamation (draindown)	Average	None	None	Feb-25	0	0	0	0	132	132	0	0	0	0	0	0	0	132	0
Closure & Reclamation (draindown)	Average	None	None	Mar-25	0	0	0	0	104	104	0	0	0	0	0	0	0	104	0
Closure & Reclamation (draindown)	Average	None	None	Apr-25	4,387	0	4,265	37	85	122	12,085	0	0	2,417	9,668	0	0	9,890	0
Closure & Reclamation (draindown)	Average	None	None	May-25	42,883	7,685	32,397	1,782	1,019	2,801	117,817	0	7,685	22,026	88,106	0	2,417	93,686	0
Closure & Reclamation (draindown)	Average	None	None	Jun-25	29,735	17,256	8,668	356	3,455	3,811	80,706	0	17,256	12,690	50,760	0	22,026	76,571	0
Closure & Reclamation (draindown)	Average	None	None	Jul-25	29,187	19,647	4,660	1,557	3,322	4,880	78,968	0	19,647	11,864	47,457	0	12,690	65,026	0
Closure & Reclamation (draindown)	Average	None	None	Aug-25	21,297	14,482	3,026	915	2,874	3,789	57,627	0	14,482	8,629	34,516	0	11,864	50,179	0
Closure & Reclamation (draindown)	Average	None	None	Sep-25	18,377	8,904	5,657	1,052	2,765	3,816	49,872	0	8,904	8,194	32,775	0	8,629	45,378	0
Closure & Reclamation (draindown)	Average	None	None	Oct-25	6,531	0	3,681	833	2,017	2,850	17,932	0	0	3,586	14,346	0	8,194	25,537	0
Closure & Reclamation (draindown)	Average	None	None	Nov-25	0	0	0	0	609	609	0	0	0	0	0	0	3,586	4,195	0
Closure & Reclamation (draindown)	Average	None	None	Dec-25	0	0	0	0	349	349	0	0	0	0	0	0	0	349	0
Closure & Reclamation (draindown)	Average	None	None	Jan-26	0	0	0	0	195	195	0	0	0	0	0	0	0	195	0
Closure & Reclamation (draindown)	Average	None	None	Feb-26	0	0	0	0	132	132	0	0	0	0	0	0	0	132	0
Closure & Reclamation (draindown)	Average	None	None	Mar-26	0	0	0	0	104	104	0	0	0	0	0	0	0	104	0
Closure & Reclamation (draindown)	Average	None	None	Apr-26	4,387	0	4,265	37	85	122	12,085	0	0	2,417	9,668	0	0	9,890	0
Closure & Reclamation (draindown)	Average	None	None	May-26	42,883	7,685	32,397	1,782	1,019	2,801	117,817	0	7,685	22,026	88,106	0	2,417	93,686	0
Closure & Reclamation (draindown)	Average	None	None	Jun-26	29,735	17,256	8,668	356	3,455	3,811	80,706	0	17,256	12,690	50,760	0	22,026	76,571	0
Closure & Reclamation (draindown)	Average	None	None	Jul-26	29,187	19,647	4,660	1,557	3,322	4,880	78,968	0	19,647	11,864	47,457	0	12,690	65,026	0
Closure & Reclamation (draindown)	Average	None	None	Aug-26	21,297	14,482	3,026	915	2,874	3,789	57,627	0	14,482	8,629	34,516	0	11,864	50,179	0
Closure & Reclamation (draindown)	Average	None	None	Sep-26	18,377	8,904	5,657	1,052	2,765	3,816	49,872	0	8,904	8,194	32,775	0	8,629	45,378	0

Hydroclimatic Scenario	1				Eagle Pup Waste Rock Storage Area															
	Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain +Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Undisturbed Basin Runoff	Undisturbed Basin (GW <sub>OUT</sub> )	Non-Contact to Sediment Control Pond	WRSA Net Precipitation (Rain +Snowmelt)	WRSA Evap-oration	WRSA Evapo-transpiration (Cover)	WRSA Recharge (GW <sub>IN</sub> )	WRSA Runoff	Waste Rock Moisture Content	Rock Drain Seepage (GW <sub>OUT</sub> )	Total EP WRSA SCP Volume (to MWTP)	Total DGDC (at closure)
						m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Closure & Reclamation (draindown)	Average	None	None	Oct-26	6,531	0	3,681	833	2,017	2,850	17,932	0	0	3,586	14,346	0	8,194	0	25,389	
Closure & Reclamation (draindown)	Average	None	None	Nov-26	0	0	0	0	609	609	0	0	0	0	0	0	3,586	0	4,195	
Closure & Reclamation (draindown)	Average	None	None	Dec-26	0	0	0	0	349	349	0	0	0	0	0	0	0	0	349	
Closure & Reclamation (draindown)	Average	None	None	Jan-27	0	0	0	0	195	195	0	0	0	0	0	0	0	0	195	
Closure & Reclamation (draindown)	Average	None	None	Feb-27	0	0	0	0	132	132	0	0	0	0	0	0	0	0	132	
Closure & Reclamation (draindown)	Average	None	None	Mar-27	0	0	0	0	104	104	0	0	0	0	0	0	0	0	104	
Closure & Reclamation (draindown)	Average	None	None	Apr-27	4,387	0	4,265	37	85	122	12,085	0	0	2,417	9,668	0	0	0	9,790	
Closure & Reclamation (draindown)	Average	None	None	May-27	42,883	7,685	32,397	1,782	1,019	2,801	117,817	0	7,685	22,026	88,106	0	2,417	0	93,324	
Closure & Reclamation (draindown)	Average	None	None	Jun-27	29,735	17,256	8,668	356	3,455	3,811	80,706	0	17,256	12,690	50,760	0	22,026	0	76,597	
Closure & Reclamation (draindown)	Average	None	None	Jul-27	29,187	19,647	4,660	1,557	3,322	4,880	78,968	0	19,647	11,864	47,457	0	12,690	0	65,026	
Closure & Reclamation (draindown)	Average	None	None	Aug-27	21,297	14,482	3,026	915	2,874	3,789	57,627	0	14,482	8,629	34,516	0	11,864	0	50,169	
Closure & Reclamation (draindown)	Average	None	None	Sep-27	18,377	8,904	5,657	1,052	2,765	3,816	49,872	0	8,904	8,194	32,775	0	8,629	0	45,220	
Closure & Reclamation (draindown)	Average	None	None	Oct-27	6,531	0	3,681	833	2,017	2,850	17,932	0	0	3,586	14,346	0	8,194	0	25,389	
Closure & Reclamation (draindown)	Average	None	None	Nov-27	0	0	0	0	609	609	0	0	0	0	0	0	3,586	0	4,195	
Closure & Reclamation (draindown)	Average	None	None	Dec-27	0	0	0	0	349	349	0	0	0	0	0	0	0	0	349	
Closure & Reclamation (draindown)	Average	None	None	Jan-28	0	0	0	0	195	195	0	0	0	0	0	0	0	0	195	
Closure & Reclamation (draindown)	Average	None	None	Feb-28	0	0	0	0	132	132	0	0	0	0	0	0	0	0	132	
Closure & Reclamation (draindown)	Average	None	None	Mar-28	0	0	0	0	104	104	0	0	0	0	0	0	0	0	104	
Closure & Reclamation (draindown)	Average	None	None	Apr-28	4,387	0	4,265	37	85	122	12,085	0	0	2,417	9,668	0	0	0	9,790	
Closure & Reclamation (draindown)	Average	None	None	May-28	42,883	7,685	32,397	1,782	1,019	2,801	117,817	0	7,685	22,026	88,106	0	2,417	0	93,324	
Closure & Reclamation (draindown)	Average	None	None	Jun-28	29,735	17,256	8,668	356	3,455	3,811	80,706	0	17,256	12,690	50,760	0	22,026	0	76,597	
Closure & Reclamation (draindown)	Average	None	None	Jul-28	29,187	19,647	4,660	1,557	3,322	4,880	78,968	0	19,647	11,864	47,457	0	12,690	0	65,026	
Closure & Reclamation (draindown)	Average	None	None	Aug-28	21,297	14,482	3,026	915	2,874	3,789	57,627	0	14,482	8,629	34,516	0	11,864	0	50,169	
Closure & Reclamation (draindown)	Average	None	None	Sep-28	18,377	8,904	5,657	1,052	2,765	3,816	49,872	0	8,904	8,194	32,775	0	8,629	0	45,220	
Closure & Reclamation (draindown)	Average	None	None	Oct-28	6,531	0	3,681	833	2,017	2,850	17,932	0	0	3,586	14,346	0	8,194	0	25,389	
Closure & Reclamation (draindown)	Average	None	None	Nov-28	0	0	0	0	609	609	0	0	0	0	0	0	3,586	0	4,195	
Closure & Reclamation (draindown)	Average	None	None	Dec-28	0	0	0	0	349	349	0	0	0	0	0	0	0	0	349	
Closure & Reclamation (draindown)	Average	None	None	Jan-29	0	0	0	0	195	195	0	0	0	0	0	0	0	0	195	
Closure & Reclamation (draindown)	Average	None	None	Feb-29	0	0	0	0	132	132	0	0	0	0	0	0	0	0	132	
Closure & Reclamation (draindown)	Average	None	None	Mar-29	0	0	0	0	104	104	0	0	0	0	0	0	0	0	104	
Closure & Reclamation (draindown)	Average	None	None	Apr-29	4,387	0	4,265	37	85	122	12,085	0	0	2,417	9,668	0	0	0	9,790	
Closure & Reclamation (draindown)	Average	None	None	May-29	42,883	7,685	32,397	1,782	1,019	2,801	117,817	0	7,685	22,026	88,106	0	2,417	0	93,324	
Closure & Reclamation (draindown)	Average	None	None	Jun-29	29,735	17,256	8,668	356	3,455	3,811	80,706	0	17,256	12,690	50,760	0	22,026	0	76,597	
Closure & Reclamation (draindown)	Average	None	None	Jul-29	29,187	19,647	4,660	1,557	3,322	4,880	78,968	0	19,647	11,864	47,457	0	12,690	0	65,026	
Closure & Reclamation (draindown)	Average	None	None	Aug-29	21,297	14,482	3,026	915	2,874	3,789	57,627	0	14,482	8,629	34,516	0	11,864	0	50,169	
Closure & Reclamation (draindown)	Average	None	None	Sep-29	18,377	8,904	5,657	1,052	2,765	3,816	49,872	0	8,904	8,194	32,775	0	8,629	0	45,220	

Hydroclimatic Scenario		1			Eagle Pup Waste Rock Storage Area														
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain +Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Undisturbed Basin Runoff	Undisturbed Basin (GW <sub>OUT</sub> )	Non-Contact to Sediment Control Pond	WRSA Net Precipitation (Rain +Snowmelt)	WRSA Evap-oration	WRSA Evapo-transpiration (Cover)	WRSA Recharge (GW <sub>IN</sub> )	WRSA Runoff	Waste Rock Moisture Content	Rock Drain Seepage (GW <sub>OUT</sub> )	Total EP WRSA SCP Volume (to MWTP)	Total DGDC (at closure)
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Closure & Reclamation (draindown)	Average	None	None	Oct-29	6,531	0	3,681	833	2,017	2,850	17,932	0	0	3,586	14,346	0	8,194	0	25,389
Closure & Reclamation (draindown)	Average	None	None	Nov-29	0	0	0	0	609	609	0	0	0	0	0	0	3,586	0	4,195
Closure & Reclamation (draindown)	Average	None	None	Dec-29	0	0	0	0	349	349	0	0	0	0	0	0	0	0	349
Closure & Reclamation (draindown)	Average	None	None	Jan-30	0	0	0	0	195	195	0	0	0	0	0	0	0	0	195
Closure & Reclamation (draindown)	Average	None	None	Feb-30	0	0	0	0	132	132	0	0	0	0	0	0	0	0	132
Closure & Reclamation (draindown)	Average	None	None	Mar-30	0	0	0	0	104	104	0	0	0	0	0	0	0	0	104
Closure & Reclamation (draindown)	Average	None	None	Apr-30	4,387	0	4,265	37	85	122	12,085	0	0	2,417	9,668	0	0	0	9,790
Closure & Reclamation (draindown)	Average	None	None	May-30	42,883	7,685	32,397	1,782	1,019	2,801	117,817	0	7,685	22,026	88,106	0	2,417	0	93,324
Closure & Reclamation (draindown)	Average	None	None	Jun-30	29,735	17,256	8,668	356	3,455	3,811	80,706	0	17,256	12,690	50,760	0	22,026	0	76,597
Closure & Reclamation (draindown)	Average	None	None	Jul-30	29,187	19,647	4,660	1,557	3,322	4,880	78,968	0	19,647	11,864	47,457	0	12,690	0	65,026
Closure & Reclamation (draindown)	Average	None	None	Aug-30	21,297	14,482	3,026	915	2,874	3,789	57,627	0	14,482	8,629	34,516	0	11,864	0	50,169
Closure & Reclamation (draindown)	Average	None	None	Sep-30	18,377	8,904	5,657	1,052	2,765	3,816	49,872	0	8,904	8,194	32,775	0	8,629	0	45,220
Closure & Reclamation (draindown)	Average	None	None	Oct-30	6,531	0	3,681	833	2,017	2,850	17,932	0	0	3,586	14,346	0	8,194	0	25,389
Closure & Reclamation (draindown)	Average	None	None	Nov-30	0	0	0	0	609	609	0	0	0	0	0	0	3,586	0	4,195
Closure & Reclamation (draindown)	Average	None	None	Dec-30	0	0	0	0	349	349	0	0	0	0	0	0	0	0	349
Post-closure Monitoring	Average	None	None	Jan-31	0	0	0	0	195	195	0	0	0	0	0	0	0	0	195
Post-closure Monitoring	Average	None	None	Feb-31	0	0	0	0	132	132	0	0	0	0	0	0	0	0	132
Post-closure Monitoring	Average	None	None	Mar-31	0	0	0	0	104	104	0	0	0	0	0	0	0	0	104
Post-closure Monitoring	Average	None	None	Apr-31	4,387	0	4,265	37	85	122	12,085	0	0	2,417	9,668	0	0	0	9,790
Post-closure Monitoring	Average	None	None	May-31	42,883	7,685	32,397	1,782	1,019	2,801	117,817	0	7,685	22,026	88,106	0	2,417	0	93,324
Post-closure Monitoring	Average	None	None	Jun-31	29,735	17,256	8,668	356	3,455	3,811	80,706	0	17,256	12,690	50,760	0	22,026	0	76,597
Post-closure Monitoring	Average	None	None	Jul-31	29,187	19,647	4,660	1,557	3,322	4,880	78,968	0	19,647	11,864	47,457	0	12,690	0	65,026
Post-closure Monitoring	Average	None	None	Aug-31	21,297	14,482	3,026	915	2,874	3,789	57,627	0	14,482	8,629	34,516	0	11,864	0	50,169
Post-closure Monitoring	Average	None	None	Sep-31	18,377	8,904	5,657	1,052	2,765	3,816	49,872	0	8,904	8,194	32,775	0	8,629	0	45,220
Post-closure Monitoring	Average	None	None	Oct-31	6,531	0	3,681	833	2,017	2,850	17,932	0	0	3,586	14,346	0	8,194	0	25,389
Post-closure Monitoring	Average	None	None	Nov-31	0	0	0	0	609	609	0	0	0	0	0	0	3,586	0	4,195
Post-closure Monitoring	Average	None	None	Dec-31	0	0	0	0	349	349	0	0	0	0	0	0	0	0	349
Post-closure Monitoring	Average	None	None	Jan-32	0	0	0	0	195	195	0	0	0	0	0	0	0	0	195
Post-closure Monitoring	Average	None	None	Feb-32	0	0	0	0	132	132	0	0	0	0	0	0	0	0	132
Post-closure Monitoring	Average	None	None	Mar-32	0	0	0	0	104	104	0	0	0	0	0	0	0	0	104
Post-closure Monitoring	Average	None	None	Apr-32	4,387	0	4,265	37	85	122	12,085	0	0	2,417	9,668	0	0	0	9,790
Post-closure Monitoring	Average	None	None	May-32	42,883	7,685	32,397	1,782	1,019	2,801	117,817	0	7,685	22,026	88,106	0	2,417	0	93,324
Post-closure Monitoring	Average	None	None	Jun-32	29,735	17,256	8,668	356	3,455	3,811	80,706	0	17,256	12,690	50,760	0	22,026	0	76,597
Post-closure Monitoring	Average	None	None	Jul-32	29,187	19,647	4,660	1,557	3,322	4,880	78,968	0	19,647	11,864	47,457	0	12,690	0	65,026
Post-closure Monitoring	Average	None	None	Aug-32	21,297	14,482	3,026	915	2,874	3,789	57,627	0	14,482	8,629	34,516	0	11,864	0	50,169
Post-closure Monitoring	Average	None	None	Sep-32	18,377	8,904	5,657	1,052	2,765	3,816	49,872	0	8,904	8,194	32,775	0	8,629	0	45,220

Hydroclimatic Scenario	1				Eagle Pup Waste Rock Storage Area														
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain +Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Undisturbed Basin Runoff	Undisturbed Basin (GW <sub>OUT</sub> )	Non-Contact to Sediment Control Pond	WRSA Net Precipitation (Rain +Snowmelt)	WRSA Evap-oration	WRSA Evapo-transpiration (Cover)	WRSA Recharge (GW <sub>IN</sub> )	WRSA Runoff	Waste Rock Moisture Content	Rock Drain Seepage (GW <sub>OUT</sub> )	Total EP WRSA SCP Volume (to MWTP)	Total DGDC (at closure)
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Post-closure Monitoring	Average	None	None	Oct-32	6,531	0	3,681	833	2,017	2,850	17,932	0	0	3,586	14,346	0	8,194	0	25,389
Post-closure Monitoring	Average	None	None	Nov-32	0	0	0	0	609	609	0	0	0	0	0	0	3,586	0	4,195
Post-closure Monitoring	Average	None	None	Dec-32	0	0	0	0	349	349	0	0	0	0	0	0	0	0	349
Post-closure Monitoring	Average	None	None	Jan-33	0	0	0	0	195	195	0	0	0	0	0	0	0	0	195
Post-closure Monitoring	Average	None	None	Feb-33	0	0	0	0	132	132	0	0	0	0	0	0	0	0	132
Post-closure Monitoring	Average	None	None	Mar-33	0	0	0	0	104	104	0	0	0	0	0	0	0	0	104
Post-closure Monitoring	Average	None	None	Apr-33	4,387	0	4,265	37	85	122	12,085	0	0	2,417	9,668	0	0	0	9,790
Post-closure Monitoring	Average	None	None	May-33	42,883	7,685	32,397	1,782	1,019	2,801	117,817	0	7,685	22,026	88,106	0	2,417	0	93,324
Post-closure Monitoring	Average	None	None	Jun-33	29,735	17,256	8,668	356	3,455	3,811	80,706	0	17,256	12,690	50,760	0	22,026	0	76,597
Post-closure Monitoring	Average	None	None	Jul-33	29,187	19,647	4,660	1,557	3,322	4,880	78,968	0	19,647	11,864	47,457	0	12,690	0	65,026
Post-closure Monitoring	Average	None	None	Aug-33	21,297	14,482	3,026	915	2,874	3,789	57,627	0	14,482	8,629	34,516	0	11,864	0	50,169
Post-closure Monitoring	Average	None	None	Sep-33	18,377	8,904	5,657	1,052	2,765	3,816	49,872	0	8,904	8,194	32,775	0	8,629	0	45,220
Post-closure Monitoring	Average	None	None	Oct-33	6,531	0	3,681	833	2,017	2,850	17,932	0	0	3,586	14,346	0	8,194	0	25,389
Post-closure Monitoring	Average	None	None	Nov-33	0	0	0	0	609	609	0	0	0	0	0	0	3,586	0	4,195
Post-closure Monitoring	Average	None	None	Dec-33	0	0	0	0	349	349	0	0	0	0	0	0	0	0	349
Post-closure Monitoring	Average	None	None	Jan-34	0	0	0	0	195	195	0	0	0	0	0	0	0	0	195
Post-closure Monitoring	Average	None	None	Feb-34	0	0	0	0	132	132	0	0	0	0	0	0	0	0	132
Post-closure Monitoring	Average	None	None	Mar-34	0	0	0	0	104	104	0	0	0	0	0	0	0	0	104
Post-closure Monitoring	Average	None	None	Apr-34	4,387	0	4,265	37	85	122	12,085	0	0	2,417	9,668	0	0	0	9,790
Post-closure Monitoring	Average	None	None	May-34	42,883	7,685	32,397	1,782	1,019	2,801	117,817	0	7,685	22,026	88,106	0	2,417	0	93,324
Post-closure Monitoring	Average	None	None	Jun-34	29,735	17,256	8,668	356	3,455	3,811	80,706	0	17,256	12,690	50,760	0	22,026	0	76,597
Post-closure Monitoring	Average	None	None	Jul-34	29,187	19,647	4,660	1,557	3,322	4,880	78,968	0	19,647	11,864	47,457	0	12,690	0	65,026
Post-closure Monitoring	Average	None	None	Aug-34	21,297	14,482	3,026	915	2,874	3,789	57,627	0	14,482	8,629	34,516	0	11,864	0	50,169
Post-closure Monitoring	Average	None	None	Sep-34	18,377	8,904	5,657	1,052	2,765	3,816	49,872	0	8,904	8,194	32,775	0	8,629	0	45,220
Post-closure Monitoring	Average	None	None	Oct-34	6,531	0	3,681	833	2,017	2,850	17,932	0	0	3,586	14,346	0	8,194	0	25,389
Post-closure Monitoring	Average	None	None	Nov-34	0	0	0	0	609	609	0	0	0	0	0	0	3,586	0	4,195
Post-closure Monitoring	Average	None	None	Dec-34	0	0	0	0	349	349	0	0	0	0	0	0	0	0	349
Post-closure Monitoring	Average	None	None	Jan-35	0	0	0	0	195	195	0	0	0	0	0	0	0	0	195

**Table C3-2: Eagle Pup Waste Rock Storage Area – Scenario 2 model results – selected years**

Hydroclimatic Scenario	2				Eagle Pup Waste Rock Storage Area															
	Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain +Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>in</sub> )	Undisturbed Basin Runoff	Undisturbed Basin (GW <sub>out</sub> )	Non-Contact to Sediment Control Pond	WRSA Net Precipitation (Rain +Snowmelt)	WRSA Evaporation	WRSA Evapo-transpiration (Cover)	WRSA Recharge (GW <sub>in</sub> )	WRSA Runoff	Waste Rock Moisture Content	Rock Drain Seepage (GW <sub>out</sub> )	Total EP WRSA SCP Volume (to MWTP)	Total DGDC (at closure)
						m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Construction	Wet	None	None	Oct-12	52,196	0	31,208	11,669	9,319	20,988	0	0	0	0	0	0	0	0	0	0
Construction	Wet	None	None	Nov-12	0	0	0	0	3,320	3,320	0	0	0	0	0	0	0	0	0	0
Construction	Wet	None	None	Dec-12	0	0	0	0	1,920	1,920	0	0	0	0	0	0	0	0	0	0
Construction	Wet	None	None	Jan-13	0	0	0	0	1,161	1,161	0	0	0	0	0	0	0	0	0	0
Construction	Wet	None	None	Feb-13	0	0	0	0	712	712	0	0	0	0	0	0	0	0	0	0
Construction	Wet	None	None	Mar-13	0	0	0	0	487	487	0	0	0	0	0	0	0	0	0	0
Construction	Wet	None	None	Apr-13	36,604	0	35,903	331	370	701	0	0	0	0	0	0	0	0	0	0
Construction	Wet	None	None	May-13	348,481	44,186	280,373	16,566	7,356	23,922	0	0	0	0	0	0	0	0	0	0
Construction	Wet	None	None	Jun-13	188,054	77,377	91,042	3,610	16,024	19,634	19,947	8,933	0	9,913	1,101	0	0	0	21,130	0
Construction	Wet	None	None	Jul-13	177,675	87,462	57,740	17,998	14,476	32,473	18,846	8,416	0	9,387	1,043	0	0	0	33,891	0
Construction	Wet	None	None	Aug-13	129,832	64,686	44,472	8,482	12,191	20,673	13,772	6,002	0	6,993	777	0	0	0	21,736	0
Operation	Wet	None	None	Sep-13	116,294	36,160	56,089	11,817	12,227	24,044	12,521	3,235	0	8,357	929	5,769	0	0	25,407	0
Operation	Wet	None	None	Oct-19	14,722	0	8,802	3,291	2,628	5,920	31,181	0	0	28,063	3,118	7,333	0	0	9,315	0
Operation	Wet	None	None	Nov-19	0	0	0	0	936	936	0	0	0	0	0	1,333	22,063	22,999	0	0
Operation	Wet	None	None	Dec-19	0	0	0	0	542	542	0	0	0	0	0	1,333	0	542	0	0
Operation	Wet	None	None	Jan-20	0	0	0	0	327	327	0	0	0	0	0	1,333	0	327	0	0
Operation	Wet	None	None	Feb-20	0	0	0	0	201	201	0	0	0	0	0	1,333	0	201	0	0
Operation	Wet	None	None	Mar-20	0	0	0	0	137	137	0	0	0	0	0	1,333	0	137	0	0
Operation	Wet	None	None	Apr-20	10,324	0	10,126	93	104	198	21,932	0	0	21,932	0	5,333	0	393	0	0
Operation	Wet	None	None	May-20	98,289	12,463	79,079	4,672	2,075	6,747	208,356	47,803	0	144,498	16,055	21,333	17,932	41,982	0	0
Operation	Wet	None	None	Jun-20	59,698	24,564	28,902	1,146	5,087	6,233	125,097	54,303	0	63,715	7,079	1,333	124,498	138,233	0	0
Operation	Wet	None	None	Jul-20	56,403	27,765	18,330	5,713	4,595	10,309	117,766	51,158	0	59,948	6,661	1,333	63,715	81,082	0	0
Operation	Wet	None	None	Aug-20	41,215	20,535	14,118	2,693	3,870	6,563	86,067	36,481	0	44,627	4,959	1,333	59,948	71,771	0	0
Operation	Wet	None	None	Sep-20	36,918	11,479	17,806	3,751	3,882	7,633	77,358	19,918	0	51,696	5,744	11,333	44,627	58,439	0	0
Closure & Reclamation (draindown)	Wet	None	None	Jul-24	46,980	23,126	15,267	4,759	3,828	8,586	127,315	0	23,126	20,838	83,351	0	12,690	105,025	0	0
Closure & Reclamation (draindown)	Wet	None	None	Aug-24	34,330	17,104	11,759	2,243	3,224	5,466	93,045	0	17,104	15,188	60,753	0	20,838	87,359	0	0
Closure & Reclamation (draindown)	Wet	None	None	Sep-24	30,750	9,561	14,831	3,125	3,233	6,358	83,630	0	9,561	14,814	59,255	0	15,188	81,236	0	0
Closure & Reclamation (draindown)	Wet	None	None	Oct-24	12,262	0	7,332	2,741	2,189	4,931	33,709	0	0	6,742	26,967	0	14,814	46,990	0	0
Closure & Reclamation (draindown)	Wet	None	None	Nov-24	0	0	0	0	780	780	0	0	0	0	0	0	6,742	7,522	0	0
Closure & Reclamation (draindown)	Wet	None	None	Dec-24	0	0	0	0	451	451	0	0	0	0	0	0	0	451	0	0
Closure & Reclamation (draindown)	Wet	None	None	Jan-25	0	0	0	0	273	273	0	0	0	0	0	0	0	273	0	0
Closure & Reclamation (draindown)	Wet	None	None	Feb-25	0	0	0	0	167	167	0	0	0	0	0	0	0	167	0	0
Closure & Reclamation (draindown)	Wet	None	None	Mar-25	0	0	0	0	114	114	0	0	0	0	0	0	0	114	0	0
Closure & Reclamation (draindown)	Wet	None	None	Apr-25	8,599	0	8,435	78	87	165	23,711	0	0	4,742	18,969	0	0	19,329	0	0
Closure & Reclamation (draindown)	Wet	None	None	May-25	81,868	10,381	65,867	3,892	1,728	5,620	225,250	0	10,381	42,974	171,895	0	4,742	183,504	0	0
Closure & Reclamation (draindown)	Wet	None	None	Jun-25	49,724	20,460	24,073	955	4,237	5,192	135,240	0	20,460	22,956	91,824	0	42,974	140,413	0	0

Hydroclimatic Scenario	2				Eagle Pup Waste Rock Storage Area															
	Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain +Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Undisturbed Basin Runoff	Undisturbed Basin (GW <sub>OUT</sub> )	Non-Contact to Sediment Control Pond	WRSA Net Precipitation (Rain +Snowmelt)	WRSA Evap-oration	WRSA Evapo-transpiration (Cover)	WRSA Recharge (GW <sub>IN</sub> )	WRSA Runoff	Waste Rock Moisture Content	Rock Drain Seepage (GW <sub>OUT</sub> )	Total EP WRSA SCP Volume (to MWTP)	Total DGDC (at closure)
						m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Post-closure Monitoring	Wet	None	None	Oct-31	12,262	0	7,332	2,741	2,189	4,931	33,709	0	0	6,742	26,967	0	8,194	0	40,092	
Post-closure Monitoring	Wet	None	None	Nov-31	0	0	0	0	780	780	0	0	0	0	0	0	6,742	0	7,522	
Post-closure Monitoring	Wet	None	None	Dec-31	0	0	0	0	451	451	0	0	0	0	0	0	0	0	451	
Post-closure Monitoring	Wet	None	None	Jan-32	0	0	0	0	273	273	0	0	0	0	0	0	0	0	273	
Post-closure Monitoring	Wet	None	None	Feb-32	0	0	0	0	167	167	0	0	0	0	0	0	0	0	167	
Post-closure Monitoring	Wet	None	None	Mar-32	0	0	0	0	114	114	0	0	0	0	0	0	0	0	114	
Post-closure Monitoring	Wet	None	None	Apr-32	8,599	0	8,435	78	87	165	23,711	0	0	4,742	18,969	0	0	0	19,133	
Post-closure Monitoring	Wet	None	None	May-32	81,868	10,381	65,867	3,892	1,728	5,620	225,250	0	10,381	42,974	171,895	0	4,742	0	182,257	
Post-closure Monitoring	Wet	None	None	Jun-32	49,724	20,460	24,073	955	4,237	5,192	135,240	0	20,460	22,956	91,824	0	42,974	0	139,990	
Post-closure Monitoring	Wet	None	None	Jul-32	46,980	23,126	15,267	4,759	3,828	8,586	127,315	0	23,126	20,838	83,351	0	22,956	0	114,893	
Post-closure Monitoring	Wet	None	None	Aug-32	34,330	17,104	11,759	2,243	3,224	5,466	93,045	0	17,104	15,188	60,753	0	20,838	0	87,057	
Post-closure Monitoring	Wet	None	None	Sep-32	30,750	9,561	14,831	3,125	3,233	6,358	83,630	0	9,561	14,814	59,255	0	15,188	0	80,801	

**Table C3-3: Eagle Pup Waste Rock Storage Area – Scenario 3 Model Results – Selected Years**

Hydroclimatic Scenario	3				Eagle Pup Waste Rock Storage Area															
	Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain +Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Undisturbed Basin Runoff	Undisturbed Basin (GW <sub>OUT</sub> )	Non-Contact to Sediment Control Pond	WRSA Net Precipitation (Rain +Snowmelt)	WRSA Evap-oration	WRSA Evapo-transpiration (Cover)	WRSA Recharge (GW <sub>IN</sub> )	WRSA Runoff	Waste Rock Moisture Content	Rock Drain Seepage (GW <sub>OUT</sub> )	Total EP WRSA SCP Volume (to MWTP)	Total DGDC (at closure)
						m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Construction	Dry	None	None	Oct-12	10,482	0	2,301	331	7,850	8,181	0	0	0	0	0	0	0	0	0	0
Construction	Dry	None	None	Nov-12	0	0	0	0	1,862	1,862	0	0	0	0	0	0	0	0	0	0
Construction	Dry	None	None	Dec-12	0	0	0	0	1,051	1,051	0	0	0	0	0	0	0	0	0	0
Construction	Dry	None	None	Jan-13	0	0	0	0	499	499	0	0	0	0	0	0	0	0	0	0
Construction	Dry	None	None	Feb-13	0	0	0	0	409	409	0	0	0	0	0	0	0	0	0	0
Construction	Dry	None	None	Mar-13	0	0	0	0	402	402	0	0	0	0	0	0	0	0	0	0
Construction	Dry	None	None	Apr-13	7,042	0	6,635	57	350	406	0	0	0	0	0	0	0	0	0	0
Construction	Dry	None	None	May-13	68,829	14,024	51,036	2,448	1,321	3,769	0	0	0	0	0	0	0	0	0	0
Construction	Dry	None	None	Jun-13	42,403	33,322	0	202	10,107	10,309	4,498	4,435	0	56	6	0	0	0	9,861	0
Construction	Dry	None	None	Jul-13	41,622	38,454	0	225	10,655	10,880	4,415	4,001	0	373	41	0	0	0	10,504	0
Construction	Dry	None	None	Aug-13	30,370	28,164	0	612	10,191	10,803	3,221	2,780	0	397	44	0	0	0	10,554	0
Operation	Dry	None	None	Sep-13	26,206	22,178	0	338	7,833	8,170	2,776	459	0	2,085	232	2,854	0	0	8,301	0
Operation	Dry	None	None	Oct-19	2,957	0	649	93	2,214	2,307	6,154	0	0	5,539	615	6,872	0	0	2,978	0
Operation	Dry	None	None	Nov-19	0	0	0	0	525	525	0	0	0	0	0	1,333	0	0	525	0
Operation	Dry	None	None	Dec-19	0	0	0	0	296	296	0	0	0	0	0	1,333	0	0	296	0
Operation	Dry	None	None	Jan-20	0	0	0	0	141	141	0	0	0	0	0	1,333	0	0	141	0
Operation	Dry	None	None	Feb-20	0	0	0	0	115	115	0	0	0	0	0	1,333	0	0	115	0
Operation	Dry	None	None	Mar-20	0	0	0	0	113	113	0	0	0	0	0	1,333	0	0	113	0
Operation	Dry	None	None	Apr-20	1,986	0	1,871	16	99	115	4,147	0	0	4,147	0	5,333	0	0	152	0
Operation	Dry	None	None	May-20	19,413	3,956	14,395	691	373	1,063	40,432	7,371	0	29,756	3,306	21,333	147	0	4,269	0
Operation	Dry	None	None	Jun-20	13,461	10,578	0	64	3,208	3,273	27,697	26,606	0	982	109	1,333	9,756	0	12,693	0
Operation	Dry	None	None	Jul-20	13,213	12,207	0	71	3,382	3,454	27,100	24,057	0	2,739	304	1,333	982	0	4,331	0
Operation	Dry	None	None	Aug-20	9,641	8,941	0	194	3,235	3,430	19,776	16,705	0	2,764	307	1,333	2,739	0	6,188	0
Operation	Dry	None	None	Sep-20	8,319	7,041	0	107	2,487	2,594	17,115	2,803	0	12,881	1,431	11,333	2,764	0	6,688	0
Closure & Reclamation (draindown)	Dry	None	None	Jul-24	11,006	10,168	0	60	2,817	2,877	29,298	0	10,168	3,826	15,304	0	12,690	0	30,461	0
Closure & Reclamation (draindown)	Dry	None	None	Aug-24	8,030	7,447	0	162	2,695	2,857	21,380	0	7,447	2,787	11,146	0	3,826	0	17,541	0
Closure & Reclamation (draindown)	Dry	None	None	Sep-24	6,929	5,864	0	89	2,071	2,160	18,503	0	5,864	2,528	10,111	0	2,787	0	14,957	0
Closure & Reclamation (draindown)	Dry	None	None	Oct-24	2,463	0	541	78	1,844	1,922	6,653	0	0	1,331	5,322	0	2,528	0	9,827	0
Closure & Reclamation (draindown)	Dry	None	None	Nov-24	0	0	0	0	437	437	0	0	0	0	0	0	1,331	0	1,768	0
Closure & Reclamation (draindown)	Dry	None	None	Dec-24	0	0	0	0	247	247	0	0	0	0	0	0	0	0	247	0
Closure & Reclamation (draindown)	Dry	None	None	Jan-25	0	0	0	0	117	117	0	0	0	0	0	0	0	0	117	0
Closure & Reclamation (draindown)	Dry	None	None	Feb-25	0	0	0	0	96	96	0	0	0	0	0	0	0	0	96	0
Closure & Reclamation (draindown)	Dry	None	None	Mar-25	0	0	0	0	94	94	0	0	0	0	0	0	0	0	94	0
Closure & Reclamation (draindown)	Dry	None	None	Apr-25	1,654	0	1,559	13	82	95	4,484	0	0	897	3,587	0	0	0	3,719	0
Closure & Reclamation (draindown)	Dry	None	None	May-25	16,170	3,295	11,990	575	310	886	43,711	0	3,295	8,083	32,333	0	897	0	33,867	0
Closure & Reclamation (draindown)	Dry	None	None	Jun-25	11,212	8,811	0	53	2,672	2,726	29,943	0	8,811	4,226	16,905	0	8,083	0	27,270	0

Hydroclimatic Scenario	3				Eagle Pup Waste Rock Storage Area														
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain +Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Undisturbed Basin Runoff	Undisturbed Basin (GW <sub>OUT</sub> )	Non-Contact to Sediment Control Pond	WRSA Net Precipitation (Rain +Snowmelt)	WRSA Evap-oration	WRSA Evapo-transpiration (Cover)	WRSA Recharge (GW <sub>IN</sub> )	WRSA Runoff	Waste Rock Moisture Content	Rock Drain Seepage (GW <sub>OUT</sub> )	Total EP WRSA SCP Volume (to MWTP)	Total DGDC (at closure)
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Post-closure Monitoring	Dry	None	None	Oct-31	2,463	0	541	78	1,844	1,922	6,653	0	0	1,331	5,322	0	8,194	0	15,438
Post-closure Monitoring	Dry	None	None	Nov-31	0	0	0	0	437	437	0	0	0	0	0	0	1,331	0	1,768
Post-closure Monitoring	Dry	None	None	Dec-31	0	0	0	0	247	247	0	0	0	0	0	0	0	0	247
Post-closure Monitoring	Dry	None	None	Jan-32	0	0	0	0	117	117	0	0	0	0	0	0	0	0	117
Post-closure Monitoring	Dry	None	None	Feb-32	0	0	0	0	96	96	0	0	0	0	0	0	0	0	96
Post-closure Monitoring	Dry	None	None	Mar-32	0	0	0	0	94	94	0	0	0	0	0	0	0	0	94
Post-closure Monitoring	Dry	None	None	Apr-32	1,654	0	1,559	13	82	95	4,484	0	0	897	3,587	0	0	0	3,682
Post-closure Monitoring	Dry	None	None	May-32	16,170	3,295	11,990	575	310	886	43,711	0	3,295	8,083	32,333	0	897	0	34,115
Post-closure Monitoring	Dry	None	None	Jun-32	11,212	8,811	0	53	2,672	2,726	29,943	0	8,811	4,226	16,905	0	8,083	0	27,714
Post-closure Monitoring	Dry	None	None	Jul-32	11,006	10,168	0	60	2,817	2,877	29,298	0	10,168	3,826	15,304	0	4,226	0	22,407
Post-closure Monitoring	Dry	None	None	Aug-32	8,030	7,447	0	162	2,695	2,857	21,380	0	7,447	2,787	11,146	0	3,826	0	17,829
Post-closure Monitoring	Dry	None	None	Sep-32	6,929	5,864	0	89	2,071	2,160	18,503	0	5,864	2,528	10,111	0	2,787	0	15,058



**Table C4-1: Ann Gulch Heap Leach Facility – Scenario 1 Model Results (Part 1)**

Hydroclimatic Scenario	1				Ann Gulch Heap Leach Facility (Part 1)												
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain +Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Ann Gulch Runoff - East (Non-Contact)	Ann Gulch Runoff - West (Non-Contact)	Undisturbed Basin (GW <sub>OUT</sub> ) Sub-Liner Drains	HLF Net Precipitation	Moisture from Crushing	Irrigation to Heap	Total Moisture Losses (Emitter Evap.+Idle Heap Evap.+Ore Adsorption)	Total Moisture Inputs	Net Flow to Heap Pond	Volume to Recovery (ADR)
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Existing Conditions	Average	None	None	Oct-11	17,752	0	16,173	0	0	0	0	0	0	0	0	0	0
Existing Conditions	Average	None	None	Nov-11	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Conditions	Average	None	None	Dec-11	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Jan-12	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Feb-12	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Mar-12	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Apr-12	11,847	0	11,788	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	May-12	116,425	21,690	89,157	558	5,020	0	0	0	0	0	0	0	0
Construction	Average	None	None	Jun-12	82,702	49,719	31,064	192	1,727	0	0	0	0	0	0	0	0
Construction	Average	None	None	Jul-12	81,683	56,526	20,672	448	4,036	0	0	0	0	0	0	0	0
Construction	Average	None	None	Aug-12	59,589	41,464	16,463	166	1,496	0	0	0	0	0	0	0	0
Construction	Average	None	None	Sep-12	51,124	25,761	24,245	112	1,007	0	0	0	0	0	0	0	0
Construction	Average	None	None	Oct-12	17,752	0	16,173	158	1,421	0	0	0	0	0	0	0	0
Construction	Average	None	None	Nov-12	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Dec-12	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Jan-13	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Feb-13	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Mar-13	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Apr-13	7,938	0	7,898	4	35	0	3,909	0	0	0	0	0	0
Construction	Average	None	None	May-13	78,007	14,533	59,737	374	3,363	29,869	38,418	0	0	0	0	0	0
Construction	Average	None	None	Jun-13	55,412	33,313	20,814	129	1,157	10,407	27,290	0	0	0	0	0	0
Construction	Average	None	None	Jul-13	54,729	37,874	13,851	300	2,704	6,925	26,953	0	0	0	0	0	0
Construction	Average	None	None	Aug-13	39,926	27,782	11,030	111	1,002	5,515	19,663	0	0	0	0	0	0
Operation	Average	None	None	Sep-13	30,164	15,199	14,305	66	594	7,152	19,984	15,980	855,360	37,056	854,268	854,268	770,501
Operation	Average	None	None	Oct-13	10,474	0	9,542	93	839	4,771	6,703	19,740	883,872	39,060	871,255	871,255	871,255
Operation	Average	None	None	Nov-13	0	0	0	0	0	0	0	19,740	855,360	39,060	836,040	836,040	836,040
Operation	Average	None	None	Dec-13	0	0	0	0	0	0	0	25,458	883,872	50,375	858,955	858,955	858,955
Operation	Average	None	None	Jan-14	0	0	0	0	0	0	0	25,458	883,872	50,375	858,955	858,955	858,955
Operation	Average	None	None	Feb-14	0	0	0	0	0	0	0	25,458	798,336	50,375	773,419	773,419	773,419
Operation	Average	None	None	Mar-14	0	0	0	0	0	0	0	25,458	883,872	44,958	864,372	864,372	864,372
Operation	Average	None	None	Apr-14	6,990	0	6,955	3	31	3,478	4,427	25,458	855,360	50,375	834,871	834,871	834,871
Operation	Average	None	None	May-14	68,691	12,797	52,603	329	2,962	26,302	43,878	25,458	883,872	52,036	901,172	901,172	860,158
Operation	Average	None	None	Jun-14	48,795	29,335	18,328	113	1,019	9,164	32,316	25,458	855,360	59,406	853,728	853,728	837,894
Operation	Average	None	None	Jul-14	48,193	33,351	12,197	265	2,381	6,098	32,204	25,458	883,872	60,076	881,458	881,458	866,467
Operation	Average	None	None	Aug-14	35,158	24,464	9,713	98	882	4,857	23,486	25,458	883,872	61,033	871,783	871,783	871,179
Operation	Average	None	None	Sep-14	30,654	15,128	14,854	67	604	7,427	20,593	25,458	855,360	55,645	845,766	845,766	844,230

Hydroclimatic Scenario		1			Ann Gulch Heap Leach Facility (Part 1)												
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain +Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Ann Gulch Runoff - East (Non-Contact)	Ann Gulch Runoff - West (Non-Contact)	Undisturbed Basin (GW <sub>OUT</sub> ) Sub-Liner Drains	HLF Net Precipitation	Moisture from Crushing	Irrigation to Heap	Total Moisture Losses (Emitter Evap.+Idle Heap Evap.+Ore Adsorption)	Total Moisture Inputs	Net Flow to Heap Pond	Volume to Recovery (ADR)
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Operation	Average	None	None	Oct-14	10,776	0	9,817	96	863	4,908	7,057	35,642	1,450,800	70,525	1,422,974	1,422,974	1,422,974
Operation	Average	None	None	Nov-14	0	0	0	0	0	0	0	35,642	1,404,000	70,525	1,369,117	1,369,117	1,369,117
Operation	Average	None	None	Dec-14	0	0	0	0	0	0	0	35,642	1,450,800	70,525	1,415,917	1,415,917	1,415,917
Operation	Average	None	None	Jan-15	0	0	0	0	0	0	0	35,642	1,450,800	70,525	1,415,917	1,415,917	1,415,917
Operation	Average	None	None	Feb-15	0	0	0	0	0	0	0	35,642	1,310,400	70,525	1,275,517	1,275,517	1,275,517
Operation	Average	None	None	Mar-15	0	0	0	0	0	0	0	35,642	1,450,800	62,942	1,423,500	1,423,500	1,423,500
Operation	Average	None	None	Apr-15	7,216	0	7,181	4	32	3,590	4,692	35,642	1,404,000	70,525	1,373,808	1,373,808	1,373,808
Operation	Average	None	None	May-15	70,716	12,909	54,420	339	3,049	27,210	46,253	35,642	1,450,800	71,744	1,460,951	1,460,951	1,397,301
Operation	Average	None	None	Jun-15	49,594	29,268	19,176	115	1,036	9,588	33,309	35,642	1,404,000	77,965	1,394,985	1,394,985	1,365,473
Operation	Average	None	None	Jul-15	48,824	33,299	12,845	268	2,412	6,422	33,011	35,642	1,450,800	77,716	1,441,737	1,441,737	1,412,618
Operation	Average	None	None	Aug-15	35,621	24,487	10,141	99	894	5,070	24,079	35,642	1,450,800	81,070	1,429,451	1,429,451	1,422,949
Operation	Average	None	None	Sep-15	25,853	12,759	12,528	57	509	6,264	25,235	35,642	1,404,000	73,629	1,391,248	1,391,248	1,384,822
Operation	Average	None	None	Oct-15	9,144	0	8,330	325	488	4,165	8,924	35,642	1,450,800	70,525	1,424,841	1,424,841	1,424,841
Operation	Average	None	None	Nov-15	0	0	0	0	0	0	0	35,642	1,404,000	70,525	1,369,117	1,369,117	1,369,117
Operation	Average	None	None	Dec-15	0	0	0	0	0	0	0	35,642	1,450,800	70,525	1,415,917	1,415,917	1,415,917
Operation	Average	None	None	Jan-16	0	0	0	0	0	0	0	35,642	1,450,800	70,525	1,415,917	1,415,917	1,415,917
Operation	Average	None	None	Feb-16	0	0	0	0	0	0	0	35,642	1,357,200	70,525	1,322,317	1,322,317	1,322,317
Operation	Average	None	None	Mar-16	0	0	0	0	0	0	0	35,642	1,450,800	62,942	1,423,500	1,423,500	1,423,500
Operation	Average	None	None	Apr-16	6,128	0	6,098	12	18	3,049	5,956	35,642	1,404,000	70,525	1,375,073	1,375,073	1,375,073
Operation	Average	None	None	May-16	60,014	10,906	46,233	1,150	1,725	23,117	58,529	35,642	1,450,800	71,763	1,473,207	1,473,207	1,406,319
Operation	Average	None	None	Jun-16	41,972	24,669	16,329	390	584	8,165	41,565	35,642	1,404,000	77,958	1,403,248	1,403,248	1,372,412
Operation	Average	None	None	Jul-16	41,291	28,072	10,952	907	1,360	5,476	41,049	35,642	1,450,800	77,711	1,449,780	1,449,780	1,419,603
Operation	Average	None	None	Aug-16	30,126	20,655	8,631	336	504	4,316	29,946	35,642	1,450,800	81,076	1,435,312	1,435,312	1,428,042
Operation	Average	None	None	Sep-16	21,125	10,379	10,284	185	277	5,142	30,420	35,642	1,404,000	73,618	1,396,443	1,396,443	1,389,199
Operation	Average	None	None	Oct-16	7,491	0	6,825	267	400	3,412	10,566	35,642	1,450,800	70,525	1,426,482	1,426,482	1,426,482
Operation	Average	None	None	Nov-16	0	0	0	0	0	0	0	35,642	1,404,000	70,525	1,369,117	1,369,117	1,369,117
Operation	Average	None	None	Dec-16	0	0	0	0	0	0	0	35,642	1,450,800	70,525	1,415,917	1,415,917	1,415,917
Operation	Average	None	None	Jan-17	0	0	0	0	0	0	0	35,642	1,450,800	70,525	1,415,917	1,415,917	1,415,917
Operation	Average	None	None	Feb-17	0	0	0	0	0	0	0	35,642	1,310,400	70,525	1,275,517	1,275,517	1,275,517
Operation	Average	None	None	Mar-17	0	0	0	0	0	0	0	35,642	1,450,800	62,942	1,423,500	1,423,500	1,423,500
Operation	Average	None	None	Apr-17	5,024	0	5,000	10	15	2,500	7,051	35,642	1,404,000	70,525	1,376,168	1,376,168	1,376,168
Operation	Average	None	None	May-17	49,175	8,896	37,923	942	1,413	18,961	69,294	35,642	1,450,800	71,763	1,483,973	1,483,973	1,417,084
Operation	Average	None	None	Jun-17	34,296	20,076	13,425	318	477	6,712	49,209	35,642	1,404,000	77,958	1,410,893	1,410,893	1,380,056
Operation	Average	None	None	Jul-17	33,715	22,848	9,016	740	1,111	4,508	48,599	35,642	1,450,800	77,711	1,457,330	1,457,330	1,427,153
Operation	Average	None	None	Aug-17	24,600	16,821	7,092	274	412	3,546	35,454	35,642	1,450,800	81,076	1,440,820	1,440,820	1,433,549
Operation	Average	None	None	Sep-17	16,363	8,003	8,002	143	215	4,001	35,146	35,642	1,404,000	73,618	1,401,169	1,401,169	1,393,925

Hydroclimatic Scenario		1			Ann Gulch Heap Leach Facility (Part 1)												
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain +Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Ann Gulch Runoff - East (Non-Contact)	Ann Gulch Runoff - West (Non-Contact)	Undisturbed Basin (GW <sub>OUT</sub> ) Sub-Liner Drains	HLF Net Precipitation	Moisture from Crushing	Irrigation to Heap	Total Moisture Losses (Emitter Evap.+Idle Heap Evap.+Ore Adsorption)	Total Moisture Inputs	Net Flow to Heap Pond	Volume to Recovery (ADR)
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Operation	Average	None	None	Oct-17	5,818	0	5,300	207	311	2,650	12,207	35,642	1,450,800	70,525	1,428,124	1,428,124	1,428,124
Operation	Average	None	None	Nov-17	0	0	0	0	0	0	0	35,642	1,404,000	70,525	1,369,117	1,369,117	1,369,117
Operation	Average	None	None	Dec-17	0	0	0	0	0	0	0	35,642	1,450,800	70,525	1,415,917	1,415,917	1,415,917
Operation	Average	None	None	Jan-18	0	0	0	0	0	0	0	35,642	1,450,800	70,525	1,415,917	1,415,917	1,415,917
Operation	Average	None	None	Feb-18	0	0	0	0	0	0	0	35,642	1,310,400	70,525	1,275,517	1,275,517	1,275,517
Operation	Average	None	None	Mar-18	0	0	0	0	0	0	0	35,642	1,450,800	62,942	1,423,500	1,423,500	1,423,500
Operation	Average	None	None	Apr-18	3,905	0	3,886	8	12	1,943	8,147	35,642	1,404,000	70,525	1,377,264	1,377,264	1,377,264
Operation	Average	None	None	May-18	38,197	6,879	29,488	732	1,098	14,744	80,060	35,642	1,450,800	71,763	1,494,738	1,494,738	1,427,849
Operation	Average	None	None	Jun-18	26,566	15,487	10,462	247	370	5,231	56,854	35,642	1,404,000	77,958	1,418,538	1,418,538	1,387,701
Operation	Average	None	None	Jul-18	26,097	17,629	7,035	573	860	3,518	56,149	35,642	1,450,800	77,711	1,464,880	1,464,880	1,434,703
Operation	Average	None	None	Aug-18	19,042	12,986	5,524	212	319	2,762	40,962	35,642	1,450,800	81,076	1,446,328	1,446,328	1,439,057
Operation	Average	None	None	Sep-18	16,419	7,994	8,065	144	216	4,033	35,146	35,642	1,404,000	73,618	1,401,169	1,401,169	1,393,925
Operation	Average	None	None	Oct-18	5,853	0	5,332	208	312	2,666	12,207	35,642	1,450,800	70,525	1,428,124	1,428,124	1,428,124
Operation	Average	None	None	Nov-18	0	0	0	0	0	0	0	35,642	1,404,000	70,525	1,369,117	1,369,117	1,369,117
Operation	Average	None	None	Dec-18	0	0	0	0	0	0	0	35,642	1,450,800	70,525	1,415,917	1,415,917	1,415,917
Operation	Average	None	None	Jan-19	0	0	0	0	0	0	0	35,642	1,450,800	70,525	1,415,917	1,415,917	1,415,917
Operation	Average	None	None	Feb-19	0	0	0	0	0	0	0	35,642	1,310,400	70,525	1,275,517	1,275,517	1,275,517
Operation	Average	None	None	Mar-19	0	0	0	0	0	0	0	35,642	1,450,800	62,942	1,423,500	1,423,500	1,423,500
Operation	Average	None	None	Apr-19	3,932	0	3,912	8	12	1,956	8,147	35,642	1,404,000	70,525	1,377,264	1,377,264	1,377,264
Operation	Average	None	None	May-19	38,433	6,891	29,702	736	1,105	14,851	80,060	35,642	1,450,800	71,763	1,494,738	1,494,738	1,427,849
Operation	Average	None	None	Jun-19	26,657	15,476	10,562	247	371	5,281	56,854	35,642	1,404,000	77,958	1,418,538	1,418,538	1,387,701
Operation	Average	None	None	Jul-19	26,168	17,620	7,111	575	862	3,555	56,149	35,642	1,450,800	77,711	1,464,880	1,464,880	1,434,703
Operation	Average	None	None	Aug-19	19,094	12,987	5,574	213	319	2,787	40,962	35,642	1,450,800	81,076	1,446,328	1,446,328	1,439,057
Operation	Average	None	None	Sep-19	11,608	5,626	5,727	102	152	2,864	39,872	35,642	1,404,000	80,376	1,399,137	1,399,137	1,398,651
Operation	Average	None	None	Oct-19	4,149	0	3,780	148	221	1,890	14,282	35,642	1,450,800	70,525	1,430,199	1,430,199	1,430,199
Operation	Average	None	None	Nov-19	0	0	0	0	0	0	0	35,642	1,404,000	70,525	1,369,117	1,369,117	1,369,117
Operation	Average	None	None	Dec-19	0	0	0	0	0	0	0	35,642	1,450,800	70,525	1,415,917	1,415,917	1,415,917
Operation	Average	None	None	Jan-20	0	0	0	0	0	0	0	35,642	1,450,800	70,525	1,415,917	1,415,917	1,415,917
Operation	Average	None	None	Feb-20	0	0	0	0	0	0	0	35,642	1,357,200	70,525	1,322,317	1,322,317	1,322,317
Operation	Average	None	None	Mar-20	0	0	0	0	0	0	0	35,642	1,450,800	62,942	1,423,500	1,423,500	1,423,500
Operation	Average	None	None	Apr-20	2,789	0	2,775	5	8	1,388	9,568	35,642	1,404,000	70,525	1,378,685	1,378,685	1,378,685
Operation	Average	None	None	May-20	27,247	4,863	21,078	522	783	10,539	93,735	35,642	1,450,800	77,526	1,502,650	1,502,650	1,438,224
Operation	Average	None	None	Jun-20	18,846	10,896	7,512	175	262	3,756	65,646	35,642	1,404,000	90,957	1,414,331	1,414,331	1,395,192
Operation	Average	None	None	Jul-20	18,486	12,408	5,063	406	609	2,532	64,604	35,642	1,450,800	92,506	1,458,539	1,458,539	1,442,132
Operation	Average	None	None	Aug-20	13,489	9,151	3,962	150	226	1,981	47,135	35,642	1,450,800	91,969	1,441,608	1,441,608	1,441,608
Operation	Average	None	None	Sep-20	214	103	106	2	3	53	51,834	35,642	1,404,000	86,232	1,405,244	1,405,244	1,405,244

Hydroclimatic Scenario	1				Ann Gulch Heap Leach Facility (Part 1)													
	Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain +Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Ann Gulch Runoff - East (Non-Contact)	Ann Gulch Runoff - West (Non-Contact)	Undisturbed Basin (GW <sub>OUT</sub> ) Sub-Liner Drains	HLF Net Precipitation	Moisture from Crushing	Irrigation to Heap	Total Moisture Losses (Emitter Evap.+Idle Heap Evap.+Ore Adsorption)	Total Moisture Inputs	Net Flow to Heap Pond	Volume to Recovery (ADR)
						m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Operation	Average	None	None	Oct-20	77	0	70	3	4	35	18,245	35,642	1,450,800	70,525	1,434,162	1,434,162	1,434,162	
Operation	Average	None	None	Nov-20	0	0	0	0	0	0	0	35,642	1,404,000	70,525	1,369,117	1,369,117	1,369,117	
Operation	Average	None	None	Dec-20	0	0	0	0	0	0	0	35,642	1,450,800	70,525	1,415,917	1,415,917	1,415,917	
Closure & Reclamation (au recovery)	Average	None	None	Jan-21	0	0	0	0	0	0	0	0	1,450,800	0	1,450,800	1,450,800	1,450,800	
Closure & Reclamation (au recovery)	Average	None	None	Feb-21	0	0	0	0	0	0	0	0	1,310,400	0	1,310,400	1,310,400	1,310,400	
Closure & Reclamation (au recovery)	Average	None	None	Mar-21	0	0	0	0	0	0	0	0	1,450,800	0	1,450,800	1,450,800	1,450,800	
Closure & Reclamation (au recovery)	Average	None	None	Apr-21	52	0	51	0	0	26	12,223	0	1,404,000	0	1,416,223	1,416,223	1,416,223	
Closure & Reclamation (au recovery)	Average	None	None	May-21	504	90	391	10	15	195	119,744	0	1,450,800	27,211	1,543,333	1,543,333	1,543,333	
Closure & Reclamation (au recovery)	Average	None	None	Jun-21	348	200	140	3	5	70	83,862	0	1,404,000	47,019	1,440,843	1,440,843	1,440,843	
Closure & Reclamation (au recovery)	Average	None	None	Jul-21	341	228	94	7	11	47	82,530	0	1,450,800	50,142	1,483,188	1,483,188	1,483,188	
Closure & Reclamation (au recovery)	Average	None	None	Aug-21	249	168	74	3	4	37	60,214	0	1,450,800	38,585	1,472,429	1,472,429	1,472,429	
Closure & Reclamation (au recovery)	Average	None	None	Sep-21	215	103	107	2	3	54	51,834	0	1,404,000	23,290	1,432,544	1,432,544	1,432,544	
Closure & Reclamation (au recovery)	Average	None	None	Oct-21	77	0	70	3	4	35	18,245	0	1,450,800	0	1,469,045	1,469,045	1,469,045	
Closure & Reclamation (au recovery)	Average	None	None	Nov-21	0	0	0	0	0	0	0	0	1,404,000	0	1,404,000	1,404,000	1,404,000	
Closure & Reclamation (au recovery)	Average	None	None	Dec-21	0	0	0	0	0	0	0	0	1,450,800	0	1,450,800	1,450,800	1,450,800	
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-22	0	0	0	0	0	0	0	0	0	0	0	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-22	0	0	0	0	0	0	0	0	0	0	0	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-22	0	0	0	0	0	0	0	0	0	0	0	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-22	52	0	51	0	0	26	12,223	0	0	0	12,223	12,223	0	
Closure & Reclamation (hlf rinse)	Average	None	None	May-22	504	90	391	10	15	195	119,744	0	0	27,211	92,533	92,533	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Jun-22	348	200	140	3	5	70	83,862	0	0	47,019	36,843	36,843	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Jul-22	341	228	94	7	11	47	82,530	0	0	50,142	32,388	32,388	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Aug-22	249	168	74	3	4	37	60,214	0	0	38,585	21,629	21,629	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Sep-22	215	103	107	2	3	54	51,834	0	0	23,290	28,544	28,544	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Oct-22	77	0	70	3	4	35	18,245	0	0	0	18,245	18,245	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Nov-22	0	0	0	0	0	0	0	0	0	0	0	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Dec-22	0	0	0	0	0	0	0	0	0	0	0	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-23	0	0	0	0	0	0	0	0	0	0	0	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-23	0	0	0	0	0	0	0	0	0	0	0	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-23	0	0	0	0	0	0	0	0	0	0	0	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-23	52	0	51	0	0	26	12,223	0	0	0	12,223	12,223	0	
Closure & Reclamation (hlf rinse)	Average	None	None	May-23	504	90	391	10	15	195	119,744	0	0	27,211	92,533	92,533	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Jun-23	348	200	140	3	5	70	83,862	0	0	47,019	36,843	36,843	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Jul-23	341	228	94	7	11	47	82,530	0	0	50,142	32,388	32,388	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Aug-23	249	168	74	3	4	37	60,214	0	0	38,585	21,629	21,629	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Sep-23	215	103	107	2	3	54	51,834	0	0	23,290	28,544	28,544	0	

Hydroclimatic Scenario		1			Ann Gulch Heap Leach Facility (Part 1)												
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain +Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Ann Gulch Runoff - East (Non-Contact)	Ann Gulch Runoff - West (Non-Contact)	Undisturbed Basin (GW <sub>OUT</sub> ) Sub-Liner Drains	HLF Net Precipitation	Moisture from Crushing	Irrigation to Heap	Total Moisture Losses (Emitter Evap.+Idle Heap Evap.+Ore Adsorption)	Total Moisture Inputs	Net Flow to Heap Pond	Volume to Recovery (ADR)
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Closure & Reclamation (hlf rinse)	Average	None	None	Oct-23	77	0	70	3	4	35	18,245	0	0	0	18,245	18,245	0
Closure & Reclamation (hlf rinse)	Average	None	None	Nov-23	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (hlf rinse)	Average	None	None	Dec-23	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-24	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-24	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-24	0	0	0	0	0	0	0	0	0	0	0	0	0
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-24	52	0	51	0	0	26	12,223	0	0	0	12,223	12,223	0
Closure & Reclamation (hlf rinse)	Average	None	None	May-24	504	90	391	10	15	195	119,744	0	0	12,703	107,041	107,041	0
Closure & Reclamation (hlf rinse)	Average	None	None	Jun-24	348	200	140	3	5	70	83,862	0	0	28,767	55,095	55,095	0
Closure & Reclamation (draindown)	Average	None	None	Jul-24	341	228	94	7	11	47	82,530	0	0	0	82,530	269,409	0
Closure & Reclamation (draindown)	Average	None	None	Aug-24	249	168	74	3	4	37	60,214	0	0	0	60,214	136,952	0
Closure & Reclamation (draindown)	Average	None	None	Sep-24	215	103	107	2	3	54	51,834	0	0	0	51,834	71,258	0
Closure & Reclamation (draindown)	Average	None	None	Oct-24	77	0	70	3	4	35	18,245	0	0	0	18,245	35,581	0
Closure & Reclamation (draindown)	Average	None	None	Nov-24	0	0	0	0	0	0	0	0	0	0	0	15,966	0
Closure & Reclamation (draindown)	Average	None	None	Dec-24	0	0	0	0	0	0	0	0	0	0	0	7,983	0
Closure & Reclamation (draindown)	Average	None	None	Jan-25	0	0	0	0	0	0	0	0	0	0	0	6,386	0
Closure & Reclamation (draindown)	Average	None	None	Feb-25	0	0	0	0	0	0	0	0	0	0	0	4,790	0
Closure & Reclamation (draindown)	Average	None	None	Mar-25	0	0	0	0	0	0	0	0	0	0	0	4,568	0
Closure & Reclamation (draindown)	Average	None	None	Apr-25	52	0	51	0	0	26	12,223	0	0	0	12,223	6,791	0
Closure & Reclamation (draindown)	Average	None	None	May-25	504	90	391	10	15	195	119,744	0	0	0	119,744	25,533	0
Closure & Reclamation (draindown)	Average	None	None	Jun-25	348	200	140	3	5	70	83,862	0	0	0	83,862	14,922	0
Closure & Reclamation (draindown)	Average	None	None	Jul-25	341	228	94	7	11	47	82,530	0	0	0	82,530	13,641	0
Closure & Reclamation (draindown)	Average	None	None	Aug-25	249	168	74	3	4	37	60,214	0	0	0	60,214	10,687	0
Closure & Reclamation (draindown)	Average	None	None	Sep-25	215	103	107	2	3	54	51,834	0	0	0	51,834	10,631	0
Closure & Reclamation (draindown)	Average	None	None	Oct-25	77	0	70	3	4	35	18,245	0	0	0	18,245	6,665	0
Closure & Reclamation (draindown)	Average	None	None	Nov-25	0	0	0	0	0	0	0	0	0	0	0	2,794	0
Closure & Reclamation (draindown)	Average	None	None	Dec-25	0	0	0	0	0	0	0	0	0	0	0	2,628	0
Closure & Reclamation (draindown)	Average	None	None	Jan-26	0	0	0	0	0	0	0	0	0	0	0	2,461	0
Closure & Reclamation (draindown)	Average	None	None	Feb-26	0	0	0	0	0	0	0	0	0	0	0	2,295	0
Closure & Reclamation (draindown)	Average	None	None	Mar-26	0	0	0	0	0	0	0	0	0	0	0	2,129	0
Closure & Reclamation (draindown)	Average	None	None	Apr-26	52	0	51	0	0	26	12,223	0	0	0	12,223	4,407	0
Closure & Reclamation (draindown)	Average	None	None	May-26	504	90	391	10	15	195	119,744	0	0	0	119,744	23,204	0
Closure & Reclamation (draindown)	Average	None	None	Jun-26	348	200	140	3	5	70	83,862	0	0	0	83,862	12,765	0
Closure & Reclamation (draindown)	Average	None	None	Jul-26	341	228	94	7	11	47	82,530	0	0	0	82,530	11,656	0
Closure & Reclamation (draindown)	Average	None	None	Aug-26	249	168	74	3	4	37	60,214	0	0	0	60,214	8,874	0
Closure & Reclamation (draindown)	Average	None	None	Sep-26	215	103	107	2	3	54	51,834	0	0	0	51,834	8,990	0

Hydroclimatic Scenario		1			Ann Gulch Heap Leach Facility (Part 1)												
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain +Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Ann Gulch Runoff - East (Non-Contact)	Ann Gulch Runoff - West (Non-Contact)	Undisturbed Basin (GW <sub>OUT</sub> ) Sub-Liner Drains	HLF Net Precipitation	Moisture from Crushing	Irrigation to Heap	Total Moisture Losses (Emitter Evap.+Idle Heap Evap.+Ore Adsorption)	Total Moisture Inputs	Net Flow to Heap Pond	Volume to Recovery (ADR)
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Closure & Reclamation (draindown)	Average	None	None	Oct-26	77	0	70	3	4	35	18,245	0	0	0	18,245	5,196	0
Closure & Reclamation (draindown)	Average	None	None	Nov-26	0	0	0	0	0	0	0	0	0	0	0	1,497	0
Closure & Reclamation (draindown)	Average	None	None	Dec-26	0	0	0	0	0	0	0	0	0	0	0	1,447	0
Closure & Reclamation (draindown)	Average	None	None	Jan-27	0	0	0	0	0	0	0	0	0	0	0	1,397	0
Closure & Reclamation (draindown)	Average	None	None	Feb-27	0	0	0	0	0	0	0	0	0	0	0	1,347	0
Closure & Reclamation (draindown)	Average	None	None	Mar-27	0	0	0	0	0	0	0	0	0	0	0	1,297	0
Closure & Reclamation (draindown)	Average	None	None	Apr-27	52	0	51	0	0	26	12,223	0	0	0	12,223	3,692	0
Closure & Reclamation (draindown)	Average	None	None	May-27	504	90	391	10	15	195	119,744	0	0	0	119,744	22,606	0
Closure & Reclamation (draindown)	Average	None	None	Jun-27	348	200	140	3	5	70	83,862	0	0	0	83,862	12,193	0
Closure & Reclamation (draindown)	Average	None	None	Jul-27	341	228	94	7	11	47	82,530	0	0	0	82,530	11,111	0
Closure & Reclamation (draindown)	Average	None	None	Aug-27	249	168	74	3	4	37	60,214	0	0	0	60,214	8,356	0
Closure & Reclamation (draindown)	Average	None	None	Sep-27	215	103	107	2	3	54	51,834	0	0	0	51,834	8,499	0
Closure & Reclamation (draindown)	Average	None	None	Oct-27	77	0	70	3	4	35	18,245	0	0	0	18,245	4,731	0
Closure & Reclamation (draindown)	Average	None	None	Nov-27	0	0	0	0	0	0	0	0	0	0	0	1,059	0
Closure & Reclamation (draindown)	Average	None	None	Dec-27	0	0	0	0	0	0	0	0	0	0	0	1,036	0
Closure & Reclamation (draindown)	Average	None	None	Jan-28	0	0	0	0	0	0	0	0	0	0	0	1,013	0
Closure & Reclamation (draindown)	Average	None	None	Feb-28	0	0	0	0	0	0	0	0	0	0	0	990	0
Closure & Reclamation (draindown)	Average	None	None	Mar-28	0	0	0	0	0	0	0	0	0	0	0	967	0
Closure & Reclamation (draindown)	Average	None	None	Apr-28	52	0	51	0	0	26	12,223	0	0	0	12,223	3,389	0
Closure & Reclamation (draindown)	Average	None	None	May-28	504	90	391	10	15	195	119,744	0	0	0	119,744	22,329	0
Closure & Reclamation (draindown)	Average	None	None	Jun-28	348	200	140	3	5	70	83,862	0	0	0	83,862	11,917	0
Closure & Reclamation (draindown)	Average	None	None	Jul-28	341	228	94	7	11	47	82,530	0	0	0	82,530	10,833	0
Closure & Reclamation (draindown)	Average	None	None	Aug-28	249	168	74	3	4	37	60,214	0	0	0	60,214	8,076	0
Closure & Reclamation (draindown)	Average	None	None	Sep-28	215	103	107	2	3	54	51,834	0	0	0	51,834	8,217	0
Closure & Reclamation (draindown)	Average	None	None	Oct-28	77	0	70	3	4	35	18,245	0	0	0	18,245	4,447	0
Closure & Reclamation (draindown)	Average	None	None	Nov-28	0	0	0	0	0	0	0	0	0	0	0	773	0
Closure & Reclamation (draindown)	Average	None	None	Dec-28	0	0	0	0	0	0	0	0	0	0	0	748	0
Closure & Reclamation (draindown)	Average	None	None	Jan-29	0	0	0	0	0	0	0	0	0	0	0	723	0
Closure & Reclamation (draindown)	Average	None	None	Feb-29	0	0	0	0	0	0	0	0	0	0	0	699	0
Closure & Reclamation (draindown)	Average	None	None	Mar-29	0	0	0	0	0	0	0	0	0	0	0	674	0
Closure & Reclamation (draindown)	Average	None	None	Apr-29	52	0	51	0	0	26	12,223	0	0	0	12,223	3,093	0
Closure & Reclamation (draindown)	Average	None	None	May-29	504	90	391	10	15	195	119,744	0	0	0	119,744	22,032	0
Closure & Reclamation (draindown)	Average	None	None	Jun-29	348	200	140	3	5	70	83,862	0	0	0	83,862	11,618	0
Closure & Reclamation (draindown)	Average	None	None	Jul-29	341	228	94	7	11	47	82,530	0	0	0	82,530	10,550	0
Closure & Reclamation (draindown)	Average	None	None	Aug-29	249	168	74	3	4	37	60,214	0	0	0	60,214	7,809	0
Closure & Reclamation (draindown)	Average	None	None	Sep-29	215	103	107	2	3	54	51,834	0	0	0	51,834	7,967	0

Hydroclimatic Scenario	1				Ann Gulch Heap Leach Facility (Part 1)													
	Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain +Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Ann Gulch Runoff - East (Non-Contact)	Ann Gulch Runoff - West (Non-Contact)	Undisturbed Basin (GW <sub>OUT</sub> ) Sub-Liner Drains	HLF Net Precipitation	Moisture from Crushing	Irrigation to Heap	Total Moisture Losses (Emitter Evap.+Idle Heap Evap.+Ore Adsorption)	Total Moisture Inputs	Net Flow to Heap Pond	Volume to Recovery (ADR)
						m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Closure & Reclamation (draindown)	Average	None	None	Oct-29	77	0	70	3	4	35	18,245	0	0	0	18,245	4,215	0	
Closure & Reclamation (draindown)	Average	None	None	Nov-29	0	0	0	0	0	0	0	0	0	0	0	557	0	
Closure & Reclamation (draindown)	Average	None	None	Dec-29	0	0	0	0	0	0	0	0	0	0	0	549	0	
Closure & Reclamation (draindown)	Average	None	None	Jan-30	0	0	0	0	0	0	0	0	0	0	0	541	0	
Closure & Reclamation (draindown)	Average	None	None	Feb-30	0	0	0	0	0	0	0	0	0	0	0	532	0	
Closure & Reclamation (draindown)	Average	None	None	Mar-30	0	0	0	0	0	0	0	0	0	0	0	524	0	
Closure & Reclamation (draindown)	Average	None	None	Apr-30	52	0	51	0	0	26	12,223	0	0	0	12,223	2,960	0	
Closure & Reclamation (draindown)	Average	None	None	May-30	504	90	391	10	15	195	119,744	0	0	0	119,744	21,916	0	
Closure & Reclamation (draindown)	Average	None	None	Jun-30	348	200	140	3	5	70	83,862	0	0	0	83,862	11,518	0	
Closure & Reclamation (draindown)	Average	None	None	Jul-30	341	228	94	7	11	47	82,530	0	0	0	82,530	10,426	0	
Closure & Reclamation (draindown)	Average	None	None	Aug-30	249	168	74	3	4	37	60,214	0	0	0	60,214	7,601	0	
Closure & Reclamation (draindown)	Average	None	None	Sep-30	215	103	107	2	3	54	51,834	0	0	0	51,834	7,674	0	
Closure & Reclamation (draindown)	Average	None	None	Oct-30	77	0	70	3	4	35	18,245	0	0	0	18,245	3,859	0	
Closure & Reclamation (draindown)	Average	None	None	Nov-30	0	0	0	0	0	0	0	0	0	0	0	163	0	
Closure & Reclamation (draindown)	Average	None	None	Dec-30	0	0	0	0	0	0	0	0	0	0	0	0	0	
Post-closure Monitoring	Average	None	None	Jan-31	0	0	0	0	0	0	0	0	0	0	0	0	0	
Post-closure Monitoring	Average	None	None	Feb-31	0	0	0	0	0	0	0	0	0	0	0	0	0	
Post-closure Monitoring	Average	None	None	Mar-31	0	0	0	0	0	0	0	0	0	0	0	0	0	
Post-closure Monitoring	Average	None	None	Apr-31	52	0	51	0	0	26	12,223	0	0	0	12,223	2,445	0	
Post-closure Monitoring	Average	None	None	May-31	504	90	391	10	15	195	119,744	0	0	0	119,744	21,408	0	
Post-closure Monitoring	Average	None	None	Jun-31	348	200	140	3	5	70	83,862	0	0	0	83,862	11,019	0	
Post-closure Monitoring	Average	None	None	Jul-31	341	228	94	7	11	47	82,530	0	0	0	82,530	9,960	0	
Post-closure Monitoring	Average	None	None	Aug-31	249	168	74	3	4	37	60,214	0	0	0	60,214	7,227	0	
Post-closure Monitoring	Average	None	None	Sep-31	215	103	107	2	3	54	51,834	0	0	0	51,834	7,394	0	
Post-closure Monitoring	Average	None	None	Oct-31	77	0	70	3	4	35	18,245	0	0	0	18,245	3,649	0	
Post-closure Monitoring	Average	None	None	Nov-31	0	0	0	0	0	0	0	0	0	0	0	0	0	
Post-closure Monitoring	Average	None	None	Dec-31	0	0	0	0	0	0	0	0	0	0	0	0	0	
Post-closure Monitoring	Average	None	None	Jan-32	0	0	0	0	0	0	0	0	0	0	0	0	0	
Post-closure Monitoring	Average	None	None	Feb-32	0	0	0	0	0	0	0	0	0	0	0	0	0	
Post-closure Monitoring	Average	None	None	Mar-32	0	0	0	0	0	0	0	0	0	0	0	0	0	
Post-closure Monitoring	Average	None	None	Apr-32	52	0	51	0	0	26	12,223	0	0	0	12,223	2,445	0	
Post-closure Monitoring	Average	None	None	May-32	504	90	391	10	15	195	119,744	0	0	0	119,744	21,408	0	
Post-closure Monitoring	Average	None	None	Jun-32	348	200	140	3	5	70	83,862	0	0	0	83,862	11,019	0	
Post-closure Monitoring	Average	None	None	Jul-32	341	228	94	7	11	47	82,530	0	0	0	82,530	9,960	0	
Post-closure Monitoring	Average	None	None	Aug-32	249	168	74	3	4	37	60,214	0	0	0	60,214	7,227	0	
Post-closure Monitoring	Average	None	None	Sep-32	215	103	107	2	3	54	51,834	0	0	0	51,834	7,394	0	

Hydroclimatic Scenario		1			Ann Gulch Heap Leach Facility (Part 1)												
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain +Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Ann Gulch Runoff - East (Non-Contact)	Ann Gulch Runoff - West (Non-Contact)	Undisturbed Basin (GW <sub>OUT</sub> ) Sub-Liner Drains	HLF Net Precipitation	Moisture from Crushing	Irrigation to Heap	Total Moisture Losses (Emitter Evap.+Idle Heap Evap.+Ore Adsorption)	Total Moisture Inputs	Net Flow to Heap Pond	Volume to Recovery (ADR)
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Post-closure Monitoring	Average	None	None	Oct-32	77	0	70	3	4	35	18,245	0	0	0	18,245	3,649	0
Post-closure Monitoring	Average	None	None	Nov-32	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Dec-32	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Jan-33	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Feb-33	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Mar-33	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Apr-33	52	0	51	0	0	26	12,223	0	0	0	12,223	2,445	0
Post-closure Monitoring	Average	None	None	May-33	504	90	391	10	15	195	119,744	0	0	0	119,744	21,408	0
Post-closure Monitoring	Average	None	None	Jun-33	348	200	140	3	5	70	83,862	0	0	0	83,862	11,019	0
Post-closure Monitoring	Average	None	None	Jul-33	341	228	94	7	11	47	82,530	0	0	0	82,530	9,960	0
Post-closure Monitoring	Average	None	None	Aug-33	249	168	74	3	4	37	60,214	0	0	0	60,214	7,227	0
Post-closure Monitoring	Average	None	None	Sep-33	215	103	107	2	3	54	51,834	0	0	0	51,834	7,394	0
Post-closure Monitoring	Average	None	None	Oct-33	77	0	70	3	4	35	18,245	0	0	0	18,245	3,649	0
Post-closure Monitoring	Average	None	None	Nov-33	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Dec-33	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Jan-34	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Feb-34	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Mar-34	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Apr-34	52	0	51	0	0	26	12,223	0	0	0	12,223	2,445	0
Post-closure Monitoring	Average	None	None	May-34	504	90	391	10	15	195	119,744	0	0	0	119,744	21,408	0
Post-closure Monitoring	Average	None	None	Jun-34	348	200	140	3	5	70	83,862	0	0	0	83,862	11,019	0
Post-closure Monitoring	Average	None	None	Jul-34	341	228	94	7	11	47	82,530	0	0	0	82,530	9,960	0
Post-closure Monitoring	Average	None	None	Aug-34	249	168	74	3	4	37	60,214	0	0	0	60,214	7,227	0
Post-closure Monitoring	Average	None	None	Sep-34	215	103	107	2	3	54	51,834	0	0	0	51,834	7,394	0
Post-closure Monitoring	Average	None	None	Oct-34	77	0	70	3	4	35	18,245	0	0	0	18,245	3,649	0
Post-closure Monitoring	Average	None	None	Nov-34	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Dec-34	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Jan-35	0	0	0	0	0	0	0	0	0	0	0	0	0



**Table C4-1: Ann Gulch Heap Leach Facility – Scenario 1 Model Results (Part 2)**

Hydroclimatic Scenario	1				Ann Gulch Heap Leach Facility (Part 2)										
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Excess Heap Pond to Events Pond	Make-up Water Requirements for HLF System (from Event Pond)	Raw Make-Up Water Required for Barren Tank (from GW Well)	Net Events Pond Volume		Excess from HLF to Detox	HLF Cover Evapo-transpiration	HLF Cover Runoff	HLF Cover Infiltration	Estimated Draindown Volume (Total 613,000 m <sup>3</sup> )	Net Precip. + Draindown Volume(to Detox,MWTP)
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% full/mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Existing Conditions	Average	None	None	Oct-11	0	0	0	0	0	0	0	0	0	0	0
Existing Conditions	Average	None	None	Nov-11	0	0	0	0	0	0	0	0	0	0	0
Existing Conditions	Average	None	None	Dec-11	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Jan-12	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Feb-12	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Mar-12	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Apr-12	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	May-12	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Jun-12	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Jul-12	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Aug-12	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Sep-12	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Oct-12	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Nov-12	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Dec-12	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Jan-13	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Feb-13	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Mar-13	0	0	0	0	0	0	0	0	0	0	0
Construction	Average	None	None	Apr-13	0	0	0	4,732	0	0	0	0	0	0	0
Construction	Average	None	None	May-13	0	0	0	10,548	0	0	0	0	0	0	0
Construction	Average	None	None	Jun-13	0	0	0	34,285	0	0	0	0	0	0	0
Construction	Average	None	None	Jul-13	0	0	0	64,707	0	0	0	0	0	0	0
Construction	Average	None	None	Aug-13	0	0	0	90,189	1	0	0	0	0	0	0
Operation	Average	None	None	Sep-13	0	1,752	0	114,065	1	0	0	0	0	0	0
Operation	Average	None	None	Oct-13	0	11,314	0	123,641	1	0	0	0	0	0	0
Operation	Average	None	None	Nov-13	0	19,320	0	108,367	1	0	0	0	0	0	0
Operation	Average	None	None	Dec-13	0	24,917	0	84,338	0	0	0	0	0	0	0
Operation	Average	None	None	Jan-14	0	24,917	0	59,728	0	0	0	0	0	0	0
Operation	Average	None	None	Feb-14	0	24,917	0	34,919	0	0	0	0	0	0	0
Operation	Average	None	None	Mar-14	0	19,500	0	15,382	0	0	0	0	0	0	0
Operation	Average	None	None	Apr-14	0	18,096	0	1,002	0	0	0	0	0	0	0
Operation	Average	None	None	May-14	41,015	0	0	40,895	0	0	0	0	0	0	0
Operation	Average	None	None	Jun-14	15,834	0	0	75,979	0	0	0	0	0	0	0
Operation	Average	None	None	Jul-14	14,991	0	0	112,994	1	0	0	0	0	0	0
Operation	Average	None	None	Aug-14	605	0	5,025	140,464	1	0	0	0	0	0	0
Operation	Average	None	None	Sep-14	1,537	0	3,174	171,534	1	0	0	0	0	0	0

Hydroclimatic Scenario	1				Ann Gulch Heap Leach Facility (Part 2)										
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Excess Heap Pond to Events Pond	Make-up Water Requirements for HLF System (from Event Pond)	Raw Make-Up Water Required for Barren Tank (from GW Well)	Net Events Pond Volume		Excess from HLF to Detox	HLF Cover Evapo-transpiration	HLF Cover Runoff	HLF Cover Infiltration	Estimated Draindown Volume (Total 613,000 m <sup>3</sup> )	Net Precip. + Draindown Volume (to Detox, MWTP)
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% full/mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Operation	Average	None	None	Oct-14	0	19,663	4,306	176,377	1	0	0	0	0	0	0
Operation	Average	None	None	Nov-14	0	34,883	0	150,597	1	0	0	0	0	0	0
Operation	Average	None	None	Dec-14	0	34,883	0	122,179	1	0	0	0	0	0	0
Operation	Average	None	None	Jan-15	0	34,883	0	93,246	1	0	0	0	0	0	0
Operation	Average	None	None	Feb-15	0	34,883	0	63,588	0	0	0	0	0	0	0
Operation	Average	None	None	Mar-15	0	27,300	0	41,935	0	0	0	0	0	0	0
Operation	Average	None	None	Apr-15	0	24,765	2,111	24,319	0	0	0	0	0	0	0
Operation	Average	None	None	May-15	63,650	0	0	71,596	0	0	0	0	0	0	0
Operation	Average	None	None	Jun-15	29,512	0	114	113,135	1	0	0	0	0	0	0
Operation	Average	None	None	Jul-15	29,119	0	141	159,852	1	0	0	0	0	0	0
Operation	Average	None	None	Aug-15	6,502	0	14,170	174,580	1	0	0	0	0	0	0
Operation	Average	None	None	Sep-15	6,426	0	6,333	176,224	1	0	0	0	0	0	0
Operation	Average	None	None	Oct-15	0	19,177	2,881	176,421	1	0	0	0	0	0	0
Operation	Average	None	None	Nov-15	0	34,883	0	139,644	1	0	0	0	0	0	0
Operation	Average	None	None	Dec-15	0	34,883	0	103,623	1	0	0	0	0	0	0
Operation	Average	None	None	Jan-16	0	34,883	0	67,245	0	0	0	0	0	0	0
Operation	Average	None	None	Feb-16	0	34,883	0	30,846	0	0	0	0	0	0	0
Operation	Average	None	None	Mar-16	0	27,300	0	1,841	0	0	0	0	0	0	0
Operation	Average	None	None	Apr-16	0	24,401	1,178	949	0	0	0	0	0	0	0
Operation	Average	None	None	May-16	66,889	0	0	78,661	0	0	0	0	0	0	0
Operation	Average	None	None	Jun-16	30,837	0	0	113,507	1	0	0	0	0	0	0
Operation	Average	None	None	Jul-16	30,177	0	0	169,762	1	0	0	0	0	0	0
Operation	Average	None	None	Aug-16	7,270	0	8,239	174,730	1	0	0	0	0	0	0
Operation	Average	None	None	Sep-16	7,244	0	1,064	176,341	1	0	0	0	0	0	0
Operation	Average	None	None	Oct-16	0	19,177	1,239	176,421	1	0	0	0	0	0	0
Operation	Average	None	None	Nov-16	0	34,883	0	157,079	1	0	0	0	0	0	0
Operation	Average	None	None	Dec-16	0	34,883	0	132,186	1	0	0	0	0	0	0
Operation	Average	None	None	Jan-17	0	34,883	0	106,987	1	0	0	0	0	0	0
Operation	Average	None	None	Feb-17	0	34,883	0	80,763	0	0	0	0	0	0	0
Operation	Average	None	None	Mar-17	0	27,300	0	62,967	0	0	0	0	0	0	0
Operation	Average	None	None	Apr-17	0	24,401	82	56,321	0	0	0	0	0	0	0
Operation	Average	None	None	May-17	66,889	0	0	149,910	1	0	0	0	0	0	0
Operation	Average	None	None	Jun-17	30,837	0	0	174,118	1	0	0	0	0	0	0
Operation	Average	None	None	Jul-17	30,177	0	0	174,471	1	0	0	0	0	0	0
Operation	Average	None	None	Aug-17	7,270	0	2,731	174,730	1	0	0	0	0	0	0
Operation	Average	None	None	Sep-17	7,244	0	0	176,341	1	0	0	0	0	0	0

Hydroclimatic Scenario	1				Ann Gulch Heap Leach Facility (Part 2)										
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Excess Heap Pond to Events Pond	Make-up Water Requirements for HLF System (from Event Pond)	Raw Make-Up Water Required for Barren Tank (from GW Well)	Net Events Pond Volume		Excess from HLF to Detox	HLF Cover Evapo-transpiration	HLF Cover Runoff	HLF Cover Infiltration	Estimated Draindown Volume (Total 613,000 m <sup>3</sup> )	Net Precip. + Draindown Volume(to Detox,MWTP)
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% full/mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Operation	Average	None	None	Oct-17	0	19,177	0	176,421	1	0	0	0	0	0	0
Operation	Average	None	None	Nov-17	0	34,883	0	141,057	1	0	0	0	0	0	0
Operation	Average	None	None	Dec-17	0	34,883	0	105,145	1	0	0	0	0	0	0
Operation	Average	None	None	Jan-18	0	34,883	0	68,987	0	0	0	0	0	0	0
Operation	Average	None	None	Feb-18	0	34,883	0	32,881	0	0	0	0	0	0	0
Operation	Average	None	None	Mar-18	0	27,300	0	4,160	0	0	0	0	0	0	0
Operation	Average	None	None	Apr-18	0	24,401	0	949	0	0	0	0	0	0	0
Operation	Average	None	None	May-18	66,889	0	0	123,144	1	0	0	0	0	0	0
Operation	Average	None	None	Jun-18	30,837	0	0	174,118	1	0	0	0	0	0	0
Operation	Average	None	None	Jul-18	30,177	0	0	174,471	1	0	0	0	0	0	0
Operation	Average	None	None	Aug-18	7,270	0	0	174,730	1	0	0	0	0	0	0
Operation	Average	None	None	Sep-18	7,244	0	0	176,341	1	0	0	0	0	0	0
Operation	Average	None	None	Oct-18	0	19,177	0	176,421	1	0	0	0	0	0	0
Operation	Average	None	None	Nov-18	0	34,883	0	150,602	1	0	0	0	0	0	0
Operation	Average	None	None	Dec-18	0	34,883	0	124,610	1	0	0	0	0	0	0
Operation	Average	None	None	Jan-19	0	34,883	0	98,402	1	0	0	0	0	0	0
Operation	Average	None	None	Feb-19	0	34,883	0	71,292	0	0	0	0	0	0	0
Operation	Average	None	None	Mar-19	0	27,300	0	52,541	0	0	0	0	0	0	0
Operation	Average	None	None	Apr-19	0	24,401	0	51,316	0	0	0	0	0	0	0
Operation	Average	None	None	May-19	66,889	0	0	177,718	1	0	0	0	0	0	0
Operation	Average	None	None	Jun-19	30,837	0	0	174,118	1	0	0	0	0	0	0
Operation	Average	None	None	Jul-19	30,177	0	0	174,471	1	0	0	0	0	0	0
Operation	Average	None	None	Aug-19	7,270	0	0	174,730	1	0	0	0	0	0	0
Operation	Average	None	None	Sep-19	487	0	0	176,341	1	0	0	0	0	0	0
Operation	Average	None	None	Oct-19	0	18,685	0	176,466	1	0	0	0	0	0	0
Operation	Average	None	None	Nov-19	0	34,883	0	148,660	1	0	0	0	0	0	0
Operation	Average	None	None	Dec-19	0	34,883	0	111,716	1	0	0	0	0	0	0
Operation	Average	None	None	Jan-20	0	34,883	0	74,587	0	0	0	0	0	0	0
Operation	Average	None	None	Feb-20	0	34,883	0	37,542	0	0	0	0	0	0	0
Operation	Average	None	None	Mar-20	0	27,300	0	7,887	0	0	0	0	0	0	0
Operation	Average	None	None	Apr-20	0	24,031	0	982	0	0	0	0	0	0	0
Operation	Average	None	None	May-20	64,426	0	0	135,163	1	0	0	0	0	0	0
Operation	Average	None	None	Jun-20	19,138	0	0	174,354	1	0	0	0	0	0	0
Operation	Average	None	None	Jul-20	16,407	0	0	174,675	1	0	0	0	0	0	0
Operation	Average	None	None	Aug-20	0	2,868	0	174,877	1	0	0	0	0	0	0
Operation	Average	None	None	Sep-20	0	4,571	0	176,456	1	0	0	0	0	0	0

Hydroclimatic Scenario	1				Ann Gulch Heap Leach Facility (Part 2)											
	Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Excess Heap Pond to Events Pond	Make-up Water Requirements for HLF System (from Event Pond)	Raw Make-Up Water Required for Barren Tank (from GW Well)	Net Events Pond Volume		Excess from HLF to Detox	HLF Cover Evapo-transpiration	HLF Cover Runoff	HLF Cover Infiltration	Estimated Draindown Volume (Total 613,000 m <sup>3</sup> )	Net Precip. + Draindown Volume (to Detox, MWTP)
						m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% full/mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Operation	Average	None	None	Oct-20	0	18,685	0	176,466	1	0	0	0	0	0	0	
Operation	Average	None	None	Nov-20	0	34,883	0	149,560	1	0	0	0	0	0	0	
Operation	Average	None	None	Dec-20	0	34,883	0	112,546	1	0	0	0	0	0	0	
Closure & Reclamation (au recovery)	Average	None	None	Jan-21	0	0	0	111,555	1	0	0	0	0	0	0	
Closure & Reclamation (au recovery)	Average	None	None	Feb-21	0	0	0	110,615	1	0	0	0	0	0	0	
Closure & Reclamation (au recovery)	Average	None	None	Mar-21	0	0	0	109,532	1	0	0	0	0	0	0	
Closure & Reclamation (au recovery)	Average	None	None	Apr-21	0	0	0	123,721	1	0	0	0	0	0	0	
Closure & Reclamation (au recovery)	Average	None	None	May-21	0	27,211	0	178,121	1	0	0	0	0	0	0	
Closure & Reclamation (au recovery)	Average	None	None	Jun-21	0	47,019	0	174,354	1	0	0	0	0	0	0	
Closure & Reclamation (au recovery)	Average	None	None	Jul-21	0	50,142	0	174,675	1	0	0	0	0	0	0	
Closure & Reclamation (au recovery)	Average	None	None	Aug-21	0	38,585	0	174,877	1	0	0	0	0	0	0	
Closure & Reclamation (au recovery)	Average	None	None	Sep-21	0	23,290	0	176,456	1	0	0	0	0	0	0	
Closure & Reclamation (au recovery)	Average	None	None	Oct-21	0	0	0	176,466	1	0	0	0	0	0	0	
Closure & Reclamation (au recovery)	Average	None	None	Nov-21	0	0	0	175,000	1	0	0	0	0	0	0	
Closure & Reclamation (au recovery)	Average	None	None	Dec-21	0	0	0	174,162	1	0	0	0	0	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-22	0	0	0	173,171	1	0	0	0	0	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-22	0	0	0	172,231	1	0	0	0	0	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-22	0	0	0	171,149	1	0	0	0	0	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-22	0	0	0	175,982	1	0	0	0	0	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	May-22	0	27,211	0	178,121	1	0	0	0	0	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Jun-22	0	47,019	0	174,354	1	0	0	0	0	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Jul-22	0	50,142	0	174,675	1	0	0	0	0	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Aug-22	0	38,585	0	174,877	1	0	0	0	0	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Sep-22	0	23,290	0	176,456	1	0	0	0	0	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Oct-22	0	0	0	176,466	1	0	0	0	0	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Nov-22	0	0	0	175,000	1	0	0	0	0	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Dec-22	0	0	0	174,162	1	0	0	0	0	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-23	0	0	0	173,171	1	0	0	0	0	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-23	0	0	0	172,231	1	0	0	0	0	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-23	0	0	0	175,000	1	0	0	0	0	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-23	0	0	0	175,982	1	0	0	0	0	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	May-23	0	27,211	0	178,121	1	0	0	0	0	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Jun-23	0	47,019	0	174,354	1	0	0	0	0	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Jul-23	0	50,142	0	174,675	1	0	0	0	0	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Aug-23	0	38,585	0	174,877	1	0	0	0	0	0	0	
Closure & Reclamation (hlf rinse)	Average	None	None	Sep-23	0	23,290	0	176,456	1	0	0	0	0	0	0	

Hydroclimatic Scenario	1				Ann Gulch Heap Leach Facility (Part 2)										
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Excess Heap Pond to Events Pond	Make-up Water Requirements for HLF System (from Event Pond)	Raw Make-Up Water Required for Barren Tank (from GW Well)	Net Events Pond Volume		Excess from HLF to Detox	HLF Cover Evapo-transpiration	HLF Cover Runoff	HLF Cover Infiltration	Estimated Draindown Volume (Total 613,000 m <sup>3</sup> )	Net Precip. + Draindown Volume(to Detox,MWTP)
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% full/mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Closure & Reclamation (hlf rinse)	Average	None	None	Oct-23	0	0	0	176,466	1	0	0	0	0	0	0
Closure & Reclamation (hlf rinse)	Average	None	None	Nov-23	0	0	0	175,000	1	0	0	0	0	0	0
Closure & Reclamation (hlf rinse)	Average	None	None	Dec-23	0	0	0	174,162	1	0	0	0	0	0	0
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-24	0	0	0	173,171	1	0	0	0	0	0	0
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-24	0	0	0	172,193	1	0	0	0	0	0	0
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-24	0	0	0	169,713	1	0	0	0	0	0	0
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-24	0	0	0	168,295	1	0	0	0	0	0	0
Closure & Reclamation (hlf rinse)	Average	None	None	May-24	0	12,703	0	155,251	1	0	0	0	0	0	0
Closure & Reclamation (hlf rinse)	Average	None	None	Jun-24	0	28,767	0	120,317	1	120,963	0	0	0	0	0
Closure & Reclamation (draindown)	Average	None	None	Jul-24	0	0	0	0	0	269,409	32,732	39,838	9,960	259,450	269,409
Closure & Reclamation (draindown)	Average	None	None	Aug-24	0	0	0	0	0	136,952	24,077	28,909	7,227	129,725	136,952
Closure & Reclamation (draindown)	Average	None	None	Sep-24	0	0	0	0	0	71,258	14,866	29,574	7,394	63,865	71,258
Closure & Reclamation (draindown)	Average	None	None	Oct-24	0	0	0	0	0	35,581	0	14,596	3,649	31,932	35,581
Closure & Reclamation (draindown)	Average	None	None	Nov-24	0	0	0	0	0	15,966	0	0	0	15,966	15,966
Closure & Reclamation (draindown)	Average	None	None	Dec-24	0	0	0	0	0	7,983	0	0	0	7,983	7,983
Closure & Reclamation (draindown)	Average	None	None	Jan-25	0	0	0	0	0	6,386	0	0	0	6,386	6,386
Closure & Reclamation (draindown)	Average	None	None	Feb-25	0	0	0	0	0	4,790	0	0	0	4,790	4,790
Closure & Reclamation (draindown)	Average	None	None	Mar-25	0	0	0	0	0	4,568	0	0	0	4,568	4,568
Closure & Reclamation (draindown)	Average	None	None	Apr-25	0	0	0	0	0	6,791	0	9,779	2,445	4,346	6,791
Closure & Reclamation (draindown)	Average	None	None	May-25	0	0	0	0	0	25,533	12,703	85,633	21,408	4,125	25,533
Closure & Reclamation (draindown)	Average	None	None	Jun-25	0	0	0	0	0	14,922	28,767	44,076	11,019	3,903	14,922
Closure & Reclamation (draindown)	Average	None	None	Jul-25	0	0	0	0	0	13,641	32,732	39,838	9,960	3,681	13,641
Closure & Reclamation (draindown)	Average	None	None	Aug-25	0	0	0	0	0	10,687	24,077	28,909	7,227	3,459	10,687
Closure & Reclamation (draindown)	Average	None	None	Sep-25	0	0	0	0	0	10,631	14,866	29,574	7,394	3,238	10,631
Closure & Reclamation (draindown)	Average	None	None	Oct-25	0	0	0	0	0	6,665	0	14,596	3,649	3,016	6,665
Closure & Reclamation (draindown)	Average	None	None	Nov-25	0	0	0	0	0	2,794	0	0	0	2,794	2,794
Closure & Reclamation (draindown)	Average	None	None	Dec-25	0	0	0	0	0	2,628	0	0	0	2,628	2,628
Closure & Reclamation (draindown)	Average	None	None	Jan-26	0	0	0	0	0	2,461	0	0	0	2,461	2,461
Closure & Reclamation (draindown)	Average	None	None	Feb-26	0	0	0	0	0	2,295	0	0	0	2,295	2,295
Closure & Reclamation (draindown)	Average	None	None	Mar-26	0	0	0	0	0	2,129	0	0	0	2,129	2,129
Closure & Reclamation (draindown)	Average	None	None	Apr-26	0	0	0	0	0	4,407	0	9,779	2,445	1,963	4,407
Closure & Reclamation (draindown)	Average	None	None	May-26	0	0	0	0	0	23,204	12,703	85,633	21,408	1,796	23,204
Closure & Reclamation (draindown)	Average	None	None	Jun-26	0	0	0	0	0	12,765	28,767	44,076	11,019	1,746	12,765
Closure & Reclamation (draindown)	Average	None	None	Jul-26	0	0	0	0	0	11,656	32,732	39,838	9,960	1,696	11,656
Closure & Reclamation (draindown)	Average	None	None	Aug-26	0	0	0	0	0	8,874	24,077	28,909	7,227	1,647	8,874
Closure & Reclamation (draindown)	Average	None	None	Sep-26	0	0	0	0	0	8,990	14,866	29,574	7,394	1,597	8,990

Hydroclimatic Scenario	1				Ann Gulch Heap Leach Facility (Part 2)										
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Excess Heap Pond to Events Pond	Make-up Water Requirements for HLF System (from Event Pond)	Raw Make-Up Water Required for Barren Tank (from GW Well)	Net Events Pond Volume		Excess from HLF to Detox	HLF Cover Evapo-transpiration	HLF Cover Runoff	HLF Cover Infiltration	Estimated Draindown Volume (Total 613,000 m <sup>3</sup> )	Net Precip. + Draindown Volume(to Detox,MWTP)
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% full/mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Closure & Reclamation (draindown)	Average	None	None	Oct-26	0	0	0	0	0	5,196	0	14,596	3,649	1,547	5,196
Closure & Reclamation (draindown)	Average	None	None	Nov-26	0	0	0	0	0	1,497	0	0	0	1,497	1,497
Closure & Reclamation (draindown)	Average	None	None	Dec-26	0	0	0	0	0	1,447	0	0	0	1,447	1,447
Closure & Reclamation (draindown)	Average	None	None	Jan-27	0	0	0	0	0	1,397	0	0	0	1,397	1,397
Closure & Reclamation (draindown)	Average	None	None	Feb-27	0	0	0	0	0	1,347	0	0	0	1,347	1,347
Closure & Reclamation (draindown)	Average	None	None	Mar-27	0	0	0	0	0	1,297	0	0	0	1,297	1,297
Closure & Reclamation (draindown)	Average	None	None	Apr-27	0	0	0	0	0	3,692	0	9,779	2,445	1,247	3,692
Closure & Reclamation (draindown)	Average	None	None	May-27	0	0	0	0	0	22,606	12,703	85,633	21,408	1,197	22,606
Closure & Reclamation (draindown)	Average	None	None	Jun-27	0	0	0	0	0	12,193	28,767	44,076	11,019	1,174	12,193
Closure & Reclamation (draindown)	Average	None	None	Jul-27	0	0	0	0	0	11,111	32,732	39,838	9,960	1,151	11,111
Closure & Reclamation (draindown)	Average	None	None	Aug-27	0	0	0	0	0	8,356	24,077	28,909	7,227	1,128	8,356
Closure & Reclamation (draindown)	Average	None	None	Sep-27	0	0	0	0	0	8,499	14,866	29,574	7,394	1,105	8,499
Closure & Reclamation (draindown)	Average	None	None	Oct-27	0	0	0	0	0	4,731	0	14,596	3,649	1,082	4,731
Closure & Reclamation (draindown)	Average	None	None	Nov-27	0	0	0	0	0	1,059	0	0	0	1,059	1,059
Closure & Reclamation (draindown)	Average	None	None	Dec-27	0	0	0	0	0	1,036	0	0	0	1,036	1,036
Closure & Reclamation (draindown)	Average	None	None	Jan-28	0	0	0	0	0	1,013	0	0	0	1,013	1,013
Closure & Reclamation (draindown)	Average	None	None	Feb-28	0	0	0	0	0	990	0	0	0	990	990
Closure & Reclamation (draindown)	Average	None	None	Mar-28	0	0	0	0	0	967	0	0	0	967	967
Closure & Reclamation (draindown)	Average	None	None	Apr-28	0	0	0	0	0	3,389	0	9,779	2,445	944	3,389
Closure & Reclamation (draindown)	Average	None	None	May-28	0	0	0	0	0	22,329	12,703	85,633	21,408	921	22,329
Closure & Reclamation (draindown)	Average	None	None	Jun-28	0	0	0	0	0	11,917	28,767	44,076	11,019	898	11,917
Closure & Reclamation (draindown)	Average	None	None	Jul-28	0	0	0	0	0	10,833	32,732	39,838	9,960	873	10,833
Closure & Reclamation (draindown)	Average	None	None	Aug-28	0	0	0	0	0	8,076	24,077	28,909	7,227	848	8,076
Closure & Reclamation (draindown)	Average	None	None	Sep-28	0	0	0	0	0	8,217	14,866	29,574	7,394	823	8,217
Closure & Reclamation (draindown)	Average	None	None	Oct-28	0	0	0	0	0	4,447	0	14,596	3,649	798	4,447
Closure & Reclamation (draindown)	Average	None	None	Nov-28	0	0	0	0	0	773	0	0	0	773	773
Closure & Reclamation (draindown)	Average	None	None	Dec-28	0	0	0	0	0	748	0	0	0	748	748
Closure & Reclamation (draindown)	Average	None	None	Jan-29	0	0	0	0	0	723	0	0	0	723	723
Closure & Reclamation (draindown)	Average	None	None	Feb-29	0	0	0	0	0	699	0	0	0	699	699
Closure & Reclamation (draindown)	Average	None	None	Mar-29	0	0	0	0	0	674	0	0	0	674	674
Closure & Reclamation (draindown)	Average	None	None	Apr-29	0	0	0	0	0	3,093	0	9,779	2,445	649	3,093
Closure & Reclamation (draindown)	Average	None	None	May-29	0	0	0	0	0	22,032	12,703	85,633	21,408	624	22,032
Closure & Reclamation (draindown)	Average	None	None	Jun-29	0	0	0	0	0	11,618	28,767	44,076	11,019	599	11,618
Closure & Reclamation (draindown)	Average	None	None	Jul-29	0	0	0	0	0	10,550	32,732	39,838	9,960	590	10,550
Closure & Reclamation (draindown)	Average	None	None	Aug-29	0	0	0	0	0	7,809	24,077	28,909	7,227	582	7,809
Closure & Reclamation (draindown)	Average	None	None	Sep-29	0	0	0	0	0	7,967	14,866	29,574	7,394	574	7,967

Hydroclimatic Scenario	1				Ann Gulch Heap Leach Facility (Part 2)										
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Excess Heap Pond to Events Pond	Make-up Water Requirements for HLF System (from Event Pond)	Raw Make-Up Water Required for Barren Tank (from GW Well)	Net Events Pond Volume		Excess from HLF to Detox	HLF Cover Evapo-transpiration	HLF Cover Runoff	HLF Cover Infiltration	Estimated Draindown Volume (Total 613,000 m <sup>3</sup> )	Net Precip. + Draindown Volume(to Detox,MWTP)
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% full/mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Closure & Reclamation (draindown)	Average	None	None	Oct-29	0	0	0	0	0	4,215	0	14,596	3,649	565	4,215
Closure & Reclamation (draindown)	Average	None	None	Nov-29	0	0	0	0	0	557	0	0	0	557	557
Closure & Reclamation (draindown)	Average	None	None	Dec-29	0	0	0	0	0	549	0	0	0	549	549
Closure & Reclamation (draindown)	Average	None	None	Jan-30	0	0	0	0	0	541	0	0	0	541	541
Closure & Reclamation (draindown)	Average	None	None	Feb-30	0	0	0	0	0	532	0	0	0	532	532
Closure & Reclamation (draindown)	Average	None	None	Mar-30	0	0	0	0	0	524	0	0	0	524	524
Closure & Reclamation (draindown)	Average	None	None	Apr-30	0	0	0	0	0	2,960	0	9,779	2,445	516	2,960
Closure & Reclamation (draindown)	Average	None	None	May-30	0	0	0	0	0	21,916	12,703	85,633	21,408	507	21,916
Closure & Reclamation (draindown)	Average	None	None	Jun-30	0	0	0	0	0	11,518	28,767	44,076	11,019	499	11,518
Closure & Reclamation (draindown)	Average	None	None	Jul-30	0	0	0	0	0	10,426	32,732	39,838	9,960	467	10,426
Closure & Reclamation (draindown)	Average	None	None	Aug-30	0	0	0	0	0	7,601	24,077	28,909	7,227	373	7,601
Closure & Reclamation (draindown)	Average	None	None	Sep-30	0	0	0	0	0	7,674	14,866	29,574	7,394	280	7,674
Closure & Reclamation (draindown)	Average	None	None	Oct-30	0	0	0	0	0	3,859	0	14,596	3,649	210	3,859
Closure & Reclamation (draindown)	Average	None	None	Nov-30	0	0	0	0	0	163	0	0	0	163	163
Closure & Reclamation (draindown)	Average	None	None	Dec-30	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Jan-31	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Feb-31	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Mar-31	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Apr-31	0	0	0	0	0	2,445	0	9,779	2,445	0	2,445
Post-closure Monitoring	Average	None	None	May-31	0	0	0	0	0	21,408	12,703	85,633	21,408	0	21,408
Post-closure Monitoring	Average	None	None	Jun-31	0	0	0	0	0	11,019	28,767	44,076	11,019	0	11,019
Post-closure Monitoring	Average	None	None	Jul-31	0	0	0	0	0	9,960	32,732	39,838	9,960	0	9,960
Post-closure Monitoring	Average	None	None	Aug-31	0	0	0	0	0	7,227	24,077	28,909	7,227	0	7,227
Post-closure Monitoring	Average	None	None	Sep-31	0	0	0	0	0	7,394	14,866	29,574	7,394	0	7,394
Post-closure Monitoring	Average	None	None	Oct-31	0	0	0	0	0	3,649	0	14,596	3,649	0	3,649
Post-closure Monitoring	Average	None	None	Nov-31	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Dec-31	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Jan-32	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Feb-32	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Mar-32	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Apr-32	0	0	0	0	0	2,445	0	9,779	2,445	0	2,445
Post-closure Monitoring	Average	None	None	May-32	0	0	0	0	0	21,408	12,703	85,633	21,408	0	21,408
Post-closure Monitoring	Average	None	None	Jun-32	0	0	0	0	0	11,019	28,767	44,076	11,019	0	11,019
Post-closure Monitoring	Average	None	None	Jul-32	0	0	0	0	0	9,960	32,732	39,838	9,960	0	9,960
Post-closure Monitoring	Average	None	None	Aug-32	0	0	0	0	0	7,227	24,077	28,909	7,227	0	7,227
Post-closure Monitoring	Average	None	None	Sep-32	0	0	0	0	0	7,394	14,866	29,574	7,394	0	7,394

Hydroclimatic Scenario	1				Ann Gulch Heap Leach Facility (Part 2)										
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Excess Heap Pond to Events Pond	Make-up Water Requirements for HLF System (from Event Pond)	Raw Make-Up Water Required for Barren Tank (from GW Well)	Net Events Pond Volume		Excess from HLF to Detox	HLF Cover Evapo-transpiration	HLF Cover Runoff	HLF Cover Infiltration	Estimated Draindown Volume (Total 613,000 m <sup>3</sup> )	Net Precip. + Draindown Volume (to Detox, MWTP)
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% full/mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Post-closure Monitoring	Average	None	None	Oct-32	0	0	0	0	0	3,649	0	14,596	3,649	0	3,649
Post-closure Monitoring	Average	None	None	Nov-32	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Dec-32	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Jan-33	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Feb-33	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Mar-33	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Apr-33	0	0	0	0	0	2,445	0	9,779	2,445	0	2,445
Post-closure Monitoring	Average	None	None	May-33	0	0	0	0	0	21,408	12,703	85,633	21,408	0	21,408
Post-closure Monitoring	Average	None	None	Jun-33	0	0	0	0	0	11,019	28,767	44,076	11,019	0	11,019
Post-closure Monitoring	Average	None	None	Jul-33	0	0	0	0	0	9,960	32,732	39,838	9,960	0	9,960
Post-closure Monitoring	Average	None	None	Aug-33	0	0	0	0	0	7,227	24,077	28,909	7,227	0	7,227
Post-closure Monitoring	Average	None	None	Sep-33	0	0	0	0	0	7,394	14,866	29,574	7,394	0	7,394
Post-closure Monitoring	Average	None	None	Oct-33	0	0	0	0	0	3,649	0	14,596	3,649	0	3,649
Post-closure Monitoring	Average	None	None	Nov-33	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Dec-33	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Jan-34	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Feb-34	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Mar-34	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Apr-34	0	0	0	0	0	2,445	0	9,779	2,445	0	2,445
Post-closure Monitoring	Average	None	None	May-34	0	0	0	0	0	21,408	12,703	85,633	21,408	0	21,408
Post-closure Monitoring	Average	None	None	Jun-34	0	0	0	0	0	11,019	28,767	44,076	11,019	0	11,019
Post-closure Monitoring	Average	None	None	Jul-34	0	0	0	0	0	9,960	32,732	39,838	9,960	0	9,960
Post-closure Monitoring	Average	None	None	Aug-34	0	0	0	0	0	7,227	24,077	28,909	7,227	0	7,227
Post-closure Monitoring	Average	None	None	Sep-34	0	0	0	0	0	7,394	14,866	29,574	7,394	0	7,394
Post-closure Monitoring	Average	None	None	Oct-34	0	0	0	0	0	3,649	0	14,596	3,649	0	3,649
Post-closure Monitoring	Average	None	None	Nov-34	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Dec-34	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Average	None	None	Jan-35	0	0	0	0	0	0	0	0	0	0	0



**Table C4-2: Ann Gulch Heap Leach Facility – Scenario 2 Model Results – Selected Years (Part 1)**

Hydroclimatic Scenario		2			Ann Gulch Heap Leach Facility (Part 1)												
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain +Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>in</sub> )	Ann Gulch Runoff - East (Non-Contact)	Ann Gulch Runoff - West (Non-Contact)	Undisturbed Basin (GW <sub>out</sub> ) Sub-Liner Drains	HLF Net Precipitation	Moisture from Crushing	Irrigation to Heap	Total Moisture Losses (Emitter Evap.+Idle Heap Evap.+Ore Adsorption)	Total Moisture Inputs	Net Flow to Heap Pond	Volume to Recovery (ADR)
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Construction	Wet	None	None	Oct-12	33,243	0	29,257	399	3,588	0	0	0	0	0	0	0	0
Construction	Wet	None	None	Nov-12	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Wet	None	None	Dec-12	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Wet	None	None	Jan-13	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Wet	None	None	Feb-13	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Wet	None	None	Mar-13	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Wet	None	None	Apr-13	15,526	0	15,373	15	138	0	7,646	0	0	0	0	0	0
Construction	Wet	None	None	May-13	148,456	19,880	121,182	739	6,654	60,591	73,113	0	0	0	0	0	0
Construction	Wet	None	None	Jun-13	92,267	39,963	49,879	243	2,183	24,940	45,441	0	0	0	0	0	0
Construction	Wet	None	None	Jul-13	87,792	45,036	34,694	806	7,255	17,347	43,236	0	0	0	0	0	0
Construction	Wet	None	None	Aug-13	64,135	33,092	28,610	243	2,190	14,305	31,586	0	0	0	0	0	0
Operation	Wet	None	None	Sep-13	50,249	16,422	32,335	149	1,343	16,167	33,055	16,320	855,360	37,424	867,311	867,311	856,453
Operation	Wet	None	None	Oct-19	7,792	0	6,858	374	561	3,429	26,788	36,400	1,450,800	71,283	1,442,705	1,442,705	1,442,705
Operation	Wet	None	None	Nov-19	0	0	0	0	0	0	0	36,400	1,404,000	71,283	1,369,117	1,369,117	1,369,117
Operation	Wet	None	None	Dec-19	0	0	0	0	0	0	0	36,400	1,450,800	71,283	1,415,917	1,415,917	1,415,917
Operation	Wet	None	None	Jan-20	0	0	0	0	0	0	0	36,400	1,450,800	71,283	1,415,917	1,415,917	1,415,917
Operation	Wet	None	None	Feb-20	0	0	0	0	0	0	0	36,400	1,357,200	71,283	1,322,317	1,322,317	1,322,317
Operation	Wet	None	None	Mar-20	0	0	0	0	0	0	0	36,400	1,450,800	63,700	1,423,500	1,423,500	1,423,500
Operation	Wet	None	None	Apr-20	5,468	0	5,414	22	32	2,707	18,740	36,400	1,404,000	71,283	1,387,856	1,387,856	1,387,856
Operation	Wet	None	None	May-20	52,032	6,560	42,881	1,037	1,555	21,440	178,723	36,400	1,450,800	81,027	1,584,896	1,584,896	1,426,821
Operation	Wet	None	None	Jun-20	31,528	12,904	17,795	331	497	8,898	109,587	36,400	1,404,000	95,035	1,454,952	1,454,952	1,389,297
Operation	Wet	None	None	Jul-20	29,766	14,590	12,443	1,093	1,640	6,221	103,843	36,400	1,450,800	96,856	1,494,187	1,494,187	1,436,868
Operation	Wet	None	None	Aug-20	21,751	10,798	10,128	330	495	5,064	75,873	36,400	1,450,800	95,415	1,467,657	1,467,657	1,440,620
Operation	Wet	None	None	Sep-20	359	111	237	4	6	119	86,577	36,400	1,404,000	88,128	1,438,849	1,438,849	1,413,712
Closure & Reclamation (draindown)	Wet	None	None	Jul-24	549	268	231	20	30	115	132,657	0	0	0	132,657	278,244	0
Closure & Reclamation (draindown)	Wet	None	None	Aug-24	401	199	188	6	9	94	96,926	0	0	0	96,926	143,403	0
Closure & Reclamation (draindown)	Wet	None	None	Sep-24	360	111	239	4	6	119	86,577	0	0	0	86,577	77,979	0

Hydroclimatic Scenario		2			Ann Gulch Heap Leach Facility (Part 1)												
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain +Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Ann Gulch Runoff - East (Non-Contact)	Ann Gulch Runoff - West (Non-Contact)	Undisturbed Basin (GW <sub>OUT</sub> ) Sub-Liner Drains	HLF Net Precipitation	Moisture from Crushing	Irrigation to Heap	Total Moisture Losses (Emitter Evap.+Idle Heap Evap.+Ore Adsorption)	Total Moisture Inputs	Net Flow to Heap Pond	Volume to Recovery (ADR)
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Closure & Reclamation (draindown)	Wet	None	None	Oct-24	144	0	127	7	10	63	34,221	0	0	0	34,221	38,777	0
Closure & Reclamation (draindown)	Wet	None	None	Nov-24	0	0	0	0	0	0	0	0	0	0	0	15,966	0
Closure & Reclamation (draindown)	Wet	None	None	Dec-24	0	0	0	0	0	0	0	0	0	0	0	7,983	0
Closure & Reclamation (draindown)	Wet	None	None	Jan-25	0	0	0	0	0	0	0	0	0	0	0	6,386	0
Closure & Reclamation (draindown)	Wet	None	None	Feb-25	0	0	0	0	0	0	0	0	0	0	0	4,790	0
Closure & Reclamation (draindown)	Wet	None	None	Mar-25	0	0	0	0	0	0	0	0	0	0	0	4,568	0
Closure & Reclamation (draindown)	Wet	None	None	Apr-25	101	0	100	0	1	50	23,939	0	0	0	23,939	9,134	0
Closure & Reclamation (draindown)	Wet	None	None	May-25	964	121	795	19	29	397	228,315	0	0	0	228,315	46,337	0
Closure & Reclamation (draindown)	Wet	None	None	Jun-25	582	237	330	6	9	165	139,995	0	0	0	139,995	25,048	0
Post-closure Monitoring	Wet	None	None	Oct-31	144	0	127	7	10	63	34,221	0	0	0	34,221	6,844	0
Post-closure Monitoring	Wet	None	None	Nov-31	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Wet	None	None	Dec-31	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Wet	None	None	Jan-32	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Wet	None	None	Feb-32	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Wet	None	None	Mar-32	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Wet	None	None	Apr-32	101	0	100	0	1	50	23,939	0	0	0	23,939	4,788	0
Post-closure Monitoring	Wet	None	None	May-32	964	121	795	19	29	397	228,315	0	0	0	228,315	42,213	0
Post-closure Monitoring	Wet	None	None	Jun-32	582	237	330	6	9	165	139,995	0	0	0	139,995	21,145	0
Post-closure Monitoring	Wet	None	None	Jul-32	549	268	231	20	30	115	132,657	0	0	0	132,657	18,794	0
Post-closure Monitoring	Wet	None	None	Aug-32	401	199	188	6	9	94	96,926	0	0	0	96,926	13,678	0
Post-closure Monitoring	Wet	None	None	Sep-32	360	111	239	4	6	119	86,577	0	0	0	86,577	14,115	0

**Table C4-2: Ann Gulch Heap Leach Facility – Scenario 2 Model Results – Selected Years (Part 2)**

Hydroclimatic Scenario	2				Ann Gulch Heap Leach Facility (Part 2)										
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Excess Heap Pond to Events Pond	Make-up Water Requirements for HLF System (from Event Pond)	Raw Make-Up Water Required for Barren Tank (from GW Well)	Net Events Pond Volume		Excess from HLF to Detox	HLF Cover Evapo-transpiration	HLF Cover Runoff	HLF Cover Infiltration	Estimated Draindown Volume (Total 613,000 m <sup>3</sup> )	Net Precip. + Draindown Volume (to Detox, MWTP)
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% full/mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Construction	Wet	None	None	Oct-12	0	0	0	0	0	0	0	0	0	0	0
Construction	Wet	None	None	Nov-12	0	0	0	0	0	0	0	0	0	0	0
Construction	Wet	None	None	Dec-12	0	0	0	0	0	0	0	0	0	0	0
Construction	Wet	None	None	Jan-13	0	0	0	0	0	0	0	0	0	0	0
Construction	Wet	None	None	Feb-13	0	0	0	0	0	0	0	0	0	0	0
Construction	Wet	None	None	Mar-13	0	0	0	0	0	0	0	0	0	0	0
Construction	Wet	None	None	Apr-13	0	0	0	5,706	0	0	0	0	0	0	0
Construction	Wet	None	None	May-13	0	0	0	19,655	0	0	0	0	0	0	0
Construction	Wet	None	None	Jun-13	0	0	0	56,991	0	0	0	0	0	0	0
Construction	Wet	None	None	Jul-13	0	0	0	112,057	1	0	0	0	0	0	0
Construction	Wet	None	None	Aug-13	0	0	0	150,939	1	0	0	0	0	0	0
Operation	Wet	None	None	Sep-13	10,859	0	0	178,587	1	0	0	0	0	0	0
Operation	Wet	None	None	Oct-19	0	4,501	0	177,749	1	0	0	0	0	0	0
Operation	Wet	None	None	Nov-19	0	34,883	0	163,323	1	0	0	0	0	0	0
Operation	Wet	None	None	Dec-19	0	34,883	0	126,502	1	0	0	0	0	0	0
Operation	Wet	None	None	Jan-20	0	34,883	0	89,466	1	0	0	0	0	0	0
Operation	Wet	None	None	Feb-20	0	34,883	0	52,463	0	0	0	0	0	0	0
Operation	Wet	None	None	Mar-20	0	27,300	0	22,820	0	0	0	0	0	0	0
Operation	Wet	None	None	Apr-20	0	13,630	0	36,623	0	0	0	0	0	0	0
Operation	Wet	None	None	May-20	158,075	0	0	186,844	1	0	0	0	0	0	0
Operation	Wet	None	None	Jun-20	65,655	0	0	178,864	1	0	0	0	0	0	0
Operation	Wet	None	None	Jul-20	57,319	0	0	178,702	1	0	0	0	0	0	0
Operation	Wet	None	None	Aug-20	27,037	0	0	177,827	1	0	0	0	0	0	0
Operation	Wet	None	None	Sep-20	25,137	0	0	179,248	1	0	0	0	0	0	0
Closure & Reclamation (draindown)	Wet	None	None	Jul-24	0	0	0	0	0	278,244	38,688	75,175	18,794	259,450	278,244
Closure & Reclamation (draindown)	Wet	None	None	Aug-24	0	0	0	0	0	143,403	28,535	54,712	13,678	129,725	143,403
Closure & Reclamation (draindown)	Wet	None	None	Sep-24	0	0	0	0	0	77,979	16,004	56,458	14,115	63,865	77,979

Hydroclimatic Scenario		2			Ann Gulch Heap Leach Facility (Part 2)										
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Excess Heap Pond to Events Pond	Make-up Water Requirements for HLF System (from Event Pond)	Raw Make-Up Water Required for Barren Tank (from GW Well)	Net Events Pond Volume		Excess from HLF to Detox	HLF Cover Evapo-transpiration	HLF Cover Runoff	HLF Cover Infiltration	Estimated Draindown Volume (Total 613,000 m <sup>3</sup> )	Net Precip. + Draindown Volume (to Detox, MWTP)
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% full/mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Closure & Reclamation (draindown)	Wet	None	None	Oct-24	0	0	0	0	0	38,777	0	27,377	6,844	31,932	38,777
Closure & Reclamation (draindown)	Wet	None	None	Nov-24	0	0	0	0	0	15,966	0	0	0	15,966	15,966
Closure & Reclamation (draindown)	Wet	None	None	Dec-24	0	0	0	0	0	7,983	0	0	0	7,983	7,983
Closure & Reclamation (draindown)	Wet	None	None	Jan-25	0	0	0	0	0	6,386	0	0	0	6,386	6,386
Closure & Reclamation (draindown)	Wet	None	None	Feb-25	0	0	0	0	0	4,790	0	0	0	4,790	4,790
Closure & Reclamation (draindown)	Wet	None	None	Mar-25	0	0	0	0	0	4,568	0	0	0	4,568	4,568
Closure & Reclamation (draindown)	Wet	None	None	Apr-25	0	0	0	0	0	9,134	0	19,151	4,788	4,346	9,134
Closure & Reclamation (draindown)	Wet	None	None	May-25	0	0	0	0	0	46,337	17,250	168,852	42,213	4,125	46,337
Closure & Reclamation (draindown)	Wet	None	None	Jun-25	0	0	0	0	0	25,048	34,271	84,579	21,145	3,903	25,048
Post-closure Monitoring	Wet	None	None	Oct-31	0	0	0	0	0	6,844	0	27,377	6,844	0	6,844
Post-closure Monitoring	Wet	None	None	Nov-31	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Wet	None	None	Dec-31	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Wet	None	None	Jan-32	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Wet	None	None	Feb-32	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Wet	None	None	Mar-32	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Wet	None	None	Apr-32	0	0	0	0	0	4,788	0	19,151	4,788	0	4,788
Post-closure Monitoring	Wet	None	None	May-32	0	0	0	0	0	42,213	17,250	168,852	42,213	0	42,213
Post-closure Monitoring	Wet	None	None	Jun-32	0	0	0	0	0	21,145	34,271	84,579	21,145	0	21,145
Post-closure Monitoring	Wet	None	None	Jul-32	0	0	0	0	0	18,794	38,688	75,175	18,794	0	18,794
Post-closure Monitoring	Wet	None	None	Aug-32	0	0	0	0	0	13,678	28,535	54,712	13,678	0	13,678
Post-closure Monitoring	Wet	None	None	Sep-32	0	0	0	0	0	14,115	16,004	56,458	14,115	0	14,115

**Table C4-3: Ann Gulch Heap Leach Facility – Scenario 3 Model Results – Selected Years (Part 1)**

Hydroclimatic Scenario		3			Ann Gulch Heap Leach Facility (Part 1)												
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain +Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>in</sub> )	Ann Gulch Runoff - East (Non-Contact)	Ann Gulch Runoff - West (Non-Contact)	Undisturbed Basin (GW <sub>out</sub> ) Sub-Liner Drains	HLF Net Precipitation	Moisture from Crushing	Irrigation to Heap	Total Moisture Losses (Emitter Evap.+Idle Heap Evap.+Ore Adsorption)	Total Moisture Inputs	Net Flow to Heap Pond	Volume to Recovery (ADR)
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Construction	Dry	None	None	Oct-12	6,919	0	6,518	40	361	0	0	0	0	0	0	0	0
Construction	Dry	None	None	Nov-12	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Dry	None	None	Dec-12	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Dry	None	None	Jan-13	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Dry	None	None	Feb-13	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Dry	None	None	Mar-13	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction	Dry	None	None	Apr-13	3,094	0	3,094	0	0	0	1,524	0	0	0	0	0	0
Construction	Dry	None	None	May-13	30,405	6,342	22,664	140	1,259	11,332	14,974	0	0	0	0	0	0
Construction	Dry	None	None	Jun-13	21,598	17,121	4,043	43	391	2,021	10,637	0	0	0	0	0	0
Construction	Dry	None	None	Jul-13	21,332	19,761	1,187	38	345	594	10,506	0	0	0	0	0	0
Construction	Dry	None	None	Aug-13	15,562	14,452	781	33	296	391	7,664	0	0	0	0	0	0
Operation	Dry	None	None	Sep-13	11,757	10,002	1,661	9	85	830	8,205	14,620	855,360	35,591	842,594	842,594	687,897
Operation	Dry	None	None	Oct-19	1,559	0	1,469	36	54	734	5,459	32,608	1,450,800	67,492	1,421,375	1,421,375	1,421,375
Operation	Dry	None	None	Nov-19	0	0	0	0	0	0	0	32,608	1,404,000	67,492	1,369,117	1,369,117	1,369,117
Operation	Dry	None	None	Dec-19	0	0	0	0	0	0	0	32,608	1,450,800	67,492	1,415,917	1,415,917	1,415,917
Operation	Dry	None	None	Jan-20	0	0	0	0	0	0	0	32,608	1,450,800	67,492	1,415,917	1,415,917	1,415,917
Operation	Dry	None	None	Feb-20	0	0	0	0	0	0	0	32,608	1,357,200	67,492	1,322,317	1,322,317	1,322,317
Operation	Dry	None	None	Mar-20	0	0	0	0	0	0	0	32,608	1,450,800	59,908	1,423,500	1,423,500	1,423,500
Operation	Dry	None	None	Apr-20	1,048	0	1,048	0	0	524	3,657	32,608	1,404,000	67,492	1,372,774	1,372,774	1,372,774
Operation	Dry	None	None	May-20	10,239	2,081	7,687	188	283	3,844	35,826	32,608	1,450,800	70,140	1,449,094	1,449,094	1,445,993
Operation	Dry	None	None	Jun-20	7,082	5,560	1,379	57	85	690	25,090	32,608	1,404,000	79,456	1,382,243	1,382,243	1,382,243
Operation	Dry	None	None	Jul-20	6,947	6,417	406	50	75	203	24,692	32,608	1,450,800	79,981	1,428,119	1,428,119	1,428,119
Operation	Dry	None	None	Aug-20	5,069	4,700	262	43	64	131	18,015	32,608	1,450,800	81,917	1,419,507	1,419,507	1,419,507
Operation	Dry	None	None	Sep-20	81	68	12	0	0	6	19,811	32,608	1,404,000	78,119	1,378,300	1,378,300	1,378,300
Closure & Reclamation (draindown)	Dry	None	None	Jul-24	128	118	7	1	1	4	31,543	0	0	0	31,543	262,360	0
Closure & Reclamation (draindown)	Dry	None	None	Aug-24	93	86	5	1	1	2	23,014	0	0	0	23,014	131,840	0
Closure & Reclamation (draindown)	Dry	None	None	Sep-24	81	68	12	0	0	6	19,811	0	0	0	19,811	65,869	0

Hydroclimatic Scenario		3			Ann Gulch Heap Leach Facility (Part 1)												
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Undisturbed Basin Net Precipitation (Rain +Snowmelt)	Undisturbed Basin Evapo-transpiration	Undisturbed Basin Recharge (GW <sub>IN</sub> )	Ann Gulch Runoff - East (Non-Contact)	Ann Gulch Runoff - West (Non-Contact)	Undisturbed Basin (GW <sub>OUT</sub> ) Sub-Liner Drains	HLF Net Precipitation	Moisture from Crushing	Irrigation to Heap	Total Moisture Losses (Emitter Evap.+Idle Heap Evap.+Ore Adsorption)	Total Moisture Inputs	Net Flow to Heap Pond	Volume to Recovery (ADR)
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Closure & Reclamation (draindown)	Dry	None	None	Oct-24	29	0	27	1	1	14	6,973	0	0	0	6,973	33,327	0
Closure & Reclamation (draindown)	Dry	None	None	Nov-24	0	0	0	0	0	0	0	0	0	0	0	15,966	0
Closure & Reclamation (draindown)	Dry	None	None	Dec-24	0	0	0	0	0	0	0	0	0	0	0	7,983	0
Closure & Reclamation (draindown)	Dry	None	None	Jan-25	0	0	0	0	0	0	0	0	0	0	0	6,386	0
Closure & Reclamation (draindown)	Dry	None	None	Feb-25	0	0	0	0	0	0	0	0	0	0	0	4,790	0
Closure & Reclamation (draindown)	Dry	None	None	Mar-25	0	0	0	0	0	0	0	0	0	0	0	4,568	0
Closure & Reclamation (draindown)	Dry	None	None	Apr-25	19	0	19	0	0	10	4,672	0	0	0	4,672	5,281	0
Closure & Reclamation (draindown)	Dry	None	None	May-25	189	38	142	3	5	71	45,767	0	0	0	45,767	12,181	0
Closure & Reclamation (draindown)	Dry	None	None	Jun-25	130	102	25	1	2	13	32,052	0	0	0	32,052	7,369	0
Post-closure Monitoring	Dry	None	None	Oct-31	29	0	27	1	1	14	6,973	0	0	0	6,973	1,395	0
Post-closure Monitoring	Dry	None	None	Nov-31	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Dry	None	None	Dec-31	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Dry	None	None	Jan-32	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Dry	None	None	Feb-32	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Dry	None	None	Mar-32	0	0	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Dry	None	None	Apr-32	19	0	19	0	0	10	4,672	0	0	0	4,672	934	0
Post-closure Monitoring	Dry	None	None	May-32	189	38	142	3	5	71	45,767	0	0	0	45,767	8,056	0
Post-closure Monitoring	Dry	None	None	Jun-32	130	102	25	1	2	13	32,052	0	0	0	32,052	3,466	0
Post-closure Monitoring	Dry	None	None	Jul-32	128	118	7	1	1	4	31,543	0	0	0	31,543	2,910	0
Post-closure Monitoring	Dry	None	None	Aug-32	93	86	5	1	1	2	23,014	0	0	0	23,014	2,115	0
Post-closure Monitoring	Dry	None	None	Sep-32	81	68	12	0	0	6	19,811	0	0	0	19,811	2,005	0

**Table C4-3: Ann Gulch Heap Leach Facility – Scenario 3 Model Results – Selected Years (Part 2)**

Hydroclimatic Scenario	3				Ann Gulch Heap Leach Facility (Part 2)										
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Excess Heap Pond to Events Pond	Make-up Water Requirements for HLF System (from Event Pond)	Raw Make-Up Water Required for Barren Tank (from GW Well)	Net Events Pond Volume		Excess from HLF to Detox	HLF Cover Evapo-transpiration	HLF Cover Runoff	HLF Cover Infiltration	Estimated Draindown Volume (Total 613,000 m <sup>3</sup> )	Net Precip. + Draindown Volume (to Detox, MWTP)
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% full/mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Construction	Dry	None	None	Oct-12	0	0	0	0	0	0	0	0	0	0	0
Construction	Dry	None	None	Nov-12	0	0	0	0	0	0	0	0	0	0	0
Construction	Dry	None	None	Dec-12	0	0	0	0	0	0	0	0	0	0	0
Construction	Dry	None	None	Jan-13	0	0	0	0	0	0	0	0	0	0	0
Construction	Dry	None	None	Feb-13	0	0	0	0	0	0	0	0	0	0	0
Construction	Dry	None	None	Mar-13	0	0	0	0	0	0	0	0	0	0	0
Construction	Dry	None	None	Apr-13	0	0	0	4,111	0	0	0	0	0	0	0
Construction	Dry	None	None	May-13	0	0	0	4,394	0	0	0	0	0	0	0
Construction	Dry	None	None	Jun-13	0	0	0	20,949	0	0	0	0	0	0	0
Construction	Dry	None	None	Jul-13	0	0	0	39,193	0	0	0	0	0	0	0
Construction	Dry	None	None	Aug-13	0	0	0	58,834	0	0	0	0	0	0	0
Operation	Dry	None	None	Sep-13	0	13,037	0	57,967	0	0	0	0	0	0	0
Operation	Dry	None	None	Oct-19	0	28,692	0	157,090	1	0	0	0	0	0	0
Operation	Dry	None	None	Nov-19	0	34,883	0	120,106	1	0	0	0	0	0	0
Operation	Dry	None	None	Dec-19	0	34,883	0	83,039	0	0	0	0	0	0	0
Operation	Dry	None	None	Jan-20	0	34,883	0	45,817	0	0	0	0	0	0	0
Operation	Dry	None	None	Feb-20	0	34,883	0	8,729	0	0	0	0	0	0	0
Operation	Dry	None	None	Mar-20	0	27,300	0	0	0	0	0	0	0	0	0
Operation	Dry	None	None	Apr-20	0	30,736	0	375	0	0	0	0	0	0	0
Operation	Dry	None	None	May-20	3,101	0	0	32,991	0	0	0	0	0	0	0
Operation	Dry	None	None	Jun-20	0	18,391	0	47,175	0	0	0	0	0	0	0
Operation	Dry	None	None	Jul-20	0	19,369	0	44,852	0	0	0	0	0	0	0
Operation	Dry	None	None	Aug-20	0	28,876	0	36,574	0	0	0	0	0	0	0
Operation	Dry	None	None	Sep-20	0	27,922	0	22,853	0	0	0	0	0	0	0
Closure & Reclamation (draindown)	Dry	None	None	Jul-24	0	0	0	0	0	262,360	16,993	11,640	2,910	259,450	262,360
Closure & Reclamation (draindown)	Dry	None	None	Aug-24	0	0	0	0	0	131,840	12,438	8,461	2,115	129,725	131,840
Closure & Reclamation (draindown)	Dry	None	None	Sep-24	0	0	0	0	0	65,869	9,787	8,020	2,005	63,865	65,869

Hydroclimatic Scenario		3			Ann Gulch Heap Leach Facility (Part 2)										
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Excess Heap Pond to Events Pond	Make-up Water Requirements for HLF System (from Event Pond)	Raw Make-Up Water Required for Barren Tank (from GW Well)	Net Events Pond Volume		Excess from HLF to Detox	HLF Cover Evapo-transpiration	HLF Cover Runoff	HLF Cover Infiltration	Estimated Draindown Volume (Total 613,000 m <sup>3</sup> )	Net Precip. + Draindown Volume (to Detox, MWTP)
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% full/mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Closure & Reclamation (draindown)	Dry	None	None	Oct-24	0	0	0	0	0	33,327	0	5,579	1,395	31,932	33,327
Closure & Reclamation (draindown)	Dry	None	None	Nov-24	0	0	0	0	0	15,966	0	0	0	15,966	15,966
Closure & Reclamation (draindown)	Dry	None	None	Dec-24	0	0	0	0	0	7,983	0	0	0	7,983	7,983
Closure & Reclamation (draindown)	Dry	None	None	Jan-25	0	0	0	0	0	6,386	0	0	0	6,386	6,386
Closure & Reclamation (draindown)	Dry	None	None	Feb-25	0	0	0	0	0	4,790	0	0	0	4,790	4,790
Closure & Reclamation (draindown)	Dry	None	None	Mar-25	0	0	0	0	0	4,568	0	0	0	4,568	4,568
Closure & Reclamation (draindown)	Dry	None	None	Apr-25	0	0	0	0	0	5,281	0	3,737	934	4,346	5,281
Closure & Reclamation (draindown)	Dry	None	None	May-25	0	0	0	0	0	12,181	5,484	32,226	8,056	4,125	12,181
Closure & Reclamation (draindown))	Dry	None	None	Jun-25	0	0	0	0	0	7,369	14,724	13,863	3,466	3,903	7,369
Post-closure Monitoring	Dry	None	None	Oct-31	0	0	0	0	0	1,395	0	5,579	1,395	0	1,395
Post-closure Monitoring	Dry	None	None	Nov-31	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Dry	None	None	Dec-31	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Dry	None	None	Jan-32	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Dry	None	None	Feb-32	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Dry	None	None	Mar-32	0	0	0	0	0	0	0	0	0	0	0
Post-closure Monitoring	Dry	None	None	Apr-32	0	0	0	0	0	934	0	3,737	934	0	934
Post-closure Monitoring	Dry	None	None	May-32	0	0	0	0	0	8,056	5,484	32,226	8,056	0	8,056
Post-closure Monitoring	Dry	None	None	Jun-32	0	0	0	0	0	3,466	14,724	13,863	3,466	0	3,466
Post-closure Monitoring	Dry	None	None	Jul-32	0	0	0	0	0	2,910	16,993	11,640	2,910	0	2,910
Post-closure Monitoring	Dry	None	None	Aug-32	0	0	0	0	0	2,115	12,438	8,461	2,115	0	2,115
Post-closure Monitoring	Dry	None	None	Sep-32	0	0	0	0	0	2,005	9,787	8,020	2,005	0	2,005



**Table C5-1: Mine Water Treatment Plant – Scenario 1 Model Results**

Hydroclimatic Scenario	1				Mine Water Treatment Plant										
	Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Mine Water Feed Pond Inputs	Mine Water Feed Pond Inputs	Mine Water Feed Pond Inputs	Make-up Water to Heap Leach System	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond
						m <sup>3</sup> /mth	m <sup>3</sup> /day	%full/day	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /hour	L/s	m <sup>3</sup> /mth	m <sup>3</sup> /day	% full/day
Existing Conditions	Average	None	None	Oct-11	0	0	0%	0	0	0	0	0	0	0	0%
Existing Conditions	Average	None	None	Nov-11	0	0	0%	0	0	0	0	0	0	0	0%
Existing Conditions	Average	None	None	Dec-11	0	0	0%	0	0	0	0	0	0	0	0%
Construction	Average	None	None	Jan-12	0	0	0%	0	0	0	0	0	0	0	0%
Construction	Average	None	None	Feb-12	0	0	0%	0	0	0	0	0	0	0	0%
Construction	Average	None	None	Mar-12	0	0	0%	0	0	0	0	0	0	0	0%
Construction	Average	None	None	Apr-12	0	0	0%	0	0	0	0	0	0	0	0%
Construction	Average	None	None	May-12	0	0	0%	0	0	0	0	0	0	0	0%
Construction	Average	None	None	Jun-12	0	0	0%	0	0	0	0	0	0	0	0%
Construction	Average	None	None	Jul-12	0	0	0%	0	0	0	0	0	0	0	0%
Construction	Average	None	None	Aug-12	0	0	0%	0	0	0	0	0	0	0	0%
Construction	Average	None	None	Sep-12	0	0	0%	0	0	0	0	0	0	0	0%
Construction	Average	None	None	Oct-12	0	0	0%	0	0	0	0	0	0	0	0%
Construction	Average	None	None	Nov-12	0	0	0%	0	0	0	0	0	0	0	0%
Construction	Average	None	None	Dec-12	0	0	0%	0	0	0	0	0	0	0	0%
Construction	Average	None	None	Jan-13	0	0	0%	0	0	0	0	0	0	0	0%
Construction	Average	None	None	Feb-13	0	0	0%	0	0	0	0	0	0	0	0%
Construction	Average	None	None	Mar-13	0	0	0%	0	0	0	0	0	0	0	0%
Construction	Average	None	None	Apr-13	3,784	126	1%	0	0	0	0	0	0	0	0%
Construction	Average	None	None	May-13	4,053	131	1%	0	0	0	0	0	0	0	0%
Construction	Average	None	None	Jun-13	27,334	911	7%	0	0	0	0	0	0	0	0%
Construction	Average	None	None	Jul-13	30,069	970	7%	0	0	0	0	0	0	0	0%
Construction	Average	None	None	Aug-13	25,222	814	6%	0	0	0	0	0	0	0	0%
Operation	Average	None	None	Sep-13	26,719	891	7%	4,152	0	0	0	0	0	0	0%
Operation	Average	None	None	Oct-13	23,098	745	6%	13,794	0	0	0	0	0	0	0%
Operation	Average	None	None	Nov-13	7,753	258	2%	21,720	0	0	0	0	0	0	0%
Operation	Average	None	None	Dec-13	3,368	109	1%	27,397	0	0	0	0	0	0	0%
Operation	Average	None	None	Jan-14	2,786	90	1%	27,397	0	0	0	0	0	0	0%
Operation	Average	None	None	Feb-14	2,348	84	1%	27,157	0	0	0	0	0	0	0%
Operation	Average	None	None	Mar-14	2,443	79	1%	21,980	0	0	0	0	0	0	0%
Operation	Average	None	None	Apr-14	5,252	175	1%	20,496	0	0	0	0	0	0	0%
Operation	Average	None	None	May-14	41,548	1,340	10%	2,480	0	0	0	0	0	0	0%
Operation	Average	None	None	Jun-14	40,675	1,356	10%	2,400	0	0	0	0	0	0	0%
Operation	Average	None	None	Jul-14	39,065	1,260	9%	2,480	0	0	0	0	0	0	0%
Operation	Average	None	None	Aug-14	34,566	1,115	8%	7,505	0	0	0	0	0	0	0%
Operation	Average	None	None	Sep-14	34,758	1,159	9%	5,574	0	0	0	0	0	0	0%

Hydroclimatic Scenario	1				Mine Water Treatment Plant										
	Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Mine Water Feed Pond Inputs	Mine Water Feed Pond Inputs	Mine Water Feed Pond Inputs	Make-up Water to Heap Leach System	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond
						m <sup>3</sup> /mth	m <sup>3</sup> /day	%full/day	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /hour	L/s	m <sup>3</sup> /mth	m <sup>3</sup> /day	% full/day
Operation	Average	None	None	Oct-14	33,790	1,090	8%	26,449	2,652	4	1	2,652	86	1%	
Operation	Average	None	None	Nov-14	12,880	429	3%	37,283	0	0	0	0	0	0%	
Operation	Average	None	None	Dec-14	8,946	289	2%	37,363	0	0	0	0	0	0%	
Operation	Average	None	None	Jan-15	8,430	272	2%	37,363	0	0	0	0	0	0%	
Operation	Average	None	None	Feb-15	7,466	267	2%	37,123	0	0	0	0	0	0%	
Operation	Average	None	None	Mar-15	8,127	262	2%	29,780	0	0	0	0	0	0%	
Operation	Average	None	None	Apr-15	10,744	358	3%	29,276	0	0	0	0	0	0%	
Operation	Average	None	None	May-15	48,354	1,560	12%	2,480	0	0	0	0	0	0%	
Operation	Average	None	None	Jun-15	47,491	1,583	12%	2,514	0	0	0	0	0	0%	
Operation	Average	None	None	Jul-15	48,955	1,579	12%	2,621	0	0	0	0	0	0%	
Operation	Average	None	None	Aug-15	44,926	1,449	11%	16,650	13,864	19	5	13,864	447	3%	
Operation	Average	None	None	Sep-15	41,803	1,393	10%	8,733	33,070	46	13	33,070	1,102	8%	
Operation	Average	None	None	Oct-15	30,909	997	7%	24,538	6,371	9	2	6,371	206	2%	
Operation	Average	None	None	Nov-15	1,927	64	0%	37,283	0	0	0	0	0	0%	
Operation	Average	None	None	Dec-15	1,342	43	0%	37,363	0	0	0	0	0	0%	
Operation	Average	None	None	Jan-16	985	32	0%	37,363	0	0	0	0	0	0%	
Operation	Average	None	None	Feb-16	804	28	0%	37,203	0	0	0	0	0	0%	
Operation	Average	None	None	Mar-16	775	25	0%	29,780	0	0	0	0	0	0%	
Operation	Average	None	None	Apr-16	8,530	284	2%	27,979	0	0	0	0	0	0%	
Operation	Average	None	None	May-16	78,423	2,530	19%	2,480	0	0	0	0	0	0%	
Operation	Average	None	None	Jun-16	40,846	1,362	10%	2,400	0	0	0	0	0	0%	
Operation	Average	None	None	Jul-16	58,382	1,883	14%	2,480	0	0	0	0	0	0%	
Operation	Average	None	None	Aug-16	53,664	1,731	13%	10,719	38,236	51	14	38,236	1,233	9%	
Operation	Average	None	None	Sep-16	52,338	1,745	13%	3,464	48,873	68	19	48,873	1,629	12%	
Operation	Average	None	None	Oct-16	30,684	990	7%	22,896	7,788	10	3	7,788	251	2%	
Operation	Average	None	None	Nov-16	19,362	645	5%	37,283	0	0	0	0	0	0%	
Operation	Average	None	None	Dec-16	12,470	402	3%	37,363	0	0	0	0	0	0%	
Operation	Average	None	None	Jan-17	12,165	392	3%	37,363	0	0	0	0	0	0%	
Operation	Average	None	None	Feb-17	10,899	389	3%	37,123	0	0	0	0	0	0%	
Operation	Average	None	None	Mar-17	11,985	387	3%	29,780	0	0	0	0	0	0%	
Operation	Average	None	None	Apr-17	19,288	643	5%	26,883	0	0	0	0	0	0%	
Operation	Average	None	None	May-17	94,300	3,042	23%	2,480	0	0	0	0	0	0%	
Operation	Average	None	None	Jun-17	76,107	2,537	19%	2,400	45,899	64	18	45,899	1,530	11%	
Operation	Average	None	None	Jul-17	70,759	2,283	17%	2,480	68,279	92	25	68,279	2,203	16%	
Operation	Average	None	None	Aug-17	66,518	2,146	16%	5,211	61,307	82	23	61,307	1,978	15%	
Operation	Average	None	None	Sep-17	72,045	2,401	18%	2,400	69,645	97	27	69,645	2,321	17%	

Hydroclimatic Scenario		1			Mine Water Treatment Plant									
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Mine Water Feed Pond Inputs	Mine Water Feed Pond Inputs	Mine Water Feed Pond Inputs	Make-up Water to Heap Leach System	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond
					m <sup>3</sup> /mth	m <sup>3</sup> /day	%full/day	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /hour	L/s	m <sup>3</sup> /mth	m <sup>3</sup> /day	% full/day
Operation	Average	None	None	Oct-17	28,824	930	7%	21,657	7,167	10	3	7,167	231	2%
Operation	Average	None	None	Nov-17	3,340	111	1%	37,283	0	0	0	0	0	0%
Operation	Average	None	None	Dec-17	1,452	47	0%	37,363	0	0	0	0	0	0%
Operation	Average	None	None	Jan-18	1,205	39	0%	37,363	0	0	0	0	0	0%
Operation	Average	None	None	Feb-18	1,017	36	0%	37,123	0	0	0	0	0	0%
Operation	Average	None	None	Mar-18	1,060	34	0%	29,780	0	0	0	0	0	0%
Operation	Average	None	None	Apr-18	14,417	481	4%	26,801	0	0	0	0	0	0%
Operation	Average	None	None	May-18	122,906	3,965	29%	2,480	0	0	0	0	0	0%
Operation	Average	None	None	Jun-18	64,329	2,144	16%	2,400	7,355	10	3	7,355	245	2%
Operation	Average	None	None	Jul-18	68,136	2,198	16%	2,480	65,656	88	25	65,656	2,118	16%
Operation	Average	None	None	Aug-18	60,254	1,944	14%	2,480	57,774	78	22	57,774	1,864	14%
Operation	Average	None	None	Sep-18	62,627	2,088	16%	2,400	60,227	84	23	60,227	2,008	15%
Operation	Average	None	None	Oct-18	39,248	1,266	9%	21,657	17,591	24	7	17,591	567	4%
Operation	Average	None	None	Nov-18	12,885	430	3%	37,283	0	0	0	0	0	0%
Operation	Average	None	None	Dec-18	11,371	367	3%	37,363	0	0	0	0	0	0%
Operation	Average	None	None	Jan-19	11,155	360	3%	37,363	0	0	0	0	0	0%
Operation	Average	None	None	Feb-19	10,014	358	3%	37,123	0	0	0	0	0	0%
Operation	Average	None	None	Mar-19	11,028	356	3%	29,780	0	0	0	0	0	0%
Operation	Average	None	None	Apr-19	24,628	821	6%	26,801	0	0	0	0	0	0%
Operation	Average	None	None	May-19	138,168	4,457	33%	2,480	11,056	15	4	11,056	357	3%
Operation	Average	None	None	Jun-19	78,507	2,617	19%	2,400	76,107	106	29	76,107	2,537	19%
Operation	Average	None	None	Jul-19	80,129	2,585	19%	2,480	77,649	104	29	77,649	2,505	19%
Operation	Average	None	None	Aug-19	72,609	2,342	17%	2,480	70,129	94	26	70,129	2,262	17%
Operation	Average	None	None	Sep-19	75,389	2,513	19%	2,400	72,989	101	28	72,989	2,433	18%
Operation	Average	None	None	Oct-19	28,159	908	7%	21,165	6,994	9	3	6,994	226	2%
Operation	Average	None	None	Nov-19	10,944	365	3%	37,283	0	0	0	0	0	0%
Operation	Average	None	None	Dec-19	419	14	0%	37,363	0	0	0	0	0	0%
Operation	Average	None	None	Jan-20	234	8	0%	37,363	0	0	0	0	0	0%
Operation	Average	None	None	Feb-20	158	5	0%	37,203	0	0	0	0	0	0%
Operation	Average	None	None	Mar-20	125	4	0%	29,780	0	0	0	0	0	0%
Operation	Average	None	None	Apr-20	14,162	472	4%	26,431	0	0	0	0	0	0%
Operation	Average	None	None	May-20	134,522	4,339	32%	2,480	0	0	0	0	0	0%
Operation	Average	None	None	Jun-20	99,048	3,302	25%	2,400	53,691	75	21	53,691	1,790	13%
Operation	Average	None	None	Jul-20	69,708	2,249	17%	2,480	67,228	90	25	67,228	2,169	16%
Operation	Average	None	None	Aug-20	62,511	2,016	15%	5,348	57,163	77	21	57,163	1,844	14%
Operation	Average	None	None	Sep-20	65,868	2,196	16%	6,971	58,897	82	23	58,897	1,963	15%

Hydroclimatic Scenario		1			Mine Water Treatment Plant									
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Mine Water Feed Pond Inputs	Mine Water Feed Pond Inputs	Mine Water Feed Pond Inputs	Make-up Water to Heap Leach System	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond
					m <sup>3</sup> /mth	m <sup>3</sup> /day	%full/day	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /hour	L/s	m <sup>3</sup> /mth	m <sup>3</sup> /day	% full/day
Operation	Average	None	None	Oct-20	41,752	1,347	10%	21,165	20,587	28	8	20,587	664	5%
Operation	Average	None	None	Nov-20	11,844	395	3%	37,283	0	0	0	0	0	0%
Operation	Average	None	None	Dec-20	349	11	0%	37,363	0	0	0	0	0	0%
Closure & Reclamation (au recovery)	Average	None	None	Jan-21	1,489	48	0%	2,480	0	0	0	0	0	0%
Closure & Reclamation (au recovery)	Average	None	None	Feb-21	1,300	46	0%	2,240	0	0	0	0	0	0%
Closure & Reclamation (au recovery)	Average	None	None	Mar-21	1,398	45	0%	2,480	0	0	0	0	0	0%
Closure & Reclamation (au recovery)	Average	None	None	Apr-21	15,606	520	4%	2,400	0	0	0	0	0	0%
Closure & Reclamation (au recovery)	Average	None	None	May-21	140,880	4,545	34%	29,691	58,928	79	22	58,928	1,901	14%
Closure & Reclamation (au recovery)	Average	None	None	Jun-21	124,382	4,146	31%	49,419	74,963	104	29	74,963	2,499	19%
Closure & Reclamation (au recovery)	Average	None	None	Jul-21	71,910	2,320	17%	52,622	19,288	26	7	19,288	622	5%
Closure & Reclamation (au recovery)	Average	None	None	Aug-21	65,003	2,097	16%	41,065	23,938	32	9	23,938	772	6%
Closure & Reclamation (au recovery)	Average	None	None	Sep-21	68,012	2,267	17%	25,690	42,321	59	16	42,321	1,411	10%
Closure & Reclamation (au recovery)	Average	None	None	Oct-21	54,745	1,766	13%	2,480	52,265	70	20	52,265	1,686	13%
Closure & Reclamation (au recovery)	Average	None	None	Nov-21	19,501	650	5%	2,400	17,101	24	7	17,101	570	4%
Closure & Reclamation (au recovery)	Average	None	None	Dec-21	1,642	53	0%	2,480	0	0	0	0	0	0%
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-22	1,489	48	0%	2,480	0	0	0	0	0	0%
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-22	1,300	46	0%	2,240	0	0	0	0	0	0%
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-22	1,398	45	0%	2,480	0	0	0	0	0	0%
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-22	15,606	520	4%	2,400	9,355	13	4	9,355	312	2%
Closure & Reclamation (hlf rinse)	Average	None	None	May-22	140,880	4,545	34%	29,691	111,190	149	42	111,190	3,587	27%
Closure & Reclamation (hlf rinse)	Average	None	None	Jun-22	124,382	4,146	31%	49,419	74,963	104	29	74,963	2,499	19%
Closure & Reclamation (hlf rinse)	Average	None	None	Jul-22	71,910	2,320	17%	52,622	19,288	26	7	19,288	622	5%
Closure & Reclamation (hlf rinse)	Average	None	None	Aug-22	65,003	2,097	16%	41,065	23,938	32	9	23,938	772	6%
Closure & Reclamation (hlf rinse)	Average	None	None	Sep-22	97,953	3,265	24%	25,690	72,262	100	28	72,262	2,409	18%
Closure & Reclamation (hlf rinse)	Average	None	None	Oct-22	49,986	1,612	12%	2,480	47,506	64	18	47,506	1,532	11%
Closure & Reclamation (hlf rinse)	Average	None	None	Nov-22	6,948	232	2%	2,400	4,548	6	2	4,548	152	1%
Closure & Reclamation (hlf rinse)	Average	None	None	Dec-22	1,642	53	0%	2,480	0	0	0	0	0	0%
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-23	1,489	48	0%	2,480	0	0	0	0	0	0%
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-23	1,300	46	0%	2,240	0	0	0	0	0	0%
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-23	1,398	45	0%	2,480	0	0	0	0	0	0%
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-23	25,275	842	6%	2,400	19,023	26	7	19,023	634	5%
Closure & Reclamation (hlf rinse)	Average	None	None	May-23	212,704	6,861	51%	29,691	183,013	246	68	183,013	5,904	44%
Closure & Reclamation (hlf rinse)	Average	None	None	Jun-23	135,444	4,515	34%	49,419	86,025	119	33	86,025	2,867	21%
Closure & Reclamation (hlf rinse)	Average	None	None	Jul-23	109,890	3,545	26%	52,622	57,268	77	21	57,268	1,847	14%
Closure & Reclamation (hlf rinse)	Average	None	None	Aug-23	88,267	2,847	21%	41,065	47,202	63	18	47,202	1,523	11%
Closure & Reclamation (hlf rinse)	Average	None	None	Sep-23	90,213	3,007	22%	25,690	64,523	90	25	64,523	2,151	16%

Hydroclimatic Scenario	1				Mine Water Treatment Plant										
	Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Mine Water Feed Pond Inputs	Mine Water Feed Pond Inputs	Mine Water Feed Pond Inputs	Make-up Water to Heap Leach System	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond
						m <sup>3</sup> /mth	m <sup>3</sup> /day	%full/day	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /hour	L/s	m <sup>3</sup> /mth	m <sup>3</sup> /day	% full/day
Closure & Reclamation (hlf rinse)	Average	None	None	Oct-23	49,986	1,612	12%	2,480	47,506	64	18	47,506	1,532	11%	
Closure & Reclamation (hlf rinse)	Average	None	None	Nov-23	6,948	232	2%	2,400	4,548	6	2	4,548	152	1%	
Closure & Reclamation (hlf rinse)	Average	None	None	Dec-23	1,642	53	0%	2,480	0	0	0	0	0	0%	
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-24	1,489	48	0%	2,480	0	0	0	0	0	0%	
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-24	1,342	46	0%	2,320	0	0	0	0	0	0%	
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-24	1,398	45	0%	2,480	1,398	2	1	1,398	45	0%	
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-24	25,275	842	6%	2,400	25,275	35	10	25,275	842	6%	
Closure & Reclamation (hlf rinse)	Average	None	None	May-24	212,704	6,861	51%	15,183	212,704	286	79	212,704	6,861	51%	
Closure & Reclamation (hlf rinse)	Average	None	None	Jun-24	135,444	4,515	34%	31,167	256,407	356	99	256,407	8,547	64%	
Closure & Reclamation (draindown)	Average	None	None	Jul-24	379,299	12,235	91%	0	379,299	510	142	379,299	12,235	91%	
Closure & Reclamation (draindown)	Average	None	None	Aug-24	225,220	7,265	54%	0	225,220	303	84	225,220	7,265	54%	
Closure & Reclamation (draindown)	Average	None	None	Sep-24	161,471	5,382	40%	0	161,471	224	62	161,471	5,382	40%	
Closure & Reclamation (draindown)	Average	None	None	Oct-24	85,567	2,760	21%	0	85,567	115	32	85,567	2,760	21%	
Closure & Reclamation (draindown)	Average	None	None	Nov-24	22,914	764	6%	0	22,914	32	9	22,914	764	6%	
Closure & Reclamation (draindown)	Average	None	None	Dec-24	9,626	311	2%	0	9,626	13	4	9,626	311	2%	
Closure & Reclamation (draindown)	Average	None	None	Jan-25	7,875	254	2%	0	7,875	11	3	7,875	254	2%	
Closure & Reclamation (draindown)	Average	None	None	Feb-25	6,090	217	2%	0	6,090	9	3	6,090	217	2%	
Closure & Reclamation (draindown)	Average	None	None	Mar-25	5,966	192	1%	0	5,966	8	2	5,966	192	1%	
Closure & Reclamation (draindown)	Average	None	None	Apr-25	32,066	1,069	8%	0	32,066	45	12	32,066	1,069	8%	
Closure & Reclamation (draindown)	Average	None	None	May-25	238,237	7,685	57%	0	238,237	320	89	238,237	7,685	57%	
Closure & Reclamation (draindown)	Average	None	None	Jun-25	150,366	5,012	37%	0	150,366	209	58	150,366	5,012	37%	
Closure & Reclamation (draindown)	Average	None	None	Jul-25	123,530	3,985	30%	0	123,530	166	46	123,530	3,985	30%	
Closure & Reclamation (draindown)	Average	None	None	Aug-25	98,954	3,192	24%	0	98,954	133	37	98,954	3,192	24%	
Closure & Reclamation (draindown)	Average	None	None	Sep-25	100,844	3,361	25%	0	100,844	140	39	100,844	3,361	25%	
Closure & Reclamation (draindown)	Average	None	None	Oct-25	48,446	1,563	12%	0	48,446	65	18	48,446	1,563	12%	
Closure & Reclamation (draindown)	Average	None	None	Nov-25	8,241	275	2%	0	8,241	11	3	8,241	275	2%	
Closure & Reclamation (draindown)	Average	None	None	Dec-25	4,270	138	1%	0	4,270	6	2	4,270	138	1%	
Closure & Reclamation (draindown)	Average	None	None	Jan-26	3,950	127	1%	0	3,950	5	1	3,950	127	1%	
Closure & Reclamation (draindown)	Average	None	None	Feb-26	3,595	128	1%	0	3,595	5	1	3,595	128	1%	
Closure & Reclamation (draindown)	Average	None	None	Mar-26	3,527	114	1%	0	3,527	5	1	3,527	114	1%	
Closure & Reclamation (draindown)	Average	None	None	Apr-26	25,627	854	6%	0	25,627	36	10	25,627	854	6%	
Closure & Reclamation (draindown)	Average	None	None	May-26	202,276	6,525	49%	0	202,276	272	76	202,276	6,525	49%	
Closure & Reclamation (draindown)	Average	None	None	Jun-26	128,345	4,278	32%	0	128,345	178	50	128,345	4,278	32%	
Closure & Reclamation (draindown)	Average	None	None	Jul-26	109,658	3,537	26%	0	109,658	147	41	109,658	3,537	26%	
Closure & Reclamation (draindown)	Average	None	None	Aug-26	88,540	2,856	21%	0	88,540	119	33	88,540	2,856	21%	
Closure & Reclamation (draindown)	Average	None	None	Sep-26	88,815	2,960	22%	0	88,815	123	34	88,815	2,960	22%	

Hydroclimatic Scenario	1				Mine Water Treatment Plant										
	Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Mine Water Feed Pond Inputs	Mine Water Feed Pond Inputs	Mine Water Feed Pond Inputs	Make-up Water to Heap Leach System	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond
						m <sup>3</sup> /mth	m <sup>3</sup> /day	%full/day	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /hour	L/s	m <sup>3</sup> /mth	m <sup>3</sup> /day	% full/day
Closure & Reclamation (draindown)	Average	None	None	Oct-26	21,440	692	5%	0	21,440	29	8	21,440	692	5%	
Closure & Reclamation (draindown)	Average	None	None	Nov-26	2,749	92	1%	0	2,749	4	1	2,749	92	1%	
Closure & Reclamation (draindown)	Average	None	None	Dec-26	2,740	88	1%	0	2,740	4	1	2,740	88	1%	
Closure & Reclamation (draindown)	Average	None	None	Jan-27	2,691	87	1%	0	2,691	4	1	2,691	87	1%	
Closure & Reclamation (draindown)	Average	None	None	Feb-27	2,515	90	1%	0	2,515	4	1	2,515	90	1%	
Closure & Reclamation (draindown)	Average	None	None	Mar-27	2,591	84	1%	0	2,591	3	1	2,591	84	1%	
Closure & Reclamation (draindown)	Average	None	None	Apr-27	15,022	501	4%	0	15,022	21	6	15,022	501	4%	
Closure & Reclamation (draindown)	Average	None	None	May-27	107,991	3,484	26%	0	107,991	145	40	107,991	3,484	26%	
Closure & Reclamation (draindown)	Average	None	None	Jun-27	12,193	406	3%	0	12,193	17	5	12,193	406	3%	
Closure & Reclamation (draindown)	Average	None	None	Jul-27	11,111	358	3%	0	11,111	15	4	11,111	358	3%	
Closure & Reclamation (draindown)	Average	None	None	Aug-27	8,356	270	2%	0	8,356	11	3	8,356	270	2%	
Closure & Reclamation (draindown)	Average	None	None	Sep-27	8,499	283	2%	0	8,499	12	3	8,499	283	2%	
Closure & Reclamation (draindown)	Average	None	None	Oct-27	4,731	153	1%	0	4,731	6	2	4,731	153	1%	
Closure & Reclamation (draindown)	Average	None	None	Nov-27	1,059	35	0%	0	1,059	1	0	1,059	35	0%	
Closure & Reclamation (draindown)	Average	None	None	Dec-27	1,036	33	0%	0	1,036	1	0	1,036	33	0%	
Closure & Reclamation (draindown)	Average	None	None	Jan-28	1,013	33	0%	0	1,013	1	0	1,013	33	0%	
Closure & Reclamation (draindown)	Average	None	None	Feb-28	990	34	0%	0	990	1	0	990	34	0%	
Closure & Reclamation (draindown)	Average	None	None	Mar-28	967	31	0%	0	967	1	0	967	31	0%	
Closure & Reclamation (draindown)	Average	None	None	Apr-28	3,389	113	1%	0	3,389	5	1	3,389	113	1%	
Closure & Reclamation (draindown)	Average	None	None	May-28	22,329	720	5%	0	22,329	30	8	22,329	720	5%	
Closure & Reclamation (draindown)	Average	None	None	Jun-28	11,917	397	3%	0	11,917	17	5	11,917	397	3%	
Closure & Reclamation (draindown)	Average	None	None	Jul-28	10,833	349	3%	0	10,833	15	4	10,833	349	3%	
Closure & Reclamation (draindown)	Average	None	None	Aug-28	8,076	261	2%	0	8,076	11	3	8,076	261	2%	
Closure & Reclamation (draindown)	Average	None	None	Sep-28	8,217	274	2%	0	8,217	11	3	8,217	274	2%	
Closure & Reclamation (draindown)	Average	None	None	Oct-28	4,447	143	1%	0	4,447	6	2	4,447	143	1%	
Closure & Reclamation (draindown)	Average	None	None	Nov-28	773	26	0%	0	773	1	0	773	26	0%	
Closure & Reclamation (draindown)	Average	None	None	Dec-28	748	24	0%	0	748	1	0	748	24	0%	
Closure & Reclamation (draindown)	Average	None	None	Jan-29	723	23	0%	0	723	1	0	723	23	0%	
Closure & Reclamation (draindown)	Average	None	None	Feb-29	699	25	0%	0	699	1	0	699	25	0%	
Closure & Reclamation (draindown)	Average	None	None	Mar-29	674	22	0%	0	674	1	0	674	22	0%	
Closure & Reclamation (draindown)	Average	None	None	Apr-29	3,093	103	1%	0	3,093	4	1	3,093	103	1%	
Closure & Reclamation (draindown)	Average	None	None	May-29	22,032	711	5%	0	22,032	30	8	22,032	711	5%	
Closure & Reclamation (draindown)	Average	None	None	Jun-29	11,618	387	3%	0	11,618	16	4	11,618	387	3%	
Closure & Reclamation (draindown)	Average	None	None	Jul-29	10,550	340	3%	0	10,550	14	4	10,550	340	3%	
Closure & Reclamation (draindown)	Average	None	None	Aug-29	7,809	252	2%	0	7,809	10	3	7,809	252	2%	
Closure & Reclamation (draindown)	Average	None	None	Sep-29	7,967	266	2%	0	7,967	11	3	7,967	266	2%	

Hydroclimatic Scenario	1				Mine Water Treatment Plant										
	Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Mine Water Feed Pond Inputs	Mine Water Feed Pond Inputs	Mine Water Feed Pond Inputs	Make-up Water to Heap Leach System	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond
						m <sup>3</sup> /mth	m <sup>3</sup> /day	%full/day	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /hour	L/s	m <sup>3</sup> /mth	m <sup>3</sup> /day	% full/day
Closure & Reclamation (draindown)	Average	None	None	Oct-29	4,215	136	1%	0	4,215	6	2	4,215	136	1%	
Closure & Reclamation (draindown)	Average	None	None	Nov-29	557	19	0%	0	557	1	0	557	19	0%	
Closure & Reclamation (draindown)	Average	None	None	Dec-29	549	18	0%	0	549	1	0	549	18	0%	
Closure & Reclamation (draindown)	Average	None	None	Jan-30	541	17	0%	0	541	1	0	541	17	0%	
Closure & Reclamation (draindown)	Average	None	None	Feb-30	532	19	0%	0	532	1	0	532	19	0%	
Closure & Reclamation (draindown)	Average	None	None	Mar-30	524	17	0%	0	524	1	0	524	17	0%	
Closure & Reclamation (draindown)	Average	None	None	Apr-30	2,960	99	1%	0	2,960	4	1	2,960	99	1%	
Closure & Reclamation (draindown)	Average	None	None	May-30	21,916	707	5%	0	21,916	29	8	21,916	707	5%	
Closure & Reclamation (draindown)	Average	None	None	Jun-30	11,518	384	3%	0	11,518	16	4	11,518	384	3%	
Closure & Reclamation (draindown)	Average	None	None	Jul-30	10,426	336	3%	0	10,426	14	4	10,426	336	3%	
Closure & Reclamation (draindown)	Average	None	None	Aug-30	7,601	245	2%	0	7,601	10	3	7,601	245	2%	
Closure & Reclamation (draindown)	Average	None	None	Sep-30	7,674	256	2%	0	7,674	11	3	7,674	256	2%	
Closure & Reclamation (draindown)	Average	None	None	Oct-30	3,859	124	1%	0	3,859	5	1	3,859	124	1%	
Closure & Reclamation (draindown)	Average	None	None	Nov-30	163	5	0%	0	163	0	0	163	5	0%	
Closure & Reclamation (draindown)	Average	None	None	Dec-30	0	0	0%	0	0	0	0	0	0	0%	
Post-closure Monitoring	Average	None	None	Jan-31	0	0	0%	0	0	0	0	0	0	0%	
Post-closure Monitoring	Average	None	None	Feb-31	0	0	0%	0	0	0	0	0	0	0%	
Post-closure Monitoring	Average	None	None	Mar-31	0	0	0%	0	0	0	0	0	0	0%	
Post-closure Monitoring	Average	None	None	Apr-31	2,445	81	1%	0	2,445	3	1	2,445	81	1%	
Post-closure Monitoring	Average	None	None	May-31	21,408	691	5%	0	21,408	29	8	21,408	691	5%	
Post-closure Monitoring	Average	None	None	Jun-31	11,019	367	3%	0	11,019	15	4	11,019	367	3%	
Post-closure Monitoring	Average	None	None	Jul-31	9,960	321	2%	0	9,960	13	4	9,960	321	2%	
Post-closure Monitoring	Average	None	None	Aug-31	7,227	233	2%	0	7,227	10	3	7,227	233	2%	
Post-closure Monitoring	Average	None	None	Sep-31	7,394	246	2%	0	7,394	10	3	7,394	246	2%	
Post-closure Monitoring	Average	None	None	Oct-31	3,649	118	1%	0	3,649	5	1	3,649	118	1%	
Post-closure Monitoring	Average	None	None	Nov-31	0	0	0%	0	0	0	0	0	0	0%	
Post-closure Monitoring	Average	None	None	Dec-31	0	0	0%	0	0	0	0	0	0	0%	
Post-closure Monitoring	Average	None	None	Jan-32	0	0	0%	0	0	0	0	0	0	0%	
Post-closure Monitoring	Average	None	None	Feb-32	0	0	0%	0	0	0	0	0	0	0%	
Post-closure Monitoring	Average	None	None	Mar-32	0	0	0%	0	0	0	0	0	0	0%	
Post-closure Monitoring	Average	None	None	Apr-32	2,445	81	1%	0	2,445	3	1	2,445	81	1%	
Post-closure Monitoring	Average	None	None	May-32	21,408	691	5%	0	21,408	29	8	21,408	691	5%	
Post-closure Monitoring	Average	None	None	Jun-32	11,019	367	3%	0	11,019	15	4	11,019	367	3%	
Post-closure Monitoring	Average	None	None	Jul-32	9,960	321	2%	0	9,960	13	4	9,960	321	2%	
Post-closure Monitoring	Average	None	None	Aug-32	7,227	233	2%	0	7,227	10	3	7,227	233	2%	
Post-closure Monitoring	Average	None	None	Sep-32	7,394	246	2%	0	7,394	10	3	7,394	246	2%	

Hydroclimatic Scenario	1				Mine Water Treatment Plant										
	Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Mine Water Feed Pond Inputs	Mine Water Feed Pond Inputs	Mine Water Feed Pond Inputs	Make-up Water to Heap Leach System	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond
						m <sup>3</sup> /mth	m <sup>3</sup> /day	%full/day	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /hour	L/s	m <sup>3</sup> /mth	m <sup>3</sup> /day	% full/day
Post-closure Monitoring	Average	None	None	Oct-32	3,649	118	1%	0	3,649	5	1	3,649	118	1%	
Post-closure Monitoring	Average	None	None	Nov-32	0	0	0%	0	0	0	0	0	0	0%	
Post-closure Monitoring	Average	None	None	Dec-32	0	0	0%	0	0	0	0	0	0	0%	
Post-closure Monitoring	Average	None	None	Jan-33	0	0	0%	0	0	0	0	0	0	0%	
Post-closure Monitoring	Average	None	None	Feb-33	0	0	0%	0	0	0	0	0	0	0%	
Post-closure Monitoring	Average	None	None	Mar-33	0	0	0%	0	0	0	0	0	0	0%	
Post-closure Monitoring	Average	None	None	Apr-33	2,445	81	1%	0	2,445	3	1	2,445	81	1%	
Post-closure Monitoring	Average	None	None	May-33	21,408	691	5%	0	21,408	29	8	21,408	691	5%	
Post-closure Monitoring	Average	None	None	Jun-33	11,019	367	3%	0	11,019	15	4	11,019	367	3%	
Post-closure Monitoring	Average	None	None	Jul-33	9,960	321	2%	0	9,960	13	4	9,960	321	2%	
Post-closure Monitoring	Average	None	None	Aug-33	7,227	233	2%	0	7,227	10	3	7,227	233	2%	
Post-closure Monitoring	Average	None	None	Sep-33	7,394	246	2%	0	7,394	10	3	7,394	246	2%	
Post-closure Monitoring	Average	None	None	Oct-33	3,649	118	1%	0	3,649	5	1	3,649	118	1%	
Post-closure Monitoring	Average	None	None	Nov-33	0	0	0%	0	0	0	0	0	0	0%	
Post-closure Monitoring	Average	None	None	Dec-33	0	0	0%	0	0	0	0	0	0	0%	
Post-closure Monitoring	Average	None	None	Jan-34	0	0	0%	0	0	0	0	0	0	0%	
Post-closure Monitoring	Average	None	None	Feb-34	0	0	0%	0	0	0	0	0	0	0%	
Post-closure Monitoring	Average	None	None	Mar-34	0	0	0%	0	0	0	0	0	0	0%	
Post-closure Monitoring	Average	None	None	Apr-34	2,445	81	1%	0	2,445	3	1	2,445	81	1%	
Post-closure Monitoring	Average	None	None	May-34	21,408	691	5%	0	21,408	29	8	21,408	691	5%	
Post-closure Monitoring	Average	None	None	Jun-34	11,019	367	3%	0	11,019	15	4	11,019	367	3%	
Post-closure Monitoring	Average	None	None	Jul-34	9,960	321	2%	0	9,960	13	4	9,960	321	2%	
Post-closure Monitoring	Average	None	None	Aug-34	7,227	233	2%	0	7,227	10	3	7,227	233	2%	
Post-closure Monitoring	Average	None	None	Sep-34	7,394	246	2%	0	7,394	10	3	7,394	246	2%	
Post-closure Monitoring	Average	None	None	Oct-34	3,649	118	1%	0	3,649	5	1	3,649	118	1%	
Post-closure Monitoring	Average	None	None	Nov-34	0	0	0%	0	0	0	0	0	0	0%	
Post-closure Monitoring	Average	None	None	Dec-34	0	0	0%	0	0	0	0	0	0	0%	
Post-closure Monitoring	Average	None	None	Jan-35	0	0	0%	0	0	0	0	0	0	0%	



**Table C5-2: Mine Water Treatment Plant – Scenario 2 Model Results – Selected Years**

Hydroclimatic Scenario	2				Mine Water Treatment Plant										
	Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Mine Water Feed Pond Inputs	Mine Water Feed Pond Inputs	Mine Water Feed Pond Inputs	Make-up Water to Heap Leach System	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond
						m <sup>3</sup> /mth	m <sup>3</sup> /day	%full/day	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /hour	L/s	m <sup>3</sup> /mth	m <sup>3</sup> /day	% full/day
Construction	Wet	None	None	Oct-12	0	0	0%	0	0	0	0	0	0	0	0%
Construction	Wet	None	None	Nov-12	0	0	0%	0	0	0	0	0	0	0	0%
Construction	Wet	None	None	Dec-12	0	0	0%	0	0	0	0	0	0	0	0%
Construction	Wet	None	None	Jan-13	0	0	0%	0	0	0	0	0	0	0	0%
Construction	Wet	None	None	Feb-13	0	0	0%	0	0	0	0	0	0	0	0%
Construction	Wet	None	None	Mar-13	0	0	0%	0	0	0	0	0	0	0	0%
Construction	Wet	None	None	Apr-13	3,852	128	1%	0	0	0	0	0	0	0	0%
Construction	Wet	None	None	May-13	4,680	151	1%	0	0	0	0	0	0	0	0%
Construction	Wet	None	None	Jun-13	44,944	1,498	11%	0	0	0	0	0	0	0	0%
Construction	Wet	None	None	Jul-13	55,165	1,780	13%	0	0	0	0	0	0	0	0%
Construction	Wet	None	None	Aug-13	39,679	1,280	10%	0	0	0	0	0	0	0	0%
Operation	Wet	None	None	Sep-13	45,607	1,520	11%	2,400	16,527	23	6	16,527	551	4%	
Operation	Wet	None	None	Oct-19	50,694	1,635	12%	6,981	43,713	59	16	43,713	1,410	10%	
Operation	Wet	None	None	Nov-19	25,607	854	6%	37,283	0	0	0	0	0	0	0%
Operation	Wet	None	None	Dec-19	542	17	0%	37,363	0	0	0	0	0	0	0%
Operation	Wet	None	None	Jan-20	327	11	0%	37,363	0	0	0	0	0	0	0%
Operation	Wet	None	None	Feb-20	201	7	0%	37,203	0	0	0	0	0	0	0%
Operation	Wet	None	None	Mar-20	137	4	0%	29,780	0	0	0	0	0	0	0%
Operation	Wet	None	None	Apr-20	27,909	930	7%	16,030	0	0	0	0	0	0	0%
Operation	Wet	None	None	May-20	283,792	9,155	68%	2,480	141,012	190	53	141,012	4,549	34%	
Operation	Wet	None	None	Jun-20	265,064	8,835	66%	2,400	262,664	365	101	262,664	8,755	65%	
Operation	Wet	None	None	Jul-20	181,787	5,864	44%	2,480	179,307	241	67	179,307	5,784	43%	
Operation	Wet	None	None	Aug-20	150,723	4,862	36%	2,480	148,243	199	55	148,243	4,782	36%	
Operation	Wet	None	None	Sep-20	143,057	4,769	35%	2,400	140,657	195	54	140,657	4,689	35%	
Closure & Reclamation (draindown)	Wet	None	None	Jul-24	481,605	15,536	116%	0	481,605	647	180	481,605	15,536	116%	
Closure & Reclamation (draindown)	Wet	None	None	Aug-24	311,232	10,040	75%	0	311,232	418	116	311,232	10,040	75%	
Closure & Reclamation (draindown)	Wet	None	None	Sep-24	245,303	8,177	61%	0	245,303	341	95	245,303	8,177	61%	

Hydroclimatic Scenario	2				Mine Water Treatment Plant										
	Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Mine Water Feed Pond Inputs	Mine Water Feed Pond Inputs	Mine Water Feed Pond Inputs	Make-up Water to Heap Leach System	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond
						m <sup>3</sup> /mth	m <sup>3</sup> /day	%full/day	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /hour	L/s	m <sup>3</sup> /mth	m <sup>3</sup> /day	% full/day
Closure & Reclamation (draindown)	Wet	None	None	Oct-24	131,344	4,237	32%	0	131,344	177	49	131,344	4,237	32%	
Closure & Reclamation (draindown)	Wet	None	None	Nov-24	27,564	919	7%	0	27,564	38	11	27,564	919	7%	
Closure & Reclamation (draindown)	Wet	None	None	Dec-24	9,728	314	2%	0	9,728	13	4	9,728	314	2%	
Closure & Reclamation (draindown)	Wet	None	None	Jan-25	7,953	257	2%	0	7,953	11	3	7,953	257	2%	
Closure & Reclamation (draindown)	Wet	None	None	Feb-25	6,125	219	2%	0	6,125	9	3	6,125	219	2%	
Closure & Reclamation (draindown)	Wet	None	None	Mar-25	5,976	193	1%	0	5,976	8	2	5,976	193	1%	
Closure & Reclamation (draindown)	Wet	None	None	Apr-25	57,447	1,915	14%	0	57,447	80	22	57,447	1,915	14%	
Closure & Reclamation (draindown)	Wet	None	None	May-25	473,170	15,264	113%	0	473,170	636	177	473,170	15,264	113%	
Closure & Reclamation (draindown)	Wet	None	None	Jun-25	293,760	9,792	73%	0	293,760	408	113	293,760	9,792	73%	
Post-closure Monitoring	Wet	None	None	Oct-31	6,844	221	2%	0	6,844	9	3	6,844	221	2%	
Post-closure Monitoring	Wet	None	None	Nov-31	0	0	0%	0	0	0	0	0	0	0%	
Post-closure Monitoring	Wet	None	None	Dec-31	0	0	0%	0	0	0	0	0	0	0%	
Post-closure Monitoring	Wet	None	None	Jan-32	0	0	0%	0	0	0	0	0	0	0%	
Post-closure Monitoring	Wet	None	None	Feb-32	0	0	0%	0	0	0	0	0	0	0%	
Post-closure Monitoring	Wet	None	None	Mar-32	0	0	0%	0	0	0	0	0	0	0%	
Post-closure Monitoring	Wet	None	None	Apr-32	4,788	160	1%	0	4,788	7	2	4,788	160	1%	
Post-closure Monitoring	Wet	None	None	May-32	42,213	1,362	10%	0	42,213	57	16	42,213	1,362	10%	
Post-closure Monitoring	Wet	None	None	Jun-32	21,145	705	5%	0	21,145	29	8	21,145	705	5%	
Post-closure Monitoring	Wet	None	None	Jul-32	18,794	606	5%	0	18,794	25	7	18,794	606	5%	
Post-closure Monitoring	Wet	None	None	Aug-32	13,678	441	3%	0	13,678	18	5	13,678	441	3%	
Post-closure Monitoring	Wet	None	None	Sep-32	14,115	470	3%	0	14,115	20	5	14,115	470	3%	

**Table C5-3: Mine Water Treatment Plant – Scenario 3 Model Results – Selected Years**

Hydroclimatic Scenario	3				Mine Water Treatment Plant										
	Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Mine Water Feed Pond Inputs	Mine Water Feed Pond Inputs	Mine Water Feed Pond Inputs	Make-up Water to Heap Leach System	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond
						m <sup>3</sup> /mth	m <sup>3</sup> /day	%full/day	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /hour	L/s	m <sup>3</sup> /mth	m <sup>3</sup> /day	% full/day
Construction	Dry	None	None	None	Oct-12	0	0	0%	0	0	0	0	0	0	0%
Construction	Dry	None	None	None	Nov-12	0	0	0%	0	0	0	0	0	0	0%
Construction	Dry	None	None	None	Dec-12	0	0	0%	0	0	0	0	0	0	0%
Construction	Dry	None	None	None	Jan-13	0	0	0%	0	0	0	0	0	0	0%
Construction	Dry	None	None	None	Feb-13	0	0	0%	0	0	0	0	0	0	0%
Construction	Dry	None	None	None	Mar-13	0	0	0%	0	0	0	0	0	0	0%
Construction	Dry	None	None	None	Apr-13	3,741	125	1%	0	0	0	0	0	0	0%
Construction	Dry	None	None	None	May-13	3,628	117	1%	0	0	0	0	0	0	0%
Construction	Dry	None	None	None	Jun-13	18,505	617	5%	0	0	0	0	0	0	0%
Construction	Dry	None	None	None	Jul-13	17,841	576	4%	0	0	0	0	0	0	0%
Construction	Dry	None	None	None	Aug-13	18,302	590	4%	0	0	0	0	0	0	0%
Operation	Dry	None	None	None	Sep-13	12,651	422	3%	15,437	0	0	0	0	0	0%
Operation	Dry	None	None	None	Oct-19	12,702	410	3%	31,172	0	0	0	0	0	0%
Operation	Dry	None	None	None	Nov-19	860	29	0%	37,283	0	0	0	0	0	0%
Operation	Dry	None	None	None	Dec-19	296	10	0%	37,363	0	0	0	0	0	0%
Operation	Dry	None	None	None	Jan-20	141	5	0%	37,363	0	0	0	0	0	0%
Operation	Dry	None	None	None	Feb-20	115	4	0%	37,203	0	0	0	0	0	0%
Operation	Dry	None	None	None	Mar-20	113	4	0%	29,780	0	0	0	0	0	0%
Operation	Dry	None	None	None	Apr-20	5,160	172	1%	33,136	0	0	0	0	0	0%
Operation	Dry	None	None	None	May-20	38,293	1,235	9%	2,480	0	0	0	0	0	0%
Operation	Dry	None	None	None	Jun-20	36,961	1,232	9%	20,791	0	0	0	0	0	0%
Operation	Dry	None	None	None	Jul-20	19,139	617	5%	21,849	0	0	0	0	0	0%
Operation	Dry	None	None	None	Aug-20	21,768	702	5%	31,356	0	0	0	0	0	0%
Operation	Dry	None	None	None	Sep-20	14,606	487	4%	30,322	0	0	0	0	0	0%
Closure & Reclamation (draindown)	Dry	None	None	None	Jul-24	311,532	10,049	75%	0	311,532	419	116	311,532	10,049	75%
Closure & Reclamation (draindown)	Dry	None	None	None	Aug-24	166,480	5,370	40%	0	166,480	224	62	166,480	5,370	40%
Closure & Reclamation (draindown)	Dry	None	None	None	Sep-24	90,213	3,007	22%	0	90,213	125	35	90,213	3,007	22%
Closure & Reclamation (draindown)	Dry	None	None	None	Oct-24	52,436	1,691	13%	0	52,436	70	20	52,436	1,691	13%
Closure & Reclamation (draindown)	Dry	None	None	None	Nov-24	19,538	651	5%	0	19,538	27	8	19,538	651	5%
Closure & Reclamation (draindown)	Dry	None	None	None	Dec-24	9,523	307	2%	0	9,523	13	4	9,523	307	2%
Closure & Reclamation (draindown)	Dry	None	None	None	Jan-25	7,797	252	2%	0	7,797	10	3	7,797	252	2%
Closure & Reclamation (draindown)	Dry	None	None	None	Feb-25	6,054	216	2%	0	6,054	9	3	6,054	216	2%
Closure & Reclamation (draindown)	Dry	None	None	None	Mar-25	5,956	192	1%	0	5,956	8	2	5,956	192	1%
Closure & Reclamation (draindown)	Dry	None	None	None	Apr-25	15,478	516	4%	0	15,478	21	6	15,478	516	4%
Closure & Reclamation (draindown)	Dry	None	None	None	May-25	81,590	2,632	20%	0	81,590	110	30	81,590	2,632	20%
Closure & Reclamation (draindown)	Dry	None	None	None	Jun-25	60,375	2,012	15%	0	60,375	84	23	60,375	2,012	15%

Hydroclimatic Scenario	3				Mine Water Treatment Plant										
	Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Mine Water Feed Pond Inputs	Mine Water Feed Pond Inputs	Mine Water Feed Pond Inputs	Make-up Water to Heap Leach System	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond
						m <sup>3</sup> /mth	m <sup>3</sup> /day	%full/day	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /hour	L/s	m <sup>3</sup> /mth	m <sup>3</sup> /day	% full/day
Post-closure Monitoring	Dry	None	None	Oct-31	1,395	45	0%	0	1,395	2	1	1,395	45	0%	
Post-closure Monitoring	Dry	None	None	Nov-31	0	0	0%	0	0	0	0	0	0	0%	
Post-closure Monitoring	Dry	None	None	Dec-31	0	0	0%	0	0	0	0	0	0	0%	
Post-closure Monitoring	Dry	None	None	Jan-32	0	0	0%	0	0	0	0	0	0	0%	
Post-closure Monitoring	Dry	None	None	Feb-32	0	0	0%	0	0	0	0	0	0	0%	
Post-closure Monitoring	Dry	None	None	Mar-32	0	0	0%	0	0	0	0	0	0	0%	
Post-closure Monitoring	Dry	None	None	Apr-32	934	31	0%	0	934	1	0	934	31	0%	
Post-closure Monitoring	Dry	None	None	May-32	8,056	260	2%	0	8,056	11	3	8,056	260	2%	
Post-closure Monitoring	Dry	None	None	Jun-32	3,466	116	1%	0	3,466	5	1	3,466	116	1%	
Post-closure Monitoring	Dry	None	None	Jul-32	2,910	94	1%	0	2,910	4	1	2,910	94	1%	
Post-closure Monitoring	Dry	None	None	Aug-32	2,115	68	1%	0	2,115	3	1	2,115	68	1%	
Post-closure Monitoring	Dry	None	None	Sep-32	2,005	67	0%	0	2,005	3	1	2,005	67	0%	

**Table C6-1: Lower Dublin Gulch Sediment Control Pond – Scenario 1 Model Results**

Hydroclimatic Scenario	1				Stuttule Gulch Stockpile		Lower Dublin Gulch Sediment Control Pond			
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Stuttule Gulch Stockpile Runoff to LDGSCP	Stuttule Gulch Stockpile Runoff to DGDC at Closure	Total Lower Dublin Gulch Sediment Control Pond Inputs	Lower Dublin Gulch Sediment Control Pond Outputs to Haggart Creek	Lower Dublin Gulch Sediment Control Pond Outputs to Eagle Creek Connector	Lower Dublin Gulch Sediment Control Pond
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% full/month
Existing Conditions	Average	None	None	Oct-11	0	0	0	0	0	0
Existing Conditions	Average	None	None	Nov-11	0	0	0	0	0	0
Existing Conditions	Average	None	None	Dec-11	0	0	0	0	0	0
Construction	Average	None	None	Jan-12	0	0	0	0	0	0
Construction	Average	None	None	Feb-12	0	0	0	0	0	0
Construction	Average	None	None	Mar-12	0	0	0	0	0	0
Construction	Average	None	None	Apr-12	0	0	36,893	36,893	0	1
Construction	Average	None	None	May-12	0	0	358,497	358,497	0	11
Construction	Average	None	None	Jun-12	0	0	262,892	262,892	0	8
Construction	Average	None	None	Jul-12	0	0	462,739	462,739	0	14
Construction	Average	None	None	Aug-12	0	0	253,561	253,561	0	8
Construction	Average	None	None	Sep-12	0	0	290,278	290,278	0	9
Construction	Average	None	None	Oct-12	0	0	282,706	282,706	0	868%
Construction	Average	None	None	Nov-12	0	0	128,353	128,353	0	394%
Construction	Average	None	None	Dec-12	0	0	88,488	88,488	0	272%
Construction	Average	None	None	Jan-13	0	0	55,539	55,539	0	171%
Construction	Average	None	None	Feb-13	0	0	40,860	40,860	0	125%
Construction	Average	None	None	Mar-13	0	0	34,889	34,889	0	107%
Construction	Average	None	None	Apr-13	101	0	36,975	36,975	0	114%
Construction	Average	None	None	May-13	2,272	0	2,272	0	2,272	7%
Construction	Average	None	None	Jun-13	3,107	0	3,107	0	3,107	10%
Construction	Average	None	None	Jul-13	3,951	0	3,951	0	3,951	12%
Construction	Average	None	None	Aug-13	3,075	0	3,075	0	3,075	9%
Operation	Average	None	None	Sep-13	3,088	0	3,088	0	3,088	9%
Operation	Average	None	None	Oct-13	2,283	0	2,283	0	2,283	7%
Operation	Average	None	None	Nov-13	498	0	498	0	498	2%
Operation	Average	None	None	Dec-13	286	0	286	0	286	1%
Operation	Average	None	None	Jan-14	160	0	160	0	160	0%
Operation	Average	None	None	Feb-14	108	0	108	0	108	0%
Operation	Average	None	None	Mar-14	85	0	85	0	85	0%
Operation	Average	None	None	Apr-14	97	0	97	0	97	0%
Operation	Average	None	None	May-14	2,185	0	2,185	0	2,185	7%
Operation	Average	None	None	Jun-14	3,107	0	3,107	0	3,107	10%
Operation	Average	None	None	Jul-14	3,951	0	3,951	0	3,951	12%
Operation	Average	None	None	Aug-14	3,075	0	3,075	0	3,075	9%
Operation	Average	None	None	Sep-14	3,088	0	3,088	0	3,088	9%

Hydroclimatic Scenario	1				Stuttle Gulch Stockpile		Lower Dublin Gulch Sediment Control Pond			
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Stuttle Gulch Stockpile Runoff to LDGSCP	Stuttle Gulch Stockpile Runoff to DGDC at Closure	Total Lower Dublin Gulch Sediment Control Pond Inputs	Lower Dublin Gulch Sediment Control Pond Outputs to Haggart Creek	Lower Dublin Gulch Sediment Control Pond Outputs to Eagle Creek Connector	Lower Dublin Gulch Sediment Control Pond
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% full/month
Operation	Average	None	None	Oct-14	2,283	0	2,283	0	2,283	7%
Operation	Average	None	None	Nov-14	498	0	498	0	498	2%
Operation	Average	None	None	Dec-14	286	0	286	0	286	1%
Operation	Average	None	None	Jan-15	160	0	160	0	160	0%
Operation	Average	None	None	Feb-15	108	0	108	0	108	0%
Operation	Average	None	None	Mar-15	85	0	85	0	85	0%
Operation	Average	None	None	Apr-15	97	0	97	0	97	0%
Operation	Average	None	None	May-15	2,185	0	2,185	0	2,185	7%
Operation	Average	None	None	Jun-15	3,107	0	3,107	0	3,107	10%
Operation	Average	None	None	Jul-15	3,951	0	3,951	0	3,951	12%
Operation	Average	None	None	Aug-15	3,075	0	3,075	0	3,075	9%
Operation	Average	None	None	Sep-15	3,088	0	3,088	0	3,088	9%
Operation	Average	None	None	Oct-15	2,114	0	2,114	0	2,114	6%
Operation	Average	None	None	Nov-15	461	0	461	0	461	1%
Operation	Average	None	None	Dec-15	265	0	265	0	265	1%
Operation	Average	None	None	Jan-16	148	0	148	0	148	0%
Operation	Average	None	None	Feb-16	100	0	100	0	100	0%
Operation	Average	None	None	Mar-16	79	0	79	0	79	0%
Operation	Average	None	None	Apr-16	90	0	90	0	90	0%
Operation	Average	None	None	May-16	2,023	0	2,023	0	2,023	6%
Operation	Average	None	None	Jun-16	2,877	0	2,877	0	2,877	9%
Operation	Average	None	None	Jul-16	3,659	0	3,659	0	3,659	11%
Operation	Average	None	None	Aug-16	2,848	0	2,848	0	2,848	9%
Operation	Average	None	None	Sep-16	2,859	0	2,859	0	2,859	9%
Operation	Average	None	None	Oct-16	2,114	0	2,114	0	2,114	6%
Operation	Average	None	None	Nov-16	461	0	461	0	461	1%
Operation	Average	None	None	Dec-16	265	0	265	0	265	1%
Operation	Average	None	None	Jan-17	148	0	148	0	148	0%
Operation	Average	None	None	Feb-17	100	0	100	0	100	0%
Operation	Average	None	None	Mar-17	79	0	79	0	79	0%
Operation	Average	None	None	Apr-17	90	0	90	0	90	0%
Operation	Average	None	None	May-17	2,023	0	2,023	0	2,023	6%
Operation	Average	None	None	Jun-17	2,877	0	2,877	0	2,877	9%
Operation	Average	None	None	Jul-17	3,659	0	3,659	0	3,659	11%
Operation	Average	None	None	Aug-17	2,848	0	2,848	0	2,848	9%
Operation	Average	None	None	Sep-17	2,859	0	2,859	0	2,859	9%

Hydroclimatic Scenario	1				Stuttles Gulch Stockpile		Lower Dublin Gulch Sediment Control Pond			
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Stuttles Gulch Stockpile Runoff to LDGSCP	Stuttles Gulch Stockpile Runoff to DGDC at Closure	Total Lower Dublin Gulch Sediment Control Pond Inputs	Lower Dublin Gulch Sediment Control Pond Outputs to Haggart Creek	Lower Dublin Gulch Sediment Control Pond Outputs to Eagle Creek Connector	Lower Dublin Gulch Sediment Control Pond
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% full/month
Operation	Average	None	None	Oct-17	2,035	0	2,035	0	2,035	6%
Operation	Average	None	None	Nov-17	444	0	444	0	444	1%
Operation	Average	None	None	Dec-17	255	0	255	0	255	1%
Operation	Average	None	None	Jan-18	142	0	142	0	142	0%
Operation	Average	None	None	Feb-18	96	0	96	0	96	0%
Operation	Average	None	None	Mar-18	76	0	76	0	76	0%
Operation	Average	None	None	Apr-18	87	0	87	0	87	0%
Operation	Average	None	None	May-18	1,947	0	1,947	0	1,947	6%
Operation	Average	None	None	Jun-18	2,769	0	2,769	0	2,769	9%
Operation	Average	None	None	Jul-18	3,521	0	3,521	0	3,521	11%
Operation	Average	None	None	Aug-18	2,741	0	2,741	0	2,741	8%
Operation	Average	None	None	Sep-18	2,752	0	2,752	0	2,752	8%
Operation	Average	None	None	Oct-18	2,035	0	2,035	0	2,035	6%
Operation	Average	None	None	Nov-18	444	0	444	0	444	1%
Operation	Average	None	None	Dec-18	255	0	255	0	255	1%
Operation	Average	None	None	Jan-19	142	0	142	0	142	0%
Operation	Average	None	None	Feb-19	96	0	96	0	96	0%
Operation	Average	None	None	Mar-19	76	0	76	0	76	0%
Operation	Average	None	None	Apr-19	87	0	87	0	87	0%
Operation	Average	None	None	May-19	1,947	0	1,947	0	1,947	6%
Operation	Average	None	None	Jun-19	2,769	0	2,769	0	2,769	9%
Operation	Average	None	None	Jul-19	3,521	0	3,521	0	3,521	11%
Operation	Average	None	None	Aug-19	2,741	0	2,741	0	2,741	8%
Operation	Average	None	None	Sep-19	2,752	0	2,752	0	2,752	8%
Operation	Average	None	None	Oct-19	2,035	0	2,035	0	2,035	6%
Operation	Average	None	None	Nov-19	444	0	444	0	444	1%
Operation	Average	None	None	Dec-19	255	0	255	0	255	1%
Operation	Average	None	None	Jan-20	142	0	142	0	142	0%
Operation	Average	None	None	Feb-20	96	0	96	0	96	0%
Operation	Average	None	None	Mar-20	76	0	76	0	76	0%
Operation	Average	None	None	Apr-20	87	0	87	0	87	0%
Operation	Average	None	None	May-20	1,947	0	1,947	0	1,947	6%
Operation	Average	None	None	Jun-20	2,769	0	2,769	0	2,769	9%
Operation	Average	None	None	Jul-20	3,521	0	3,521	0	3,521	11%
Operation	Average	None	None	Aug-20	2,741	0	2,741	0	2,741	8%
Operation	Average	None	None	Sep-20	2,752	0	2,752	0	2,752	8%

Hydroclimatic Scenario	1				Stuttie Gulch Stockpile		Lower Dublin Gulch Sediment Control Pond			
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Stuttie Gulch Stockpile Runoff to LDGSCP	Stuttie Gulch Stockpile Runoff to DGDC at Closure	Total Lower Dublin Gulch Sediment Control Pond Inputs	Lower Dublin Gulch Sediment Control Pond Outputs to Haggart Creek	Lower Dublin Gulch Sediment Control Pond Outputs to Eagle Creek Connector	Lower Dublin Gulch Sediment Control Pond
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% full/month
Operation	Average	None	None	Oct-20	2,035	0	2,035	0	2,035	6%
Operation	Average	None	None	Nov-20	444	0	444	0	444	1%
Operation	Average	None	None	Dec-20	255	0	255	0	255	1%
Closure & Reclamation (au recovery)	Average	None	None	Jan-21	142	0	142	0	142	0%
Closure & Reclamation (au recovery)	Average	None	None	Feb-21	96	0	96	0	96	0%
Closure & Reclamation (au recovery)	Average	None	None	Mar-21	76	0	76	0	76	0%
Closure & Reclamation (au recovery)	Average	None	None	Apr-21	87	0	87	0	87	0%
Closure & Reclamation (au recovery)	Average	None	None	May-21	1,947	0	1,947	0	1,947	6%
Closure & Reclamation (au recovery)	Average	None	None	Jun-21	2,769	0	2,769	0	2,769	9%
Closure & Reclamation (au recovery)	Average	None	None	Jul-21	3,521	0	3,521	0	3,521	11%
Closure & Reclamation (au recovery)	Average	None	None	Aug-21	2,741	0	2,741	0	2,741	8%
Closure & Reclamation (au recovery)	Average	None	None	Sep-21	2,752	0	2,752	0	2,752	8%
Closure & Reclamation (au recovery)	Average	None	None	Oct-21	2,035	0	2,035	0	2,035	6%
Closure & Reclamation (au recovery)	Average	None	None	Nov-21	444	0	444	0	444	1%
Closure & Reclamation (au recovery)	Average	None	None	Dec-21	255	0	255	0	255	1%
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-22	142	0	142	0	142	0%
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-22	96	0	96	0	96	0%
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-22	76	0	76	0	76	0%
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-22	87	0	87	0	87	0%
Closure & Reclamation (hlf rinse)	Average	None	None	May-22	1,947	0	1,947	0	1,947	6%
Closure & Reclamation (hlf rinse)	Average	None	None	Jun-22	2,769	0	2,769	0	2,769	9%
Closure & Reclamation (hlf rinse)	Average	None	None	Jul-22	3,521	0	3,521	0	3,521	11%
Closure & Reclamation (hlf rinse)	Average	None	None	Aug-22	2,741	0	2,741	0	2,741	8%
Closure & Reclamation (hlf rinse)	Average	None	None	Sep-22	2,752	0	2,752	0	2,752	8%
Closure & Reclamation (hlf rinse)	Average	None	None	Oct-22	2,035	0	2,035	0	2,035	6%
Closure & Reclamation (hlf rinse)	Average	None	None	Nov-22	444	0	444	0	444	1%
Closure & Reclamation (hlf rinse)	Average	None	None	Dec-22	255	0	255	0	255	1%
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-23	142	0	142	0	142	0%
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-23	96	0	96	0	96	0%
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-23	76	0	76	0	76	0%
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-23	87	0	87	0	87	0%
Closure & Reclamation (hlf rinse)	Average	None	None	May-23	1,947	0	1,947	0	1,947	6%
Closure & Reclamation (hlf rinse)	Average	None	None	Jun-23	2,769	0	2,769	0	2,769	9%
Closure & Reclamation (hlf rinse)	Average	None	None	Jul-23	3,521	0	3,521	0	3,521	11%
Closure & Reclamation (hlf rinse)	Average	None	None	Aug-23	2,741	0	2,741	0	2,741	8%
Closure & Reclamation (hlf rinse)	Average	None	None	Sep-23	2,752	0	2,752	0	2,752	8%



Hydroclimatic Scenario	1				Stuttle Gulch Stockpile		Lower Dublin Gulch Sediment Control Pond			
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Stuttle Gulch Stockpile Runoff to LDGSCP	Stuttle Gulch Stockpile Runoff to DGDC at Closure	Total Lower Dublin Gulch Sediment Control Pond Inputs	Lower Dublin Gulch Sediment Control Pond Outputs to Haggart Creek	Lower Dublin Gulch Sediment Control Pond Outputs to Eagle Creek Connector	Lower Dublin Gulch Sediment Control Pond
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% full/month
Closure & Reclamation (hlf rinse)	Average	None	None	Oct-23	2,035	0	2,035	0	2,035	6%
Closure & Reclamation (hlf rinse)	Average	None	None	Nov-23	444	0	444	0	444	1%
Closure & Reclamation (hlf rinse)	Average	None	None	Dec-23	255	0	255	0	255	1%
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-24	142	0	142	0	142	0%
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-24	96	0	96	0	96	0%
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-24	76	0	76	0	76	0%
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-24	87	0	87	0	87	0%
Closure & Reclamation (hlf rinse)	Average	None	None	May-24	1,947	0	1,947	0	1,947	6%
Closure & Reclamation (hlf rinse)	Average	None	None	Jun-24	2,769	0	2,769	0	2,769	9%
Closure & Reclamation (draindown)	Average	None	None	Jul-24	3,521	0	3,521	0	3,521	11%
Closure & Reclamation (draindown)	Average	None	None	Aug-24	2,741	0	2,741	0	2,741	8%
Closure & Reclamation (draindown)	Average	None	None	Sep-24	2,752	0	2,752	0	2,752	8%
Closure & Reclamation (draindown)	Average	None	None	Oct-24	2,035	0	2,035	0	2,035	6%
Closure & Reclamation (draindown)	Average	None	None	Nov-24	444	0	444	0	444	1%
Closure & Reclamation (draindown)	Average	None	None	Dec-24	255	0	255	0	255	1%
Closure & Reclamation (draindown)	Average	None	None	Jan-25	142	0	142	0	142	0%
Closure & Reclamation (draindown)	Average	None	None	Feb-25	96	0	96	0	96	0%
Closure & Reclamation (draindown)	Average	None	None	Mar-25	76	0	76	0	76	0%
Closure & Reclamation (draindown)	Average	None	None	Apr-25	87	0	87	0	87	0%
Closure & Reclamation (draindown)	Average	None	None	May-25	1,947	0	1,947	0	1,947	6%
Closure & Reclamation (draindown)	Average	None	None	Jun-25	2,769	0	2,769	0	2,769	9%
Closure & Reclamation (draindown)	Average	None	None	Jul-25	3,521	0	3,521	0	3,521	11%
Closure & Reclamation (draindown)	Average	None	None	Aug-25	2,741	0	2,741	0	2,741	8%
Closure & Reclamation (draindown)	Average	None	None	Sep-25	2,752	0	2,752	0	2,752	8%
Closure & Reclamation (draindown)	Average	None	None	Oct-25	2,035	0	2,035	0	2,035	6%
Closure & Reclamation (draindown)	Average	None	None	Nov-25	444	0	444	0	444	1%
Closure & Reclamation (draindown)	Average	None	None	Dec-25	255	0	255	0	255	1%
Closure & Reclamation (draindown)	Average	None	None	Jan-26	142	0	142	0	142	0%
Closure & Reclamation (draindown)	Average	None	None	Feb-26	96	0	96	0	96	0%
Closure & Reclamation (draindown)	Average	None	None	Mar-26	76	0	76	0	76	0%
Closure & Reclamation (draindown)	Average	None	None	Apr-26	87	0	87	0	87	0%
Closure & Reclamation (draindown)	Average	None	None	May-26	1,947	0	1,947	0	1,947	6%
Closure & Reclamation (draindown)	Average	None	None	Jun-26	2,769	0	2,769	0	2,769	9%
Closure & Reclamation (draindown)	Average	None	None	Jul-26	3,521	0	3,521	0	3,521	11%
Closure & Reclamation (draindown)	Average	None	None	Aug-26	2,741	0	2,741	0	2,741	8%
Closure & Reclamation (draindown)	Average	None	None	Sep-26	2,752	0	2,752	0	2,752	8%

Hydroclimatic Scenario	1				Stuttle Gulch Stockpile		Lower Dublin Gulch Sediment Control Pond			
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Stuttle Gulch Stockpile Runoff to LDGSCP	Stuttle Gulch Stockpile Runoff to DGDC at Closure	Total Lower Dublin Gulch Sediment Control Pond Inputs	Lower Dublin Gulch Sediment Control Pond Outputs to Haggart Creek	Lower Dublin Gulch Sediment Control Pond Outputs to Eagle Creek Connector	Lower Dublin Gulch Sediment Control Pond
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% full/month
Closure & Reclamation (draindown)	Average	None	None	Oct-26	0	2,035	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Nov-26	0	444	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Dec-26	0	255	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Jan-27	0	142	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Feb-27	0	96	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Mar-27	0	76	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Apr-27	0	87	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	May-27	0	1,947	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Jun-27	0	2,769	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Jul-27	0	3,521	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Aug-27	0	2,741	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Sep-27	0	2,752	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Oct-27	0	2,035	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Nov-27	0	444	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Dec-27	0	255	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Jan-28	0	142	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Feb-28	0	96	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Mar-28	0	76	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Apr-28	0	87	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	May-28	0	1,947	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Jun-28	0	2,769	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Jul-28	0	3,521	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Aug-28	0	2,741	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Sep-28	0	2,752	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Oct-28	0	2,035	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Nov-28	0	444	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Dec-28	0	255	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Jan-29	0	142	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Feb-29	0	96	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Mar-29	0	76	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Apr-29	0	87	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	May-29	0	1,947	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Jun-29	0	2,769	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Jul-29	0	3,521	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Aug-29	0	2,741	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Sep-29	0	2,752	0	0	0	0%

Hydroclimatic Scenario	1				Stuttles Gulch Stockpile		Lower Dublin Gulch Sediment Control Pond			
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Stuttles Gulch Stockpile Runoff to LDGSCP	Stuttles Gulch Stockpile Runoff to DGDC at Closure	Total Lower Dublin Gulch Sediment Control Pond Inputs	Lower Dublin Gulch Sediment Control Pond Outputs to Haggart Creek	Lower Dublin Gulch Sediment Control Pond Outputs to Eagle Creek Connector	Lower Dublin Gulch Sediment Control Pond
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% full/month
Closure & Reclamation (draindown)	Average	None	None	Oct-29	0	2,035	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Nov-29	0	444	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Dec-29	0	255	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Jan-30	0	142	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Feb-30	0	96	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Mar-30	0	76	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Apr-30	0	87	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	May-30	0	1,947	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Jun-30	0	2,769	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Jul-30	0	3,521	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Aug-30	0	2,741	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Sep-30	0	2,752	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Oct-30	0	2,035	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Nov-30	0	444	0	0	0	0%
Closure & Reclamation (draindown)	Average	None	None	Dec-30	0	255	0	0	0	0%
Post-closure Monitoring	Average	None	None	Jan-31	0	142	0	0	0	0%
Post-closure Monitoring	Average	None	None	Feb-31	0	96	0	0	0	0%
Post-closure Monitoring	Average	None	None	Mar-31	0	76	0	0	0	0%
Post-closure Monitoring	Average	None	None	Apr-31	0	87	0	0	0	0%
Post-closure Monitoring	Average	None	None	May-31	0	1,947	0	0	0	0%
Post-closure Monitoring	Average	None	None	Jun-31	0	2,769	0	0	0	0%
Post-closure Monitoring	Average	None	None	Jul-31	0	3,521	0	0	0	0%
Post-closure Monitoring	Average	None	None	Aug-31	0	2,741	0	0	0	0%
Post-closure Monitoring	Average	None	None	Sep-31	0	2,752	0	0	0	0%
Post-closure Monitoring	Average	None	None	Oct-31	0	2,035	0	0	0	0%
Post-closure Monitoring	Average	None	None	Nov-31	0	444	0	0	0	0%
Post-closure Monitoring	Average	None	None	Dec-31	0	255	0	0	0	0%
Post-closure Monitoring	Average	None	None	Jan-32	0	142	0	0	0	0%
Post-closure Monitoring	Average	None	None	Feb-32	0	96	0	0	0	0%
Post-closure Monitoring	Average	None	None	Mar-32	0	76	0	0	0	0%
Post-closure Monitoring	Average	None	None	Apr-32	0	87	0	0	0	0%
Post-closure Monitoring	Average	None	None	May-32	0	1,947	0	0	0	0%
Post-closure Monitoring	Average	None	None	Jun-32	0	2,769	0	0	0	0%
Post-closure Monitoring	Average	None	None	Jul-32	0	3,521	0	0	0	0%
Post-closure Monitoring	Average	None	None	Aug-32	0	2,741	0	0	0	0%
Post-closure Monitoring	Average	None	None	Sep-32	0	2,752	0	0	0	0%

Hydroclimatic Scenario	1				Stuttle Gulch Stockpile		Lower Dublin Gulch Sediment Control Pond			
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Stuttle Gulch Stockpile Runoff to LDGSCP	Stuttle Gulch Stockpile Runoff to DGDC at Closure	Total Lower Dublin Gulch Sediment Control Pond Inputs	Lower Dublin Gulch Sediment Control Pond Outputs to Haggart Creek	Lower Dublin Gulch Sediment Control Pond Outputs to Eagle Creek Connector	Lower Dublin Gulch Sediment Control Pond
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% full/month
Post-closure Monitoring	Average	None	None	Oct-32	0	2,035	0	0	0	0
Post-closure Monitoring	Average	None	None	Nov-32	0	444	0	0	0	0
Post-closure Monitoring	Average	None	None	Dec-32	0	255	0	0	0	0
Post-closure Monitoring	Average	None	None	Jan-33	0	142	0	0	0	0
Post-closure Monitoring	Average	None	None	Feb-33	0	96	0	0	0	0
Post-closure Monitoring	Average	None	None	Mar-33	0	76	0	0	0	0
Post-closure Monitoring	Average	None	None	Apr-33	0	87	0	0	0	0
Post-closure Monitoring	Average	None	None	May-33	0	1,947	0	0	0	0
Post-closure Monitoring	Average	None	None	Jun-33	0	2,769	0	0	0	0
Post-closure Monitoring	Average	None	None	Jul-33	0	3,521	0	0	0	0
Post-closure Monitoring	Average	None	None	Aug-33	0	2,741	0	0	0	0
Post-closure Monitoring	Average	None	None	Sep-33	0	2,752	0	0	0	0
Post-closure Monitoring	Average	None	None	Oct-33	0	2,035	0	0	0	0
Post-closure Monitoring	Average	None	None	Nov-33	0	444	0	0	0	0
Post-closure Monitoring	Average	None	None	Dec-33	0	255	0	0	0	0
Post-closure Monitoring	Average	None	None	Jan-34	0	142	0	0	0	0
Post-closure Monitoring	Average	None	None	Feb-34	0	96	0	0	0	0
Post-closure Monitoring	Average	None	None	Mar-34	0	76	0	0	0	0
Post-closure Monitoring	Average	None	None	Apr-34	0	87	0	0	0	0
Post-closure Monitoring	Average	None	None	May-34	0	1,947	0	0	0	0
Post-closure Monitoring	Average	None	None	Jun-34	0	2,769	0	0	0	0
Post-closure Monitoring	Average	None	None	Jul-34	0	3,521	0	0	0	0
Post-closure Monitoring	Average	None	None	Aug-34	0	2,741	0	0	0	0
Post-closure Monitoring	Average	None	None	Sep-34	0	2,752	0	0	0	0
Post-closure Monitoring	Average	None	None	Oct-34	0	2,035	0	0	0	0
Post-closure Monitoring	Average	None	None	Nov-34	0	444	0	0	0	0
Post-closure Monitoring	Average	None	None	Dec-34	0	255	0	0	0	0
Post-closure Monitoring	Average	None	None	Jan-35	0	142	0	0	0	0

**Table C6-2: Lower Dublin Gulch Sediment Control Pond – Scenario 2 Model Results – Selected Years**

Hydroclimatic Scenario	2				Stuttles Gulch Stockpile		Lower Dublin Gulch Sediment Control Pond			
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Stuttles Gulch Stockpile Runoff to LDGSCP	Stuttles Gulch Stockpile Runoff to DGDC at Closure	Total Lower Dublin Gulch Sediment Control Pond Inputs	Lower Dublin Gulch Sediment Control Pond Outputs to Haggart Creek	Lower Dublin Gulch Sediment Control Pond Outputs to Eagle Creek Connector	Lower Dublin Gulch Sediment Control Pond
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% full/month
Construction	Wet	None	None	Oct-12	0	0	410,027	410,027	0	1259%
Construction	Wet	None	None	Nov-12	0	0	164,280	164,280	0	505%
Construction	Wet	None	None	Dec-12	0	0	114,478	114,478	0	352%
Construction	Wet	None	None	Jan-13	0	0	77,429	77,429	0	238%
Construction	Wet	None	None	Feb-13	0	0	51,698	51,698	0	159%
Construction	Wet	None	None	Mar-13	0	0	38,082	38,082	0	117%
Construction	Wet	None	None	Apr-13	135	0	46,692	46,692	0	143%
Construction	Wet	None	None	May-13	4,525	0	4,525	0	4,525	14%
Construction	Wet	None	None	Jun-13	4,212	0	4,212	0	4,212	13%
Construction	Wet	None	None	Jul-13	6,878	0	6,878	0	6,878	21%
Construction	Wet	None	None	Aug-13	4,403	0	4,403	0	4,403	14%
Operation	Wet	None	None	Sep-13	5,081	0	5,081	0	5,081	16%
Operation	Wet	None	None	Oct-19	3,445	0	3,445	0	3,445	11%
Operation	Wet	None	None	Nov-19	569	0	569	0	569	2%
Operation	Wet	None	None	Dec-19	329	0	329	0	329	1%
Operation	Wet	None	None	Jan-20	199	0	199	0	199	1%
Operation	Wet	None	None	Feb-20	122	0	122	0	122	0%
Operation	Wet	None	None	Mar-20	83	0	83	0	83	0%
Operation	Wet	None	None	Apr-20	115	0	115	0	115	0%
Operation	Wet	None	None	May-20	3,877	0	3,877	0	3,877	12%
Operation	Wet	None	None	Jun-20	3,754	0	3,754	0	3,754	12%
Operation	Wet	None	None	Jul-20	6,130	0	6,130	0	6,130	19%
Operation	Wet	None	None	Aug-20	3,924	0	3,924	0	3,924	12%
Operation	Wet	None	None	Sep-20	4,529	0	4,529	0	4,529	14%
Closure & Reclamation (draindown)	Wet	None	None	Jul-24	6,130	0	6,130	0	6,130	19%
Closure & Reclamation (draindown)	Wet	None	None	Aug-24	3,924	0	3,924	0	3,924	12%
Closure & Reclamation (draindown)	Wet	None	None	Sep-24	4,529	0	4,529	0	4,529	14%
Closure & Reclamation (draindown)	Wet	None	None	Oct-24	3,445	0	3,445	0	3,445	11%
Closure & Reclamation (draindown)	Wet	None	None	Nov-24	569	0	569	0	569	2%
Closure & Reclamation (draindown)	Wet	None	None	Dec-24	329	0	329	0	329	1%
Closure & Reclamation (draindown)	Wet	None	None	Jan-25	199	0	199	0	199	1%
Closure & Reclamation (draindown)	Wet	None	None	Feb-25	122	0	122	0	122	0%
Closure & Reclamation (draindown)	Wet	None	None	Mar-25	83	0	83	0	83	0%
Closure & Reclamation (draindown)	Wet	None	None	Apr-25	115	0	115	0	115	0%
Closure & Reclamation (draindown)	Wet	None	None	May-25	3,877	0	3,877	0	3,877	12%
Closure & Reclamation (draindown)	Wet	None	None	Jun-25	3,754	0	3,754	0	3,754	12%

Hydroclimatic Scenario	2				Stuttle Gulch Stockpile		Lower Dublin Gulch Sediment Control Pond			
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Stuttle Gulch Stockpile Runoff to LDGSCP	Stuttle Gulch Stockpile Runoff to DGDC at Closure	Total Lower Dublin Gulch Sediment Control Pond Inputs	Lower Dublin Gulch Sediment Control Pond Outputs to Haggart Creek	Lower Dublin Gulch Sediment Control Pond Outputs to Eagle Creek Connector	Lower Dublin Gulch Sediment Control Pond
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% full/month
Post-closure Monitoring	Wet	None	None	Oct-31	0	3,445	0	0	0	0%
Post-closure Monitoring	Wet	None	None	Nov-31	0	569	0	0	0	0%
Post-closure Monitoring	Wet	None	None	Dec-31	0	329	0	0	0	0%
Post-closure Monitoring	Wet	None	None	Jan-32	0	199	0	0	0	0%
Post-closure Monitoring	Wet	None	None	Feb-32	0	122	0	0	0	0%
Post-closure Monitoring	Wet	None	None	Mar-32	0	83	0	0	0	0%
Post-closure Monitoring	Wet	None	None	Apr-32	0	115	0	0	0	0%
Post-closure Monitoring	Wet	None	None	May-32	0	3,877	0	0	0	0%
Post-closure Monitoring	Wet	None	None	Jun-32	0	3,754	0	0	0	0%
Post-closure Monitoring	Wet	None	None	Jul-32	0	6,130	0	0	0	0%
Post-closure Monitoring	Wet	None	None	Aug-32	0	3,924	0	0	0	0%
Post-closure Monitoring	Wet	None	None	Sep-32	0	4,529	0	0	0	0%

**Table C6-3: Lower Dublin Gulch Sediment Control Pond – Scenario 3 Model Results – Selected Years**

Hydroclimatic Scenario	3				Stuttles Gulch Stockpile		Lower Dublin Gulch Sediment Control Pond			
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Stuttles Gulch Stockpile Runoff to LDGSCP	Stuttles Gulch Stockpile Runoff to DGDC at Closure	Total Lower Dublin Gulch Sediment Control Pond Inputs	Lower Dublin Gulch Sediment Control Pond Outputs to Haggart Creek	Lower Dublin Gulch Sediment Control Pond Outputs to Eagle Creek Connector	Lower Dublin Gulch Sediment Control Pond
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% full/month
Construction	Dry	None	None	Oct-12	0	0	174,606	174,606	0	536%
Construction	Dry	None	None	Nov-12	0	0	92,427	92,427	0	284%
Construction	Dry	None	None	Dec-12	0	0	62,498	62,498	0	192%
Construction	Dry	None	None	Jan-13	0	0	33,650	33,650	0	103%
Construction	Dry	None	None	Feb-13	0	0	30,021	30,021	0	92%
Construction	Dry	None	None	Mar-13	0	0	31,697	31,697	0	97%
Construction	Dry	None	None	Apr-13	81	0	30,341	30,341	0	93%
Construction	Dry	None	None	May-13	739	0	739	0	739	2%
Construction	Dry	None	None	Jun-13	2,231	0	2,231	0	2,231	7%
Construction	Dry	None	None	Jul-13	2,355	0	2,355	0	2,355	7%
Construction	Dry	None	None	Aug-13	2,340	0	2,340	0	2,340	7%
Operation	Dry	None	None	Sep-13	1,768	0	1,768	0	1,768	5%
Operation	Dry	None	None	Oct-19	1,400	0	1,400	0	1,400	4%
Operation	Dry	None	None	Nov-19	319	0	319	0	319	1%
Operation	Dry	None	None	Dec-19	180	0	180	0	180	1%
Operation	Dry	None	None	Jan-20	86	0	86	0	86	0%
Operation	Dry	None	None	Feb-20	70	0	70	0	70	0%
Operation	Dry	None	None	Mar-20	69	0	69	0	69	0%
Operation	Dry	None	None	Apr-20	69	0	69	0	69	0%
Operation	Dry	None	None	May-20	634	0	634	0	634	2%
Operation	Dry	None	None	Jun-20	1,989	0	1,989	0	1,989	6%
Operation	Dry	None	None	Jul-20	2,099	0	2,099	0	2,099	6%
Operation	Dry	None	None	Aug-20	2,085	0	2,085	0	2,085	6%
Operation	Dry	None	None	Sep-20	1,576	0	1,576	0	1,576	5%
Closure & Reclamation (draindown)	Dry	None	None	Jul-24	2,099	0	2,099	0	2,099	6%
Closure & Reclamation (draindown)	Dry	None	None	Aug-24	2,085	0	2,085	0	2,085	6%
Closure & Reclamation (draindown)	Dry	None	None	Sep-24	1,576	0	1,576	0	1,576	5%

Hydroclimatic Scenario	3				Stuttle Gulch Stockpile		Lower Dublin Gulch Sediment Control Pond			
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Stuttle Gulch Stockpile Runoff to LDGSCP	Stuttle Gulch Stockpile Runoff to DGDC at Closure	Total Lower Dublin Gulch Sediment Control Pond Inputs	Lower Dublin Gulch Sediment Control Pond Outputs to Haggart Creek	Lower Dublin Gulch Sediment Control Pond Outputs to Eagle Creek Connector	Lower Dublin Gulch Sediment Control Pond
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% full/month
Closure & Reclamation (draindown)	Dry	None	None	Oct-24	1,400	0	1,400	0	1,400	4%
Closure & Reclamation (draindown)	Dry	None	None	Nov-24	319	0	319	0	319	1%
Closure & Reclamation (draindown)	Dry	None	None	Dec-24	180	0	180	0	180	1%
Closure & Reclamation (draindown)	Dry	None	None	Jan-25	86	0	86	0	86	0%
Closure & Reclamation (draindown)	Dry	None	None	Feb-25	70	0	70	0	70	0%
Closure & Reclamation (draindown)	Dry	None	None	Mar-25	69	0	69	0	69	0%
Closure & Reclamation (draindown)	Dry	None	None	Apr-25	69	0	69	0	69	0%
Closure & Reclamation (draindown)	Dry	None	None	May-25	634	0	634	0	634	2%
Closure & Reclamation (draindown)	Dry	None	None	Jun-25	1,989	0	1,989	0	1,989	6%
Post-closure Monitoring	Dry	None	None	Oct-31	0	1,400	0	0	0	0%
Post-closure Monitoring	Dry	None	None	Nov-31	0	319	0	0	0	0%
Post-closure Monitoring	Dry	None	None	Dec-31	0	180	0	0	0	0%
Post-closure Monitoring	Dry	None	None	Jan-32	0	86	0	0	0	0%
Post-closure Monitoring	Dry	None	None	Feb-32	0	70	0	0	0	0%
Post-closure Monitoring	Dry	None	None	Mar-32	0	69	0	0	0	0%
Post-closure Monitoring	Dry	None	None	Apr-32	0	69	0	0	0	0%
Post-closure Monitoring	Dry	None	None	May-32	0	634	0	0	0	0%
Post-closure Monitoring	Dry	None	None	Jun-32	0	1,989	0	0	0	0%
Post-closure Monitoring	Dry	None	None	Jul-32	0	2,099	0	0	0	0%
Post-closure Monitoring	Dry	None	None	Aug-32	0	2,085	0	0	0	0%
Post-closure Monitoring	Dry	None	None	Sep-32	0	1,576	0	0	0	0%



**Table C7-1: Eagle Creek at W27 – Scenario 1 Model Results**

Hydroclimatic Scenario	1				Eagle Creek Connector												
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Eagle Pup (Baseline)	Stuttle Gulch (Baseline)	Eagle Creek Pond (Baseline)	Eagle Creek U/S Platinum Gulch (Baseline)		Eagle Creek (Pre-Construction)	Dublin Gulch Diversion Channel Routing to Haggart Creek	Outlet of Dublin Gulch Diversion Channel (to EC Connector)	Outlet of Lower Dublin Gulch Sediment Control Pond (to EC Connector)	Eagle Creek Pond Seepage (to EC Connector)	Eagle Creek Connector U/S Platinum Gulch (ECP+DGDC+LDGSCP)		
					m³/mth	m³/mth	m³/mth	m³/mth	m³/sec	m³/mth	m³/mth	m³/mth	m³/mth	m³/mth	m³/mth	m³/sec	% of EC Baseline Flow
Existing conditions	Average	None	None	Oct-11	12,131	2,375	42,896	57,401	0	57,401	0	0	0	0	57,401	0.021	100.0%
Existing conditions	Average	None	None	Nov-11	2,591	518	9,353	12,462	0	12,462	0	0	0	0	12,462	0.005	100.0%
Existing conditions	Average	None	None	Dec-11	1,485	297	5,362	7,145	0	7,145	0	0	0	0	7,145	0.003	100.0%
Construction	Average	None	None	Jan-12	830	166	2,997	3,994	0	3,994	0	0	0	0	3,994	0.001	100.0%
Construction	Average	None	None	Feb-12	560	112	2,023	2,696	0	2,696	0	0	0	0	2,696	0.001	100.0%
Construction	Average	None	None	Mar-12	444	89	1,603	2,136	0	2,136	0	0	0	0	2,136	0.001	100.0%
Construction	Average	None	None	Apr-12	519	101	1,830	2,451	0	2,451	0	0	0	0	2,451	0.001	100.0%
Construction	Average	None	None	May-12	11,924	2,272	41,087	55,283	0	0	353,477	0	0	0	0	0.000	0.0%
Construction	Average	None	None	Jun-12	16,222	3,232	58,337	77,790	0	0	261,166	0	0	0	0	0.000	0.0%
Construction	Average	None	None	Jul-12	20,771	4,109	74,209	99,089	0	0	458,704	0	0	0	0	0.000	0.0%
Construction	Average	None	None	Aug-12	16,128	3,199	57,761	77,088	0	0	252,065	0	0	0	0	0.000	0.0%
Construction	Average	None	None	Sep-12	16,245	3,212	57,996	77,453	0	0	289,271	0	0	0	0	0.000	0.0%
Construction	Average	None	None	Oct-12	12,131	2,375	42,896	57,401	0	0	281,285	0	0	0	0	0.000	0.0%
Construction	Average	None	None	Nov-12	2,591	518	9,353	12,462	0	0	128,353	0	0	0	0	0.000	0.0%
Construction	Average	None	None	Dec-12	1,485	297	5,362	7,145	0	0	88,488	0	0	0	0	0.000	0.0%
Construction	Average	None	None	Jan-13	830	166	2,997	3,994	0	0	55,539	0	0	0	0	0.000	0.0%
Construction	Average	None	None	Feb-13	560	112	2,023	2,696	0	0	40,860	0	0	0	0	0.000	0.0%
Construction	Average	None	None	Mar-13	444	89	1,603	2,136	0	0	34,889	0	0	0	0	0.000	0.0%
Construction	Average	None	None	Apr-13	519	101	1,830	2,451	0	0	36,839	0	0	0	0	0.000	0.0%
Construction	Average	None	None	May-13	11,924	2,272	41,087	55,283	0	0	0	353,293	2,272	41,087	396,652	0.148	717.5%
Construction	Average	None	None	Jun-13	16,222	3,232	58,337	77,790	0	0	0	261,102	3,107	58,337	322,546	0.124	414.6%
Construction	Average	None	None	Jul-13	20,771	4,109	74,209	99,089	0	0	0	458,556	3,951	74,209	536,715	0.200	541.6%
Construction	Average	None	None	Aug-13	16,128	3,199	57,761	77,088	0	0	0	252,010	3,075	57,761	312,847	0.117	405.8%
Operation	Average	None	None	Sep-13	16,245	3,212	57,996	77,453	0	0	0	289,225	3,088	57,996	350,308	0.135	452.3%
Operation	Average	None	None	Oct-13	12,131	2,375	42,896	57,401	0	0	0	281,220	2,283	42,896	326,399	0.122	568.6%
Operation	Average	None	None	Nov-13	2,591	518	9,353	12,462	0	0	0	128,353	498	9,353	138,204	0.053	1109.0%
Operation	Average	None	None	Dec-13	1,485	297	5,362	7,145	0	0	0	88,488	286	5,362	94,136	0.035	1317.6%
Operation	Average	None	None	Jan-14	830	166	2,997	3,994	0	0	0	55,539	160	2,997	58,696	0.022	1469.8%
Operation	Average	None	None	Feb-14	560	112	2,023	2,696	0	0	0	40,860	108	2,023	42,991	0.018	1594.8%
Operation	Average	None	None	Mar-14	444	89	1,603	2,136	0	0	0	34,889	85	1,603	36,578	0.014	1712.5%
Operation	Average	None	None	Apr-14	519	101	1,830	2,451	0	0	0	36,838	97	1,830	38,766	0.015	1581.6%
Operation	Average	None	None	May-14	11,924	2,272	41,087	55,283	0	0	0	353,249	2,185	41,087	396,520	0.148	717.3%
Operation	Average	None	None	Jun-14	16,222	3,232	58,337	77,790	0	0	0	261,087	3,107	58,337	322,530	0.124	414.6%
Operation	Average	None	None	Jul-14	20,771	4,109	74,209	99,089	0	0	0	458,520	3,951	74,209	536,679	0.200	541.6%
Operation	Average	None	None	Aug-14	16,128	3,199	57,761	77,088	0	0	0	251,997	3,075	57,761	312,834	0.117	405.8%
Operation	Average	None	None	Sep-14	16,245	3,212	57,996	77,453	0	0	0	289,226	3,088	57,996	350,309	0.135	452.3%

Hydroclimatic Scenario		1				Eagle Creek Connector											
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Eagle Pup (Baseline)	Stuttle Gulch (Baseline)	Eagle Creek Pond (Baseline)	Eagle Creek U/S Platinum Gulch (Baseline)		Eagle Creek (Pre-Construction)	Dublin Gulch Diversion Channel Routing to Haggart Creek	Outlet of Dublin Gulch Diversion Channel (to EC Connector)	Outlet of Lower Dublin Gulch Sediment Control Pond (to EC Connector)	Eagle Creek Pond Seepage (to EC Connector)	Eagle Creek Connector U/S Platinum Gulch (ECP+DGDC+LDGSCP)		
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /sec	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Operation	Average	None	None	Oct-14	12,131	2,375	42,896	57,401	0	0	0	281,223	2,283	42,896	326,401	0.122	568.6%
Operation	Average	None	None	Nov-14	2,591	518	9,353	12,462	0	0	0	128,353	498	9,353	138,204	0.053	1109.0%
Operation	Average	None	None	Dec-14	1,485	297	5,362	7,145	0	0	0	88,488	286	5,362	94,136	0.035	1317.6%
Operation	Average	None	None	Jan-15	830	166	2,997	3,994	0	0	0	55,539	160	2,997	58,696	0.022	1469.8%
Operation	Average	None	None	Feb-15	560	112	2,023	2,696	0	0	0	40,860	108	2,023	42,991	0.018	1594.8%
Operation	Average	None	None	Mar-15	444	89	1,603	2,136	0	0	0	34,889	85	1,603	36,578	0.014	1712.5%
Operation	Average	None	None	Apr-15	519	101	1,830	2,451	0	0	0	36,839	97	1,830	38,766	0.015	1581.6%
Operation	Average	None	None	May-15	11,924	2,272	41,087	55,283	0	0	0	353,258	2,185	41,087	396,530	0.148	717.3%
Operation	Average	None	None	Jun-15	16,222	3,232	58,337	77,790	0	0	0	261,089	3,107	58,337	322,532	0.124	414.6%
Operation	Average	None	None	Jul-15	20,771	4,109	74,209	99,089	0	0	0	458,523	3,951	74,209	536,683	0.200	541.6%
Operation	Average	None	None	Aug-15	16,128	3,199	57,761	77,088	0	0	0	251,998	3,075	57,761	312,835	0.117	405.8%
Operation	Average	None	None	Sep-15	16,245	3,212	57,996	77,453	0	0	0	289,215	3,088	57,996	350,299	0.135	452.3%
Operation	Average	None	None	Oct-15	12,131	2,375	42,896	57,401	0	0	0	281,452	2,114	42,896	326,462	0.122	568.7%
Operation	Average	None	None	Nov-15	2,591	518	9,353	12,462	0	0	0	128,353	461	9,353	138,167	0.053	1108.7%
Operation	Average	None	None	Dec-15	1,485	297	5,362	7,145	0	0	0	88,488	265	5,362	94,115	0.035	1317.3%
Operation	Average	None	None	Jan-16	830	166	2,997	3,994	0	0	0	55,539	148	2,997	58,684	0.022	1469.5%
Operation	Average	None	None	Feb-16	560	112	2,023	2,696	0	0	0	40,860	100	2,023	42,983	0.017	1594.5%
Operation	Average	None	None	Mar-16	444	89	1,603	2,136	0	0	0	34,889	79	1,603	36,572	0.014	1712.2%
Operation	Average	None	None	Apr-16	519	101	1,830	2,451	0	0	0	36,847	90	1,830	38,767	0.015	1581.7%
Operation	Average	None	None	May-16	11,924	2,272	41,087	55,283	0	0	0	354,070	2,023	41,087	397,179	0.148	718.4%
Operation	Average	None	None	Jun-16	16,222	3,232	58,337	77,790	0	0	0	261,363	2,877	58,337	322,577	0.124	414.7%
Operation	Average	None	None	Jul-16	20,771	4,109	74,209	99,089	0	0	0	459,162	3,659	74,209	537,029	0.201	542.0%
Operation	Average	None	None	Aug-16	16,128	3,199	57,761	77,088	0	0	0	252,235	2,848	57,761	312,845	0.117	405.8%
Operation	Average	None	None	Sep-16	16,245	3,212	57,996	77,453	0	0	0	289,344	2,859	57,996	350,199	0.135	452.1%
Operation	Average	None	None	Oct-16	12,131	2,375	42,896	57,401	0	0	0	281,394	2,114	42,896	326,403	0.122	568.6%
Operation	Average	None	None	Nov-16	2,591	518	9,353	12,462	0	0	0	128,353	461	9,353	138,167	0.053	1108.7%
Operation	Average	None	None	Dec-16	1,485	297	5,362	7,145	0	0	0	88,488	265	5,362	94,115	0.035	1317.3%
Operation	Average	None	None	Jan-17	830	166	2,997	3,994	0	0	0	55,539	148	2,997	58,684	0.022	1469.5%
Operation	Average	None	None	Feb-17	560	112	2,023	2,696	0	0	0	40,860	100	2,023	42,983	0.018	1594.5%
Operation	Average	None	None	Mar-17	444	89	1,603	2,136	0	0	0	34,889	79	1,603	36,572	0.014	1712.2%
Operation	Average	None	None	Apr-17	519	101	1,830	2,451	0	0	0	36,845	90	1,830	38,765	0.015	1581.6%
Operation	Average	None	None	May-17	11,924	2,272	41,087	55,283	0	0	0	353,862	2,023	41,087	396,972	0.148	718.1%
Operation	Average	None	None	Jun-17	16,222	3,232	58,337	77,790	0	0	0	261,292	2,877	58,337	322,506	0.124	414.6%
Operation	Average	None	None	Jul-17	20,771	4,109	74,209	99,089	0	0	0	458,995	3,659	74,209	536,863	0.200	541.8%
Operation	Average	None	None	Aug-17	16,128	3,199	57,761	77,088	0	0	0	252,173	2,848	57,761	312,783	0.117	405.7%
Operation	Average	None	None	Sep-17	16,245	3,212	57,996	77,453	0	0	0	289,302	2,859	57,996	350,157	0.135	452.1%

Hydroclimatic Scenario	1				Eagle Creek Connector												
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Eagle Pup (Baseline)	Stuttle Gulch (Baseline)	Eagle Creek Pond (Baseline)	Eagle Creek U/S Platinum Gulch (Baseline)		Eagle Creek (Pre-Construction)	Dublin Gulch Diversion Channel Routing to Haggart Creek	Outlet of Dublin Gulch Diversion Channel (to EC Connector)	Outlet of Lower Dublin Gulch Sediment Control Pond (to EC Connector)	Eagle Creek Pond Seepage (to EC Connector)	Eagle Creek Connector U/S Platinum Gulch (ECP+DGDC+LDGSCP)		
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /sec	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Operation	Average	None	None	Oct-17	12,131	2,375	42,896	57,401	0	0	0	281,334	2,035	42,896	326,264	0.122	568.4%
Operation	Average	None	None	Nov-17	2,591	518	9,353	12,462	0	0	0	128,353	444	9,353	138,150	0.053	1108.6%
Operation	Average	None	None	Dec-17	1,485	297	5,362	7,145	0	0	0	88,488	255	5,362	94,105	0.035	1317.1%
Operation	Average	None	None	Jan-18	830	166	2,997	3,994	0	0	0	55,539	142	2,997	58,679	0.022	1469.3%
Operation	Average	None	None	Feb-18	560	112	2,023	2,696	0	0	0	40,860	96	2,023	42,979	0.018	1594.4%
Operation	Average	None	None	Mar-18	444	89	1,603	2,136	0	0	0	34,889	76	1,603	36,569	0.014	1712.0%
Operation	Average	None	None	Apr-18	519	101	1,830	2,451	0	0	0	36,843	87	1,830	38,760	0.015	1581.4%
Operation	Average	None	None	May-18	11,924	2,272	41,087	55,283	0	0	0	353,651	1,947	41,087	396,685	0.148	717.6%
Operation	Average	None	None	Jun-18	16,222	3,232	58,337	77,790	0	0	0	261,220	2,769	58,337	322,326	0.124	414.4%
Operation	Average	None	None	Jul-18	20,771	4,109	74,209	99,089	0	0	0	458,828	3,521	74,209	536,558	0.200	541.5%
Operation	Average	None	None	Aug-18	16,128	3,199	57,761	77,088	0	0	0	252,111	2,741	57,761	312,614	0.117	405.5%
Operation	Average	None	None	Sep-18	16,245	3,212	57,996	77,453	0	0	0	289,302	2,752	57,996	350,050	0.135	452.0%
Operation	Average	None	None	Oct-18	12,131	2,375	42,896	57,401	0	0	0	281,335	2,035	42,896	326,266	0.122	568.4%
Operation	Average	None	None	Nov-18	2,591	518	9,353	12,462	0	0	0	128,353	444	9,353	138,150	0.053	1108.6%
Operation	Average	None	None	Dec-18	1,485	297	5,362	7,145	0	0	0	88,488	255	5,362	94,105	0.035	1317.1%
Operation	Average	None	None	Jan-19	830	166	2,997	3,994	0	0	0	55,539	142	2,997	58,679	0.022	1469.3%
Operation	Average	None	None	Feb-19	560	112	2,023	2,696	0	0	0	40,860	96	2,023	42,979	0.018	1594.4%
Operation	Average	None	None	Mar-19	444	89	1,603	2,136	0	0	0	34,889	76	1,603	36,569	0.014	1712.0%
Operation	Average	None	None	Apr-19	519	101	1,830	2,451	0	0	0	36,843	87	1,830	38,760	0.015	1581.4%
Operation	Average	None	None	May-19	11,924	2,272	41,087	55,283	0	0	0	353,656	1,947	41,087	396,690	0.148	717.6%
Operation	Average	None	None	Jun-19	16,222	3,232	58,337	77,790	0	0	0	261,221	2,769	58,337	322,327	0.124	414.4%
Operation	Average	None	None	Jul-19	20,771	4,109	74,209	99,089	0	0	0	458,830	3,521	74,209	536,560	0.200	541.5%
Operation	Average	None	None	Aug-19	16,128	3,199	57,761	77,088	0	0	0	252,112	2,741	57,761	312,614	0.117	405.5%
Operation	Average	None	None	Sep-19	16,245	3,212	57,996	77,453	0	0	0	289,260	2,752	57,996	350,008	0.135	451.9%
Operation	Average	None	None	Oct-19	12,131	2,375	42,896	57,401	0	0	0	281,275	2,035	42,896	326,205	0.122	568.3%
Operation	Average	None	None	Nov-19	2,591	518	9,353	12,462	0	0	0	128,353	444	9,353	138,150	0.053	1108.6%
Operation	Average	None	None	Dec-19	1,485	297	5,362	7,145	0	0	0	88,488	255	5,362	94,105	0.035	1317.1%
Operation	Average	None	None	Jan-20	830	166	2,997	3,994	0	0	0	55,539	142	2,997	58,679	0.022	1469.3%
Operation	Average	None	None	Feb-20	560	112	2,023	2,696	0	0	0	40,860	96	2,023	42,979	0.017	1594.4%
Operation	Average	None	None	Mar-20	444	89	1,603	2,136	0	0	0	34,889	76	1,603	36,569	0.014	1712.0%
Operation	Average	None	None	Apr-20	519	101	1,830	2,451	0	0	0	36,840	87	1,830	38,758	0.015	1581.3%
Operation	Average	None	None	May-20	11,924	2,272	41,087	55,283	0	0	0	353,442	1,947	41,087	396,476	0.148	717.2%
Operation	Average	None	None	Jun-20	16,222	3,232	58,337	77,790	0	0	0	261,149	2,769	58,337	322,254	0.124	414.3%
Operation	Average	None	None	Jul-20	20,771	4,109	74,209	99,089	0	0	0	458,661	3,521	74,209	536,391	0.200	541.3%
Operation	Average	None	None	Aug-20	16,128	3,199	57,761	77,088	0	0	0	252,049	2,741	57,761	312,552	0.117	405.4%
Operation	Average	None	None	Sep-20	16,245	3,212	57,996	77,453	0	0	0	289,161	2,752	57,996	349,909	0.135	451.8%

Hydroclimatic Scenario	1				Eagle Creek Connector												
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Eagle Pup (Baseline)	Stuttle Gulch (Baseline)	Eagle Creek Pond (Baseline)	Eagle Creek U/S Platinum Gulch (Baseline)		Eagle Creek (Pre-Construction)	Dublin Gulch Diversion Channel Routing to Haggart Creek	Outlet of Dublin Gulch Diversion Channel (to EC Connector)	Outlet of Lower Dublin Gulch Sediment Control Pond (to EC Connector)	Eagle Creek Pond Seepage (to EC Connector)	Eagle Creek Connector U/S Platinum Gulch (ECP+DGDC+LDGSCP)		
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /sec	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /sec
Operation	Average	None	None	Oct-20	12,131	2,375	42,896	57,401	0	0	0	281,130	2,035	42,896	326,060	0.122	568.0%
Operation	Average	None	None	Nov-20	2,591	518	9,353	12,462	0	0	0	128,353	444	9,353	138,150	0.053	1108.6%
Operation	Average	None	None	Dec-20	1,485	297	5,362	7,145	0	0	0	88,488	255	5,362	94,105	0.035	1317.1%
Closure & Reclamation (au recovery)	Average	None	None	Jan-21	830	166	2,997	3,994	0	0	0	55,539	142	2,997	58,679	0.022	1469.3%
Closure & Reclamation (au recovery)	Average	None	None	Feb-21	560	112	2,023	2,696	0	0	0	40,860	96	2,023	42,979	0.018	1594.4%
Closure & Reclamation (au recovery)	Average	None	None	Mar-21	444	89	1,603	2,136	0	0	0	34,889	76	1,603	36,569	0.014	1712.0%
Closure & Reclamation (au recovery)	Average	None	None	Apr-21	519	101	1,830	2,451	0	0	0	36,835	87	1,830	38,752	0.015	1581.1%
Closure & Reclamation (au recovery)	Average	None	None	May-21	11,924	2,272	41,087	55,283	0	0	0	352,929	1,947	41,087	395,963	0.148	716.2%
Closure & Reclamation (au recovery)	Average	None	None	Jun-21	16,222	3,232	58,337	77,790	0	0	0	260,977	2,769	58,337	322,083	0.124	414.0%
Closure & Reclamation (au recovery)	Average	None	None	Jul-21	20,771	4,109	74,209	99,089	0	0	0	458,263	3,521	74,209	535,993	0.200	540.9%
Closure & Reclamation (au recovery)	Average	None	None	Aug-21	16,128	3,199	57,761	77,088	0	0	0	251,902	2,741	57,761	312,404	0.117	405.3%
Closure & Reclamation (au recovery)	Average	None	None	Sep-21	16,245	3,212	57,996	77,453	0	0	0	289,161	2,752	57,996	349,909	0.135	451.8%
Closure & Reclamation (au recovery)	Average	None	None	Oct-21	12,131	2,375	42,896	57,401	0	0	0	281,130	2,035	42,896	326,060	0.122	568.0%
Closure & Reclamation (au recovery)	Average	None	None	Nov-21	2,591	518	9,353	12,462	0	0	0	128,353	444	9,353	138,150	0.053	1108.6%
Closure & Reclamation (au recovery)	Average	None	None	Dec-21	1,485	297	5,362	7,145	0	0	0	88,488	255	5,362	94,105	0.035	1317.1%
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-22	830	166	2,997	3,994	0	0	0	55,539	142	2,997	58,679	0.022	1469.3%
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-22	560	112	2,023	2,696	0	0	0	40,860	96	2,023	42,979	0.018	1594.4%
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-22	444	89	1,603	2,136	0	0	0	34,889	76	1,603	36,569	0.014	1712.0%
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-22	519	101	1,830	2,451	0	0	0	36,835	87	1,830	38,752	0.015	1581.1%
Closure & Reclamation (hlf rinse)	Average	None	None	May-22	11,924	2,272	41,087	55,283	0	0	0	352,929	1,947	41,087	395,963	0.148	716.2%
Closure & Reclamation (hlf rinse)	Average	None	None	Jun-22	16,222	3,232	58,337	77,790	0	0	0	260,977	2,769	58,337	322,083	0.124	414.0%
Closure & Reclamation (hlf rinse)	Average	None	None	Jul-22	20,771	4,109	74,209	99,089	0	0	0	458,263	3,521	74,209	535,993	0.200	540.9%
Closure & Reclamation (hlf rinse)	Average	None	None	Aug-22	16,128	3,199	57,761	77,088	0	0	0	251,902	2,741	57,761	312,404	0.117	405.3%
Closure & Reclamation (hlf rinse)	Average	None	None	Sep-22	16,245	3,212	57,996	77,453	0	0	0	289,161	2,752	57,996	349,909	0.135	451.8%
Closure & Reclamation (hlf rinse)	Average	None	None	Oct-22	12,131	2,375	42,896	57,401	0	0	0	281,130	2,035	42,896	326,060	0.122	568.0%
Closure & Reclamation (hlf rinse)	Average	None	None	Nov-22	2,591	518	9,353	12,462	0	0	0	128,353	444	9,353	138,150	0.053	1108.6%
Closure & Reclamation (hlf rinse)	Average	None	None	Dec-22	1,485	297	5,362	7,145	0	0	0	88,488	255	5,362	94,105	0.035	1317.1%
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-23	830	166	2,997	3,994	0	0	0	55,539	142	2,997	58,679	0.022	1469.3%
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-23	560	112	2,023	2,696	0	0	0	40,860	96	2,023	42,979	0.018	1594.4%
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-23	444	89	1,603	2,136	0	0	0	34,889	76	1,603	36,569	0.014	1712.0%
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-23	519	101	1,830	2,451	0	0	0	36,835	87	1,830	38,752	0.015	1581.1%
Closure & Reclamation (hlf rinse)	Average	None	None	May-23	11,924	2,272	41,087	55,283	0	0	0	352,929	1,947	41,087	395,963	0.148	716.2%
Closure & Reclamation (hlf rinse)	Average	None	None	Jun-23	16,222	3,232	58,337	77,790	0	0	0	260,977	2,769	58,337	322,083	0.124	414.0%
Closure & Reclamation (hlf rinse)	Average	None	None	Jul-23	20,771	4,109	74,209	99,089	0	0	0	458,263	3,521	74,209	535,993	0.200	540.9%
Closure & Reclamation (hlf rinse)	Average	None	None	Aug-23	16,128	3,199	57,761	77,088	0	0	0	251,902	2,741	57,761	312,404	0.117	405.3%
Closure & Reclamation (hlf rinse)	Average	None	None	Sep-23	16,245	3,212	57,996	77,453	0	0	0	289,161	2,752	57,996	349,909	0.135	451.8%

Hydroclimatic Scenario	1				Eagle Creek Connector												
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Eagle Pup (Baseline)	Stuttle Gulch (Baseline)	Eagle Creek Pond (Baseline)	Eagle Creek U/S Platinum Gulch (Baseline)		Eagle Creek (Pre-Construction)	Dublin Gulch Diversion Channel Routing to Haggart Creek	Outlet of Dublin Gulch Diversion Channel (to EC Connector)	Outlet of Lower Dublin Gulch Sediment Control Pond (to EC Connector)	Eagle Creek Pond Seepage (to EC Connector)	Eagle Creek Connector U/S Platinum Gulch (ECP+DGDC+LDGSCP)		
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /sec	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /sec
Closure & Reclamation (hlf rinse)	Average	None	None	Oct-23	12,131	2,375	42,896	57,401	0	0	0	281,130	2,035	42,896	326,060	0.122	568.0%
Closure & Reclamation (hlf rinse)	Average	None	None	Nov-23	2,591	518	9,353	12,462	0	0	0	128,353	444	9,353	138,150	0.053	1108.6%
Closure & Reclamation (hlf rinse)	Average	None	None	Dec-23	1,485	297	5,362	7,145	0	0	0	88,488	255	5,362	94,105	0.035	1317.1%
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-24	830	166	2,997	3,994	0	0	0	55,539	142	2,997	58,679	0.022	1469.3%
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-24	560	112	2,023	2,696	0	0	0	40,860	96	2,023	42,979	0.017	1594.4%
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-24	444	89	1,603	2,136	0	0	0	34,889	76	1,603	36,569	0.014	1712.0%
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-24	519	101	1,830	2,451	0	0	0	36,835	87	1,830	38,752	0.015	1581.1%
Closure & Reclamation (hlf rinse)	Average	None	None	May-24	11,924	2,272	41,087	55,283	0	0	0	352,929	1,947	41,087	395,963	0.148	716.2%
Closure & Reclamation (hlf rinse)	Average	None	None	Jun-24	16,222	3,232	58,337	77,790	0	0	0	260,977	2,769	58,337	322,083	0.124	414.0%
Closure & Reclamation (draindown)	Average	None	None	Jul-24	20,771	4,109	74,209	99,089	0	0	0	458,263	3,521	74,209	535,993	0.200	540.9%
Closure & Reclamation (draindown)	Average	None	None	Aug-24	16,128	3,199	57,761	77,088	0	0	0	251,902	2,741	57,761	312,404	0.117	405.3%
Closure & Reclamation (draindown)	Average	None	None	Sep-24	16,245	3,212	57,996	77,453	0	0	0	289,161	2,752	57,996	349,909	0.135	451.8%
Closure & Reclamation (draindown)	Average	None	None	Oct-24	12,131	2,375	42,896	57,401	0	0	0	281,130	2,035	42,896	326,060	0.122	568.0%
Closure & Reclamation (draindown)	Average	None	None	Nov-24	2,591	518	9,353	12,462	0	0	0	128,353	444	9,353	138,150	0.053	1108.6%
Closure & Reclamation (draindown)	Average	None	None	Dec-24	1,485	297	5,362	7,145	0	0	0	88,488	255	5,362	94,105	0.035	1317.1%
Closure & Reclamation (draindown)	Average	None	None	Jan-25	830	166	2,997	3,994	0	0	0	55,539	142	2,997	58,679	0.022	1469.3%
Closure & Reclamation (draindown)	Average	None	None	Feb-25	560	112	2,023	2,696	0	0	0	40,860	96	2,023	42,979	0.018	1594.4%
Closure & Reclamation (draindown)	Average	None	None	Mar-25	444	89	1,603	2,136	0	0	0	34,889	76	1,603	36,569	0.014	1712.0%
Closure & Reclamation (draindown)	Average	None	None	Apr-25	519	101	1,830	2,451	0	0	0	36,835	87	1,830	38,752	0.015	1581.1%
Closure & Reclamation (draindown)	Average	None	None	May-25	11,924	2,272	41,087	55,283	0	0	0	352,929	1,947	41,087	395,963	0.148	716.2%
Closure & Reclamation (draindown)	Average	None	None	Jun-25	16,222	3,232	58,337	77,790	0	0	0	260,977	2,769	58,337	322,083	0.124	414.0%
Closure & Reclamation (draindown)	Average	None	None	Jul-25	20,771	4,109	74,209	99,089	0	0	0	458,263	3,521	74,209	535,993	0.200	540.9%
Closure & Reclamation (draindown)	Average	None	None	Aug-25	16,128	3,199	57,761	77,088	0	0	0	251,902	2,741	57,761	312,404	0.117	405.3%
Closure & Reclamation (draindown)	Average	None	None	Sep-25	16,245	3,212	57,996	77,453	0	0	0	289,161	2,752	57,996	349,909	0.135	451.8%
Closure & Reclamation (draindown)	Average	None	None	Oct-25	12,131	2,375	42,896	57,401	0	0	0	281,130	2,035	42,896	326,060	0.122	568.0%
Closure & Reclamation (draindown)	Average	None	None	Nov-25	2,591	518	9,353	12,462	0	0	0	128,353	444	9,353	138,150	0.053	1108.6%
Closure & Reclamation (draindown)	Average	None	None	Dec-25	1,485	297	5,362	7,145	0	0	0	88,488	255	5,362	94,105	0.035	1317.1%
Closure & Reclamation (draindown)	Average	None	None	Jan-26	830	166	2,997	3,994	0	0	0	55,539	142	2,997	58,679	0.022	1469.3%
Closure & Reclamation (draindown)	Average	None	None	Feb-26	560	112	2,023	2,696	0	0	0	40,860	96	2,023	42,979	0.018	1594.4%
Closure & Reclamation (draindown)	Average	None	None	Mar-26	444	89	1,603	2,136	0	0	0	34,889	76	1,603	36,569	0.014	1712.0%
Closure & Reclamation (draindown)	Average	None	None	Apr-26	519	101	1,830	2,451	0	0	0	36,835	87	1,830	38,752	0.015	1581.1%
Closure & Reclamation (draindown)	Average	None	None	May-26	11,924	2,272	41,087	55,283	0	0	0	352,929	1,947	41,087	395,963	0.148	716.2%
Closure & Reclamation (draindown)	Average	None	None	Jun-26	16,222	3,232	58,337	77,790	0	0	0	260,977	2,769	58,337	322,083	0.124	414.0%
Closure & Reclamation (draindown)	Average	None	None	Jul-26	20,771	4,109	74,209	99,089	0	0	0	458,263	3,521	74,209	535,993	0.200	540.9%
Closure & Reclamation (draindown)	Average	None	None	Aug-26	16,128	3,199	57,761	77,088	0	0	0	251,902	2,741	57,761	312,404	0.117	405.3%
Closure & Reclamation (draindown)	Average	None	None	Sep-26	16,245	3,212	57,996	77,453	0	0	0	289,161	2,752	57,996	349,909	0.135	451.8%

Hydroclimatic Scenario	1				Eagle Creek Connector												
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Eagle Pup (Baseline)	Stuttle Gulch (Baseline)	Eagle Creek Pond (Baseline)	Eagle Creek U/S Platinum Gulch (Baseline)		Eagle Creek (Pre-Construction)	Dublin Gulch Diversion Channel Routing to Haggart Creek	Outlet of Dublin Gulch Diversion Channel (to EC Connector)	Outlet of Lower Dublin Gulch Sediment Control Pond (to EC Connector)	Eagle Creek Pond Seepage (to EC Connector)	Eagle Creek Connector U/S Platinum Gulch (ECP+DGDC+LDGSCP)		
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /sec	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /sec
Closure & Reclamation (draindown)	Average	None	None	Oct-26	12,131	2,375	42,896	57,401	0	0	0	306,519	0	42,896	349,415	0.130	608.7%
Closure & Reclamation (draindown)	Average	None	None	Nov-26	2,591	518	9,353	12,462	0	0	0	132,548	0	9,353	141,901	0.055	1138.7%
Closure & Reclamation (draindown)	Average	None	None	Dec-26	1,485	297	5,362	7,145	0	0	0	88,837	0	5,362	94,199	0.035	1318.5%
Closure & Reclamation (draindown)	Average	None	None	Jan-27	830	166	2,997	3,994	0	0	0	55,734	0	2,997	58,732	0.022	1470.7%
Closure & Reclamation (draindown)	Average	None	None	Feb-27	560	112	2,023	2,696	0	0	0	40,991	0	2,023	43,014	0.018	1595.7%
Closure & Reclamation (draindown)	Average	None	None	Mar-27	444	89	1,603	2,136	0	0	0	34,994	0	1,603	36,597	0.014	1713.3%
Closure & Reclamation (draindown)	Average	None	None	Apr-27	519	101	1,830	2,451	0	0	0	46,625	0	1,830	48,456	0.019	1977.0%
Closure & Reclamation (draindown)	Average	None	None	May-27	11,924	2,272	41,087	55,283	0	0	0	446,253	0	41,087	487,340	0.182	881.5%
Closure & Reclamation (draindown)	Average	None	None	Jun-27	16,222	3,232	58,337	77,790	0	0	0	337,574	0	58,337	395,911	0.153	508.9%
Closure & Reclamation (draindown)	Average	None	None	Jul-27	20,771	4,109	74,209	99,089	0	0	0	523,289	0	74,209	597,498	0.223	603.0%
Closure & Reclamation (draindown)	Average	None	None	Aug-27	16,128	3,199	57,761	77,088	0	0	0	302,070	0	57,761	359,832	0.134	466.8%
Closure & Reclamation (draindown)	Average	None	None	Sep-27	16,245	3,212	57,996	77,453	0	0	0	334,381	0	57,996	392,377	0.151	506.6%
Closure & Reclamation (draindown)	Average	None	None	Oct-27	12,131	2,375	42,896	57,401	0	0	0	306,519	0	42,896	349,415	0.130	608.7%
Closure & Reclamation (draindown)	Average	None	None	Nov-27	2,591	518	9,353	12,462	0	0	0	132,548	0	9,353	141,901	0.055	1138.7%
Closure & Reclamation (draindown)	Average	None	None	Dec-27	1,485	297	5,362	7,145	0	0	0	88,837	0	5,362	94,199	0.035	1318.5%
Closure & Reclamation (draindown)	Average	None	None	Jan-28	830	166	2,997	3,994	0	0	0	55,734	0	2,997	58,732	0.022	1470.7%
Closure & Reclamation (draindown)	Average	None	None	Feb-28	560	112	2,023	2,696	0	0	0	40,991	0	2,023	43,014	0.017	1595.7%
Closure & Reclamation (draindown)	Average	None	None	Mar-28	444	89	1,603	2,136	0	0	0	34,994	0	1,603	36,597	0.014	1713.3%
Closure & Reclamation (draindown)	Average	None	None	Apr-28	519	101	1,830	2,451	0	0	0	46,625	0	1,830	48,456	0.019	1977.0%
Closure & Reclamation (draindown)	Average	None	None	May-28	11,924	2,272	41,087	55,283	0	0	0	446,253	0	41,087	487,340	0.182	881.5%
Closure & Reclamation (draindown)	Average	None	None	Jun-28	16,222	3,232	58,337	77,790	0	0	0	337,574	0	58,337	395,911	0.153	508.9%
Closure & Reclamation (draindown)	Average	None	None	Jul-28	20,771	4,109	74,209	99,089	0	0	0	523,289	0	74,209	597,498	0.223	603.0%
Closure & Reclamation (draindown)	Average	None	None	Aug-28	16,128	3,199	57,761	77,088	0	0	0	302,070	0	57,761	359,832	0.134	466.8%
Closure & Reclamation (draindown)	Average	None	None	Sep-28	16,245	3,212	57,996	77,453	0	0	0	334,381	0	57,996	392,377	0.151	506.6%
Closure & Reclamation (draindown)	Average	None	None	Oct-28	12,131	2,375	42,896	57,401	0	0	0	306,519	0	42,896	349,415	0.130	608.7%
Closure & Reclamation (draindown)	Average	None	None	Nov-28	2,591	518	9,353	12,462	0	0	0	132,548	0	9,353	141,901	0.055	1138.7%
Closure & Reclamation (draindown)	Average	None	None	Dec-28	1,485	297	5,362	7,145	0	0	0	88,837	0	5,362	94,199	0.035	1318.5%
Closure & Reclamation (draindown)	Average	None	None	Jan-29	830	166	2,997	3,994	0	0	0	55,734	0	2,997	58,732	0.022	1470.7%
Closure & Reclamation (draindown)	Average	None	None	Feb-29	560	112	2,023	2,696	0	0	0	40,991	0	2,023	43,014	0.018	1595.7%
Closure & Reclamation (draindown)	Average	None	None	Mar-29	444	89	1,603	2,136	0	0	0	34,994	0	1,603	36,597	0.014	1713.3%
Closure & Reclamation (draindown)	Average	None	None	Apr-29	519	101	1,830	2,451	0	0	0	46,625	0	1,830	48,456	0.019	1977.0%
Closure & Reclamation (draindown)	Average	None	None	May-29	11,924	2,272	41,087	55,283	0	0	0	446,253	0	41,087	487,340	0.182	881.5%
Closure & Reclamation (draindown)	Average	None	None	Jun-29	16,222	3,232	58,337	77,790	0	0	0	337,574	0	58,337	395,911	0.153	508.9%
Closure & Reclamation (draindown)	Average	None	None	Jul-29	20,771	4,109	74,209	99,089	0	0	0	523,289	0	74,209	597,498	0.223	603.0%
Closure & Reclamation (draindown)	Average	None	None	Aug-29	16,128	3,199	57,761	77,088	0	0	0	302,070	0	57,761	359,832	0.134	466.8%
Closure & Reclamation (draindown)	Average	None	None	Sep-29	16,245	3,212	57,996	77,453	0	0	0	334,381	0	57,996	392,377	0.151	506.6%

Hydroclimatic Scenario	1				Eagle Creek Connector												
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Eagle Pup (Baseline)	Stuttle Gulch (Baseline)	Eagle Creek Pond (Baseline)	Eagle Creek U/S Platinum Gulch (Baseline)		Eagle Creek (Pre-Construction)	Dublin Gulch Diversion Channel Routing to Haggart Creek	Outlet of Dublin Gulch Diversion Channel (to EC Connector)	Outlet of Lower Dublin Gulch Sediment Control Pond (to EC Connector)	Eagle Creek Pond Seepage (to EC Connector)	Eagle Creek Connector U/S Platinum Gulch (ECP+DGDC+LDGSCP)		
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /sec	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /sec
Closure & Reclamation (draindown)	Average	None	None	Oct-29	12,131	2,375	42,896	57,401	0	0	0	306,519	0	42,896	349,415	0.130	608.7%
Closure & Reclamation (draindown)	Average	None	None	Nov-29	2,591	518	9,353	12,462	0	0	0	132,548	0	9,353	141,901	0.055	1138.7%
Closure & Reclamation (draindown)	Average	None	None	Dec-29	1,485	297	5,362	7,145	0	0	0	88,837	0	5,362	94,199	0.035	1318.5%
Closure & Reclamation (draindown)	Average	None	None	Jan-30	830	166	2,997	3,994	0	0	0	55,734	0	2,997	58,732	0.022	1470.7%
Closure & Reclamation (draindown)	Average	None	None	Feb-30	560	112	2,023	2,696	0	0	0	40,991	0	2,023	43,014	0.018	1595.7%
Closure & Reclamation (draindown)	Average	None	None	Mar-30	444	89	1,603	2,136	0	0	0	34,994	0	1,603	36,597	0.014	1713.3%
Closure & Reclamation (draindown)	Average	None	None	Apr-30	519	101	1,830	2,451	0	0	0	46,625	0	1,830	48,456	0.019	1977.0%
Closure & Reclamation (draindown)	Average	None	None	May-30	11,924	2,272	41,087	55,283	0	0	0	446,253	0	41,087	487,340	0.182	881.5%
Closure & Reclamation (draindown)	Average	None	None	Jun-30	16,222	3,232	58,337	77,790	0	0	0	337,574	0	58,337	395,911	0.153	508.9%
Closure & Reclamation (draindown)	Average	None	None	Jul-30	20,771	4,109	74,209	99,089	0	0	0	523,289	0	74,209	597,498	0.223	603.0%
Closure & Reclamation (draindown)	Average	None	None	Aug-30	16,128	3,199	57,761	77,088	0	0	0	302,070	0	57,761	359,832	0.134	466.8%
Closure & Reclamation (draindown)	Average	None	None	Sep-30	16,245	3,212	57,996	77,453	0	0	0	334,381	0	57,996	392,377	0.151	506.6%
Closure & Reclamation (draindown)	Average	None	None	Oct-30	12,131	2,375	42,896	57,401	0	0	0	306,519	0	42,896	349,415	0.130	608.7%
Closure & Reclamation (draindown)	Average	None	None	Nov-30	2,591	518	9,353	12,462	0	0	0	132,548	0	9,353	141,901	0.055	1138.7%
Closure & Reclamation (draindown)	Average	None	None	Dec-30	1,485	297	5,362	7,145	0	0	0	88,837	0	5,362	94,199	0.035	1318.5%
Post-closure Monitoring	Average	None	None	Jan-31	830	166	2,997	3,994	0	0	0	55,734	0	2,997	58,732	0.022	1470.7%
Post-closure Monitoring	Average	None	None	Feb-31	560	112	2,023	2,696	0	0	0	40,991	0	2,023	43,014	0.018	1595.7%
Post-closure Monitoring	Average	None	None	Mar-31	444	89	1,603	2,136	0	0	0	34,994	0	1,603	36,597	0.014	1713.3%
Post-closure Monitoring	Average	None	None	Apr-31	519	101	1,830	2,451	0	0	0	46,625	0	1,830	48,456	0.019	1977.0%
Post-closure Monitoring	Average	None	None	May-31	11,924	2,272	41,087	55,283	0	0	0	446,253	0	41,087	487,340	0.182	881.5%
Post-closure Monitoring	Average	None	None	Jun-31	16,222	3,232	58,337	77,790	0	0	0	337,574	0	58,337	395,911	0.153	508.9%
Post-closure Monitoring	Average	None	None	Jul-31	20,771	4,109	74,209	99,089	0	0	0	523,289	0	74,209	597,498	0.223	603.0%
Post-closure Monitoring	Average	None	None	Aug-31	16,128	3,199	57,761	77,088	0	0	0	302,070	0	57,761	359,832	0.134	466.8%
Post-closure Monitoring	Average	None	None	Sep-31	16,245	3,212	57,996	77,453	0	0	0	334,381	0	57,996	392,377	0.151	506.6%
Post-closure Monitoring	Average	None	None	Oct-31	12,131	2,375	42,896	57,401	0	0	0	306,519	0	42,896	349,415	0.130	608.7%
Post-closure Monitoring	Average	None	None	Nov-31	2,591	518	9,353	12,462	0	0	0	132,548	0	9,353	141,901	0.055	1138.7%
Post-closure Monitoring	Average	None	None	Dec-31	1,485	297	5,362	7,145	0	0	0	88,837	0	5,362	94,199	0.035	1318.5%
Post-closure Monitoring	Average	None	None	Jan-32	830	166	2,997	3,994	0	0	0	55,734	0	2,997	58,732	0.022	1470.7%
Post-closure Monitoring	Average	None	None	Feb-32	560	112	2,023	2,696	0	0	0	40,991	0	2,023	43,014	0.017	1595.7%
Post-closure Monitoring	Average	None	None	Mar-32	444	89	1,603	2,136	0	0	0	34,994	0	1,603	36,597	0.014	1713.3%
Post-closure Monitoring	Average	None	None	Apr-32	519	101	1,830	2,451	0	0	0	46,625	0	1,830	48,456	0.019	1977.0%
Post-closure Monitoring	Average	None	None	May-32	11,924	2,272	41,087	55,283	0	0	0	446,253	0	41,087	487,340	0.182	881.5%
Post-closure Monitoring	Average	None	None	Jun-32	16,222	3,232	58,337	77,790	0	0	0	337,574	0	58,337	395,911	0.153	508.9%
Post-closure Monitoring	Average	None	None	Jul-32	20,771	4,109	74,209	99,089	0	0	0	523,289	0	74,209	597,498	0.223	603.0%
Post-closure Monitoring	Average	None	None	Aug-32	16,128	3,199	57,761	77,088	0	0	0	302,070	0	57,761	359,832	0.134	466.8%
Post-closure Monitoring	Average	None	None	Sep-32	16,245	3,212	57,996	77,453	0	0	0	334,381	0	57,996	392,377	0.151	506.6%

Hydroclimatic Scenario	1				Eagle Creek Connector												
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Eagle Pup (Baseline)	Stuttle Gulch (Baseline)	Eagle Creek Pond (Baseline)	Eagle Creek U/S Platinum Gulch (Baseline)		Eagle Creek (Pre-Construction)	Dublin Gulch Diversion Channel Routing to Haggart Creek	Outlet of Dublin Gulch Diversion Channel (to EC Connector)	Outlet of Lower Dublin Gulch Sediment Control Pond (to EC Connector)	Eagle Creek Pond Seepage (to EC Connector)	Eagle Creek Connector U/S Platinum Gulch (ECP+DGDC+LDGSCP)		
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /sec	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /sec
Post-closure Monitoring	Average	None	None	Oct-32	12,131	2,375	42,896	57,401	0	0	0	306,519	0	42,896	349,415	0.130	608.7%
Post-closure Monitoring	Average	None	None	Nov-32	2,591	518	9,353	12,462	0	0	0	132,548	0	9,353	141,901	0.055	1138.7%
Post-closure Monitoring	Average	None	None	Dec-32	1,485	297	5,362	7,145	0	0	0	88,837	0	5,362	94,199	0.035	1318.5%
Post-closure Monitoring	Average	None	None	Jan-33	830	166	2,997	3,994	0	0	0	55,734	0	2,997	58,732	0.022	1470.7%
Post-closure Monitoring	Average	None	None	Feb-33	560	112	2,023	2,696	0	0	0	40,991	0	2,023	43,014	0.018	1595.7%
Post-closure Monitoring	Average	None	None	Mar-33	444	89	1,603	2,136	0	0	0	34,994	0	1,603	36,597	0.014	1713.3%
Post-closure Monitoring	Average	None	None	Apr-33	519	101	1,830	2,451	0	0	0	46,625	0	1,830	48,456	0.019	1977.0%
Post-closure Monitoring	Average	None	None	May-33	11,924	2,272	41,087	55,283	0	0	0	446,253	0	41,087	487,340	0.182	881.5%
Post-closure Monitoring	Average	None	None	Jun-33	16,222	3,232	58,337	77,790	0	0	0	337,574	0	58,337	395,911	0.153	508.9%
Post-closure Monitoring	Average	None	None	Jul-33	20,771	4,109	74,209	99,089	0	0	0	523,289	0	74,209	597,498	0.223	603.0%
Post-closure Monitoring	Average	None	None	Aug-33	16,128	3,199	57,761	77,088	0	0	0	302,070	0	57,761	359,832	0.134	466.8%
Post-closure Monitoring	Average	None	None	Sep-33	16,245	3,212	57,996	77,453	0	0	0	334,381	0	57,996	392,377	0.151	506.6%
Post-closure Monitoring	Average	None	None	Oct-33	12,131	2,375	42,896	57,401	0	0	0	306,519	0	42,896	349,415	0.130	608.7%
Post-closure Monitoring	Average	None	None	Nov-33	2,591	518	9,353	12,462	0	0	0	132,548	0	9,353	141,901	0.055	1138.7%
Post-closure Monitoring	Average	None	None	Dec-33	1,485	297	5,362	7,145	0	0	0	88,837	0	5,362	94,199	0.035	1318.5%
Post-closure Monitoring	Average	None	None	Jan-34	830	166	2,997	3,994	0	0	0	55,734	0	2,997	58,732	0.022	1470.7%
Post-closure Monitoring	Average	None	None	Feb-34	560	112	2,023	2,696	0	0	0	40,991	0	2,023	43,014	0.018	1595.7%
Post-closure Monitoring	Average	None	None	Mar-34	444	89	1,603	2,136	0	0	0	34,994	0	1,603	36,597	0.014	1713.3%
Post-closure Monitoring	Average	None	None	Apr-34	519	101	1,830	2,451	0	0	0	46,625	0	1,830	48,456	0.019	1977.0%
Post-closure Monitoring	Average	None	None	May-34	11,924	2,272	41,087	55,283	0	0	0	446,253	0	41,087	487,340	0.182	881.5%
Post-closure Monitoring	Average	None	None	Jun-34	16,222	3,232	58,337	77,790	0	0	0	337,574	0	58,337	395,911	0.153	508.9%
Post-closure Monitoring	Average	None	None	Jul-34	20,771	4,109	74,209	99,089	0	0	0	523,289	0	74,209	597,498	0.223	603.0%
Post-closure Monitoring	Average	None	None	Aug-34	16,128	3,199	57,761	77,088	0	0	0	302,070	0	57,761	359,832	0.134	466.8%
Post-closure Monitoring	Average	None	None	Sep-34	16,245	3,212	57,996	77,453	0	0	0	334,381	0	57,996	392,377	0.151	506.6%
Post-closure Monitoring	Average	None	None	Oct-34	12,131	2,375	42,896	57,401	0	0	0	306,519	0	42,896	349,415	0.130	608.7%
Post-closure Monitoring	Average	None	None	Nov-34	2,591	518	9,353	12,462	0	0	0	132,548	0	9,353	141,901	0.055	1138.7%
Post-closure Monitoring	Average	None	None	Dec-34	1,485	297	5,362	7,145	0	0	0	88,837	0	5,362	94,199	0.035	1318.5%
Post-closure Monitoring	Average	None	None	Jan-35	830	166	2,997	3,994	0	0	0	55,734	0	2,997	58,732	0.022	1470.7%



**Table C7-2: Eagle Creek at W27 – Scenario 2 model results – Selected Years**

Hydroclimatic Scenario	2				Eagle Creek Connector												
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Eagle Pup (Baseline)	Stuttie Gulch (Baseline)	Eagle Creek Pond (Baseline)	Eagle Creek U/S Platinum Gulch (Baseline)		Eagle Creek (Pre-Construction)	Dublin Gulch Diversion Channel Routing to Haggart Creek	Outlet of Dublin Gulch Diversion Channel (to EC Connector)	Outlet of Lower Dublin Gulch Sediment Control Pond (to EC Connector)	Eagle Creek Pond Seepage (to EC Connector)	Eagle Creek Connector U/S Platinum Gulch (ECP+DGDC+LDGSCP)		
					m³/mth	m³/mth	m³/mth	m³/mth	m³/sec	m³/mth	m³/mth	m³/mth	m³/mth	m³/mth	m³/mth	m³/sec	% of EC Baseline Flow
Construction	Wet	None	None	Oct-12	20,988	4,020	72,677	97,685	0	0	406,439	0	0	0	0	0.000	0.0%
Construction	Wet	None	None	Nov-12	3,320	664	11,984	15,968	0	0	164,280	0	0	0	0	0.000	0.0%
Construction	Wet	None	None	Dec-12	1,920	384	6,931	9,235	0	0	114,478	0	0	0	0	0.000	0.0%
Construction	Wet	None	None	Jan-13	1,161	232	4,191	5,585	0	0	77,429	0	0	0	0	0.000	0.0%
Construction	Wet	None	None	Feb-13	712	142	2,570	3,424	0	0	51,698	0	0	0	0	0.000	0.0%
Construction	Wet	None	None	Mar-13	487	97	1,757	2,341	0	0	38,082	0	0	0	0	0.000	0.0%
Construction	Wet	None	None	Apr-13	701	135	2,434	3,270	0	0	46,419	0	0	0	0	0.000	0.0%
Construction	Wet	None	None	May-13	23,922	4,525	81,843	110,290	0	0	0	709,546	4,525	81,843	795,915	0.297	721.7%
Construction	Wet	None	None	Jun-13	22,098	4,381	79,099	105,578	0	0	0	334,654	4,212	79,099	417,965	0.161	395.9%
Construction	Wet	None	None	Jul-13	36,549	7,154	129,253	172,956	0	0	0	1,015,453	6,878	129,253	1,151,584	0.430	665.8%
Construction	Wet	None	None	Aug-13	23,268	4,579	82,718	110,566	0	0	0	518,456	4,403	82,718	605,576	0.226	547.7%
Operation	Wet	None	None	Sep-13	27,062	5,285	95,494	127,841	0	0	0	521,483	5,081	95,494	622,057	0.240	486.6%
Operation	Wet	None	None	Oct-19	20,988	4,020	72,677	97,685	0	0	0	406,414	3,445	72,677	482,536	0.180	494.0%
Operation	Wet	None	None	Nov-19	3,320	664	11,984	15,968	0	0	0	164,280	569	11,984	176,833	0.068	1107.4%
Operation	Wet	None	None	Dec-19	1,920	384	6,931	9,235	0	0	0	114,478	329	6,931	121,738	0.045	1318.2%
Operation	Wet	None	None	Jan-20	1,161	232	4,191	5,585	0	0	0	77,429	199	4,191	81,819	0.031	1465.1%
Operation	Wet	None	None	Feb-20	712	142	2,570	3,424	0	0	0	51,698	122	2,570	54,390	0.022	1588.5%
Operation	Wet	None	None	Mar-20	487	97	1,757	2,341	0	0	0	38,082	83	1,757	39,922	0.015	1705.6%
Operation	Wet	None	None	Apr-20	701	135	2,434	3,270	0	0	0	46,425	115	2,434	48,975	0.019	1497.7%
Operation	Wet	None	None	May-20	23,922	4,525	81,843	110,290	0	0	0	709,843	3,877	81,843	795,564	0.297	721.3%
Operation	Wet	None	None	Jun-20	22,098	4,381	79,099	105,578	0	0	0	334,743	3,754	79,099	417,596	0.161	395.5%
Operation	Wet	None	None	Jul-20	36,549	7,154	129,253	172,956	0	0	0	1,015,740	6,130	129,253	1,151,123	0.430	665.6%
Operation	Wet	None	None	Aug-20	23,268	4,579	82,718	110,566	0	0	0	518,542	3,924	82,718	605,184	0.226	547.4%
Operation	Wet	None	None	Sep-20	27,062	5,285	95,494	127,841	0	0	0	521,338	4,529	95,494	621,360	0.240	486.0%
Closure & Reclamation (draindown)	Wet	None	None	Jul-24	36,549	7,154	129,253	172,956	0	0	0	1,014,667	6,130	129,253	1,150,050	0.429	664.9%
Closure & Reclamation (draindown)	Wet	None	None	Aug-24	23,268	4,579	82,718	110,566	0	0	0	518,218	3,924	82,718	604,861	0.226	547.1%
Closure & Reclamation (draindown)	Wet	None	None	Sep-24	27,062	5,285	95,494	127,841	0	0	0	521,338	4,529	95,494	621,360	0.240	486.0%
Closure & Reclamation (draindown)	Wet	None	None	Oct-24	20,988	4,020	72,677	97,685	0	0	0	406,047	3,445	72,677	482,169	0.180	493.6%
Closure & Reclamation (draindown)	Wet	None	None	Nov-24	3,320	664	11,984	15,968	0	0	0	164,280	569	11,984	176,833	0.068	1107.4%
Closure & Reclamation (draindown)	Wet	None	None	Dec-24	1,920	384	6,931	9,235	0	0	0	114,478	329	6,931	121,738	0.045	1318.2%
Closure & Reclamation (draindown)	Wet	None	None	Jan-25	1,161	232	4,191	5,585	0	0	0	77,429	199	4,191	81,819	0.031	1465.1%
Closure & Reclamation (draindown)	Wet	None	None	Feb-25	712	142	2,570	3,424	0	0	0	51,698	122	2,570	54,390	0.022	1588.5%
Closure & Reclamation (draindown)	Wet	None	None	Mar-25	487	97	1,757	2,341	0	0	0	38,082	83	1,757	39,922	0.015	1705.6%
Closure & Reclamation (draindown)	Wet	None	None	Apr-25	701	135	2,434	3,270	0	0	0	46,404	115	2,434	48,954	0.019	1497.0%
Closure & Reclamation (draindown)	Wet	None	None	May-25	23,922	4,525	81,843	110,290	0	0	0	708,826	3,877	81,843	794,547	0.297	720.4%
Closure & Reclamation (draindown)	Wet	None	None	Jun-25	22,098	4,381	79,099	105,578	0	0	0	334,418	3,754	79,099	417,270	0.161	395.2%

Hydroclimatic Scenario	2				Eagle Creek Connector												
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Eagle Pup (Baseline)	Stuttle Gulch (Baseline)	Eagle Creek Pond (Baseline)	Eagle Creek U/S Platinum Gulch (Baseline)		Eagle Creek (Pre-Construction)	Dublin Gulch Diversion Channel Routing to Haggart Creek	Outlet of Dublin Gulch Diversion Channel (to EC Connector)	Outlet of Lower Dublin Gulch Sediment Control Pond (to EC Connector)	Eagle Creek Pond Seepage (to EC Connector)	Eagle Creek Connector U/S Platinum Gulch (ECP+DGDC+LDGSCP)		
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /sec	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Post-closure Monitoring	Wet	None	None	Oct-31	20,988	4,020	72,677	97,685	0	0	0	446,139	0	72,677	518,816	0.194	531.1%
Post-closure Monitoring	Wet	None	None	Nov-31	3,320	664	11,984	15,968	0	0	0	171,801	0	11,984	183,786	0.071	1151.0%
Post-closure Monitoring	Wet	None	None	Dec-31	1,920	384	6,931	9,235	0	0	0	114,929	0	6,931	121,860	0.045	1319.5%
Post-closure Monitoring	Wet	None	None	Jan-32	1,161	232	4,191	5,585	0	0	0	77,702	0	4,191	81,893	0.031	1466.4%
Post-closure Monitoring	Wet	None	None	Feb-32	712	142	2,570	3,424	0	0	0	51,865	0	2,570	54,435	0.022	1589.8%
Post-closure Monitoring	Wet	None	None	Mar-32	487	97	1,757	2,341	0	0	0	38,197	0	1,757	39,953	0.015	1707.0%
Post-closure Monitoring	Wet	None	None	Apr-32	701	135	2,434	3,270	0	0	0	65,538	0	2,434	67,972	0.026	2078.6%
Post-closure Monitoring	Wet	None	None	May-32	23,922	4,525	81,843	110,290	0	0	0	891,083	0	81,843	972,927	0.363	882.2%
Post-closure Monitoring	Wet	None	None	Jun-32	22,098	4,381	79,099	105,578	0	0	0	474,408	0	79,099	553,506	0.214	524.3%
Post-closure Monitoring	Wet	None	None	Jul-32	36,549	7,154	129,253	172,956	0	0	0	1,129,561	0	129,253	1,258,814	0.470	727.8%
Post-closure Monitoring	Wet	None	None	Aug-32	23,268	4,579	82,718	110,566	0	0	0	605,275	0	82,718	687,993	0.257	622.2%
Post-closure Monitoring	Wet	None	None	Sep-32	27,062	5,285	95,494	127,841	0	0	0	602,138	0	95,494	697,632	0.269	545.7%

**Table C7-3: Eagle Creek at W27 – Scenario 3 model results – Selected Years**

Hydroclimatic Scenario	3				Eagle Creek Connector												
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Eagle Pup (Baseline)	Stuttle Gulch (Baseline)	Eagle Creek Pond (Baseline)	Eagle Creek U/S Platinum Gulch (Baseline)		Eagle Creek (Pre-Construction)	Dublin Gulch Diversion Channel Routing to Haggart Creek	Outlet of Dublin Gulch Diversion Channel (to EC Connector)	Outlet of Lower Dublin Gulch Sediment Control Pond (to EC Connector)	Eagle Creek Pond Seepage (to EC Connector)	Eagle Creek Connector U/S Platinum Gulch (ECP+DGDC+LDGSCP)		
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /sec	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Construction	Dry	None	None	Oct-12	8,181	1,634	29,500	39,316	0	0	174,244	0	0	0	0	0.000	0.0%
Construction	Dry	None	None	Nov-12	1,862	372	6,721	8,956	0	0	92,427	0	0	0	0	0.000	0.0%
Construction	Dry	None	None	Dec-12	1,051	210	3,793	5,054	0	0	62,498	0	0	0	0	0.000	0.0%
Construction	Dry	None	None	Jan-13	499	100	1,803	2,402	0	0	33,650	0	0	0	0	0.000	0.0%
Construction	Dry	None	None	Feb-13	409	82	1,476	1,967	0	0	30,021	0	0	0	0	0.000	0.0%
Construction	Dry	None	None	Mar-13	402	80	1,450	1,931	0	0	31,697	0	0	0	0	0.000	0.0%
Construction	Dry	None	None	Apr-13	406	81	1,460	1,947	0	0	30,260	0	0	0	0	0.000	0.0%
Construction	Dry	None	None	May-13	3,769	739	13,355	17,863	0	0	0	127,109	739	13,355	141,203	0.053	790.5%
Construction	Dry	None	None	Jun-13	11,603	2,321	41,887	55,811	0	0	0	207,361	2,231	41,887	251,480	0.097	450.6%
Construction	Dry	None	None	Jul-13	12,246	2,450	44,217	58,912	0	0	0	109,278	2,355	44,217	155,850	0.058	264.5%
Construction	Dry	None	None	Aug-13	12,160	2,434	43,923	58,516	0	0	0	59,817	2,340	43,923	106,080	0.040	181.3%
Operation	Dry	None	None	Sep-13	9,196	1,840	33,201	44,237	0	0	0	161,490	1,768	33,201	196,460	0.076	444.1%
Operation	Dry	None	None	Oct-19	8,181	1,634	29,500	39,316	0	0	0	174,240	1,400	29,500	205,141	0.077	521.8%
Operation	Dry	None	None	Nov-19	1,862	372	6,721	8,956	0	0	0	92,427	319	6,721	99,467	0.038	1110.7%
Operation	Dry	None	None	Dec-19	1,051	210	3,793	5,054	0	0	0	62,498	180	3,793	66,472	0.025	1315.2%
Operation	Dry	None	None	Jan-20	499	100	1,803	2,402	0	0	0	33,650	86	1,803	35,538	0.013	1479.3%
Operation	Dry	None	None	Feb-20	409	82	1,476	1,967	0	0	0	30,021	70	1,476	31,568	0.013	1604.8%
Operation	Dry	None	None	Mar-20	402	80	1,450	1,931	0	0	0	31,697	69	1,450	33,215	0.012	1719.8%
Operation	Dry	None	None	Apr-20	406	81	1,460	1,947	0	0	0	30,260	69	1,460	31,789	0.012	1632.9%
Operation	Dry	None	None	May-20	3,769	739	13,355	17,863	0	0	0	127,157	634	13,355	141,145	0.053	790.1%
Operation	Dry	None	None	Jun-20	11,603	2,321	41,887	55,811	0	0	0	207,375	1,989	41,887	251,251	0.097	450.2%
Operation	Dry	None	None	Jul-20	12,246	2,450	44,217	58,912	0	0	0	109,290	2,099	44,217	155,606	0.058	264.1%
Operation	Dry	None	None	Aug-20	12,160	2,434	43,923	58,516	0	0	0	59,827	2,085	43,923	105,836	0.040	180.9%
Operation	Dry	None	None	Sep-20	9,196	1,840	33,201	44,237	0	0	0	161,481	1,576	33,201	196,259	0.076	443.7%
Closure & Reclamation (draindown)	Dry	None	None	Jul-24	12,246	2,450	44,217	58,912	0	0	0	109,241	2,099	44,217	155,557	0.058	264.0%
Closure & Reclamation (draindown)	Dry	None	None	Aug-24	12,160	2,434	43,923	58,516	0	0	0	59,785	2,085	43,923	105,794	0.039	180.8%
Closure & Reclamation (draindown)	Dry	None	None	Sep-24	9,196	1,840	33,201	44,237	0	0	0	161,481	1,576	33,201	196,259	0.076	443.7%
Closure & Reclamation (draindown)	Dry	None	None	Oct-24	8,181	1,634	29,500	39,316	0	0	0	174,205	1,400	29,500	205,106	0.077	521.7%
Closure & Reclamation (draindown)	Dry	None	None	Nov-24	1,862	372	6,721	8,956	0	0	0	92,427	319	6,721	99,467	0.038	1110.7%
Closure & Reclamation (draindown)	Dry	None	None	Dec-24	1,051	210	3,793	5,054	0	0	0	62,498	180	3,793	66,472	0.025	1315.2%
Closure & Reclamation (draindown)	Dry	None	None	Jan-25	499	100	1,803	2,402	0	0	0	33,650	86	1,803	35,538	0.013	1479.3%
Closure & Reclamation (draindown)	Dry	None	None	Feb-25	409	82	1,476	1,967	0	0	0	30,021	70	1,476	31,568	0.013	1604.8%
Closure & Reclamation (draindown)	Dry	None	None	Mar-25	402	80	1,450	1,931	0	0	0	31,697	69	1,450	33,215	0.012	1719.8%
Closure & Reclamation (draindown)	Dry	None	None	Apr-25	406	81	1,460	1,947	0	0	0	30,260	69	1,460	31,789	0.012	1632.9%
Closure & Reclamation (draindown)	Dry	None	None	May-25	3,769	739	13,355	17,863	0	0	0	126,972	634	13,355	140,960	0.053	789.1%
Closure & Reclamation (draindown)	Dry	None	None	Jun-25	11,603	2,321	41,887	55,811	0	0	0	207,319	1,989	41,887	251,195	0.097	450.1%

Hydroclimatic Scenario		3			Eagle Creek Connector												
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Eagle Pup (Baseline)	Stuttle Gulch (Baseline)	Eagle Creek Pond (Baseline)	Eagle Creek U/S Platinum Gulch (Baseline)		Eagle Creek (Pre-Construction)	Dublin Gulch Diversion Channel Routing to Haggart Creek	Outlet of Dublin Gulch Diversion Channel (to EC Connector)	Outlet of Lower Dublin Gulch Sediment Control Pond (to EC Connector)	Eagle Creek Pond Seepage (to EC Connector)	Eagle Creek Connector U/S Platinum Gulch (ECP+DGDC+LDGSCP)		
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /sec	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth
Post-closure Monitoring	Dry	None	None	Oct-31	8,181	1,634	29,500	39,316	0	0	0	189,643	0	29,500	219,143	0.082	557.4%
Post-closure Monitoring	Dry	None	None	Nov-31	1,862	372	6,721	8,956	0	0	0	94,195	0	6,721	100,916	0.039	1126.8%
Post-closure Monitoring	Dry	None	None	Dec-31	1,051	210	3,793	5,054	0	0	0	62,745	0	3,793	66,539	0.025	1316.5%
Post-closure Monitoring	Dry	None	None	Jan-32	499	100	1,803	2,402	0	0	0	33,767	0	1,803	35,570	0.013	1480.6%
Post-closure Monitoring	Dry	None	None	Feb-32	409	82	1,476	1,967	0	0	0	30,117	0	1,476	31,594	0.013	1606.1%
Post-closure Monitoring	Dry	None	None	Mar-32	402	80	1,450	1,931	0	0	0	31,791	0	1,450	33,240	0.012	1721.1%
Post-closure Monitoring	Dry	None	None	Apr-32	406	81	1,460	1,947	0	0	0	33,943	0	1,460	35,402	0.014	1818.4%
Post-closure Monitoring	Dry	None	None	May-32	3,769	739	13,355	17,863	0	0	0	161,088	0	13,355	174,442	0.065	976.5%
Post-closure Monitoring	Dry	None	None	Jun-32	11,603	2,321	41,887	55,811	0	0	0	235,033	0	41,887	276,921	0.107	496.2%
Post-closure Monitoring	Dry	None	None	Jul-32	12,246	2,450	44,217	58,912	0	0	0	131,648	0	44,217	175,865	0.066	298.5%
Post-closure Monitoring	Dry	None	None	Aug-32	12,160	2,434	43,923	58,516	0	0	0	77,614	0	43,923	121,537	0.045	207.7%
Post-closure Monitoring	Dry	None	None	Sep-32	9,196	1,840	33,201	44,237	0	0	0	176,539	0	33,201	209,740	0.081	474.1%

**Table C8-1: Haggart Creek at W4 and W29 – Scenario 1 Model Results (Part 1)**

Hydroclimatic Scenario	1				Haggart Creek (W4 and W29) (Part 1)														
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Dublin Gulch (Baseline)	Dublin Gulch Flow (Project)	Construction Flow Diversions	Treated Camp Sewage	Ann Gulch Runoff West	Ann Gulch Heap Leach Facility Sub-Liner Drains	Ann Gulch Heap Leach Facility Runoff (at Closure)	Mine Water Treatment Plant Output	Total Flow to Haggart Creek near Dublin Gulch		Haggart Creek D/S of Dublin Gulch (W4 - Baseline)		Haggart Creek D/S of Dublin Gulch (W-4 Project)		
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of DG Baseline	m <sup>3</sup> /mth	m <sup>3</sup> /sec	m <sup>3</sup> /mth	m <sup>3</sup> /day	% of HC Baseline
Existing Conditions	Average	None	None	Oct-11	285,783	285,783	0	0	0	0	0	0	285,783	100%	2,119,812	0.791	2,119,812	0.791	100.0%
Existing Conditions	Average	None	None	Nov-11	129,767	129,767	0	0	0	0	0	0	129,767	100%	1,204,248	0.465	1,204,248	0.465	100.0%
Existing Conditions	Average	None	None	Dec-11	88,979	88,979	0	0	0	0	0	0	88,979	100%	842,975	0.315	842,975	0.315	100.0%
Construction	Average	None	None	Jan-12	55,539	55,539	0	0	0	0	0	0	55,539	100%	533,900	0.199	533,900	0.199	100.0%
Construction	Average	None	None	Feb-12	40,860	40,860	0	0	0	0	0	0	40,860	100%	392,785	0.157	392,785	0.157	100.0%
Construction	Average	None	None	Mar-12	34,889	34,889	0	0	0	0	0	0	34,889	100%	335,392	0.125	335,392	0.125	100.0%
Construction	Average	None	None	Apr-12	36,893	0	36,893	2,700	0	0	0	0	39,593	107%	337,588	0.130	340,288	0.131	100.8%
Construction	Average	None	None	May-12	360,939	0	353,477	2,790	5,020	0	0	0	361,287	100%	3,163,700	1.181	3,164,048	1.181	100.0%
Construction	Average	None	None	Jun-12	268,003	0	261,166	2,700	1,727	0	0	0	265,592	99%	2,342,086	0.904	2,339,676	0.903	99.9%
Construction	Average	None	None	Jul-12	467,356	0	458,704	2,790	4,036	0	0	0	465,529	100%	2,174,716	0.812	2,172,890	0.811	99.9%
Construction	Average	None	None	Aug-12	258,542	0	252,065	2,790	1,496	0	0	0	256,351	99%	1,920,174	0.717	1,917,983	0.716	99.9%
Construction	Average	None	None	Sep-12	295,790	0	289,271	2,700	1,007	0	0	0	292,978	99%	2,228,787	0.860	2,225,975	0.859	99.9%
Construction	Average	None	None	Oct-12	285,783	0	281,285	2,790	1,421	0	0	0	285,496	100%	2,119,812	0.791	2,119,526	0.791	100.0%
Construction	Average	None	None	Nov-12	129,767	0	128,353	2,700	0	0	0	0	131,053	101%	1,204,248	0.465	1,205,533	0.465	100.1%
Construction	Average	None	None	Dec-12	88,979	0	88,488	2,790	0	0	0	0	91,278	103%	842,975	0.315	845,274	0.316	100.3%
Construction	Average	None	None	Jan-13	55,539	0	55,539	2,790	0	0	0	0	58,329	105%	533,900	0.199	536,690	0.200	100.5%
Construction	Average	None	None	Feb-13	40,860	0	40,860	2,520	0	0	0	0	43,380	106%	392,785	0.162	395,305	0.163	100.6%
Construction	Average	None	None	Mar-13	34,889	0	34,889	2,790	0	0	0	0	37,679	108%	335,392	0.125	338,182	0.126	100.8%
Construction	Average	None	None	Apr-13	36,893	0	36,839	2,700	35	0	0	0	39,574	107%	337,588	0.130	340,269	0.131	100.8%
Construction	Average	None	None	May-13	360,939	0	0	2,790	3,363	29,869	0	0	36,022	10%	3,163,700	1.181	2,838,783	1.060	89.7%
Construction	Average	None	None	Jun-13	268,003	0	0	2,700	1,157	10,407	0	0	14,264	5%	2,342,086	0.904	2,088,347	0.806	89.2%
Construction	Average	None	None	Jul-13	467,356	0	0	2,790	2,704	6,925	0	0	12,419	3%	2,174,716	0.812	1,719,780	0.642	79.1%
Construction	Average	None	None	Aug-13	258,542	0	0	2,790	1,002	5,515	0	0	9,307	4%	1,920,174	0.717	1,670,939	0.624	87.0%
Operation	Average	None	None	Sep-13	295,790	0	0	1,710	594	7,152	0	0	9,456	3%	2,228,787	0.860	1,942,453	0.749	87.2%
Operation	Average	None	None	Oct-13	285,783	0	0	1,767	839	4,771	0	0	7,377	3%	2,119,812	0.791	1,841,406	0.688	86.9%
Operation	Average	None	None	Nov-13	129,767	0	0	1,710	0	0	0	0	1,710	1%	1,204,248	0.465	1,076,190	0.415	89.4%
Operation	Average	None	None	Dec-13	88,979	0	0	1,767	0	0	0	0	1,767	2%	842,975	0.315	755,762	0.282	89.7%
Operation	Average	None	None	Jan-14	55,539	0	0	1,767	0	0	0	0	1,767	3%	533,900	0.199	480,128	0.179	89.9%
Operation	Average	None	None	Feb-14	40,860	0	0	1,596	0	0	0	0	1,596	4%	392,785	0.162	353,521	0.146	90.0%
Operation	Average	None	None	Mar-14	34,889	0	0	1,767	0	0	0	0	1,767	5%	335,392	0.125	302,270	0.113	90.1%
Operation	Average	None	None	Apr-14	36,893	0	0	1,710	31	3,478	0	0	5,219	14%	337,588	0.130	305,913	0.118	90.6%
Operation	Average	None	None	May-14	360,939	0	0	1,767	2,962	26,302	0	0	31,030	9%	3,163,700	1.181	2,833,791	1.058	89.6%
Operation	Average	None	None	Jun-14	268,003	0	0	1,710	1,019	9,164	0	0	11,893	4%	2,342,086	0.904	2,085,976	0.805	89.1%
Operation	Average	None	None	Jul-14	467,356	0	0	1,767	2,381	6,098	0	0	10,246	2%	2,174,716	0.812	1,717,607	0.641	79.0%
Operation	Average	None	None	Aug-14	258,542	0	0	1,767	882	4,857	0	0	7,506	3%	1,920,174	0.717	1,669,138	0.623	86.9%
Operation	Average	None	None	Sep-14	295,790	0	0	1,710	604	7,427	0	0	9,741	3%	2,228,787	0.860	1,942,738	0.750	87.2%

Hydroclimatic Scenario		1			Haggart Creek (W4 and W29) (Part 1)														
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Dublin Gulch (Baseline)	Dublin Gulch Flow (Project)	Construction Flow Diversions	Treated Camp Sewage	Ann Gulch Runoff West	Ann Gulch Heap Leach Facility Sub-Liner Drains	Ann Gulch Heap Leach Facility Runoff (at Closure)	Mine Water Treatment Plant Output	Total Flow to Haggart Creek near Dublin Gulch		Haggart Creek D/S of Dublin Gulch (W4 - Baseline)		Haggart Creek D/S of Dublin Gulch (W-4 Project)		
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of DG Baseline	m <sup>3</sup> /mth	m <sup>3</sup> /sec	m <sup>3</sup> /mth	m <sup>3</sup> /day	% of HC Baseline
Operation	Average	None	None	Oct-14	285,783	0	0	1,767	863	4,908	0	2,652	10,191	4%	2,119,812	0.791	1,844,220	0.689	87.0%
Operation	Average	None	None	Nov-14	129,767	0	0	1,710	0	0	0	0	1,710	1%	1,204,248	0.465	1,076,190	0.415	89.4%
Operation	Average	None	None	Dec-14	88,979	0	0	1,767	0	0	0	0	1,767	2%	842,975	0.315	755,762	0.282	89.7%
Operation	Average	None	None	Jan-15	55,539	0	0	1,767	0	0	0	0	1,767	3%	533,900	0.199	480,128	0.179	89.9%
Operation	Average	None	None	Feb-15	40,860	0	0	1,596	0	0	0	0	1,596	4%	392,785	0.162	353,521	0.146	90.0%
Operation	Average	None	None	Mar-15	34,889	0	0	1,767	0	0	0	0	1,767	5%	335,392	0.125	302,270	0.113	90.1%
Operation	Average	None	None	Apr-15	36,893	0	0	1,710	32	3,590	0	0	5,332	14%	337,588	0.130	306,027	0.118	90.7%
Operation	Average	None	None	May-15	360,939	0	0	1,767	3,049	27,210	0	0	32,026	9%	3,163,700	1.181	2,834,786	1.058	89.6%
Operation	Average	None	None	Jun-15	268,003	0	0	1,710	1,036	9,588	0	0	12,333	5%	2,342,086	0.904	2,086,417	0.805	89.1%
Operation	Average	None	None	Jul-15	467,356	0	0	1,767	2,412	6,422	0	0	10,602	2%	2,174,716	0.812	1,717,962	0.641	79.0%
Operation	Average	None	None	Aug-15	258,542	0	0	1,767	894	5,070	0	13,864	21,596	8%	1,920,174	0.717	1,683,228	0.628	87.7%
Operation	Average	None	None	Sep-15	295,790	0	0	1,710	509	6,264	0	33,070	41,554	14%	2,228,787	0.860	1,974,550	0.762	88.6%
Operation	Average	None	None	Oct-15	285,783	0	0	1,767	488	4,165	0	6,371	12,791	4%	2,119,812	0.791	1,846,821	0.690	87.1%
Operation	Average	None	None	Nov-15	129,767	0	0	1,710	0	0	0	0	1,710	1%	1,204,248	0.465	1,076,190	0.415	89.4%
Operation	Average	None	None	Dec-15	88,979	0	0	1,767	0	0	0	0	1,767	2%	842,975	0.315	755,762	0.282	89.7%
Operation	Average	None	None	Jan-16	55,539	0	0	1,767	0	0	0	0	1,767	3%	533,900	0.199	480,128	0.179	89.9%
Operation	Average	None	None	Feb-16	40,860	0	0	1,653	0	0	0	0	1,653	4%	392,785	0.157	353,578	0.141	90.0%
Operation	Average	None	None	Mar-16	34,889	0	0	1,767	0	0	0	0	1,767	5%	335,392	0.125	302,270	0.113	90.1%
Operation	Average	None	None	Apr-16	36,893	0	0	1,710	18	3,049	0	0	4,777	13%	337,588	0.130	305,472	0.118	90.5%
Operation	Average	None	None	May-16	360,939	0	0	1,767	1,725	23,117	0	0	26,609	7%	3,163,700	1.181	2,829,369	1.056	89.4%
Operation	Average	None	None	Jun-16	268,003	0	0	1,710	584	8,165	0	0	10,459	4%	2,342,086	0.904	2,084,542	0.804	89.0%
Operation	Average	None	None	Jul-16	467,356	0	0	1,767	1,360	5,476	0	0	8,603	2%	2,174,716	0.812	1,715,964	0.641	78.9%
Operation	Average	None	None	Aug-16	258,542	0	0	1,767	504	4,316	0	38,236	44,823	17%	1,920,174	0.717	1,706,455	0.637	88.9%
Operation	Average	None	None	Sep-16	295,790	0	0	1,710	277	5,142	0	48,873	56,002	19%	2,228,787	0.860	1,988,999	0.767	89.2%
Operation	Average	None	None	Oct-16	285,783	0	0	1,767	400	3,412	0	7,788	13,367	5%	2,119,812	0.791	1,847,397	0.690	87.1%
Operation	Average	None	None	Nov-16	129,767	0	0	1,710	0	0	0	0	1,710	1%	1,204,248	0.465	1,076,190	0.415	89.4%
Operation	Average	None	None	Dec-16	88,979	0	0	1,767	0	0	0	0	1,767	2%	842,975	0.315	755,762	0.282	89.7%
Operation	Average	None	None	Jan-17	55,539	0	0	1,767	0	0	0	0	1,767	3%	533,900	0.199	480,128	0.179	89.9%
Operation	Average	None	None	Feb-17	40,860	0	0	1,596	0	0	0	0	1,596	4%	392,785	0.162	353,521	0.146	90.0%
Operation	Average	None	None	Mar-17	34,889	0	0	1,767	0	0	0	0	1,767	5%	335,392	0.125	302,270	0.113	90.1%
Operation	Average	None	None	Apr-17	36,893	0	0	1,710	15	2,500	0	0	4,225	11%	337,588	0.130	304,919	0.118	90.3%
Operation	Average	None	None	May-17	360,939	0	0	1,767	1,413	18,961	0	0	22,142	6%	3,163,700	1.181	2,824,902	1.055	89.3%
Operation	Average	None	None	Jun-17	268,003	0	0	1,710	477	6,712	0	45,899	54,799	20%	2,342,086	0.904	2,128,882	0.821	90.9%
Operation	Average	None	None	Jul-17	467,356	0	0	1,767	1,111	4,508	0	68,279	75,664	16%	2,174,716	0.812	1,783,024	0.666	82.0%
Operation	Average	None	None	Aug-17	258,542	0	0	1,767	412	3,546	0	61,307	67,032	26%	1,920,174	0.717	1,728,664	0.645	90.0%
Operation	Average	None	None	Sep-17	295,790	0	0	1,710	215	4,001	0	69,645	75,571	26%	2,228,787	0.860	2,008,568	0.775	90.1%

Hydroclimatic Scenario		1			Haggart Creek (W4 and W29) (Part 1)														
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Dublin Gulch (Baseline)	Dublin Gulch Flow (Project)	Construction Flow Diversions	Treated Camp Sewage	Ann Gulch Runoff West	Ann Gulch Heap Leach Facility Sub-Liner Drains	Ann Gulch Heap Leach Facility Runoff (at Closure)	Mine Water Treatment Plant Output	Total Flow to Haggart Creek near Dublin Gulch		Haggart Creek D/S of Dublin Gulch (W4 - Baseline)		Haggart Creek D/S of Dublin Gulch (W-4 Project)		
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of DG Baseline	m <sup>3</sup> /mth	m <sup>3</sup> /sec	m <sup>3</sup> /mth	m <sup>3</sup> /day	% of HC Baseline
Operation	Average	None	None	Oct-17	285,783	0	0	1,767	311	2,650	0	7,167	11,895	4%	2,119,812	0.791	1,845,925	0.689	87.1%
Operation	Average	None	None	Nov-17	129,767	0	0	1,710	0	0	0	0	1,710	1%	1,204,248	0.465	1,076,190	0.415	89.4%
Operation	Average	None	None	Dec-17	88,979	0	0	1,767	0	0	0	0	1,767	2%	842,975	0.315	755,762	0.282	89.7%
Operation	Average	None	None	Jan-18	55,539	0	0	1,767	0	0	0	0	1,767	3%	533,900	0.199	480,128	0.179	89.9%
Operation	Average	None	None	Feb-18	40,860	0	0	1,596	0	0	0	0	1,596	4%	392,785	0.162	353,521	0.146	90.0%
Operation	Average	None	None	Mar-18	34,889	0	0	1,767	0	0	0	0	1,767	5%	335,392	0.125	302,270	0.113	90.1%
Operation	Average	None	None	Apr-18	36,893	0	0	1,710	12	1,943	0	0	3,664	10%	337,588	0.130	304,359	0.117	90.2%
Operation	Average	None	None	May-18	360,939	0	0	1,767	1,098	14,744	0	0	17,609	5%	3,163,700	1.181	2,820,369	1.053	89.1%
Operation	Average	None	None	Jun-18	268,003	0	0	1,710	370	5,231	0	7,355	14,666	5%	2,342,086	0.904	2,088,749	0.806	89.2%
Operation	Average	None	None	Jul-18	467,356	0	0	1,767	860	3,518	0	65,656	71,800	15%	2,174,716	0.812	1,779,161	0.664	81.8%
Operation	Average	None	None	Aug-18	258,542	0	0	1,767	319	2,762	0	57,774	62,622	24%	1,920,174	0.717	1,724,254	0.644	89.8%
Operation	Average	None	None	Sep-18	295,790	0	0	1,710	216	4,033	0	60,227	66,185	22%	2,228,787	0.860	1,999,182	0.771	89.7%
Operation	Average	None	None	Oct-18	285,783	0	0	1,767	312	2,666	0	17,591	22,337	8%	2,119,812	0.791	1,856,367	0.693	87.6%
Operation	Average	None	None	Nov-18	129,767	0	0	1,710	0	0	0	0	1,710	1%	1,204,248	0.465	1,076,190	0.415	89.4%
Operation	Average	None	None	Dec-18	88,979	0	0	1,767	0	0	0	0	1,767	2%	842,975	0.315	755,762	0.282	89.7%
Operation	Average	None	None	Jan-19	55,539	0	0	1,767	0	0	0	0	1,767	3%	533,900	0.199	480,128	0.179	89.9%
Operation	Average	None	None	Feb-19	40,860	0	0	1,596	0	0	0	0	1,596	4%	392,785	0.162	353,521	0.146	90.0%
Operation	Average	None	None	Mar-19	34,889	0	0	1,767	0	0	0	0	1,767	5%	335,392	0.125	302,270	0.113	90.1%
Operation	Average	None	None	Apr-19	36,893	0	0	1,710	12	1,956	0	0	3,678	10%	337,588	0.130	304,372	0.117	90.2%
Operation	Average	None	None	May-19	360,939	0	0	1,767	1,105	14,851	0	11,056	28,778	8%	3,163,700	1.181	2,831,539	1.057	89.5%
Operation	Average	None	None	Jun-19	268,003	0	0	1,710	371	5,281	0	76,107	83,469	31%	2,342,086	0.904	2,157,553	0.832	92.1%
Operation	Average	None	None	Jul-19	467,356	0	0	1,767	862	3,555	0	77,649	83,833	18%	2,174,716	0.812	1,791,193	0.669	82.4%
Operation	Average	None	None	Aug-19	258,542	0	0	1,767	319	2,787	0	70,129	75,002	29%	1,920,174	0.717	1,736,634	0.648	90.4%
Operation	Average	None	None	Sep-19	295,790	0	0	1,710	152	2,864	0	72,989	77,715	26%	2,228,787	0.860	2,010,712	0.776	90.2%
Operation	Average	None	None	Oct-19	285,783	0	0	1,767	221	1,890	0	6,994	10,873	4%	2,119,812	0.791	1,844,903	0.689	87.0%
Operation	Average	None	None	Nov-19	129,767	0	0	1,710	0	0	0	0	1,710	1%	1,204,248	0.465	1,076,190	0.415	89.4%
Operation	Average	None	None	Dec-19	88,979	0	0	1,767	0	0	0	0	1,767	2%	842,975	0.315	755,762	0.282	89.7%
Operation	Average	None	None	Jan-20	55,539	0	0	1,767	0	0	0	0	1,767	3%	533,900	0.199	480,128	0.179	89.9%
Operation	Average	None	None	Feb-20	40,860	0	0	1,653	0	0	0	0	1,653	4%	392,785	0.157	353,578	0.141	90.0%
Operation	Average	None	None	Mar-20	34,889	0	0	1,767	0	0	0	0	1,767	5%	335,392	0.125	302,270	0.113	90.1%
Operation	Average	None	None	Apr-20	36,893	0	0	1,710	8	1,388	0	0	3,106	8%	337,588	0.130	303,801	0.117	90.0%
Operation	Average	None	None	May-20	360,939	0	0	1,767	783	10,539	0	0	13,089	4%	3,163,700	1.181	2,815,850	1.051	89.0%
Operation	Average	None	None	Jun-20	268,003	0	0	1,710	262	3,756	0	53,691	59,419	22%	2,342,086	0.904	2,133,502	0.823	91.1%
Operation	Average	None	None	Jul-20	467,356	0	0	1,767	609	2,532	0	67,228	72,136	15%	2,174,716	0.812	1,779,496	0.664	81.8%
Operation	Average	None	None	Aug-20	258,542	0	0	1,767	226	1,981	0	57,163	61,137	24%	1,920,174	0.717	1,722,769	0.643	89.7%
Operation	Average	None	None	Sep-20	295,790	0	0	1,710	3	53	0	58,897	60,663	21%	2,228,787	0.860	1,993,660	0.769	89.5%

Hydroclimatic Scenario		1			Haggart Creek (W4 and W29) (Part 1)														
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Dublin Gulch (Baseline)	Dublin Gulch Flow (Project)	Construction Flow Diversions	Treated Camp Sewage	Ann Gulch Runoff West	Ann Gulch Heap Leach Facility Sub-Liner Drains	Ann Gulch Heap Leach Facility Runoff (at Closure)	Mine Water Treatment Plant Output	Total Flow to Haggart Creek near Dublin Gulch		Haggart Creek D/S of Dublin Gulch (W4 - Baseline)		Haggart Creek D/S of Dublin Gulch (W-4 Project)		
					m³/mth	m³/mth	m³/mth	m³/mth	m³/mth	m³/mth	m³/mth	m³/mth	m³/mth	% of DG Baseline	m³/mth	m³/sec	m³/mth	m³/day	% of HC Baseline
Operation	Average	None	None	Oct-20	285,783	0	0	1,767	4	35	0	20,587	22,393	8%	2,119,812	0.791	1,856,423	0.693	87.6%
Operation	Average	None	None	Nov-20	129,767	0	0	1,710	0	0	0	0	1,710	1%	1,204,248	0.465	1,076,190	0.415	89.4%
Operation	Average	None	None	Dec-20	88,979	0	0	1,767	0	0	0	0	1,767	2%	842,975	0.315	755,762	0.282	89.7%
Closure & Reclamation (au recovery)	Average	None	None	Jan-21	55,539	0	0	1,860	0	0	0	0	1,860	3%	533,900	0.199	480,221	0.179	89.9%
Closure & Reclamation (au recovery)	Average	None	None	Feb-21	40,860	0	0	1,680	0	0	0	0	1,680	4%	392,785	0.162	353,605	0.146	90.0%
Closure & Reclamation (au recovery)	Average	None	None	Mar-21	34,889	0	0	1,860	0	0	0	0	1,860	5%	335,392	0.125	302,363	0.113	90.2%
Closure & Reclamation (au recovery)	Average	None	None	Apr-21	36,893	0	0	1,800	0	26	0	0	1,826	5%	337,588	0.130	302,521	0.117	89.6%
Closure & Reclamation (au recovery)	Average	None	None	May-21	360,939	0	0	1,860	15	195	0	58,928	60,998	17%	3,163,700	1.181	2,863,759	1.069	90.5%
Closure & Reclamation (au recovery)	Average	None	None	Jun-21	268,003	0	0	1,800	5	70	0	74,963	76,837	29%	2,342,086	0.904	2,150,921	0.830	91.8%
Closure & Reclamation (au recovery)	Average	None	None	Jul-21	467,356	0	0	1,860	11	47	0	19,288	21,207	5%	2,174,716	0.812	1,728,567	0.645	79.5%
Closure & Reclamation (au recovery)	Average	None	None	Aug-21	258,542	0	0	1,860	4	37	0	23,938	25,838	10%	1,920,174	0.717	1,687,470	0.630	87.9%
Closure & Reclamation (au recovery)	Average	None	None	Sep-21	295,790	0	0	1,800	3	54	0	42,321	44,178	15%	2,228,787	0.860	1,977,175	0.763	88.7%
Closure & Reclamation (au recovery)	Average	None	None	Oct-21	285,783	0	0	1,860	4	35	0	52,265	54,164	19%	2,119,812	0.791	1,888,194	0.705	89.1%
Closure & Reclamation (au recovery)	Average	None	None	Nov-21	129,767	0	0	1,800	0	0	0	17,101	18,901	15%	1,204,248	0.465	1,093,381	0.422	90.8%
Closure & Reclamation (au recovery)	Average	None	None	Dec-21	88,979	0	0	1,860	0	0	0	0	1,860	2%	842,975	0.315	755,855	0.282	89.7%
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-22	55,539	0	0	1,860	0	0	0	0	1,860	3%	533,900	0.199	480,221	0.179	89.9%
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-22	40,860	0	0	1,680	0	0	0	0	1,680	4%	392,785	0.162	353,605	0.146	90.0%
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-22	34,889	0	0	1,860	0	0	0	0	1,860	5%	335,392	0.125	302,363	0.113	90.2%
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-22	36,893	0	0	1,800	0	26	0	9,355	11,181	30%	337,588	0.130	311,876	0.120	92.4%
Closure & Reclamation (hlf rinse)	Average	None	None	May-22	360,939	0	0	1,860	15	195	0	111,190	113,259	31%	3,163,700	1.181	2,916,020	1.089	92.2%
Closure & Reclamation (hlf rinse)	Average	None	None	Jun-22	268,003	0	0	1,800	5	70	0	74,963	76,837	29%	2,342,086	0.904	2,150,921	0.830	91.8%
Closure & Reclamation (hlf rinse)	Average	None	None	Jul-22	467,356	0	0	1,860	11	47	0	19,288	21,207	5%	2,174,716	0.812	1,728,567	0.645	79.5%
Closure & Reclamation (hlf rinse)	Average	None	None	Aug-22	258,542	0	0	1,860	4	37	0	23,938	25,838	10%	1,920,174	0.717	1,687,470	0.630	87.9%
Closure & Reclamation (hlf rinse)	Average	None	None	Sep-22	295,790	0	0	1,800	3	54	0	72,262	74,119	25%	2,228,787	0.860	2,007,116	0.774	90.1%
Closure & Reclamation (hlf rinse)	Average	None	None	Oct-22	285,783	0	0	1,860	4	35	0	47,506	49,405	17%	2,119,812	0.791	1,883,435	0.703	88.8%
Closure & Reclamation (hlf rinse)	Average	None	None	Nov-22	129,767	0	0	1,800	0	0	0	4,548	6,348	5%	1,204,248	0.465	1,080,829	0.417	89.8%
Closure & Reclamation (hlf rinse)	Average	None	None	Dec-22	88,979	0	0	1,860	0	0	0	0	1,860	2%	842,975	0.315	755,855	0.282	89.7%
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-23	55,539	0	0	930	0	0	0	0	930	2%	533,900	0.199	479,291	0.179	89.8%
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-23	40,860	0	0	840	0	0	0	0	840	2%	392,785	0.162	352,765	0.146	89.8%
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-23	34,889	0	0	930	0	0	0	0	930	3%	335,392	0.125	301,433	0.113	89.9%
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-23	36,893	0	0	900	0	26	0	19,023	19,949	54%	337,588	0.130	320,644	0.124	95.0%
Closure & Reclamation (hlf rinse)	Average	None	None	May-23	360,939	0	0	930	15	195	0	183,013	184,153	51%	3,163,700	1.181	2,986,914	1.115	94.4%
Closure & Reclamation (hlf rinse)	Average	None	None	Jun-23	268,003	0	0	900	5	70	0	86,025	86,999	32%	2,342,086	0.904	2,161,083	0.834	92.3%
Closure & Reclamation (hlf rinse)	Average	None	None	Jul-23	467,356	0	0	930	11	47	0	57,268	58,256	12%	2,174,716	0.812	1,765,617	0.659	81.2%
Closure & Reclamation (hlf rinse)	Average	None	None	Aug-23	258,542	0	0	930	4	37	0	47,202	48,173	19%	1,920,174	0.717	1,709,805	0.638	89.0%
Closure & Reclamation (hlf rinse)	Average	None	None	Sep-23	295,790	0	0	900	3	54	0	64,523	65,479	22%	2,228,787	0.860	1,998,476	0.771	89.7%



Hydroclimatic Scenario		1			Haggart Creek (W4 and W29) (Part 1)														
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Dublin Gulch (Baseline)	Dublin Gulch Flow (Project)	Construction Flow Diversions	Treated Camp Sewage	Ann Gulch Runoff West	Ann Gulch Heap Leach Facility Sub-Liner Drains	Ann Gulch Heap Leach Facility Runoff (at Closure)	Mine Water Treatment Plant Output	Total Flow to Haggart Creek near Dublin Gulch		Haggart Creek D/S of Dublin Gulch (W4 - Baseline)		Haggart Creek D/S of Dublin Gulch (W-4 Project)		
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of DG Baseline	m <sup>3</sup> /mth	m <sup>3</sup> /sec	m <sup>3</sup> /mth	m <sup>3</sup> /day	% of HC Baseline
Closure & Reclamation (hlf rinse)	Average	None	None	Oct-23	285,783	0	0	930	4	35	0	47,506	48,475	17%	2,119,812	0.791	1,882,505	0.703	88.8%
Closure & Reclamation (hlf rinse)	Average	None	None	Nov-23	129,767	0	0	900	0	0	0	4,548	5,448	4%	1,204,248	0.465	1,079,929	0.417	89.7%
Closure & Reclamation (hlf rinse)	Average	None	None	Dec-23	88,979	0	0	930	0	0	0	0	930	1%	842,975	0.315	754,925	0.282	89.6%
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-24	55,539	0	0	465	0	0	0	0	465	1%	533,900	0.199	478,826	0.179	89.7%
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-24	40,860	0	0	435	0	0	0	0	435	1%	392,785	0.157	352,360	0.141	89.7%
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-24	34,889	0	0	465	0	0	0	1,398	1,863	5%	335,392	0.125	302,366	0.113	90.2%
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-24	36,893	0	0	450	0	26	0	25,275	25,750	70%	337,588	0.130	326,445	0.126	96.7%
Closure & Reclamation (hlf rinse)	Average	None	None	May-24	360,939	0	0	465	15	195	0	212,704	213,379	59%	3,163,700	1.181	3,016,140	1.126	95.3%
Closure & Reclamation (hlf rinse)	Average	None	None	Jun-24	268,003	0	0	450	5	70	0	256,407	256,931	96%	2,342,086	0.904	2,331,014	0.899	99.5%
Closure & Reclamation (draindown)	Average	None	None	Jul-24	467,356	0	0	465	11	47	39,838	379,299	419,661	90%	2,174,716	0.812	2,127,021	0.794	97.8%
Closure & Reclamation (draindown)	Average	None	None	Aug-24	258,542	0	0	465	4	37	28,909	225,220	254,635	98%	1,920,174	0.717	1,916,267	0.715	99.8%
Closure & Reclamation (draindown)	Average	None	None	Sep-24	295,790	0	0	450	3	54	33,271	157,774	191,552	65%	2,228,787	0.860	2,124,549	0.820	95.3%
Closure & Reclamation (draindown)	Average	None	None	Oct-24	285,783	0	0	465	4	35	14,596	85,567	100,668	35%	2,119,812	0.791	1,934,698	0.722	91.3%
Closure & Reclamation (draindown)	Average	None	None	Nov-24	129,767	0	0	450	0	0	0	22,914	23,364	18%	1,204,248	0.465	1,097,845	0.424	91.2%
Closure & Reclamation (draindown)	Average	None	None	Dec-24	88,979	0	0	465	0	0	0	9,626	10,091	11%	842,975	0.315	764,086	0.285	90.6%
Closure & Reclamation (draindown)	Average	None	None	Jan-25	55,539	0	0	186	0	0	0	7,875	8,061	15%	533,900	0.199	486,422	0.182	91.1%
Closure & Reclamation (draindown)	Average	None	None	Feb-25	40,860	0	0	168	0	0	0	6,090	6,258	15%	392,785	0.162	358,183	0.148	91.2%
Closure & Reclamation (draindown)	Average	None	None	Mar-25	34,889	0	0	186	0	0	0	5,966	6,152	18%	335,392	0.125	306,655	0.114	91.4%
Closure & Reclamation (draindown)	Average	None	None	Apr-25	36,893	0	0	180	0	26	9,779	32,066	42,050	114%	337,588	0.130	342,745	0.132	101.5%
Closure & Reclamation (draindown)	Average	None	None	May-25	360,939	0	0	186	15	195	85,633	238,237	324,266	90%	3,163,700	1.181	3,127,027	1.167	98.8%
Closure & Reclamation (draindown)	Average	None	None	Jun-25	268,003	0	0	180	5	70	44,076	150,366	194,696	73%	2,342,086	0.904	2,268,779	0.875	96.9%
Closure & Reclamation (draindown)	Average	None	None	Jul-25	467,356	0	0	186	11	47	39,838	123,530	163,613	35%	2,174,716	0.812	1,870,973	0.699	86.0%
Closure & Reclamation (draindown)	Average	None	None	Aug-25	258,542	0	0	186	4	37	28,909	98,954	128,090	50%	1,920,174	0.717	1,789,722	0.668	93.2%
Closure & Reclamation (draindown)	Average	None	None	Sep-25	295,790	0	0	180	3	54	33,271	97,147	130,655	44%	2,228,787	0.860	2,063,652	0.796	92.6%
Closure & Reclamation (draindown)	Average	None	None	Oct-25	285,783	0	0	186	4	35	14,596	48,446	63,267	22%	2,119,812	0.791	1,897,297	0.708	89.5%
Closure & Reclamation (draindown)	Average	None	None	Nov-25	129,767	0	0	180	0	0	0	8,241	8,421	6%	1,204,248	0.465	1,082,901	0.418	89.9%
Closure & Reclamation (draindown)	Average	None	None	Dec-25	88,979	0	0	186	0	0	0	4,270	4,456	5%	842,975	0.315	758,452	0.283	90.0%
Closure & Reclamation (draindown)	Average	None	None	Jan-26	55,539	0	0	186	0	0	0	3,950	4,136	7%	533,900	0.199	482,497	0.180	90.4%
Closure & Reclamation (draindown)	Average	None	None	Feb-26	40,860	0	0	168	0	0	0	3,595	3,763	9%	392,785	0.162	355,688	0.147	90.6%
Closure & Reclamation (draindown)	Average	None	None	Mar-26	34,889	0	0	186	0	0	0	3,527	3,713	11%	335,392	0.125	304,216	0.114	90.7%
Closure & Reclamation (draindown)	Average	None	None	Apr-26	36,893	0	0	180	0	26	9,779	25,627	35,611	97%	337,588	0.130	336,306	0.130	99.6%
Closure & Reclamation (draindown)	Average	None	None	May-26	360,939	0	0	186	15	195	85,633	202,276	288,305	80%	3,163,700	1.181	3,091,066	1.154	97.7%
Closure & Reclamation (draindown)	Average	None	None	Jun-26	268,003	0	0	180	5	70	44,076	128,345	172,676	64%	2,342,086	0.904	2,246,759	0.867	95.9%
Closure & Reclamation (draindown)	Average	None	None	Jul-26	467,356	0	0	186	11	47	39,838	109,658	149,740	32%	2,174,716	0.812	1,857,100	0.693	85.4%
Closure & Reclamation (draindown)	Average	None	None	Aug-26	258,542	0	0	186	4	37	28,909	88,540	117,677	46%	1,920,174	0.717	1,779,309	0.664	92.7%
Closure & Reclamation (draindown)	Average	None	None	Sep-26	295,790	0	0	180	3	54	33,271	85,118	118,625	40%	2,228,787	0.860	2,051,622	0.792	92.1%

Hydroclimatic Scenario		1			Haggart Creek (W4 and W29) (Part 1)														
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Dublin Gulch (Baseline)	Dublin Gulch Flow (Project)	Construction Flow Diversions	Treated Camp Sewage	Ann Gulch Runoff West	Ann Gulch Heap Leach Facility Sub-Liner Drains	Ann Gulch Heap Leach Facility Runoff (at Closure)	Mine Water Treatment Plant Output	Total Flow to Haggart Creek near Dublin Gulch		Haggart Creek D/S of Dublin Gulch (W4 - Baseline)		Haggart Creek D/S of Dublin Gulch (W-4 Project)		
					m³/mth	m³/mth	m³/mth	m³/mth	m³/mth	m³/mth	m³/mth	m³/mth	m³/mth	% of DG Baseline	m³/mth	m³/sec	m³/mth	m³/day	% of HC Baseline
Closure & Reclamation (draindown)	Average	None	None	Oct-26	285,783	0	0	186	4	35	14,596	21,440	36,261	13%	2,119,812	0.791	1,870,291	0.698	88.2%
Closure & Reclamation (draindown)	Average	None	None	Nov-26	129,767	0	0	180	0	0	0	2,749	2,929	2%	1,204,248	0.465	1,077,409	0.416	89.5%
Closure & Reclamation (draindown)	Average	None	None	Dec-26	88,979	0	0	186	0	0	0	2,740	2,926	3%	842,975	0.315	756,922	0.283	89.8%
Closure & Reclamation (draindown)	Average	None	None	Jan-27	55,539	0	0	186	0	0	0	2,691	2,877	5%	533,900	0.199	481,237	0.180	90.1%
Closure & Reclamation (draindown)	Average	None	None	Feb-27	40,860	0	0	168	0	0	0	2,515	2,683	7%	392,785	0.162	354,608	0.147	90.3%
Closure & Reclamation (draindown)	Average	None	None	Mar-27	34,889	0	0	186	0	0	0	2,591	2,777	8%	335,392	0.125	303,280	0.113	90.4%
Closure & Reclamation (draindown)	Average	None	None	Apr-27	36,893	0	0	180	0	26	9,779	15,022	25,006	68%	337,588	0.130	325,701	0.126	96.5%
Closure & Reclamation (draindown)	Average	None	None	May-27	360,939	0	0	186	15	195	85,633	107,991	194,020	54%	3,163,700	1.181	2,996,781	1.119	94.7%
Closure & Reclamation (draindown)	Average	None	None	Jun-27	268,003	0	0	180	5	70	44,076	12,193	56,524	21%	2,342,086	0.904	2,130,607	0.822	91.0%
Closure & Reclamation (draindown)	Average	None	None	Jul-27	467,356	0	0	186	11	47	39,838	11,111	51,194	11%	2,174,716	0.812	1,758,554	0.657	80.9%
Closure & Reclamation (draindown)	Average	None	None	Aug-27	258,542	0	0	186	4	37	28,909	8,356	37,492	15%	1,920,174	0.717	1,699,124	0.634	88.5%
Closure & Reclamation (draindown)	Average	None	None	Sep-27	295,790	0	0	180	3	54	33,271	4,802	38,309	13%	2,228,787	0.860	1,971,306	0.761	88.4%
Closure & Reclamation (draindown)	Average	None	None	Oct-27	285,783	0	0	186	4	35	14,596	4,731	19,367	7%	2,119,812	0.791	1,853,396	0.692	87.4%
Closure & Reclamation (draindown)	Average	None	None	Nov-27	129,767	0	0	180	0	0	0	1,059	1,059	1%	1,204,248	0.465	1,075,540	0.415	89.3%
Closure & Reclamation (draindown)	Average	None	None	Dec-27	88,979	0	0	186	0	0	0	1,036	1,036	1%	842,975	0.315	755,032	0.282	89.6%
Closure & Reclamation (draindown)	Average	None	None	Jan-28	55,539	0	0	186	0	0	0	1,013	1,013	2%	533,900	0.199	479,374	0.179	89.8%
Closure & Reclamation (draindown)	Average	None	None	Feb-28	40,860	0	0	174	0	0	0	990	990	2%	392,785	0.157	352,915	0.141	89.8%
Closure & Reclamation (draindown)	Average	None	None	Mar-28	34,889	0	0	186	0	0	0	967	967	3%	335,392	0.125	301,470	0.113	89.9%
Closure & Reclamation (draindown)	Average	None	None	Apr-28	36,893	0	0	180	0	26	9,779	3,389	13,193	36%	337,588	0.130	313,888	0.121	93.0%
Closure & Reclamation (draindown)	Average	None	None	May-28	360,939	0	0	186	15	195	85,633	22,329	108,172	30%	3,163,700	1.181	2,910,933	1.087	92.0%
Closure & Reclamation (draindown)	Average	None	None	Jun-28	268,003	0	0	180	5	70	44,076	11,917	56,067	21%	2,342,086	0.904	2,130,151	0.822	91.0%
Closure & Reclamation (draindown)	Average	None	None	Jul-28	467,356	0	0	186	11	47	39,838	10,833	50,729	11%	2,174,716	0.812	1,758,090	0.656	80.8%
Closure & Reclamation (draindown)	Average	None	None	Aug-28	258,542	0	0	186	4	37	28,909	8,076	37,026	14%	1,920,174	0.717	1,698,658	0.634	88.5%
Closure & Reclamation (draindown)	Average	None	None	Sep-28	295,790	0	0	180	3	54	33,271	4,520	37,847	13%	2,228,787	0.860	1,970,844	0.760	88.4%
Closure & Reclamation (draindown)	Average	None	None	Oct-28	285,783	0	0	186	4	35	14,596	4,447	19,083	7%	2,119,812	0.791	1,853,112	0.692	87.4%
Closure & Reclamation (draindown)	Average	None	None	Nov-28	129,767	0	0	180	0	0	0	773	773	1%	1,204,248	0.465	1,075,254	0.415	89.3%
Closure & Reclamation (draindown)	Average	None	None	Dec-28	88,979	0	0	186	0	0	0	748	748	1%	842,975	0.315	754,744	0.282	89.5%
Closure & Reclamation (draindown)	Average	None	None	Jan-29	55,539	0	0	186	0	0	0	723	723	1%	533,900	0.199	479,084	0.179	89.7%
Closure & Reclamation (draindown)	Average	None	None	Feb-29	40,860	0	0	168	0	0	0	699	699	2%	392,785	0.162	352,623	0.146	89.8%
Closure & Reclamation (draindown)	Average	None	None	Mar-29	34,889	0	0	186	0	0	0	674	674	2%	335,392	0.125	301,177	0.112	89.8%
Closure & Reclamation (draindown)	Average	None	None	Apr-29	36,893	0	0	180	0	26	9,779	3,093	12,898	35%	337,588	0.130	313,592	0.121	92.9%
Closure & Reclamation (draindown)	Average	None	None	May-29	360,939	0	0	186	15	195	85,633	22,032	107,875	30%	3,163,700	1.181	2,910,636	1.087	92.0%
Closure & Reclamation (draindown)	Average	None	None	Jun-29	268,003	0	0	180	5	70	44,076	11,618	55,768	21%	2,342,086	0.904	2,129,851	0.822	90.9%
Closure & Reclamation (draindown)	Average	None	None	Jul-29	467,356	0	0	186	11	47	39,838	10,550	50,447	11%	2,174,716	0.812	1,757,807	0.656	80.8%
Closure & Reclamation (draindown)	Average	None	None	Aug-29	258,542	0	0	186	4	37	28,909	7,809	36,760	14%	1,920,174	0.717	1,698,392	0.634	88.4%
Closure & Reclamation (draindown)	Average	None	None	Sep-29	295,790	0	0	180	3	54	33,271	4,271	37,598	13%	2,228,787	0.860	1,970,595	0.760	88.4%

Hydroclimatic Scenario		1			Haggart Creek (W4 and W29) (Part 1)														
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Dublin Gulch (Baseline)	Dublin Gulch Flow (Project)	Construction Flow Diversions	Treated Camp Sewage	Ann Gulch Runoff West	Ann Gulch Heap Leach Facility Sub-Liner Drains	Ann Gulch Heap Leach Facility Runoff (at Closure)	Mine Water Treatment Plant Output	Total Flow to Haggart Creek near Dublin Gulch		Haggart Creek D/S of Dublin Gulch (W4 - Baseline)		Haggart Creek D/S of Dublin Gulch (W-4 Project)		
					m³/mth	m³/mth	m³/mth	m³/mth	m³/mth	m³/mth	m³/mth	m³/mth	m³/mth	% of DG Baseline	m³/mth	m³/sec	m³/mth	m³/day	% of HC Baseline
Closure & Reclamation (draindown)	Average	None	None	Oct-29	285,783	0	0	186	4	35	14,596	4,215	18,850	7%	2,119,812	0.791	1,852,880	0.692	87.4%
Closure & Reclamation (draindown)	Average	None	None	Nov-29	129,767	0	0	180	0	0	0	557	557	0%	1,204,248	0.465	1,075,037	0.415	89.3%
Closure & Reclamation (draindown)	Average	None	None	Dec-29	88,979	0	0	186	0	0	0	549	549	1%	842,975	0.315	754,544	0.282	89.5%
Closure & Reclamation (draindown)	Average	None	None	Jan-30	55,539	0	0	186	0	0	0	541	541	1%	533,900	0.199	478,901	0.179	89.7%
Closure & Reclamation (draindown)	Average	None	None	Feb-30	40,860	0	0	168	0	0	0	532	532	1%	392,785	0.162	352,457	0.146	89.7%
Closure & Reclamation (draindown)	Average	None	None	Mar-30	34,889	0	0	186	0	0	0	524	524	2%	335,392	0.125	301,027	0.112	89.8%
Closure & Reclamation (draindown)	Average	None	None	Apr-30	36,893	0	0	180	0	26	9,779	2,960	12,765	35%	337,588	0.130	313,459	0.121	92.9%
Closure & Reclamation (draindown)	Average	None	None	May-30	360,939	0	0	186	15	195	85,633	21,916	107,758	30%	3,163,700	1.181	2,910,519	1.087	92.0%
Closure & Reclamation (draindown)	Average	None	None	Jun-30	268,003	0	0	180	5	70	44,076	11,518	55,668	21%	2,342,086	0.904	2,129,751	0.822	90.9%
Closure & Reclamation (draindown)	Average	None	None	Jul-30	467,356	0	0	186	11	47	39,838	10,426	50,323	11%	2,174,716	0.812	1,757,683	0.656	80.8%
Closure & Reclamation (draindown)	Average	None	None	Aug-30	258,542	0	0	186	4	37	28,909	7,601	36,551	14%	1,920,174	0.717	1,698,183	0.634	88.4%
Closure & Reclamation (draindown)	Average	None	None	Sep-30	295,790	0	0	180	3	54	33,271	3,977	37,304	13%	2,228,787	0.860	1,970,301	0.760	88.4%
Closure & Reclamation (draindown)	Average	None	None	Oct-30	285,783	0	0	186	4	35	14,596	3,859	18,494	6%	2,119,812	0.791	1,852,524	0.692	87.4%
Closure & Reclamation (draindown)	Average	None	None	Nov-30	129,767	0	0	180	0	0	0	163	163	0%	1,204,248	0.465	1,074,644	0.415	89.2%
Closure & Reclamation (draindown)	Average	None	None	Dec-30	88,979	0	0	186	0	0	0	0	0	0%	842,975	0.315	753,995	0.282	89.4%
Post-closure Monitoring	Average	None	None	Jan-31	55,539	0	0	93	0	0	0	0	0	0%	533,900	0.199	478,361	0.179	89.6%
Post-closure Monitoring	Average	None	None	Feb-31	40,860	0	0	84	0	0	0	0	0	0%	392,785	0.162	351,925	0.145	89.6%
Post-closure Monitoring	Average	None	None	Mar-31	34,889	0	0	93	0	0	0	0	0	0%	335,392	0.125	300,503	0.112	89.6%
Post-closure Monitoring	Average	None	None	Apr-31	36,893	0	0	90	0	26	9,779	2,445	12,249	33%	337,588	0.130	312,944	0.121	92.7%
Post-closure Monitoring	Average	None	None	May-31	360,939	0	0	93	15	195	85,633	21,408	107,251	30%	3,163,700	1.181	2,910,012	1.086	92.0%
Post-closure Monitoring	Average	None	None	Jun-31	268,003	0	0	90	5	70	44,076	11,019	55,169	21%	2,342,086	0.904	2,129,253	0.821	90.9%
Post-closure Monitoring	Average	None	None	Jul-31	467,356	0	0	93	11	47	39,838	9,960	49,856	11%	2,174,716	0.812	1,757,216	0.656	80.8%
Post-closure Monitoring	Average	None	None	Aug-31	258,542	0	0	93	4	37	28,909	7,227	36,178	14%	1,920,174	0.717	1,697,810	0.634	88.4%
Post-closure Monitoring	Average	None	None	Sep-31	295,790	0	0	90	3	54	33,271	3,697	37,024	13%	2,228,787	0.860	1,970,021	0.760	88.4%
Post-closure Monitoring	Average	None	None	Oct-31	285,783	0	0	93	4	35	14,596	3,649	18,284	6%	2,119,812	0.791	1,852,314	0.692	87.4%
Post-closure Monitoring	Average	None	None	Nov-31	129,767	0	0	90	0	0	0	0	0	0%	1,204,248	0.465	1,074,480	0.415	89.2%
Post-closure Monitoring	Average	None	None	Dec-31	88,979	0	0	93	0	0	0	0	0	0%	842,975	0.315	753,995	0.282	89.4%
Post-closure Monitoring	Average	None	None	Jan-32	55,539	0	0	47	0	0	0	0	0	0%	533,900	0.199	478,361	0.179	89.6%
Post-closure Monitoring	Average	None	None	Feb-32	40,860	0	0	44	0	0	0	0	0	0%	392,785	0.157	351,925	0.140	89.6%
Post-closure Monitoring	Average	None	None	Mar-32	34,889	0	0	47	0	0	0	0	0	0%	335,392	0.125	300,503	0.112	89.6%
Post-closure Monitoring	Average	None	None	Apr-32	36,893	0	0	45	0	26	9,779	2,445	12,249	33%	337,588	0.130	312,944	0.121	92.7%
Post-closure Monitoring	Average	None	None	May-32	360,939	0	0	47	15	195	85,633	21,408	107,251	30%	3,163,700	1.181	2,910,012	1.086	92.0%
Post-closure Monitoring	Average	None	None	Jun-32	268,003	0	0	45	5	70	44,076	11,019	55,169	21%	2,342,086	0.904	2,129,253	0.821	90.9%
Post-closure Monitoring	Average	None	None	Jul-32	467,356	0	0	47	11	47	39,838	9,960	49,856	11%	2,174,716	0.812	1,757,216	0.656	80.8%
Post-closure Monitoring	Average	None	None	Aug-32	258,542	0	0	47	4	37	28,909	7,227	36,178	14%	1,920,174	0.717	1,697,810	0.634	88.4%
Post-closure Monitoring	Average	None	None	Sep-32	295,790	0	0	45	3	54	33,271	3,697	37,024	13%	2,228,787	0.860	1,970,021	0.760	88.4%

Hydroclimatic Scenario		1			Haggart Creek (W4 and W29) (Part 1)														
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Dublin Gulch (Baseline)	Dublin Gulch Flow (Project)	Construction Flow Diversions	Treated Camp Sewage	Ann Gulch Runoff West	Ann Gulch Heap Leach Facility Sub-Liner Drains	Ann Gulch Heap Leach Facility Runoff (at Closure)	Mine Water Treatment Plant Output	Total Flow to Haggart Creek near Dublin Gulch		Haggart Creek D/S of Dublin Gulch (W4 - Baseline)		Haggart Creek D/S of Dublin Gulch (W-4 Project)		
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of DG Baseline	m <sup>3</sup> /mth	m <sup>3</sup> /sec	m <sup>3</sup> /mth	m <sup>3</sup> /day	% of HC Baseline
Post-closure Monitoring	Average	None	None	Oct-32	285,783	0	0	47	4	35	14,596	3,649	18,284	6%	2,119,812	0.791	1,852,314	0.692	87.4%
Post-closure Monitoring	Average	None	None	Nov-32	129,767	0	0	45	0	0	0	0	0	0%	1,204,248	0.465	1,074,480	0.415	89.2%
Post-closure Monitoring	Average	None	None	Dec-32	88,979	0	0	47	0	0	0	0	0	0%	842,975	0.315	753,995	0.282	89.4%
Post-closure Monitoring	Average	None	None	Jan-33	55,539	0	0	47	0	0	0	0	0	0%	533,900	0.199	478,361	0.179	89.6%
Post-closure Monitoring	Average	None	None	Feb-33	40,860	0	0	42	0	0	0	0	0	0%	392,785	0.162	351,925	0.145	89.6%
Post-closure Monitoring	Average	None	None	Mar-33	34,889	0	0	47	0	0	0	0	0	0%	335,392	0.125	300,503	0.112	89.6%
Post-closure Monitoring	Average	None	None	Apr-33	36,893	0	0	45	0	26	9,779	2,445	12,249	33%	337,588	0.130	312,944	0.121	92.7%
Post-closure Monitoring	Average	None	None	May-33	360,939	0	0	47	15	195	85,633	21,408	107,251	30%	3,163,700	1.181	2,910,012	1.086	92.0%
Post-closure Monitoring	Average	None	None	Jun-33	268,003	0	0	45	5	70	44,076	11,019	55,169	21%	2,342,086	0.904	2,129,253	0.821	90.9%
Post-closure Monitoring	Average	None	None	Jul-33	467,356	0	0	47	11	47	39,838	9,960	49,856	11%	2,174,716	0.812	1,757,216	0.656	80.8%
Post-closure Monitoring	Average	None	None	Aug-33	258,542	0	0	47	4	37	28,909	7,227	36,178	14%	1,920,174	0.717	1,697,810	0.634	88.4%
Post-closure Monitoring	Average	None	None	Sep-33	295,790	0	0	45	3	54	33,271	3,697	37,024	13%	2,228,787	0.860	1,970,021	0.760	88.4%
Post-closure Monitoring	Average	None	None	Oct-33	285,783	0	0	47	4	35	14,596	3,649	18,284	6%	2,119,812	0.791	1,852,314	0.692	87.4%
Post-closure Monitoring	Average	None	None	Nov-33	129,767	0	0	45	0	0	0	0	0	0%	1,204,248	0.465	1,074,480	0.415	89.2%
Post-closure Monitoring	Average	None	None	Dec-33	88,979	0	0	47	0	0	0	0	0	0%	842,975	0.315	753,995	0.282	89.4%
Post-closure Monitoring	Average	None	None	Jan-34	55,539	0	0	47	0	0	0	0	0	0%	533,900	0.199	478,361	0.179	89.6%
Post-closure Monitoring	Average	None	None	Feb-34	40,860	0	0	42	0	0	0	0	0	0%	392,785	0.162	351,925	0.145	89.6%
Post-closure Monitoring	Average	None	None	Mar-34	34,889	0	0	47	0	0	0	0	0	0%	335,392	0.125	300,503	0.112	89.6%
Post-closure Monitoring	Average	None	None	Apr-34	36,893	0	0	45	0	26	9,779	2,445	12,249	33%	337,588	0.130	312,944	0.121	92.7%
Post-closure Monitoring	Average	None	None	May-34	360,939	0	0	47	15	195	85,633	21,408	107,251	30%	3,163,700	1.181	2,910,012	1.086	92.0%
Post-closure Monitoring	Average	None	None	Jun-34	268,003	0	0	45	5	70	44,076	11,019	55,169	21%	2,342,086	0.904	2,129,253	0.821	90.9%
Post-closure Monitoring	Average	None	None	Jul-34	467,356	0	0	47	11	47	39,838	9,960	49,856	11%	2,174,716	0.812	1,757,216	0.656	80.8%
Post-closure Monitoring	Average	None	None	Aug-34	258,542	0	0	47	4	37	28,909	7,227	36,178	14%	1,920,174	0.717	1,697,810	0.634	88.4%
Post-closure Monitoring	Average	None	None	Sep-34	295,790	0	0	45	3	54	33,271	3,697	37,024	13%	2,228,787	0.860	1,970,021	0.760	88.4%
Post-closure Monitoring	Average	None	None	Oct-34	285,783	0	0	47	4	35	14,596	3,649	18,284	6%	2,119,812	0.791	1,852,314	0.692	87.4%
Post-closure Monitoring	Average	None	None	Nov-34	129,767	0	0	45	0	0	0	0	0	0%	1,204,248	0.465	1,074,480	0.415	89.2%
Post-closure Monitoring	Average	None	None	Dec-34	88,979	0	0	47	0	0	0	0	0	0%	842,975	0.315	753,995	0.282	89.4%
Post-closure Monitoring	Average	None	None	Jan-35	55,539	0	0	47	0	0	0	0	0	0%	533,900	0.199	478,361	0.179	89.6%

**Table C8-1: Haggart Creek at W4 and W29 – Scenario 1 Model Results (Part 2)**

Hydroclimatic Scenario	1				Haggart Creek (W4 and W29) (Part 2)								
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Gil Gulch	Haggart Creek D/S of Gil Gulch	Platinum Gulch (Baseline)	Total Flow to Platinum Gulch incl. OP Lake Overflow (Project)		Platinum Gulch (Project)	Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Baseline)	Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Project)	
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of PG Baseline Flow	% of HC Project	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of HC Baseline
Existing Conditions	Average	None	None	Oct-11	98,071	2,217,883	7,641	7,641	100%	0.3%	2,282,925	2,282,925	100.0%
Existing Conditions	Average	None	None	Nov-11	42,606	1,246,853	2,301	2,301	100%	0.2%	1,261,616	1,261,616	100.0%
Existing Conditions	Average	None	None	Dec-11	28,795	871,770	799	799	100%	0.1%	879,714	879,714	100.0%
Construction	Average	None	None	Jan-12	17,834	551,734	0	0	100%	0.0%	555,727	555,727	100.0%
Construction	Average	None	None	Feb-12	13,047	405,832	0	0	100%	0.0%	408,528	408,528	100.0%
Construction	Average	None	None	Mar-12	11,091	346,484	0	0	100%	0.0%	348,620	348,620	100.0%
Construction	Average	None	None	Apr-12	11,199	351,487	98	89	91%	0.0%	351,336	354,027	100.8%
Construction	Average	None	None	May-12	117,752	3,281,799	13,288	12,124	91%	0.4%	3,350,023	3,293,924	98.3%
Construction	Average	None	None	Jun-12	102,027	2,441,703	11,483	10,478	91%	0.4%	2,533,387	2,452,181	96.8%
Construction	Average	None	None	Jul-12	162,619	2,335,509	23,186	21,156	91%	0.9%	2,459,611	2,356,665	95.8%
Construction	Average	None	None	Aug-12	100,624	2,018,606	10,284	9,383	91%	0.5%	2,108,170	2,027,990	96.2%
Construction	Average	None	None	Sep-12	111,104	2,337,079	11,348	10,354	91%	0.4%	2,428,692	2,347,433	96.7%
Construction	Average	None	None	Oct-12	98,071	2,217,597	7,641	6,972	91%	0.3%	2,282,925	2,224,569	97.4%
Construction	Average	None	None	Nov-12	42,606	1,248,139	2,301	2,099	91%	0.2%	1,261,616	1,250,239	99.1%
Construction	Average	None	None	Dec-12	28,795	874,068	799	729	91%	0.1%	879,714	874,798	99.4%
Construction	Average	None	None	Jan-13	17,834	554,524	0	0	100%	0.0%	555,727	554,524	99.8%
Construction	Average	None	None	Feb-13	13,047	408,352	0	0	100%	0.0%	408,528	408,352	100.0%
Construction	Average	None	None	Mar-13	11,091	349,274	0	0	100%	0.0%	348,620	349,274	100.2%
Construction	Average	None	None	Apr-13	11,199	351,468	98	89	91%	0.0%	351,336	351,557	100.1%
Construction	Average	None	None	May-13	117,752	2,956,535	13,288	12,124	91%	0.4%	3,350,023	3,365,311	100.5%
Construction	Average	None	None	Jun-13	102,027	2,190,374	11,483	9,223	80%	0.4%	2,533,387	2,522,143	99.6%
Construction	Average	None	None	Jul-13	162,619	1,882,399	23,186	18,751	81%	1.0%	2,459,611	2,437,865	99.1%
Construction	Average	None	None	Aug-13	100,624	1,771,563	10,284	8,318	81%	0.5%	2,108,170	2,092,728	99.3%
Operation	Average	None	None	Sep-13	111,104	2,053,557	11,348	9,396	83%	0.5%	2,428,692	2,413,262	99.4%
Operation	Average	None	None	Oct-13	98,071	1,939,477	7,641	6,383	84%	0.3%	2,282,925	2,272,259	99.5%
Operation	Average	None	None	Nov-13	42,606	1,118,796	2,301	1,865	81%	0.2%	1,261,616	1,258,866	99.8%
Operation	Average	None	None	Dec-13	28,795	784,557	799	648	81%	0.1%	879,714	879,341	100.0%
Operation	Average	None	None	Jan-14	17,834	497,961	0	0	100%	0.0%	555,727	556,658	100.2%
Operation	Average	None	None	Feb-14	13,047	366,568	0	0	100%	0.0%	408,528	409,559	100.3%
Operation	Average	None	None	Mar-14	11,091	313,361	0	0	100%	0.0%	348,620	349,939	100.4%
Operation	Average	None	None	Apr-14	11,199	317,112	98	206	211%	0.1%	351,336	356,084	101.4%
Operation	Average	None	None	May-14	117,752	2,951,543	13,288	11,216	84%	0.4%	3,350,023	3,359,279	100.3%
Operation	Average	None	None	Jun-14	102,027	2,188,003	11,483	9,261	81%	0.4%	2,533,387	2,519,795	99.5%
Operation	Average	None	None	Jul-14	162,619	1,880,226	23,186	18,784	81%	1.0%	2,459,611	2,435,689	99.0%
Operation	Average	None	None	Aug-14	100,624	1,769,762	10,284	8,342	81%	0.5%	2,108,170	2,090,937	99.2%
Operation	Average	None	None	Sep-14	111,104	2,053,842	11,348	8,346	74%	0.4%	2,428,692	2,412,498	99.3%

Hydroclimatic Scenario		1			Haggart Creek (W4 and W29) (Part 2)								
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Gil Gulch	Haggart Creek D/S of Gil Gulch	Platinum Gulch (Baseline)	Total Flow to Platinum Gulch incl. OP Lake Overflow (Project)		Platinum Gulch (Project)	Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Baseline)	Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Project)	
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of PG Baseline Flow	% of HC Project	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of HC Baseline
Operation	Average	None	None	Oct-14	98,071	1,942,291	7,641	5,674	74%	0.3%	2,282,925	2,274,367	99.6%
Operation	Average	None	None	Nov-14	42,606	1,118,796	2,301	1,651	72%	0.1%	1,261,616	1,258,651	99.8%
Operation	Average	None	None	Dec-14	28,795	784,557	799	574	72%	0.1%	879,714	879,267	99.9%
Operation	Average	None	None	Jan-15	17,834	497,961	0	0	100%	0.0%	555,727	556,658	100.2%
Operation	Average	None	None	Feb-15	13,047	366,568	0	0	100%	0.0%	408,528	409,559	100.3%
Operation	Average	None	None	Mar-15	11,091	313,361	0	0	100%	0.0%	348,620	349,939	100.4%
Operation	Average	None	None	Apr-15	11,199	317,226	98	199	204%	0.1%	351,336	356,191	101.4%
Operation	Average	None	None	May-15	117,752	2,952,538	13,288	10,004	75%	0.3%	3,350,023	3,359,072	100.3%
Operation	Average	None	None	Jun-15	102,027	2,188,444	11,483	8,206	71%	0.4%	2,533,387	2,519,182	99.4%
Operation	Average	None	None	Jul-15	162,619	1,880,581	23,186	16,636	72%	0.9%	2,459,611	2,433,900	99.0%
Operation	Average	None	None	Aug-15	100,624	1,783,852	10,284	7,393	72%	0.4%	2,108,170	2,104,079	99.8%
Operation	Average	None	None	Sep-15	111,104	2,085,654	11,348	6,890	61%	0.3%	2,428,692	2,442,843	100.6%
Operation	Average	None	None	Oct-15	98,071	1,944,892	7,641	3,992	52%	0.2%	2,282,925	2,275,346	99.7%
Operation	Average	None	None	Nov-15	42,606	1,118,796	2,301	1,144	50%	0.1%	1,261,616	1,258,107	99.7%
Operation	Average	None	None	Dec-15	28,795	784,557	799	397	50%	0.1%	879,714	879,069	99.9%
Operation	Average	None	None	Jan-16	17,834	497,961	0	0	100%	0.0%	555,727	556,646	100.2%
Operation	Average	None	None	Feb-16	13,047	366,625	0	0	100%	0.0%	408,528	409,608	100.3%
Operation	Average	None	None	Mar-16	11,091	313,361	0	0	100%	0.0%	348,620	349,933	100.4%
Operation	Average	None	None	Apr-16	11,199	316,671	98	180	184%	0.1%	351,336	355,618	101.2%
Operation	Average	None	None	May-16	117,752	2,947,121	13,288	7,100	53%	0.2%	3,350,023	3,351,401	100.0%
Operation	Average	None	None	Jun-16	102,027	2,186,569	11,483	5,689	50%	0.3%	2,533,387	2,514,835	99.3%
Operation	Average	None	None	Jul-16	162,619	1,878,583	23,186	11,537	50%	0.6%	2,459,611	2,427,149	98.7%
Operation	Average	None	None	Aug-16	100,624	1,807,078	10,284	5,134	50%	0.3%	2,108,170	2,125,058	100.8%
Operation	Average	None	None	Sep-16	111,104	2,100,103	11,348	5,038	44%	0.2%	2,428,692	2,455,341	101.1%
Operation	Average	None	None	Oct-16	98,071	1,945,468	7,641	3,445	45%	0.2%	2,282,925	2,275,316	99.7%
Operation	Average	None	None	Nov-16	42,606	1,118,796	2,301	979	43%	0.1%	1,261,616	1,257,942	99.7%
Operation	Average	None	None	Dec-16	28,795	784,557	799	340	43%	0.0%	879,714	879,012	99.9%
Operation	Average	None	None	Jan-17	17,834	497,961	0	0	100%	0.0%	555,727	556,646	100.2%
Operation	Average	None	None	Feb-17	13,047	366,568	0	0	100%	0.0%	408,528	409,551	100.3%
Operation	Average	None	None	Mar-17	11,091	313,361	0	0	100%	0.0%	348,620	349,933	100.4%
Operation	Average	None	None	Apr-17	11,199	316,118	98	173	177%	0.1%	351,336	355,056	101.1%
Operation	Average	None	None	May-17	117,752	2,942,654	13,288	6,148	46%	0.2%	3,350,023	3,345,774	99.9%
Operation	Average	None	None	Jun-17	102,027	2,230,909	11,483	4,866	42%	0.2%	2,533,387	2,558,281	101.0%
Operation	Average	None	None	Jul-17	162,619	1,945,644	23,186	9,875	43%	0.5%	2,459,611	2,492,382	101.3%
Operation	Average	None	None	Aug-17	100,624	1,829,288	10,284	4,398	43%	0.2%	2,108,170	2,146,468	101.8%
Operation	Average	None	None	Sep-17	111,104	2,119,672	11,348	4,307	38%	0.2%	2,428,692	2,474,136	101.9%

Hydroclimatic Scenario	1				Haggart Creek (W4 and W29) (Part 2)								
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Gil Gulch	Haggart Creek D/S of Gil Gulch	Platinum Gulch (Baseline)	Total Flow to Platinum Gulch incl. OP Lake Overflow (Project)		Platinum Gulch (Project)	Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Baseline)	Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Project)	
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of PG Baseline Flow	% of HC Project	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of HC Baseline
Operation	Average	None	None	Oct-17	98,071	1,943,995	7,641	2,818	37%	0.1%	2,282,925	2,273,078	99.6%
Operation	Average	None	None	Nov-17	42,606	1,118,796	2,301	790	34%	0.1%	1,261,616	1,257,736	99.7%
Operation	Average	None	None	Dec-17	28,795	784,557	799	274	34%	0.0%	879,714	878,936	99.9%
Operation	Average	None	None	Jan-18	17,834	497,961	0	0	100%	0.0%	555,727	556,640	100.2%
Operation	Average	None	None	Feb-18	13,047	366,568	0	0	100%	0.0%	408,528	409,547	100.2%
Operation	Average	None	None	Mar-18	11,091	313,361	0	0	100%	0.0%	348,620	349,930	100.4%
Operation	Average	None	None	Apr-18	11,199	315,558	98	165	169%	0.1%	351,336	354,482	100.9%
Operation	Average	None	None	May-18	117,752	2,938,121	13,288	5,057	38%	0.2%	3,350,023	3,339,864	99.7%
Operation	Average	None	None	Jun-18	102,027	2,190,777	11,483	3,924	34%	0.2%	2,533,387	2,517,026	99.4%
Operation	Average	None	None	Jul-18	162,619	1,941,780	23,186	7,973	34%	0.4%	2,459,611	2,486,311	101.1%
Operation	Average	None	None	Aug-18	100,624	1,824,878	10,284	3,554	35%	0.2%	2,108,170	2,141,045	101.6%
Operation	Average	None	None	Sep-18	111,104	2,110,286	11,348	3,619	32%	0.2%	2,428,692	2,463,956	101.5%
Operation	Average	None	None	Oct-18	98,071	1,954,438	7,641	2,489	33%	0.1%	2,282,925	2,283,193	100.0%
Operation	Average	None	None	Nov-18	42,606	1,118,796	2,301	691	30%	0.1%	1,261,616	1,257,637	99.7%
Operation	Average	None	None	Dec-18	28,795	784,557	799	240	30%	0.0%	879,714	878,902	99.9%
Operation	Average	None	None	Jan-19	17,834	497,961	0	0	100%	0.0%	555,727	556,640	100.2%
Operation	Average	None	None	Feb-19	13,047	366,568	0	0	100%	0.0%	408,528	409,547	100.2%
Operation	Average	None	None	Mar-19	11,091	313,361	0	0	100%	0.0%	348,620	349,930	100.4%
Operation	Average	None	None	Apr-19	11,199	315,571	98	160	164%	0.1%	351,336	354,491	100.9%
Operation	Average	None	None	May-19	117,752	2,949,291	13,288	4,486	34%	0.2%	3,350,023	3,350,467	100.0%
Operation	Average	None	None	Jun-19	102,027	2,259,580	11,483	3,430	30%	0.2%	2,533,387	2,585,336	102.1%
Operation	Average	None	None	Jul-19	162,619	1,953,812	23,186	6,976	30%	0.4%	2,459,611	2,497,348	101.5%
Operation	Average	None	None	Aug-19	100,624	1,837,258	10,284	3,111	30%	0.2%	2,108,170	2,152,984	102.1%
Operation	Average	None	None	Sep-19	111,104	2,121,816	11,348	3,131	28%	0.1%	2,428,692	2,474,955	101.9%
Operation	Average	None	None	Oct-19	98,071	1,942,973	7,641	2,161	28%	0.1%	2,282,925	2,271,339	99.5%
Operation	Average	None	None	Nov-19	42,606	1,118,796	2,301	592	26%	0.1%	1,261,616	1,257,538	99.7%
Operation	Average	None	None	Dec-19	28,795	784,557	799	206	26%	0.0%	879,714	878,868	99.9%
Operation	Average	None	None	Jan-20	17,834	497,961	0	0	100%	0.0%	555,727	556,640	100.2%
Operation	Average	None	None	Feb-20	13,047	366,625	0	0	100%	0.0%	408,528	409,604	100.3%
Operation	Average	None	None	Mar-20	11,091	313,361	0	0	100%	0.0%	348,620	349,930	100.4%
Operation	Average	None	None	Apr-20	11,199	314,999	98	156	160%	0.0%	351,336	353,913	100.7%
Operation	Average	None	None	May-20	117,752	2,933,602	13,288	3,915	29%	0.1%	3,350,023	3,333,992	99.5%
Operation	Average	None	None	Jun-20	102,027	2,235,529	11,483	2,936	26%	0.1%	2,533,387	2,560,719	101.1%
Operation	Average	None	None	Jul-20	162,619	1,942,116	23,186	5,979	26%	0.3%	2,459,611	2,484,486	101.0%
Operation	Average	None	None	Aug-20	100,624	1,823,393	10,284	2,669	26%	0.1%	2,108,170	2,138,614	101.4%
Operation	Average	None	None	Sep-20	111,104	2,104,764	11,348	3,131	28%	0.1%	2,428,692	2,457,804	101.2%

Hydroclimatic Scenario	1				Haggart Creek (W4 and W29) (Part 2)								
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Gil Gulch	Haggart Creek D/S of Gil Gulch	Platinum Gulch (Baseline)	Total Flow to Platinum Gulch incl. OP Lake Overflow (Project)		Platinum Gulch (Project)	Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Baseline)	Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Project)	
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of PG Baseline Flow	% of HC Project	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of HC Baseline
Operation	Average	None	None	Oct-20	98,071	1,954,493	7,641	2,161	28%	0.1%	2,282,925	2,282,714	100.0%
Operation	Average	None	None	Nov-20	42,606	1,118,796	2,301	592	26%	0.1%	1,261,616	1,257,538	99.7%
Operation	Average	None	None	Dec-20	28,795	784,557	799	171	21%	0.0%	879,714	878,833	99.9%
Closure & Reclamation (au recovery)	Average	None	None	Jan-21	17,834	498,054	0	0	100%	0.0%	555,727	556,733	100.2%
Closure & Reclamation (au recovery)	Average	None	None	Feb-21	13,047	366,652	0	0	100%	0.0%	408,528	409,631	100.3%
Closure & Reclamation (au recovery)	Average	None	None	Mar-21	11,091	313,454	0	0	100%	0.0%	348,620	350,023	100.4%
Closure & Reclamation (au recovery)	Average	None	None	Apr-21	11,199	313,719	98	152	156%	0.0%	351,336	352,624	100.4%
Closure & Reclamation (au recovery)	Average	None	None	May-21	117,752	2,981,511	13,288	3,343	25%	0.1%	3,350,023	3,380,817	100.9%
Closure & Reclamation (au recovery)	Average	None	None	Jun-21	102,027	2,252,948	11,483	2,442	21%	0.1%	2,533,387	2,577,473	101.7%
Closure & Reclamation (au recovery)	Average	None	None	Jul-21	162,619	1,891,186	23,186	4,982	21%	0.3%	2,459,611	2,432,161	98.9%
Closure & Reclamation (au recovery)	Average	None	None	Aug-21	100,624	1,788,094	10,284	2,227	22%	0.1%	2,108,170	2,102,725	99.7%
Closure & Reclamation (au recovery)	Average	None	None	Sep-21	111,104	2,088,279	11,348	2,643	23%	0.1%	2,428,692	2,440,831	100.5%
Closure & Reclamation (au recovery)	Average	None	None	Oct-21	98,071	1,986,265	7,641	1,832	24%	0.1%	2,282,925	2,314,157	101.4%
Closure & Reclamation (au recovery)	Average	None	None	Nov-21	42,606	1,135,987	2,301	493	21%	0.0%	1,261,616	1,274,630	101.0%
Closure & Reclamation (au recovery)	Average	None	None	Dec-21	28,795	784,650	799	171	21%	0.0%	879,714	878,926	99.9%
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-22	17,834	498,054	0	0	100%	0.0%	555,727	556,733	100.2%
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-22	13,047	366,652	0	0	100%	0.0%	408,528	409,631	100.3%
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-22	11,091	313,454	0	0	100%	0.0%	348,620	350,023	100.4%
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-22	11,199	323,075	98	152	156%	0.0%	351,336	361,979	103.0%
Closure & Reclamation (hlf rinse)	Average	None	None	May-22	117,752	3,033,772	13,288	3,343	25%	0.1%	3,350,023	3,433,078	102.5%
Closure & Reclamation (hlf rinse)	Average	None	None	Jun-22	102,027	2,252,948	11,483	2,442	21%	0.1%	2,533,387	2,577,473	101.7%
Closure & Reclamation (hlf rinse)	Average	None	None	Jul-22	162,619	1,891,186	23,186	4,982	21%	0.3%	2,459,611	2,432,161	98.9%
Closure & Reclamation (hlf rinse)	Average	None	None	Aug-22	100,624	1,788,094	10,284	2,227	22%	0.1%	2,108,170	2,102,725	99.7%
Closure & Reclamation (hlf rinse)	Average	None	None	Sep-22	111,104	2,118,220	11,348	2,643	23%	0.1%	2,428,692	2,470,772	101.7%
Closure & Reclamation (hlf rinse)	Average	None	None	Oct-22	98,071	1,981,506	7,641	1,832	24%	0.1%	2,282,925	2,309,398	101.2%
Closure & Reclamation (hlf rinse)	Average	None	None	Nov-22	42,606	1,123,434	2,301	493	21%	0.0%	1,261,616	1,262,078	100.0%
Closure & Reclamation (hlf rinse)	Average	None	None	Dec-22	28,795	784,650	799	171	21%	0.0%	879,714	878,926	99.9%
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-23	17,834	497,124	0	0	100%	0.0%	555,727	555,803	100.0%
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-23	13,047	365,812	0	0	100%	0.0%	408,528	408,791	100.1%
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-23	11,091	312,524	0	0	100%	0.0%	348,620	349,093	100.1%
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-23	11,199	331,843	98	152	156%	0.0%	351,336	370,747	105.5%
Closure & Reclamation (hlf rinse)	Average	None	None	May-23	117,752	3,104,666	13,288	3,343	25%	0.1%	3,350,023	3,503,972	104.6%
Closure & Reclamation (hlf rinse)	Average	None	None	Jun-23	102,027	2,263,110	11,483	2,442	21%	0.1%	2,533,387	2,587,635	102.1%
Closure & Reclamation (hlf rinse)	Average	None	None	Jul-23	162,619	1,928,236	23,186	4,982	21%	0.3%	2,459,611	2,469,211	100.4%
Closure & Reclamation (hlf rinse)	Average	None	None	Aug-23	100,624	1,810,429	10,284	2,227	22%	0.1%	2,108,170	2,125,060	100.8%
Closure & Reclamation (hlf rinse)	Average	None	None	Sep-23	111,104	2,109,580	11,348	2,643	23%	0.1%	2,428,692	2,462,132	101.4%



Hydroclimatic Scenario	1				Haggart Creek (W4 and W29) (Part 2)									
	Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Gil Gulch	Haggart Creek D/S of Gil Gulch	Platinum Gulch (Baseline)	Total Flow to Platinum Gulch incl. OP Lake Overflow (Project)		Platinum Gulch (Project)	Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Baseline)	Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Project)	
						m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of PG Baseline Flow	% of HC Project	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of HC Baseline
Closure & Reclamation (hlf rinse)	Average	None	None	Oct-23	98,071	1,980,576	7,641	1,832	24%	0.1%	2,282,925	2,308,468	101.1%	
Closure & Reclamation (hlf rinse)	Average	None	None	Nov-23	42,606	1,122,534	2,301	493	21%	0.0%	1,261,616	1,261,178	100.0%	
Closure & Reclamation (hlf rinse)	Average	None	None	Dec-23	28,795	783,720	799	171	21%	0.0%	879,714	877,996	99.8%	
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-24	17,834	496,659	0	0	100%	0.0%	555,727	555,338	99.9%	
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-24	13,047	365,407	0	0	100%	0.0%	408,528	408,386	100.0%	
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-24	11,091	313,457	0	0	100%	0.0%	348,620	350,026	100.4%	
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-24	11,199	337,644	98	152	156%	0.0%	351,336	376,548	107.2%	
Closure & Reclamation (hlf rinse)	Average	None	None	May-24	117,752	3,133,891	13,288	3,343	25%	0.1%	3,350,023	3,533,198	105.5%	
Closure & Reclamation (hlf rinse)	Average	None	None	Jun-24	102,027	2,433,042	11,483	2,442	21%	0.1%	2,533,387	2,757,567	108.8%	
Closure & Reclamation (draindown)	Average	None	None	Jul-24	162,619	2,289,640	23,186	4,982	21%	0.2%	2,459,611	2,830,615	115.1%	
Closure & Reclamation (draindown)	Average	None	None	Aug-24	100,624	2,016,890	10,284	2,227	22%	0.1%	2,108,170	2,331,522	110.6%	
Closure & Reclamation (draindown)	Average	None	None	Sep-24	111,104	2,235,652	11,348	2,643	23%	0.1%	2,428,692	2,588,205	106.6%	
Closure & Reclamation (draindown)	Average	None	None	Oct-24	98,071	2,032,768	7,641	1,832	24%	0.1%	2,282,925	2,360,660	103.4%	
Closure & Reclamation (draindown)	Average	None	None	Nov-24	42,606	1,140,451	2,301	493	21%	0.0%	1,261,616	1,279,094	101.4%	
Closure & Reclamation (draindown)	Average	None	None	Dec-24	28,795	792,881	799	171	21%	0.0%	879,714	887,157	100.8%	
Closure & Reclamation (draindown)	Average	None	None	Jan-25	17,834	504,255	0	0	100%	0.0%	555,727	562,934	101.3%	
Closure & Reclamation (draindown)	Average	None	None	Feb-25	13,047	371,230	0	0	100%	0.0%	408,528	414,209	101.4%	
Closure & Reclamation (draindown)	Average	None	None	Mar-25	11,091	317,746	0	0	100%	0.0%	348,620	354,315	101.6%	
Closure & Reclamation (draindown)	Average	None	None	Apr-25	11,199	353,944	98	152	156%	0.0%	351,336	392,848	111.8%	
Closure & Reclamation (draindown)	Average	None	None	May-25	117,752	3,244,778	13,288	3,343	25%	0.1%	3,350,023	3,644,085	108.8%	
Closure & Reclamation (draindown)	Average	None	None	Jun-25	102,027	2,370,807	11,483	2,442	21%	0.1%	2,533,387	2,695,332	106.4%	
Closure & Reclamation (draindown)	Average	None	None	Jul-25	162,619	2,033,593	23,186	4,982	21%	0.2%	2,459,611	2,574,567	104.7%	
Closure & Reclamation (draindown)	Average	None	None	Aug-25	100,624	1,890,346	10,284	2,227	22%	0.1%	2,108,170	2,204,977	104.6%	
Closure & Reclamation (draindown)	Average	None	None	Sep-25	111,104	2,174,755	11,348	2,643	23%	0.1%	2,428,692	2,527,308	104.1%	
Closure & Reclamation (draindown)	Average	None	None	Oct-25	98,071	1,995,367	7,641	10,037	131%	0.5%	2,282,925	2,331,465	102.1%	
Closure & Reclamation (draindown)	Average	None	None	Nov-25	42,606	1,125,507	2,301	1,995	87%	0.2%	1,261,616	1,265,652	100.3%	
Closure & Reclamation (draindown)	Average	None	None	Dec-25	28,795	787,246	799	171	21%	0.0%	879,714	881,523	100.2%	
Closure & Reclamation (draindown)	Average	None	None	Jan-26	17,834	500,330	0	0	100%	0.0%	555,727	559,009	100.6%	
Closure & Reclamation (draindown)	Average	None	None	Feb-26	13,047	368,735	0	0	100%	0.0%	408,528	411,714	100.8%	
Closure & Reclamation (draindown)	Average	None	None	Mar-26	11,091	315,307	0	0	100%	0.0%	348,620	351,876	100.9%	
Closure & Reclamation (draindown)	Average	None	None	Apr-26	11,199	347,505	98	4,076	4171%	1.2%	351,336	390,333	111.1%	
Closure & Reclamation (draindown)	Average	None	None	May-26	117,752	3,208,818	13,288	36,480	275%	1.1%	3,350,023	3,641,261	108.7%	
Closure & Reclamation (draindown)	Average	None	None	Jun-26	102,027	2,348,786	11,483	22,326	194%	1.0%	2,533,387	2,693,194	106.3%	
Closure & Reclamation (draindown)	Average	None	None	Jul-26	162,619	2,019,720	23,186	16,858	73%	0.8%	2,459,611	2,572,571	104.6%	
Closure & Reclamation (draindown)	Average	None	None	Aug-26	100,624	1,879,932	10,284	10,805	105%	0.6%	2,108,170	2,203,142	104.5%	
Closure & Reclamation (draindown)	Average	None	None	Sep-26	111,104	2,162,726	11,348	12,821	113%	0.6%	2,428,692	2,525,456	104.0%	

Hydroclimatic Scenario	1				Haggart Creek (W4 and W29) (Part 2)								
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Gil Gulch	Haggart Creek D/S of Gil Gulch	Platinum Gulch (Baseline)	Total Flow to Platinum Gulch incl. OP Lake Overflow (Project)		Platinum Gulch (Project)	Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Baseline)	Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Project)	
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of PG Baseline Flow	% of HC Project	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of HC Baseline
Closure & Reclamation (draindown)	Average	None	None	Oct-26	98,071	1,968,361	7,641	9,843	129%	0.5%	2,282,925	2,327,619	102.0%
Closure & Reclamation (draindown)	Average	None	None	Nov-26	42,606	1,120,015	2,301	1,995	87%	0.2%	1,261,616	1,263,910	100.2%
Closure & Reclamation (draindown)	Average	None	None	Dec-26	28,795	785,717	799	171	21%	0.0%	879,714	880,087	100.0%
Closure & Reclamation (draindown)	Average	None	None	Jan-27	17,834	499,071	0	0	100%	0.0%	555,727	557,803	100.4%
Closure & Reclamation (draindown)	Average	None	None	Feb-27	13,047	367,656	0	0	100%	0.0%	408,528	410,670	100.5%
Closure & Reclamation (draindown)	Average	None	None	Mar-27	11,091	314,371	0	0	100%	0.0%	348,620	350,968	100.7%
Closure & Reclamation (draindown)	Average	None	None	Apr-27	11,199	336,900	98	4,076	4171%	1.2%	351,336	389,431	110.8%
Closure & Reclamation (draindown)	Average	None	None	May-27	117,752	3,114,533	13,288	36,480	275%	1.2%	3,350,023	3,638,353	108.6%
Closure & Reclamation (draindown)	Average	None	None	Jun-27	102,027	2,232,634	11,483	22,326	194%	1.0%	2,533,387	2,650,871	104.6%
Closure & Reclamation (draindown)	Average	None	None	Jul-27	162,619	1,921,173	23,186	16,858	73%	0.9%	2,459,611	2,535,529	103.1%
Closure & Reclamation (draindown)	Average	None	None	Aug-27	100,624	1,799,748	10,284	10,805	105%	0.6%	2,108,170	2,170,385	103.0%
Closure & Reclamation (draindown)	Average	None	None	Sep-27	111,104	2,082,410	11,348	12,821	113%	0.6%	2,428,692	2,487,608	102.4%
Closure & Reclamation (draindown)	Average	None	None	Oct-27	98,071	1,951,467	7,641	9,843	129%	0.5%	2,282,925	2,310,725	101.2%
Closure & Reclamation (draindown)	Average	None	None	Nov-27	42,606	1,118,145	2,301	1,995	87%	0.2%	1,261,616	1,262,041	100.0%
Closure & Reclamation (draindown)	Average	None	None	Dec-27	28,795	783,826	799	171	21%	0.0%	879,714	878,197	99.8%
Closure & Reclamation (draindown)	Average	None	None	Jan-28	17,834	497,208	0	0	100%	0.0%	555,727	555,939	100.0%
Closure & Reclamation (draindown)	Average	None	None	Feb-28	13,047	365,962	0	0	100%	0.0%	408,528	408,977	100.1%
Closure & Reclamation (draindown)	Average	None	None	Mar-28	11,091	312,561	0	0	100%	0.0%	348,620	349,158	100.2%
Closure & Reclamation (draindown)	Average	None	None	Apr-28	11,199	325,087	98	4,076	4171%	1.3%	351,336	377,618	107.5%
Closure & Reclamation (draindown)	Average	None	None	May-28	117,752	3,028,685	13,288	121,866	917%	4.0%	3,350,023	3,637,891	108.6%
Closure & Reclamation (draindown)	Average	None	None	Jun-28	102,027	2,232,178	11,483	61,334	534%	2.7%	2,533,387	2,689,423	106.2%
Closure & Reclamation (draindown)	Average	None	None	Jul-28	162,619	1,920,709	23,186	49,834	215%	2.6%	2,459,611	2,568,041	104.4%
Closure & Reclamation (draindown)	Average	None	None	Aug-28	100,624	1,799,281	10,284	40,292	392%	2.2%	2,108,170	2,199,406	104.3%
Closure & Reclamation (draindown)	Average	None	None	Sep-28	111,104	2,081,948	11,348	47,268	417%	2.3%	2,428,692	2,521,593	103.8%
Closure & Reclamation (draindown)	Average	None	None	Oct-28	98,071	1,951,183	7,641	26,087	341%	1.3%	2,282,925	2,326,685	101.9%
Closure & Reclamation (draindown)	Average	None	None	Nov-28	42,606	1,117,860	2,301	3,246	141%	0.3%	1,261,616	1,263,007	100.1%
Closure & Reclamation (draindown)	Average	None	None	Dec-28	28,795	783,539	799	1,465	183%	0.2%	879,714	879,203	99.9%
Closure & Reclamation (draindown)	Average	None	None	Jan-29	17,834	496,918	0	1,294	1294%	0.3%	555,727	556,943	100.2%
Closure & Reclamation (draindown)	Average	None	None	Feb-29	13,047	365,671	0	1,168	1168%	0.3%	408,528	409,854	100.3%
Closure & Reclamation (draindown)	Average	None	None	Mar-29	11,091	312,268	0	1,294	1294%	0.4%	348,620	350,158	100.4%
Closure & Reclamation (draindown)	Average	None	None	Apr-29	11,199	324,791	98	15,406	15765%	4.7%	351,336	388,653	110.6%
Closure & Reclamation (draindown)	Average	None	None	May-29	117,752	3,028,387	13,288	121,866	917%	4.0%	3,350,023	3,637,594	108.6%
Closure & Reclamation (draindown)	Average	None	None	Jun-29	102,027	2,231,878	11,483	61,334	534%	2.7%	2,533,387	2,689,124	106.1%
Closure & Reclamation (draindown)	Average	None	None	Jul-29	162,619	1,920,426	23,186	49,834	215%	2.6%	2,459,611	2,567,758	104.4%
Closure & Reclamation (draindown)	Average	None	None	Aug-29	100,624	1,799,015	10,284	40,292	392%	2.2%	2,108,170	2,199,140	104.3%
Closure & Reclamation (draindown)	Average	None	None	Sep-29	111,104	2,081,699	11,348	47,268	417%	2.3%	2,428,692	2,521,343	103.8%

Hydroclimatic Scenario	1				Haggart Creek (W4 and W29) (Part 2)								
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Gil Gulch	Haggart Creek D/S of Gil Gulch	Platinum Gulch (Baseline)	Total Flow to Platinum Gulch incl. OP Lake Overflow (Project)		Platinum Gulch (Project)	Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Baseline)	Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Project)	
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of PG Baseline Flow	% of HC Project	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of HC Baseline
Closure & Reclamation (draindown)	Average	None	None	Oct-29	98,071	1,950,950	7,641	26,087	341%	1.3%	2,282,925	2,326,452	101.9%
Closure & Reclamation (draindown)	Average	None	None	Nov-29	42,606	1,117,643	2,301	3,246	141%	0.3%	1,261,616	1,262,791	100.1%
Closure & Reclamation (draindown)	Average	None	None	Dec-29	28,795	783,339	799	1,465	183%	0.2%	879,714	879,003	99.9%
Closure & Reclamation (draindown)	Average	None	None	Jan-30	17,834	496,735	0	1,294	1294%	0.3%	555,727	556,760	100.2%
Closure & Reclamation (draindown)	Average	None	None	Feb-30	13,047	365,504	0	1,168	1168%	0.3%	408,528	409,687	100.3%
Closure & Reclamation (draindown)	Average	None	None	Mar-30	11,091	312,118	0	1,294	1294%	0.4%	348,620	350,008	100.4%
Closure & Reclamation (draindown)	Average	None	None	Apr-30	11,199	324,658	98	15,406	15765%	4.7%	351,336	388,519	110.6%
Closure & Reclamation (draindown)	Average	None	None	May-30	117,752	3,028,271	13,288	121,866	917%	4.0%	3,350,023	3,637,477	108.6%
Closure & Reclamation (draindown)	Average	None	None	Jun-30	102,027	2,231,779	11,483	61,334	534%	2.7%	2,533,387	2,689,024	106.1%
Closure & Reclamation (draindown)	Average	None	None	Jul-30	162,619	1,920,302	23,186	49,834	215%	2.6%	2,459,611	2,567,634	104.4%
Closure & Reclamation (draindown)	Average	None	None	Aug-30	100,624	1,798,807	10,284	40,292	392%	2.2%	2,108,170	2,198,931	104.3%
Closure & Reclamation (draindown)	Average	None	None	Sep-30	111,104	2,081,405	11,348	47,268	417%	2.3%	2,428,692	2,521,050	103.8%
Closure & Reclamation (draindown)	Average	None	None	Oct-30	98,071	1,950,595	7,641	26,087	341%	1.3%	2,282,925	2,326,096	101.9%
Closure & Reclamation (draindown)	Average	None	None	Nov-30	42,606	1,117,249	2,301	3,246	141%	0.3%	1,261,616	1,262,397	100.1%
Closure & Reclamation (draindown)	Average	None	None	Dec-30	28,795	782,790	799	1,465	183%	0.2%	879,714	878,454	99.9%
Post-closure Monitoring	Average	None	None	Jan-31	17,834	496,194	0	1,294	1294%	0.3%	555,727	556,220	100.1%
Post-closure Monitoring	Average	None	None	Feb-31	13,047	364,972	0	1,168	1168%	0.3%	408,528	409,155	100.2%
Post-closure Monitoring	Average	None	None	Mar-31	11,091	311,594	0	1,294	1294%	0.4%	348,620	349,485	100.2%
Post-closure Monitoring	Average	None	None	Apr-31	11,199	324,143	98	15,406	15765%	4.8%	351,336	388,004	110.4%
Post-closure Monitoring	Average	None	None	May-31	117,752	3,027,764	13,288	121,866	917%	4.0%	3,350,023	3,636,970	108.6%
Post-closure Monitoring	Average	None	None	Jun-31	102,027	2,231,280	11,483	61,334	534%	2.7%	2,533,387	2,688,525	106.1%
Post-closure Monitoring	Average	None	None	Jul-31	162,619	1,919,836	23,186	49,834	215%	2.6%	2,459,611	2,567,167	104.4%
Post-closure Monitoring	Average	None	None	Aug-31	100,624	1,798,433	10,284	40,292	392%	2.2%	2,108,170	2,198,558	104.3%
Post-closure Monitoring	Average	None	None	Sep-31	111,104	2,081,125	11,348	47,268	417%	2.3%	2,428,692	2,520,770	103.8%
Post-closure Monitoring	Average	None	None	Oct-31	98,071	1,950,385	7,641	26,087	341%	1.3%	2,282,925	2,325,886	101.9%
Post-closure Monitoring	Average	None	None	Nov-31	42,606	1,117,086	2,301	3,246	141%	0.3%	1,261,616	1,262,234	100.0%
Post-closure Monitoring	Average	None	None	Dec-31	28,795	782,790	799	1,465	183%	0.2%	879,714	878,454	99.9%
Post-closure Monitoring	Average	None	None	Jan-32	17,834	496,194	0	1,294	1294%	0.3%	555,727	556,220	100.1%
Post-closure Monitoring	Average	None	None	Feb-32	13,047	364,972	0	1,210	1210%	0.3%	408,528	409,197	100.2%
Post-closure Monitoring	Average	None	None	Mar-32	11,091	311,594	0	1,294	1294%	0.4%	348,620	349,485	100.2%
Post-closure Monitoring	Average	None	None	Apr-32	11,199	324,143	98	15,406	15765%	4.8%	351,336	388,004	110.4%
Post-closure Monitoring	Average	None	None	May-32	117,752	3,027,764	13,288	121,866	917%	4.0%	3,350,023	3,636,970	108.6%
Post-closure Monitoring	Average	None	None	Jun-32	102,027	2,231,280	11,483	61,334	534%	2.7%	2,533,387	2,688,525	106.1%
Post-closure Monitoring	Average	None	None	Jul-32	162,619	1,919,836	23,186	49,834	215%	2.6%	2,459,611	2,567,167	104.4%
Post-closure Monitoring	Average	None	None	Aug-32	100,624	1,798,433	10,284	40,292	392%	2.2%	2,108,170	2,198,558	104.3%
Post-closure Monitoring	Average	None	None	Sep-32	111,104	2,081,125	11,348	47,268	417%	2.3%	2,428,692	2,520,770	103.8%

Hydroclimatic Scenario	1				Haggart Creek (W4 and W29) (Part 2)									
	Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Gil Gulch	Haggart Creek D/S of Gil Gulch	Platinum Gulch (Baseline)	Total Flow to Platinum Gulch incl. OP Lake Overflow (Project)		Platinum Gulch (Project)	Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Baseline)	Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Project)	
						m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of PG Baseline Flow	% of HC Project	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of HC Baseline
Post-closure Monitoring	Average	None	None	Oct-32	98,071	1,950,385	7,641	26,087	341%	1.3%	2,282,925	2,325,886	101.9%	
Post-closure Monitoring	Average	None	None	Nov-32	42,606	1,117,086	2,301	3,246	141%	0.3%	1,261,616	1,262,234	100.0%	
Post-closure Monitoring	Average	None	None	Dec-32	28,795	782,790	799	1,465	183%	0.2%	879,714	878,454	99.9%	
Post-closure Monitoring	Average	None	None	Jan-33	17,834	496,194	0	1,294	1294%	0.3%	555,727	556,220	100.1%	
Post-closure Monitoring	Average	None	None	Feb-33	13,047	364,972	0	1,168	1168%	0.3%	408,528	409,155	100.2%	
Post-closure Monitoring	Average	None	None	Mar-33	11,091	311,594	0	1,294	1294%	0.4%	348,620	349,485	100.2%	
Post-closure Monitoring	Average	None	None	Apr-33	11,199	324,143	98	15,406	15765%	4.8%	351,336	388,004	110.4%	
Post-closure Monitoring	Average	None	None	May-33	117,752	3,027,764	13,288	121,866	917%	4.0%	3,350,023	3,636,970	108.6%	
Post-closure Monitoring	Average	None	None	Jun-33	102,027	2,231,280	11,483	61,334	534%	2.7%	2,533,387	2,688,525	106.1%	
Post-closure Monitoring	Average	None	None	Jul-33	162,619	1,919,836	23,186	49,834	215%	2.6%	2,459,611	2,567,167	104.4%	
Post-closure Monitoring	Average	None	None	Aug-33	100,624	1,798,433	10,284	40,292	392%	2.2%	2,108,170	2,198,558	104.3%	
Post-closure Monitoring	Average	None	None	Sep-33	111,104	2,081,125	11,348	47,268	417%	2.3%	2,428,692	2,520,770	103.8%	
Post-closure Monitoring	Average	None	None	Oct-33	98,071	1,950,385	7,641	26,087	341%	1.3%	2,282,925	2,325,886	101.9%	
Post-closure Monitoring	Average	None	None	Nov-33	42,606	1,117,086	2,301	3,246	141%	0.3%	1,261,616	1,262,234	100.0%	
Post-closure Monitoring	Average	None	None	Dec-33	28,795	782,790	799	1,465	183%	0.2%	879,714	878,454	99.9%	
Post-closure Monitoring	Average	None	None	Jan-34	17,834	496,194	0	1,294	1294%	0.3%	555,727	556,220	100.1%	
Post-closure Monitoring	Average	None	None	Feb-34	13,047	364,972	0	1,168	1168%	0.3%	408,528	409,155	100.2%	
Post-closure Monitoring	Average	None	None	Mar-34	11,091	311,594	0	1,294	1294%	0.4%	348,620	349,485	100.2%	
Post-closure Monitoring	Average	None	None	Apr-34	11,199	324,143	98	15,406	15765%	4.8%	351,336	388,004	110.4%	
Post-closure Monitoring	Average	None	None	May-34	117,752	3,027,764	13,288	121,866	917%	4.0%	3,350,023	3,636,970	108.6%	
Post-closure Monitoring	Average	None	None	Jun-34	102,027	2,231,280	11,483	61,334	534%	2.7%	2,533,387	2,688,525	106.1%	
Post-closure Monitoring	Average	None	None	Jul-34	162,619	1,919,836	23,186	49,834	215%	2.6%	2,459,611	2,567,167	104.4%	
Post-closure Monitoring	Average	None	None	Aug-34	100,624	1,798,433	10,284	40,292	392%	2.2%	2,108,170	2,198,558	104.3%	
Post-closure Monitoring	Average	None	None	Sep-34	111,104	2,081,125	11,348	47,268	417%	2.3%	2,428,692	2,520,770	103.8%	
Post-closure Monitoring	Average	None	None	Oct-34	98,071	1,950,385	7,641	26,087	341%	1.3%	2,282,925	2,325,886	101.9%	
Post-closure Monitoring	Average	None	None	Nov-34	42,606	1,117,086	2,301	3,246	141%	0.3%	1,261,616	1,262,234	100.0%	
Post-closure Monitoring	Average	None	None	Dec-34	28,795	782,790	799	1,465	183%	0.2%	879,714	878,454	99.9%	
Post-closure Monitoring	Average	None	None	Jan-35	17,834	496,194	0	1,294	1294%	0.3%	555,727	556,220	100.1%	

**Table C8-2: Haggart Creek at W4 and W29 – Scenario 2 Model Results – Selected Years (Part 1)**

Hydroclimatic Scenario	2				Haggart Creek (W4 and W29) (Part 1)															
	Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Dublin Gulch (Baseline)	Dublin Gulch Flow (Project)	Construction Flow Diversions	Treated Camp Sewage	Ann Gulch Runoff West	Ann Gulch Heap Leach Facility Sub-Liner Drains	Ann Gulch Heap Leach Facility Runoff (at Closure)	Mine Water Treatment Plant Output	Total Flow to Haggart Creek near Dublin Gulch		Haggart Creek D/S of Dublin Gulch (W4 - Baseline)		Haggart Creek D/S of Dublin Gulch (W-4 Project)		
						m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of DG Baseline	m <sup>3</sup> /mth	m <sup>3</sup> /sec	m <sup>3</sup> /mth	m <sup>3</sup> /day	% of HC Baseline
Construction	Wet	None	None	Oct-12	413,509	0	406,439	2,790	3,588	0	0	0	412,817	100%	3,075,936	1.148	3,075,244	1.148	100.0%	
Construction	Wet	None	None	Nov-12	166,389	0	164,280	2,700	0	0	0	0	166,980	100%	1,532,171	0.591	1,532,761	0.591	100.0%	
Construction	Wet	None	None	Dec-12	115,460	0	114,478	2,790	0	0	0	0	117,268	102%	1,085,152	0.405	1,086,959	0.406	100.2%	
Construction	Wet	None	None	Jan-13	77,429	0	77,429	2,790	0	0	0	0	80,219	104%	744,325	0.278	747,115	0.279	100.4%	
Construction	Wet	None	None	Feb-13	51,698	0	51,698	2,520	0	0	0	0	54,218	105%	496,973	0.205	499,493	0.206	100.5%	
Construction	Wet	None	None	Mar-13	38,082	0	38,082	2,790	0	0	0	0	40,872	107%	366,085	0.137	368,875	0.138	100.8%	
Construction	Wet	None	None	Apr-13	46,632	0	46,419	2,700	138	0	0	0	49,257	106%	421,399	0.163	424,023	0.164	100.6%	
Construction	Wet	None	None	May-13	724,523	0	0	2,790	6,654	60,591	0	0	70,035	10%	6,478,300	2.419	5,823,811	2.174	89.9%	
Construction	Wet	None	None	Jun-13	343,348	0	0	2,700	2,183	24,940	0	0	29,823	9%	3,412,486	1.317	3,098,960	1.196	90.8%	
Construction	Wet	None	None	Jul-13	1,033,127	0	0	2,790	7,255	17,347	0	0	27,392	3%	4,061,932	1.517	3,056,196	1.141	75.2%	
Construction	Wet	None	None	Aug-13	531,533	0	0	2,790	2,190	14,305	0	0	19,285	4%	3,130,118	1.169	2,617,870	0.977	83.6%	
Operation	Wet	None	None	Sep-13	530,592	0	0	1,710	1,343	16,167	0	16,527	35,748	7%	3,826,112	1.476	3,331,268	1.285	87.1%	
Operation	Wet	None	None	Oct-19	413,509	0	0	1,767	561	3,429	0	43,713	49,469	12%	3,075,936	1.148	2,711,896	1.013	88.2%	
Operation	Wet	None	None	Nov-19	166,389	0	0	1,710	0	0	0	0	1,710	1%	1,532,171	0.591	1,367,492	0.528	89.3%	
Operation	Wet	None	None	Dec-19	115,460	0	0	1,767	0	0	0	0	1,767	2%	1,085,152	0.405	971,459	0.363	89.5%	
Operation	Wet	None	None	Jan-20	77,429	0	0	1,767	0	0	0	0	1,767	2%	744,325	0.278	668,663	0.250	89.8%	
Operation	Wet	None	None	Feb-20	51,698	0	0	1,653	0	0	0	0	1,653	3%	496,973	0.198	446,928	0.178	89.9%	
Operation	Wet	None	None	Mar-20	38,082	0	0	1,767	0	0	0	0	1,767	5%	366,085	0.137	329,770	0.123	90.1%	
Operation	Wet	None	None	Apr-20	46,632	0	0	1,710	32	2,707	0	0	4,449	10%	421,399	0.163	379,216	0.146	90.0%	
Operation	Wet	None	None	May-20	724,523	0	0	1,767	1,555	21,440	0	141,012	165,774	23%	6,478,300	2.419	5,919,550	2.210	91.4%	
Operation	Wet	None	None	Jun-20	343,348	0	0	1,710	497	8,898	0	262,664	273,768	80%	3,412,486	1.317	3,342,906	1.290	98.0%	
Operation	Wet	None	None	Jul-20	1,033,127	0	0	1,767	1,640	6,221	0	179,307	188,935	18%	4,061,932	1.517	3,217,739	1.201	79.2%	
Operation	Wet	None	None	Aug-20	531,533	0	0	1,767	495	5,064	0	148,243	155,569	29%	3,130,118	1.169	2,754,154	1.028	88.0%	
Operation	Wet	None	None	Sep-20	530,592	0	0	1,710	6	119	0	140,657	142,492	27%	3,826,112	1.476	3,438,012	1.326	89.9%	
Closure & Reclamation (draindown)	Wet	None	None	Jul-24	1,033,127	0	0	465	30	115	75,175	481,605	557,390	54%	4,061,932	1.517	3,586,194	1.339	88.3%	
Closure & Reclamation (draindown)	Wet	None	None	Aug-24	531,533	0	0	465	9	94	54,712	311,232	366,512	69%	3,130,118	1.169	2,965,097	1.107	94.7%	
Closure & Reclamation (draindown)	Wet	None	None	Sep-24	530,592	0	0	450	6	119	63,516	238,245	302,337	57%	3,826,112	1.476	3,597,857	1.388	94.0%	
Closure & Reclamation (draindown)	Wet	None	None	Oct-24	413,509	0	0	465	10	63	27,377	131,344	159,260	39%	3,075,936	1.148	2,821,687	1.053	91.7%	
Closure & Reclamation (draindown)	Wet	None	None	Nov-24	166,389	0	0	450	0	0	0	27,564	28,014	17%	1,532,171	0.591	1,393,796	0.538	91.0%	
Closure & Reclamation (draindown)	Wet	None	None	Dec-24	115,460	0	0	465	0	0	0	9,728	10,193	9%	1,085,152	0.405	979,884	0.366	90.3%	
Closure & Reclamation (draindown)	Wet	None	None	Jan-25	77,429	0	0	186	0	0	0	7,953	8,139	11%	744,325	0.278	675,035	0.252	90.7%	
Closure & Reclamation (draindown)	Wet	None	None	Feb-25	51,698	0	0	168	0	0	0	6,125	6,293	12%	496,973	0.205	451,569	0.187	90.9%	
Closure & Reclamation (draindown)	Wet	None	None	Mar-25	38,082	0	0	186	0	0	0	5,976	6,162	16%	366,085	0.137	334,165	0.125	91.3%	
Closure & Reclamation (draindown)	Wet	None	None	Apr-25	46,632	0	0	180	1	50	19,151	57,447	76,830	165%	421,399	0.163	451,596	0.174	107.2%	
Closure & Reclamation (draindown)	Wet	None	None	May-25	724,523	0	0	186	29	397	168,852	473,170	642,634	89%	6,478,300	2.419	6,396,410	2.388	98.7%	
Closure & Reclamation (draindown)	Wet	None	None	Jun-25	343,348	0	0	180	9	165	84,579	293,760	378,693	110%	3,412,486	1.317	3,447,831	1.330	101.0%	

Hydroclimatic Scenario	2				Haggart Creek (W4 and W29) (Part 1)															
	Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Dublin Gulch (Baseline)	Dublin Gulch Flow (Project)	Construction Flow Diversions	Treated Camp Sewage	Ann Gulch Runoff West	Ann Gulch Heap Leach Facility Sub-Liner Drains	Ann Gulch Heap Leach Facility Runoff (at Closure)	Mine Water Treatment Plant Output	Total Flow to Haggart Creek near Dublin Gulch		Haggart Creek D/S of Dublin Gulch (W4 - Baseline)		Haggart Creek D/S of Dublin Gulch (W-4 Project)		
						m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of DG Baseline	m <sup>3</sup> /mth	m <sup>3</sup> /sec	m <sup>3</sup> /mth	m <sup>3</sup> /day	% of HC Baseline
Post-closure Monitoring	Wet	None	None	Oct-31	413,509	0	0	93	10	63	27,377	6,844	34,295	8%	3,075,936	1.148	2,696,722	1.007	87.7%	
Post-closure Monitoring	Wet	None	None	Nov-31	166,389	0	0	90	0	0	0	0	0	0%	1,532,171	0.591	1,365,782	0.527	89.1%	
Post-closure Monitoring	Wet	None	None	Dec-31	115,460	0	0	93	0	0	0	0	0	0%	1,085,152	0.405	969,692	0.362	89.4%	
Post-closure Monitoring	Wet	None	None	Jan-32	77,429	0	0	47	0	0	0	0	0	0%	744,325	0.278	666,896	0.249	89.6%	
Post-closure Monitoring	Wet	None	None	Feb-32	51,698	0	0	44	0	0	0	0	0	0%	496,973	0.198	445,275	0.178	89.6%	
Post-closure Monitoring	Wet	None	None	Mar-32	38,082	0	0	47	0	0	0	0	0	0%	366,085	0.137	328,003	0.122	89.6%	
Post-closure Monitoring	Wet	None	None	Apr-32	46,632	0	0	45	1	50	19,151	4,788	23,990	51%	421,399	0.163	398,757	0.154	94.6%	
Post-closure Monitoring	Wet	None	None	May-32	724,523	0	0	47	29	397	168,852	42,213	211,491	29%	6,478,300	2.419	5,965,267	2.227	92.1%	
Post-closure Monitoring	Wet	None	None	Jun-32	343,348	0	0	45	9	165	84,579	21,145	105,898	31%	3,412,486	1.317	3,175,036	1.225	93.0%	
Post-closure Monitoring	Wet	None	None	Jul-32	1,033,127	0	0	47	30	115	75,175	18,794	94,114	9%	4,061,932	1.517	3,122,918	1.166	76.9%	
Post-closure Monitoring	Wet	None	None	Aug-32	531,533	0	0	47	9	94	54,712	13,678	68,493	13%	3,130,118	1.169	2,667,078	0.996	85.2%	
Post-closure Monitoring	Wet	None	None	Sep-32	530,592	0	0	45	6	119	63,516	7,057	70,699	13%	3,826,112	1.476	3,366,219	1.299	88.0%	

**Table C8-2: Haggart Creek at W4 and W29 – Scenario 2 Model Results – Selected Years (Part 2)**

Hydroclimatic Scenario	2				Haggart Creek (W4 and W29) (Part 2)								
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Gil Gulch	Haggart Creek D/S of Gil Gulch	Platinum Gulch (Baseline)	Platinum Gulch (Project)		Platinum Gulch (Project)	Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Baseline)	Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Project)	
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of PG Baseline Flow	% of HC Project	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of HC Baseline
Construction	Wet	None	None	Oct-12	140,274	3,215,517	12,328	11,248	91%	0.3%	3,326,223	3,226,765	97.0%
Construction	Wet	None	None	Nov-12	54,626	1,587,388	3,432	3,131	91%	0.2%	1,606,197	1,590,519	99.0%
Construction	Wet	None	None	Dec-12	37,353	1,124,313	1,599	1,459	91%	0.1%	1,133,339	1,125,772	99.3%
Construction	Wet	None	None	Jan-13	24,867	771,982	0	0	100%	0.0%	774,777	771,982	99.6%
Construction	Wet	None	None	Feb-13	16,512	516,006	0	0	100%	0.0%	516,910	516,006	99.8%
Construction	Wet	None	None	Mar-13	12,109	380,984	0	0	100%	0.0%	380,535	380,984	100.1%
Construction	Wet	None	None	Apr-13	14,157	438,181	383	349	91%	0.1%	439,209	438,530	99.8%
Construction	Wet	None	None	May-13	222,953	6,046,764	26,072	23,789	91%	0.4%	6,837,615	6,866,469	100.4%
Construction	Wet	None	None	Jun-13	126,571	3,225,531	14,639	11,867	81%	0.4%	3,659,273	3,655,363	99.9%
Construction	Wet	None	None	Jul-13	361,686	3,417,882	62,396	50,583	81%	1.5%	4,658,969	4,620,049	99.2%
Construction	Wet	None	None	Aug-13	179,560	2,797,430	21,754	17,636	81%	0.6%	3,441,998	3,420,642	99.4%
Operation	Wet	None	None	Sep-13	184,939	3,516,206	17,793	14,425	81%	0.4%	4,156,685	4,152,688	99.9%
Operation	Wet	None	None	Oct-19	140,274	2,852,170	12,328	3,173	26%	0.1%	3,326,223	3,337,878	100.4%
Operation	Wet	None	None	Nov-19	54,626	1,422,118	3,432	883	26%	0.1%	1,606,197	1,599,834	99.6%
Operation	Wet	None	None	Dec-19	37,353	1,008,812	1,599	411	26%	0.0%	1,133,339	1,130,961	99.8%
Operation	Wet	None	None	Jan-20	24,867	693,530	0	0	100%	0.0%	774,777	775,350	100.1%
Operation	Wet	None	None	Feb-20	16,512	463,441	0	0	100%	0.0%	516,910	517,830	100.2%
Operation	Wet	None	None	Mar-20	12,109	341,879	0	0	100%	0.0%	380,535	381,801	100.3%
Operation	Wet	None	None	Apr-20	14,157	393,373	383	98	26%	0.0%	439,209	442,447	100.7%
Operation	Wet	None	None	May-20	222,953	6,142,503	26,072	6,710	26%	0.1%	6,837,615	6,944,777	101.6%
Operation	Wet	None	None	Jun-20	126,571	3,469,477	14,639	3,767	26%	0.1%	3,659,273	3,890,840	106.3%
Operation	Wet	None	None	Jul-20	361,686	3,579,425	62,396	16,058	26%	0.4%	4,658,969	4,746,606	101.9%
Operation	Wet	None	None	Aug-20	179,560	2,933,715	21,754	5,598	26%	0.2%	3,441,998	3,544,498	103.0%
Operation	Wet	None	None	Sep-20	184,939	3,622,951	17,793	4,579	26%	0.1%	4,156,685	4,248,890	102.2%
Closure & Reclamation (draindown)	Wet	None	None	Jul-24	361,686	3,947,880	62,396	13,375	21%	0.3%	4,658,969	5,111,305	109.7%
Closure & Reclamation (draindown)	Wet	None	None	Aug-24	179,560	3,144,657	21,754	4,663	21%	0.1%	3,441,998	3,754,181	109.1%
Closure & Reclamation (draindown)	Wet	None	None	Sep-24	184,939	3,782,795	17,793	3,814	21%	0.1%	4,156,685	4,407,969	106.0%
Closure & Reclamation (draindown)	Wet	None	None	Oct-24	140,274	2,961,960	12,328	2,643	21%	0.1%	3,326,223	3,446,772	103.6%
Closure & Reclamation (draindown)	Wet	None	None	Nov-24	54,626	1,448,422	3,432	736	21%	0.1%	1,606,197	1,625,991	101.2%
Closure & Reclamation (draindown)	Wet	None	None	Dec-24	37,353	1,017,238	1,599	343	21%	0.0%	1,133,339	1,139,318	100.5%
Closure & Reclamation (draindown)	Wet	None	None	Jan-25	24,867	699,902	0	0	100%	0.0%	774,777	781,721	100.9%
Closure & Reclamation (draindown)	Wet	None	None	Feb-25	16,512	468,081	0	0	100%	0.0%	516,910	522,471	101.1%
Closure & Reclamation (draindown)	Wet	None	None	Mar-25	12,109	346,274	0	0	100%	0.0%	380,535	386,196	101.5%
Closure & Reclamation (draindown)	Wet	None	None	Apr-25	14,157	465,753	383	82	21%	0.0%	439,209	514,789	117.2%
Closure & Reclamation (draindown)	Wet	None	None	May-25	222,953	6,619,363	26,072	5,589	21%	0.1%	6,837,615	7,419,499	108.5%

Hydroclimatic Scenario	2				Haggart Creek (W4 and W29) (Part 2)								
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Gil Gulch	Haggart Creek D/S of Gil Gulch	Platinum Gulch (Baseline)	Platinum Gulch (Project)		Platinum Gulch (Project)	Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Baseline)	Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Project)	
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of PG Baseline Flow	% of HC Project	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of HC Baseline
Closure & Reclamation (draindown)	Wet	None	None	Jun-25	126,571	3,574,401	14,639	3,138	21%	0.1%	3,659,273	3,994,810	109.2%
Post-closure Monitoring	Wet	None	None	Oct-31	140,274	2,836,996	12,328	45,539	369%	1.6%	3,326,223	3,401,351	102.3%
Post-closure Monitoring	Wet	None	None	Nov-31	54,626	1,420,408	3,432	4,812	140%	0.3%	1,606,197	1,609,006	100.2%
Post-closure Monitoring	Wet	None	None	Dec-31	37,353	1,007,045	1,599	1,636	102%	0.2%	1,133,339	1,130,541	99.8%
Post-closure Monitoring	Wet	None	None	Jan-32	24,867	691,763	0	1,294	1294%	0.2%	774,777	774,950	100.0%
Post-closure Monitoring	Wet	None	None	Feb-32	16,512	461,788	0	1,210	1210%	0.3%	516,910	517,433	100.1%
Post-closure Monitoring	Wet	None	None	Mar-32	12,109	340,112	0	1,294	1294%	0.4%	380,535	381,359	100.2%
Post-closure Monitoring	Wet	None	None	Apr-32	14,157	412,914	383	29,067	7596%	7.0%	439,209	509,952	116.1%
Post-closure Monitoring	Wet	None	None	May-32	222,953	6,188,220	26,072	248,917	955%	4.0%	6,837,615	7,410,064	108.4%
Post-closure Monitoring	Wet	None	None	Jun-32	126,571	3,301,606	14,639	131,437	898%	4.0%	3,659,273	3,986,550	108.9%
Post-closure Monitoring	Wet	None	None	Jul-32	361,686	3,484,604	62,396	115,597	185%	3.3%	4,658,969	4,859,015	104.3%
Post-closure Monitoring	Wet	None	None	Aug-32	179,560	2,846,639	21,754	85,133	391%	3.0%	3,441,998	3,619,765	105.2%
Post-closure Monitoring	Wet	None	None	Sep-32	184,939	3,551,157	17,793	89,901	505%	2.5%	4,156,685	4,338,691	104.4%



**Table C8-3: Haggart Creek at W4 and W29 – Scenario 3 Model Results – Selected Years (Part 1)**

Hydroclimatic Scenario	3				Haggart Creek (W4 and W29) (Part 1)														
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Dublin Gulch (Baseline)	Dublin Gulch Flow (Project)	Construction Flow Diversions	Treated Camp Sewage	Ann Gulch Runoff West	Ann Gulch Heap Leach Facility Sub-Liner Drains	Ann Gulch Heap Leach Facility Runoff (at Closure)	Mine Water Treatment Plant Output	Total Flow to Haggart Creek near Dublin Gulch		Haggart Creek D/S of Dublin Gulch (W4 - Baseline)		Haggart Creek D/S of Dublin Gulch (W-4 Project)		
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of DG Baseline	m <sup>3</sup> /mth	m <sup>3</sup> /sec	m <sup>3</sup> /mth	m <sup>3</sup> /day	% of HC Baseline
Construction	Dry	None	None	Oct-12	177,276	0	174,244	2,790	361	0	0	0	177,396	100%	1,280,581	0.478	1,280,701	0.478	100.0%
Construction	Dry	None	None	Nov-12	93,146	0	92,427	2,700	0	0	0	0	95,127	102%	876,325	0.338	878,305	0.339	100.2%
Construction	Dry	None	None	Dec-12	62,498	0	62,498	2,790	0	0	0	0	65,288	104%	600,798	0.224	603,588	0.225	100.5%
Construction	Dry	None	None	Jan-13	33,650	0	33,650	2,790	0	0	0	0	36,440	108%	323,476	0.121	326,266	0.122	100.9%
Construction	Dry	None	None	Feb-13	30,021	0	30,021	2,520	0	0	0	0	32,541	108%	288,596	0.119	291,116	0.120	100.9%
Construction	Dry	None	None	Mar-13	31,697	0	31,697	2,790	0	0	0	0	34,487	109%	304,699	0.114	307,489	0.115	100.9%
Construction	Dry	None	None	Apr-13	30,260	0	30,260	2,700	0	0	0	0	32,960	109%	290,105	0.112	292,805	0.113	100.9%
Construction	Dry	None	None	May-13	129,260	0	0	2,790	1,259	11,332	0	0	15,381	12%	1,108,159	0.414	994,280	0.371	89.7%
Construction	Dry	None	None	Jun-13	212,871	0	0	2,700	391	2,021	0	0	5,112	2%	1,588,866	0.613	1,381,107	0.533	86.9%
Construction	Dry	None	None	Jul-13	112,596	0	0	2,790	345	594	0	0	3,729	3%	934,960	0.349	826,093	0.308	88.4%
Construction	Dry	None	None	Aug-13	61,826	0	0	2,790	296	391	0	0	3,476	6%	739,113	0.276	680,763	0.254	92.1%
Operation	Dry	None	None	Sep-13	164,985	0	0	1,710	85	830	0	0	2,625	2%	1,471,679	0.568	1,309,319	0.505	89.0%
Operation	Dry	None	None	Oct-19	177,276	0	0	1,767	54	734	0	0	2,556	1%	1,280,581	0.478	1,105,861	0.413	86.4%
Operation	Dry	None	None	Nov-19	93,146	0	0	1,710	0	0	0	0	1,710	2%	876,325	0.338	784,889	0.303	89.6%
Operation	Dry	None	None	Dec-19	62,498	0	0	1,767	0	0	0	0	1,767	3%	600,798	0.224	540,066	0.202	89.9%
Operation	Dry	None	None	Jan-20	33,650	0	0	1,767	0	0	0	0	1,767	5%	323,476	0.121	291,593	0.109	90.1%
Operation	Dry	None	None	Feb-20	30,021	0	0	1,653	0	0	0	0	1,653	6%	288,596	0.115	260,227	0.104	90.2%
Operation	Dry	None	None	Mar-20	31,697	0	0	1,767	0	0	0	0	1,767	6%	304,699	0.114	274,770	0.103	90.2%
Operation	Dry	None	None	Apr-20	30,260	0	0	1,710	0	524	0	0	2,234	7%	290,105	0.112	262,079	0.101	90.3%
Operation	Dry	None	None	May-20	129,260	0	0	1,767	283	3,844	0	0	5,893	5%	1,108,159	0.414	984,792	0.368	88.9%
Operation	Dry	None	None	Jun-20	212,871	0	0	1,710	85	690	0	0	2,485	1%	1,588,866	0.613	1,378,480	0.532	86.8%
Operation	Dry	None	None	Jul-20	112,596	0	0	1,767	75	203	0	0	2,045	2%	934,960	0.349	824,409	0.308	88.2%
Operation	Dry	None	None	Aug-20	61,826	0	0	1,767	64	131	0	0	1,962	3%	739,113	0.276	679,249	0.254	91.9%
Operation	Dry	None	None	Sep-20	164,985	0	0	1,710	0	6	0	0	1,716	1%	1,471,679	0.568	1,308,410	0.505	88.9%
Closure & Reclamation (draindown)	Dry	None	None	Jul-24	112,596	0	0	465	1	4	11,640	311,532	323,643	287%	934,960	0.349	1,146,008	0.428	122.6%
Closure & Reclamation (draindown)	Dry	None	None	Aug-24	61,826	0	0	465	1	2	8,461	166,480	175,409	284%	739,113	0.276	852,696	0.318	115.4%
Closure & Reclamation (draindown)	Dry	None	None	Sep-24	164,985	0	0	450	0	6	9,022	89,211	98,689	60%	1,471,679	0.568	1,405,383	0.542	95.5%
Closure & Reclamation (draindown)	Dry	None	None	Oct-24	177,276	0	0	465	1	14	5,579	52,436	58,494	33%	1,280,581	0.478	1,161,800	0.434	90.7%
Closure & Reclamation (draindown)	Dry	None	None	Nov-24	93,146	0	0	450	0	0	0	19,538	19,988	21%	876,325	0.338	803,167	0.310	91.7%
Closure & Reclamation (draindown)	Dry	None	None	Dec-24	62,498	0	0	465	0	0	0	9,523	9,988	16%	600,798	0.224	548,288	0.205	91.3%
Closure & Reclamation (draindown)	Dry	None	None	Jan-25	33,650	0	0	186	0	0	0	7,797	7,983	24%	323,476	0.121	297,809	0.111	92.1%
Closure & Reclamation (draindown)	Dry	None	None	Feb-25	30,021	0	0	168	0	0	0	6,054	6,222	21%	288,596	0.119	264,797	0.109	91.8%
Closure & Reclamation (draindown)	Dry	None	None	Mar-25	31,697	0	0	186	0	0	0	5,956	6,142	19%	304,699	0.114	279,145	0.104	91.6%
Closure & Reclamation (draindown)	Dry	None	None	Apr-25	30,260	0	0	180	0	10	3,737	15,478	19,405	64%	290,105	0.112	279,249	0.108	96.3%
Closure & Reclamation (draindown)	Dry	None	None	May-25	129,260	0	0	186	5	71	32,226	81,590	114,078	88%	1,108,159	0.414	1,092,977	0.408	98.6%
Closure & Reclamation (draindown)	Dry	None	None	Jun-25	212,871	0	0	180	2	13	13,863	60,375	74,432	35%	1,588,866	0.613	1,450,427	0.560	91.3%

Hydroclimatic Scenario	3				Haggart Creek (W4 and W29) (Part 1)														
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Dublin Gulch (Baseline)	Dublin Gulch Flow (Project)	Construction Flow Diversions	Treated Camp Sewage	Ann Gulch Runoff West	Ann Gulch Heap Leach Facility Sub-Liner Drains	Ann Gulch Heap Leach Facility Runoff (at Closure)	Mine Water Treatment Plant Output	Total Flow to Haggart Creek near Dublin Gulch		Haggart Creek D/S of Dublin Gulch (W4 - Baseline)		Haggart Creek D/S of Dublin Gulch (W-4 Project)		
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of DG Baseline	m <sup>3</sup> /mth	m <sup>3</sup> /sec	m <sup>3</sup> /mth	m <sup>3</sup> /day	% of HC Baseline
Post-closure Monitoring	Dry	None	None	Oct-31	177,276	0	0	93	1	14	5,579	1,395	6,988	4%	1,280,581	0.478	1,110,293	0.415	86.7%
Post-closure Monitoring	Dry	None	None	Nov-31	93,146	0	0	90	0	0	0	0	0	0%	876,325	0.338	783,179	0.302	89.4%
Post-closure Monitoring	Dry	None	None	Dec-31	62,498	0	0	93	0	0	0	0	0	0%	600,798	0.224	538,299	0.201	89.6%
Post-closure Monitoring	Dry	None	None	Jan-32	33,650	0	0	47	0	0	0	0	0	0%	323,476	0.121	289,826	0.108	89.6%
Post-closure Monitoring	Dry	None	None	Feb-32	30,021	0	0	44	0	0	0	0	0	0%	288,596	0.115	258,574	0.103	89.6%
Post-closure Monitoring	Dry	None	None	Mar-32	31,697	0	0	47	0	0	0	0	0	0%	304,699	0.114	273,003	0.102	89.6%
Post-closure Monitoring	Dry	None	None	Apr-32	30,260	0	0	45	0	10	3,737	934	4,681	15%	290,105	0.112	264,526	0.102	91.2%
Post-closure Monitoring	Dry	None	None	May-32	129,260	0	0	47	5	71	32,226	8,056	40,359	31%	1,108,159	0.414	1,019,257	0.381	92.0%
Post-closure Monitoring	Dry	None	None	Jun-32	212,871	0	0	45	2	13	13,863	3,466	17,343	8%	1,588,866	0.613	1,393,338	0.538	87.7%
Post-closure Monitoring	Dry	None	None	Jul-32	112,596	0	0	47	1	4	11,640	2,910	14,556	13%	934,960	0.349	836,920	0.312	89.5%
Post-closure Monitoring	Dry	None	None	Aug-32	61,826	0	0	47	1	2	8,461	2,115	10,579	17%	739,113	0.276	687,866	0.257	93.1%
Post-closure Monitoring	Dry	None	None	Sep-32	164,985	0	0	45	0	6	9,022	1,002	10,031	6%	1,471,679	0.568	1,316,725	0.508	89.5%

**Table C8-3: Haggart Creek at W4 and W29 – Scenario 3 Model Results – Selected Years (Part 2)**

Hydroclimatic Scenario	3				Haggart Creek (W4 and W29) (Part 2)								
	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Gil Gulch	Haggart Creek D/S of Gil Gulch	Platinum Gulch (Baseline)	Platinum Gulch (Project)		Platinum Gulch (Project)	Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Baseline)	Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Project)	
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of PG Baseline Flow	% of HC Project	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of HC Baseline
Construction	Dry	None	None	Oct-12	66,051	1,346,752	5,004	4,566	91%	0.3%	1,390,952	1,351,318	97.2%
Construction	Dry	None	None	Nov-12	30,585	908,891	1,170	1,068	91%	0.1%	917,036	909,958	99.2%
Construction	Dry	None	None	Dec-12	20,236	623,824	0	0	100%	0.0%	626,088	623,824	99.6%
Construction	Dry	None	None	Jan-13	10,800	337,065	0	0	100%	0.0%	336,678	337,065	100.1%
Construction	Dry	None	None	Feb-13	9,582	300,698	0	0	100%	0.0%	300,145	300,698	100.2%
Construction	Dry	None	None	Mar-13	10,074	317,563	0	0	100%	0.0%	316,704	317,563	100.3%
Construction	Dry	None	None	Apr-13	9,610	302,414	0	0	100%	0.0%	301,661	302,414	100.2%
Construction	Dry	None	None	May-13	42,870	1,037,150	3,762	3,433	91%	0.3%	1,172,654	1,181,785	100.8%
Construction	Dry	None	None	Jun-13	81,979	1,463,086	9,035	7,324	81%	0.5%	1,735,691	1,721,890	99.2%
Construction	Dry	None	None	Jul-13	55,086	881,180	2,086	1,691	81%	0.2%	1,051,045	1,038,721	98.8%
Construction	Dry	None	None	Aug-13	40,130	720,893	794	644	81%	0.1%	838,554	827,617	98.7%
Operation	Dry	None	None	Sep-13	69,397	1,378,717	5,702	4,623	81%	0.3%	1,591,016	1,579,799	99.3%
Operation	Dry	None	None	Oct-19	66,051	1,171,912	5,004	1,288	26%	0.1%	1,390,952	1,378,341	99.1%
Operation	Dry	None	None	Nov-19	30,585	815,474	1,170	301	26%	0.0%	917,036	915,242	99.8%
Operation	Dry	None	None	Dec-19	20,236	560,302	0	0	100%	0.0%	626,088	626,774	100.1%
Operation	Dry	None	None	Jan-20	10,800	302,392	0	0	100%	0.0%	336,678	337,931	100.4%
Operation	Dry	None	None	Feb-20	9,582	269,810	0	0	100%	0.0%	300,145	301,378	100.4%
Operation	Dry	None	None	Mar-20	10,074	284,843	0	0	100%	0.0%	316,704	318,058	100.4%
Operation	Dry	None	None	Apr-20	9,610	271,688	0	0	100%	0.0%	301,661	303,477	100.6%
Operation	Dry	None	None	May-20	42,870	1,027,662	3,762	968	26%	0.1%	1,172,654	1,169,775	99.8%
Operation	Dry	None	None	Jun-20	81,979	1,460,459	9,035	2,325	26%	0.2%	1,735,691	1,714,035	98.8%
Operation	Dry	None	None	Jul-20	55,086	879,496	2,086	537	26%	0.1%	1,051,045	1,035,638	98.5%
Operation	Dry	None	None	Aug-20	40,130	719,379	794	204	26%	0.0%	838,554	825,419	98.4%
Operation	Dry	None	None	Sep-20	69,397	1,377,808	5,702	1,467	26%	0.1%	1,591,016	1,575,534	99.0%
Closure & Reclamation (draindown)	Dry	None	None	Jul-24	55,086	1,201,094	2,086	447	21%	0.0%	1,051,045	1,357,098	129.1%
Closure & Reclamation (draindown)	Dry	None	None	Aug-24	40,130	892,825	794	170	21%	0.0%	838,554	998,789	119.1%
Closure & Reclamation (draindown)	Dry	None	None	Sep-24	69,397	1,474,780	5,702	1,222	21%	0.1%	1,591,016	1,672,261	105.1%
Closure & Reclamation (draindown)	Dry	None	None	Oct-24	66,051	1,227,851	5,004	1,073	21%	0.1%	1,390,952	1,434,029	103.1%
Closure & Reclamation (draindown)	Dry	None	None	Nov-24	30,585	833,752	1,170	251	21%	0.0%	917,036	933,470	101.8%
Closure & Reclamation (draindown)	Dry	None	None	Dec-24	20,236	568,524	0	0	100%	0.0%	626,088	634,995	101.4%
Closure & Reclamation (draindown)	Dry	None	None	Jan-25	10,800	308,609	0	0	100%	0.0%	336,678	344,147	102.2%
Closure & Reclamation (draindown)	Dry	None	None	Feb-25	9,582	274,379	0	0	100%	0.0%	300,145	305,947	101.9%
Closure & Reclamation (draindown)	Dry	None	None	Mar-25	10,074	289,218	0	0	100%	0.0%	316,704	322,433	101.8%
Closure & Reclamation (draindown)	Dry	None	None	Apr-25	9,610	288,859	0	0	100%	0.0%	301,661	320,648	106.3%
Closure & Reclamation (draindown)	Dry	None	None	May-25	42,870	1,135,847	3,762	806	21%	0.1%	1,172,654	1,277,614	109.0%

Hydroclimatic Scenario	3				Haggart Creek (W4 and W29) (Part 2)								
Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Gil Gulch	Haggart Creek D/S of Gil Gulch	Platinum Gulch (Baseline)	Platinum Gulch (Project)		Platinum Gulch (Project)	Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Baseline)	Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Project)	
					m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of PG Baseline Flow	% of HC Project	m <sup>3</sup> /mth	m <sup>3</sup> /mth	% of HC Baseline
Closure & Reclamation (draindown)	Dry	None	None	Jun-25	81,979	1,532,406	9,035	1,937	21%	0.1%	1,735,691	1,785,537	102.9%
Post-closure Monitoring	Dry	None	None	Oct-31	66,051	1,176,345	5,004	12,314	246%	1.0%	1,390,952	1,407,802	101.2%
Post-closure Monitoring	Dry	None	None	Nov-31	30,585	813,764	1,170	2,055	176%	0.3%	917,036	916,735	100.0%
Post-closure Monitoring	Dry	None	None	Dec-31	20,236	558,535	0	1,294	1294%	0.2%	626,088	626,367	100.0%
Post-closure Monitoring	Dry	None	None	Jan-32	10,800	300,625	0	1,294	1294%	0.4%	336,678	337,489	100.2%
Post-closure Monitoring	Dry	None	None	Feb-32	9,582	268,157	0	1,210	1210%	0.5%	300,145	300,961	100.3%
Post-closure Monitoring	Dry	None	None	Mar-32	10,074	283,076	0	1,294	1294%	0.5%	316,704	317,610	100.3%
Post-closure Monitoring	Dry	None	None	Apr-32	9,610	274,136	0	6,478	6478%	2.4%	301,661	316,016	104.8%
Post-closure Monitoring	Dry	None	None	May-32	42,870	1,062,127	3,762	36,349	966%	3.4%	1,172,654	1,272,918	108.6%
Post-closure Monitoring	Dry	None	None	Jun-32	81,979	1,475,317	9,035	27,673	306%	1.9%	1,735,691	1,779,910	102.5%
Post-closure Monitoring	Dry	None	None	Jul-32	55,086	892,006	2,086	16,773	804%	1.9%	1,051,045	1,084,645	103.2%
Post-closure Monitoring	Dry	None	None	Aug-32	40,130	727,996	794	17,269	2174%	2.4%	838,554	866,802	103.4%
Post-closure Monitoring	Dry	None	None	Sep-32	69,397	1,386,122	5,702	10,609	186%	0.8%	1,591,016	1,606,471	101.0%

**Table C9-1: Hydroclimatic Wet Year Summary – Scenario 2 Model Results**

Stage	Hydro-logic Condition	Hydro-logic Event	Facility Condition	Month-Year	Upper Dublin Gulch Velocity Reduction Pond (W1+W26+ANN EAST)			Total Open Pit Sump Volume to MWTP	PG WRSA Seepage to Open Pit Sump	Total EP WRSA SCP Volume (to MWTP)	Excess Heap Pond to Events Pond	Net Events Pond Volume		Excess from HLF to Detox	Mine Water Feed Pond Inputs	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Total Lower Dublin Gulch Sediment Control Pond Inputs	Haggart Creek D/S of Dublin Gulch (W-4 Project)				Total Flow to Platinum Gulch incl. OP Lake Overflow (Project)		Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Project)	
					m³/mth	m³/day	% Full/day					m³/mth	m³/mth										m³/mth	m³/mth	% full/mth	m³/mth	m³/mth	m³/mth	m³/mth	m³/day
Construction	Wet	None	None	Oct-12	406,439	13,111	37%	1,496	0	0	0	0	0%	0	0	0	0	0	0	0	0%	410,027	3,075,244	1.148	100.0%	11,248	91%	3,226,765	97.0%	
Construction	Wet	None	None	Nov-12	164,280	5,476	16%	1,257	0	0	0	0	0%	0	0	0	0	0	0	0	0%	164,280	1,532,761	0.591	100.0%	3,131	91%	1,590,519	99.0%	
Construction	Wet	None	None	Dec-12	114,478	3,693	11%	1,298	0	0	0	0	0%	0	0	0	0	0	0	0	0%	114,478	1,086,959	0.406	100.2%	1,459	91%	1,125,772	99.3%	
Construction	Wet	None	None	Jan-13	77,429	2,498	7%	3,838	0	0	0	0	0%	0	0	0	0	0	0	0	0%	77,429	747,115	0.279	100.4%	0	100%	771,982	99.6%	
Construction	Wet	None	None	Feb-13	51,698	1,846	5%	3,466	0	0	0	0	0%	0	0	0	0	0	0	0	0%	51,698	499,493	0.206	100.5%	0	100%	516,006	99.8%	
Construction	Wet	None	None	Mar-13	38,082	1,228	4%	3,838	0	0	0	0	0%	0	0	0	0	0	0	0	0%	38,082	368,875	0.138	100.8%	0	100%	380,984	100.1%	
Construction	Wet	None	None	Apr-13	46,419	1,547	4%	3,852	0	0	0	5,706	3%	0	3,852	0	0	0	0	0	0%	46,692	424,023	0.164	100.6%	349	91%	438,530	99.8%	
Construction	Wet	None	None	May-13	709,546	22,889	65%	4,680	0	0	0	19,655	11%	0	4,680	0	0	0	0	0	0%	4,525	5,823,811	2.174	89.9%	23,789	91%	6,866,469	100.4%	
Construction	Wet	None	None	Jun-13	334,654	11,155	32%	23,814	0	21,130	0	56,991	33%	0	44,944	0	0	0	0	0	0%	4,212	3,098,960	1.196	90.8%	12,339	84%	3,655,835	99.9%	
Construction	Wet	None	None	Jul-13	1,015,453	32,757	94%	21,274	0	33,891	0	112,057	64%	0	55,165	0	0	0	0	0	0%	6,878	3,056,196	1.141	75.2%	51,037	82%	4,620,502	99.2%	
Construction	Wet	None	None	Aug-13	518,456	16,724	48%	17,943	0	21,736	0	150,939	86%	0	39,679	0	0	0	0	0	0%	4,403	2,617,870	0.977	83.6%	17,982	83%	3,420,989	99.4%	
Operation	Wet	None	None	Sep-13	521,483	17,383	50%	20,200	1,910	25,407	10,859	178,587	102%	0	45,607	16,527	23	6	16,527	551	4%	5,081	3,331,268	1.285	87.1%	14,978	84%	4,153,241	99.9%	
Operation	Wet	None	None	Oct-19	406,414	13,110	37%	41,378	13,496	9,315	0	177,749	102%	0	50,694	43,713	59	16	43,713	1,410	10%	3,445	2,711,896	1.013	88.2%	3,538	29%	3,338,243	100.4%	
Operation	Wet	None	None	Nov-19	164,280	5,476	16%	2,607	2,824	22,999	0	163,323	93%	0	25,607	0	0	0	0	0	0%	569	1,367,492	0.528	89.3%	883	26%	1,599,834	99.6%	
Operation	Wet	None	None	Dec-19	114,478	3,693	11%	0	0	542	0	126,502	72%	0	542	0	0	0	0	0	0%	329	971,459	0.363	89.5%	411	26%	1,130,961	99.8%	
Operation	Wet	None	None	Jan-20	77,429	2,498	7%	0	0	327	0	89,466	51%	0	327	0	0	0	0	0	0%	199	668,663	0.250	89.8%	0	100%	775,350	100.1%	
Operation	Wet	None	None	Feb-20	51,698	1,783	5%	0	0	201	0	52,463	30%	0	201	0	0	0	0	0	0%	122	446,928	0.178	89.9%	0	100%	517,830	100.2%	
Operation	Wet	None	None	Mar-20	38,082	1,228	4%	0	0	137	0	22,820	13%	0	137	0	0	0	0	0	0%	83	329,770	0.123	90.1%	0	100%	381,801	100.3%	
Operation	Wet	None	None	Apr-20	46,425	1,548	4%	27,516	7,959	393	0	36,623	21%	0	27,909	0	0	0	0	0	0%	115	379,216	0.146	90.0%	356	93%	442,704	100.8%	
Operation	Wet	None	None	May-20	709,843	22,898	65%	241,810	68,353	41,982	158,075	186,844	107%	0	283,792	141,012	190	53	141,012	4,549	34%	3,877	5,919,550	2.210	91.4%	8,371	32%	6,946,438	101.6%	
Operation	Wet	None	None	Jun-20	334,743	11,158	32%	126,831	43,845	138,233	65,655	178,864	102%	0	265,064	262,664	365	101	262,664	8,755	65%	3,754	3,342,906	1.290	98.0%	4,336	30%	3,891,409	106.3%	
Operation	Wet	None	None	Jul-20	1,015,740	32,766	94%	100,705	28,969	81,082	57,319	178,702	102%	0	181,787	179,307	241	67	179,307	5,784	43%	6,130	3,217,739	1.201	79.2%	16,590	27%	4,747,138	101.9%	
Operation	Wet	None	None	Aug-20	518,542	16,727	48%	78,952	21,475	71,771	27,037	177,827	102%	0	150,723	148,243	199	55	148,243	4,782	36%	3,924	2,754,154	1.028	88.0%	6,002	28%	3,544,902	103.0%	
Operation	Wet	None	None	Sep-20	521,338	17,378	50%	84,618	23,508	58,439	25,137	179,248	102%	0	143,057	140,657	195	54	140,657	4,689	35%	4,529	3,438,012	1.326	89.9%	5,154	29%	4,249,465	102.2%	
Closure & Reclamation (draindown)	Wet	None	None	Jul-24	1,014,667	32,731	94%	98,336	25,082	105,025	0	0	0%	278,244	481,605	481,605	647	180	481,605	15,536	116%	6,130	3,586,194	1.339	88.3%	13,907	22%	5,111,838	109.7%	
Closure & Reclamation (draindown)	Wet	None	None	Aug-24	518,218	16,717	48%	80,470	21,475	87,359	0	0	0%	143,403	311,232	311,232	418	116	311,232	10,040	75%	3,924	2,965,097	1.107	94.7%	5,067	23%	3,754,585	109.1%	
Closure & Reclamation (draindown)	Wet	None	None	Sep-24	521,338	17,378	50%	86,087	23,508	81,236	0	0	0%	77,979	245,303	245,303	341	95	245,303	8,177	61%	4,529	3,597,857	1.388	94.0%	4,389	25%	4,408,545	106.1%	
Closure & Reclamation (draindown)	Wet	None	None	Oct-24	406,047	13,098	37%	45,578	16,178	46,990	0	0	0%	38,777	131,344	131,344	177	49	131,344	4,237	32%	3,445	2,821,687	1.053	91.7%	3,008	24%	3,447,137	103.6%	
Closure & Reclamation (draindown)	Wet	None	None	Nov-24	164,280	5,476	16%	4,076	2,824	7,522	0	0	0%	15,966	27,564	27,564	38	11	27,564	919	7%	569	1,393,796	0.538	91.0%	736	21%	1,625,991	101.2%	
Closure & Reclamation (draindown)	Wet	None	None	Dec-24	114,478	3,693	11%	1,294	0	451	0	0	0%	7,983	9,728	9,728	13	4	9,728	314	2%	329	979,884	0.366	90.3%	343	21%	1,139,318	100.5%	
Closure & Reclamation (draindown)	Wet	None	None	Jan-25	77,429	2,498	7%	1,294	0	273	0	0	0%	6,386	7,953	7,953	11	3	7,953	257	2%	199	675,035	0.252	90.7%	0	100%	781,721	100.9%	
Closure & Reclamation (draindown)	Wet	None	None	Feb-25	51,698	1,846	5%	1,168	0	167	0	0	0%	4,790	6,125	6,125	9	3	6,125	219	2%	122	451,569	0.187	90.9%	0	100%	522,471	101.1%	
Closure & Reclamation (draindown)	Wet	None	None	Mar-25	38,082	1,228	4%	1,294	0	114	0	0	0%	4,568	5,976	5,976	8	2	5,976	193	1%	83	334,165	0.125	91.3%	0	100%	386,196	101.5%	
Closure & Reclamation (draindown)	Wet	None	None	Apr-25	46,404	1,547	4%	28,985	7,959	19,329	0	0	0%	9,134	57,447	57,447	80	22	57,447	1,915	14%	115	451,596	0.174	107.2%	339	89%	515,047	117.3%	
Closure & Reclamation (draindown)	Wet	None	None	May-25	708,826	22,865	65%	243,328	68,353	183,504	0	0	0%	46,337	473,170	473,170	636	177	473,170	15,264	113%	3,877	6,396,410	2.388	98.7%	7,250	28%	7,421,160	108.5%	
Closure & Reclamation (draindown)	Wet	None	None	Jun-25	334,418	11,147	32%	128,299	43,845	140,413	0	0	0%	25,048	293,760	293,760	408	113	293,760	9,792	73%	3,754	3,447,831	1.330	101.0%	3,707	25%	3,995,379	109.2%	

Stage	Hydro-logic Condition	Hydro-logic Event	Facility Condition	Month-Year	Upper Dublin Gulch Velocity Reduction Pond (W1+W26+ANN EAST)			Total Open Pit Sump Volume to MWTP	PG WRSA Seepage to Open Pit Sump	Total EP WRSA SCP Volume (to MWTP)	Excess Heap Pond to Events Pond	Net Events Pond Volume		Excess from HLF to Detox	Mine Water Feed Pond Inputs	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Total Lower Dublin Gulch Sediment Control Pond Inputs	Haggart Creek D/S of Dublin Gulch (W-4 Project)			Total Flow to Platinum Gulch incl. OP Lake Overflow (Project)		Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Project)	
					m³/mth	m³/day	% Full/day					m³/mth	m³/mth										m³/mth	m³/mth	% full/mth	m³/mth	m³/mth	m³/mth	m³/mth
Post-closure Monitoring	Wet	None	None	Oct-31	406,047	13,098	37%	29,400	0	0	0	0	0%	6,844	6,844	6,844	9	3	6,844	221	2%	0	2,696,722	1.007	87.7%	45,539	369%	3,401,351	102.3%
Post-closure Monitoring	Wet	None	None	Nov-31	164,280	5,476	16%	1,252	0	0	0	0	0%	0	0	0	0	0	0	0	0%	0	1,365,782	0.527	89.1%	4,812	140%	1,609,006	100.2%
Post-closure Monitoring	Wet	None	None	Dec-31	114,478	3,693	11%	1,294	0	0	0	0	0%	0	0	0	0	0	0	0	0%	0	969,692	0.362	89.4%	1,636	102%	1,130,541	99.8%
Post-closure Monitoring	Wet	None	None	Jan-32	77,429	2,498	7%	1,294	0	0	0	0	0%	0	0	0	0	0	0	0	0%	0	666,896	0.249	89.6%	1,294	1294%	774,950	100.0%
Post-closure Monitoring	Wet	None	None	Feb-32	51,698	1,783	5%	1,210	0	0	0	0	0%	0	0	0	0	0	0	0	0%	0	445,275	0.178	89.6%	1,210	1210%	517,433	100.1%
Post-closure Monitoring	Wet	None	None	Mar-32	38,082	1,228	4%	1,294	0	0	0	0	0%	0	0	0	0	0	0	0	0%	0	328,003	0.122	89.6%	1,294	1294%	381,359	100.2%
Post-closure Monitoring	Wet	None	None	Apr-32	46,404	1,547	4%	21,025	0	0	0	0	0%	4,788	4,788	4,788	7	2	4,788	160	1%	0	398,757	0.154	94.6%	29,067	7596%	509,952	116.1%
Post-closure Monitoring	Wet	None	None	May-32	708,826	22,865	65%	174,975	0	0	0	0	0%	42,213	42,213	42,213	57	16	42,213	1,362	10%	0	5,965,267	2.227	92.1%	248,917	955%	7,410,064	108.4%
Post-closure Monitoring	Wet	None	None	Jun-32	334,418	11,147	32%	84,454	0	0	0	0	0%	21,145	21,145	21,145	29	8	21,145	705	5%	0	3,175,036	1.225	93.0%	131,437	898%	3,986,550	108.9%
Post-closure Monitoring	Wet	None	None	Jul-32	1,014,667	32,731	94%	73,254	0	0	0	0	0%	18,794	18,794	18,794	25	7	18,794	606	5%	0	3,122,918	1.166	76.9%	115,597	185%	4,859,015	104.3%
Post-closure Monitoring	Wet	None	None	Aug-32	518,218	16,717	48%	58,995	0	0	0	0	0%	13,678	13,678	13,678	18	5	13,678	441	3%	0	2,667,078	0.996	85.2%	85,133	391%	3,619,765	105.2%
Post-closure Monitoring	Wet	None	None	Sep-32	521,338	17,378	50%	62,579	0	0	0	0	0%	14,115	14,115	14,115	20	5	14,115	470	3%	0	3,366,219	1.299	88.0%	89,901	505%	4,338,691	104.4%

**Table C9-2: Hydroclimatic Storm Event (May) Summary – Scenario 4 Model Results**

Stage	Hydro-logic Condition	Hydro-logic Event	Facility Condition	Month-Year	Upper Dublin Gulch Velocity Reduction Pond (W1+W26+ANN EAST)			Total Open Pit Sump Volume to MWTP	PG WRSA Seepage to Open Pit Sump	Total EP WRSA SCP Volume (to MWTP)	Excess Heap Pond to Events Pond	Net Events Pond Volume		Excess from HLF to Detox	Mine Water Feed Pond Inputs	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Total Lower Dublin Gulch Sediment Control Pond Inputs	Haggart Creek D/S of Dublin Gulch (W-4 Project)			Total Flow to Platinum Gulch incl. OP Lake Overflow (Project)		Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Project)	
					m³/mth	m³/day	% full/day					m³/mth	m³/mth										m³/mth	m³/mth	% full/mth	m³/mth	m³/mth	m³/day	% of HC Baseline
Construction	Wet	None	None	Oct-12	406,439	13,111	37%	1,496	0	0	0	0	0%	0	0	0	0	0	0	0	0%	410,027	3,075,244	1.148	100.0%	11,248	91%	3,226,765	97.0%
Construction	Wet	None	None	Nov-12	164,280	5,476	16%	1,257	0	0	0	0	0%	0	0	0	0	0	0	0	0%	164,280	1,532,761	0.591	100.0%	3,131	91%	1,590,519	99.0%
Construction	Wet	None	None	Dec-12	114,478	3,693	11%	1,298	0	0	0	0	0%	0	0	0	0	0	0	0	0%	114,478	1,086,959	0.406	100.2%	1,459	91%	1,125,772	99.3%
Construction	Wet	None	None	Jan-13	77,429	2,498	7%	3,838	0	0	0	0	0%	0	0	0	0	0	0	0	0%	77,429	747,115	0.279	100.4%	0	100%	771,982	99.6%
Construction	Wet	None	None	Feb-13	51,698	1,846	5%	3,466	0	0	0	0	0%	0	0	0	0	0	0	0	0%	51,698	499,493	0.206	100.5%	0	100%	516,006	99.8%
Construction	Wet	None	None	Mar-13	38,082	1,228	4%	3,838	0	0	0	0	0%	0	0	0	0	0	0	0	0%	38,082	368,875	0.138	100.8%	0	100%	380,984	100.1%
Construction	Wet	None	None	Apr-13	46,419	1,547	4%	3,852	0	0	0	5,706	3%	0	3,852	0	0	0	0	0	0%	46,692	424,023	0.164	100.6%	349	91%	438,530	99.8%
Construction	Wet	Storm	None	May-13	888,202	28,652	82%	5,199	0	0	0	27,300	16%	0	5,199	0	0	0	0	0	0%	5,782	7,363,286	2.749	90.1%	30,374	91%	8,671,105	100.5%
Construction	Wet	None	None	Jun-13	334,654	11,155	32%	23,814	0	21,130	0	57,510	33%	0	44,944	0	0	0	0	0	0%	4,212	3,098,960	1.196	90.8%	12,339	84%	3,655,835	99.9%
Construction	Wet	None	None	Jul-13	1,015,453	32,757	94%	21,274	0	33,891	0	112,576	64%	0	55,165	0	0	0	0	0	0%	6,878	3,056,196	1.141	75.2%	51,037	82%	4,620,502	99.2%
Construction	Wet	None	None	Aug-13	518,456	16,724	48%	17,943	0	21,736	0	151,458	87%	0	39,679	0	0	0	0	0	0%	4,403	2,617,870	0.977	83.6%	17,982	83%	3,420,989	99.4%
Operation	Wet	None	None	Sep-13	521,483	17,383	50%	20,200	1,910	25,407	10,859	178,587	102%	0	45,607	17,046	24	7	17,046	568	4%	5,081	3,331,787	1.285	87.1%	14,978	84%	4,153,761	99.9%
Operation	Wet	None	None	Oct-19	406,414	13,110	37%	41,378	13,496	9,315	0	177,749	102%	0	50,694	43,713	59	16	43,713	1,410	10%	3,445	2,711,896	1.013	88.2%	3,538	29%	3,338,243	100.4%
Operation	Wet	None	None	Nov-19	164,280	5,476	16%	2,607	2,824	22,999	0	163,323	93%	0	25,607	0	0	0	0	0	0%	569	1,367,492	0.528	89.3%	883	26%	1,599,834	99.6%
Operation	Wet	None	None	Dec-19	114,478	3,693	11%	0	0	542	0	126,502	72%	0	542	0	0	0	0	0	0%	329	971,459	0.363	89.5%	411	26%	1,130,961	99.8%
Operation	Wet	None	None	Jan-20	77,429	2,498	7%	0	0	327	0	89,466	51%	0	327	0	0	0	0	0	0%	199	668,663	0.250	89.8%	0	100%	775,350	100.1%
Operation	Wet	None	None	Feb-20	51,698	1,783	5%	0	0	201	0	52,463	30%	0	201	0	0	0	0	0	0%	122	446,928	0.178	89.9%	0	100%	517,830	100.2%
Operation	Wet	None	None	Mar-20	38,082	1,228	4%	0	0	137	0	22,820	13%	0	137	0	0	0	0	0	0%	83	329,770	0.123	90.1%	0	100%	381,801	100.3%
Operation	Wet	None	None	Apr-20	46,425	1,548	4%	27,516	7,959	393	0	36,623	21%	0	27,909	0	0	0	0	0	0%	115	379,216	0.146	90.0%	356	93%	442,704	100.8%
Operation	Wet	Storm	None	May-20	888,593	28,664	82%	335,279	92,691	52,122	232,786	193,969	111%	0	387,401	244,621	329	91	244,621	7,891	59%	4,954	7,544,458	2.817	92.3%	11,114	33%	8,832,581	102.4%
Operation	Wet	None	None	Jun-20	334,743	11,158	32%	132,915	49,930	207,386	65,655	178,864	102%	0	340,301	337,901	469	130	337,901	11,263	84%	3,754	3,418,144	1.319	100.2%	4,336	30%	3,966,647	108.4%
Operation	Wet	None	None	Jul-20	1,015,740	32,766	94%	100,705	28,969	81,082	57,319	178,702	102%	0	181,787	179,307	241	67	179,307	5,784	43%	6,130	3,217,739	1.201	79.2%	16,590	27%	4,747,138	101.9%
Operation	Wet	None	None	Aug-20	518,542	16,727	48%	78,952	21,475	71,771	27,037	177,827	102%	0	150,723	148,243	199	55	148,243	4,782	36%	3,924	2,754,154	1.028	88.0%	6,002	28%	3,544,902	103.0%
Operation	Wet	None	None	Sep-20	521,338	17,378	50%	84,618	23,508	58,439	25,137	179,248	102%	0	143,057	140,657	195	54	140,657	4,689	35%	4,529	3,438,012	1.326	89.9%	5,154	29%	4,249,465	102.2%
Closure & Reclamation (draindown)	Wet	None	None	Jul-24	1,014,667	32,731	94%	98,336	25,082	105,025	0	0	0%	278,244	481,605	481,605	647	180	481,605	15,536	116%	6,130	3,586,194	1.339	88.3%	13,907	22%	5,111,838	109.7%
Closure & Reclamation (draindown)	Wet	None	None	Aug-24	518,218	16,717	48%	80,470	21,475	87,359	0	0	0%	143,403	311,232	311,232	418	116	311,232	10,040	75%	3,924	2,965,097	1.107	94.7%	5,067	23%	3,754,585	109.1%
Closure & Reclamation (draindown)	Wet	None	None	Sep-24	521,338	17,378	50%	86,087	23,508	81,236	0	0	0%	77,979	245,303	245,303	341	95	245,303	8,177	61%	4,529	3,597,857	1.388	94.0%	4,389	25%	4,408,545	106.1%
Closure & Reclamation (draindown)	Wet	None	None	Oct-24	406,047	13,098	37%	45,578	16,178	46,990	0	0	0%	38,777	131,344	131,344	177	49	131,344	4,237	32%	3,445	2,821,687	1.053	91.7%	3,008	24%	3,447,137	103.6%
Closure & Reclamation (draindown)	Wet	None	None	Nov-24	164,280	5,476	16%	4,076	2,824	7,522	0	0	0%	15,966	27,564	27,564	38	11	27,564	919	7%	569	1,393,796	0.538	91.0%	736	21%	1,625,991	101.2%
Closure & Reclamation (draindown)	Wet	None	None	Dec-24	114,478	3,693	11%	1,294	0	451	0	0	0%	7,983	9,728	9,728	13	4	9,728	314	2%	329	979,884	0.366	90.3%	343	21%	1,139,318	100.5%
Closure & Reclamation (draindown)	Wet	None	None	Jan-25	77,429	2,498	7%	1,294	0	273	0	0	0%	6,386	7,953	7,953	11	3	7,953	257	2%	199	675,035	0.252	90.7%	0	100%	781,721	100.9%
Closure & Reclamation (draindown)	Wet	None	None	Feb-25	51,698	1,846	5%	1,168	0	167	0	0	0%	4,790	6,125	6,125	9	3	6,125	219	2%	122	451,569	0.187	90.9%	0	100%	522,471	101.1%
Closure & Reclamation (draindown)	Wet	None	None	Mar-25	38,082	1,228	4%	1,294	0	114	0	0	0%	4,568	5,976	5,976	8	2	5,976	193	1%	83	334,165	0.125	91.3%	0	100%	386,196	101.5%
Closure & Reclamation (draindown)	Wet	None	None	Apr-25	46,404	1,547	4%	28,985	7,959	19,329	0	0	0%	9,134	57,447	57,447	80	22	57,447	1,915	14%	115	451,596	0.174	107.2%	339	89%	515,047	117.3%
Closure & Reclamation (draindown)	Wet	Storm	None	May-25	887,192	28,619	82%	336,797	92,691	249,056	0	0	0%	62,739	648,592	648,592	872	242	648,592	20,922	156%	4,954	8,150,182	3.043	99.7%	9,683	29%	9,435,472	109.4%
Closure & Reclamation (draindown)	Wet	None	None	Jun-25	334,418	11,147	32%	134,384	49,930	156,261	0	0	0%	25,048	315,692	315,692	438	122	315,692	10,523	78%	3,754	3,469,763	1.339	101.7%	3,707	25%	4,017,311	109.8%

Stage	Hydro-logic Condition	Hydro-logic Event	Facility Condition	Month-Year	Upper Dublin Gulch Velocity Reduction Pond (W1+W26+ANN EAST)			Total Open Pit Sump Volume to MWTP	PG WRSA Seepage to Open Pit Sump	Total EP WRSA SCP Volume (to MWTP)	Excess Heap Pond to Events Pond	Net Events Pond Volume		Excess from HLF to Detox	Mine Water Feed Pond Inputs	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Total Lower Dublin Gulch Sediment Control Pond Inputs	Haggart Creek D/S of Dublin Gulch (W-4 Project)			Total Flow to Platinum Gulch incl. OP Lake Overflow (Project)		Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Project)	
					m³/mth	m³/day	% full/day					m³/mth	m³/mth										m³/mth	m³/mth	% full/mth	m³/mth	m³/mth	m³/mth	m³/mth
Post-closure Monitoring	Wet	None	None	Oct-31	406,047	13,098	37%	29,400	0	0	0	0	0%	6,844	6,844	6,844	9	3	6,844	221	2%	0	2,696,722	1.007	87.7%	45,539	369%	3,401,351	102.3%
Post-closure Monitoring	Wet	None	None	Nov-31	164,280	5,476	16%	1,252	0	0	0	0	0%	0	0	0	0	0	0	0	0%	0	1,365,782	0.527	89.1%	4,812	140%	1,609,006	100.2%
Post-closure Monitoring	Wet	None	None	Dec-31	114,478	3,693	11%	1,294	0	0	0	0	0%	0	0	0	0	0	0	0	0%	0	969,692	0.362	89.4%	1,636	102%	1,130,541	99.8%
Post-closure Monitoring	Wet	None	None	Jan-32	77,429	2,498	7%	1,294	0	0	0	0	0%	0	0	0	0	0	0	0	0%	0	666,896	0.249	89.6%	1,294	1294%	774,950	100.0%
Post-closure Monitoring	Wet	None	None	Feb-32	51,698	1,783	5%	1,210	0	0	0	0	0%	0	0	0	0	0	0	0	0%	0	445,275	0.178	89.6%	1,210	1210%	517,433	100.1%
Post-closure Monitoring	Wet	None	None	Mar-32	38,082	1,228	4%	1,294	0	0	0	0	0%	0	0	0	0	0	0	0	0%	0	328,003	0.122	89.6%	1,294	1294%	381,359	100.2%
Post-closure Monitoring	Wet	None	None	Apr-32	46,404	1,547	4%	21,025	0	0	0	0	0%	4,788	4,788	4,788	7	2	4,788	160	1%	0	398,757	0.154	94.6%	29,067	7596%	509,952	116.1%
Post-closure Monitoring	Wet	Storm	None	May-32	887,192	28,619	82%	244,106	0	0	0	0	0%	58,614	58,614	58,614	79	22	58,614	1,891	14%	0	7,560,018	2.823	92.5%	343,932	1033%	9,421,729	109.2%
Post-closure Monitoring	Wet	None	None	Jun-32	334,418	11,147	32%	84,454	0	0	0	0	0%	21,145	21,145	21,145	29	8	21,145	705	5%	0	3,175,036	1.225	93.0%	137,522	939%	4,008,482	109.5%
Post-closure Monitoring	Wet	None	None	Jul-32	1,014,667	32,731	94%	73,254	0	0	0	0	0%	18,794	18,794	18,794	25	7	18,794	606	5%	0	3,122,918	1.166	76.9%	115,597	185%	4,859,015	104.3%
Post-closure Monitoring	Wet	None	None	Aug-32	518,218	16,717	48%	58,995	0	0	0	0	0%	13,678	13,678	13,678	18	5	13,678	441	3%	0	2,667,078	0.996	85.2%	85,133	391%	3,619,765	105.2%
Post-closure Monitoring	Wet	None	None	Sep-32	521,338	17,378	50%	62,579	0	0	0	0	0%	14,115	14,115	14,115	20	5	14,115	470	3%	0	3,366,219	1.299	88.0%	89,901	505%	4,338,691	104.4%



**Table C9-3: Hydroclimatic Storm Event (July) Summary – Scenario 5 Model Results**

Stage	Hydro-logic Condition	Hydro-logic Event	Facility Condition	Month-Year	Upper Dublin Gulch Velocity Reduction Pond (W1+W26+ANN EAST)			Total Open Pit Sump Volume to MWTP	PG WRSA Seepage to Open Pit Sump	Total EP WRSA SCP Volume (to MWTP)	Excess Heap Pond to Events Pond	Net Events Pond Volume		Excess from HLF to Detox	Mine Water Feed Pond Inputs	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Total Lower Dublin Gulch Sediment Control Pond Inputs	Haggart Creek D/S of Dublin Gulch (W-4 Project)				Total Flow to Platinum Gulch incl. OP Lake Overflow (Project)		Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Project)	
					m³/mth	m³/day	% full/day					m³/mth	m³/mth										% full/mth	m³/mth	m³/mth	m³/mth	m³/day	% of HC Baseline	m³/mth	% of PG Baseline Flow
Construction	Wet	None	None	Oct-12	406,439	13,111	37%	1,496	0	0	0	0	0%	0	0	0	0	0	0	0	0%	410,027	3,075,244	1.148	100.0%	11,248	91%	3,226,765	97.0%	
Construction	Wet	None	None	Nov-12	164,280	5,476	16%	1,257	0	0	0	0	0%	0	0	0	0	0	0	0	0%	164,280	1,532,761	0.591	100.0%	3,131	91%	1,590,519	99.0%	
Construction	Wet	None	None	Dec-12	114,478	3,693	11%	1,298	0	0	0	0	0%	0	0	0	0	0	0	0	0%	114,478	1,086,959	0.406	100.2%	1,459	91%	1,125,772	99.3%	
Construction	Wet	None	None	Jan-13	77,429	2,498	7%	3,838	0	0	0	0	0%	0	0	0	0	0	0	0	0%	77,429	747,115	0.279	100.4%	0	100%	771,982	99.6%	
Construction	Wet	None	None	Feb-13	51,698	1,846	5%	3,466	0	0	0	0	0%	0	0	0	0	0	0	0	0%	51,698	499,493	0.206	100.5%	0	100%	516,006	99.8%	
Construction	Wet	None	None	Mar-13	38,082	1,228	4%	3,838	0	0	0	0	0%	0	0	0	0	0	0	0	0%	38,082	368,875	0.138	100.8%	0	100%	380,984	100.1%	
Construction	Wet	None	None	Apr-13	46,419	1,547	4%	3,852	0	0	0	5,706	3%	0	3,852	0	0	0	0	0	0%	46,692	424,023	0.164	100.6%	349	91%	438,530	99.8%	
Construction	Wet	None	None	May-13	709,546	22,889	65%	4,680	0	0	0	19,655	11%	0	4,680	0	0	0	0	0	0%	4,525	5,823,811	2.174	89.9%	23,789	91%	6,866,469	100.4%	
Construction	Wet	None	None	Jun-13	334,654	11,155	32%	23,814	0	21,130	0	56,991	33%	0	44,944	0	0	0	0	0	0%	4,212	3,098,960	1.196	90.8%	12,339	84%	3,655,835	99.9%	
Construction	Wet	Storm	None	Jul-13	1,503,705	48,507	139%	39,054	0	47,720	0	150,791	86%	0	86,774	0	0	0	0	0	0%	9,453	4,259,441	1.590	74.3%	80,142	82%	6,575,075	99.5%	
Construction	Wet	None	None	Aug-13	518,456	16,724	48%	17,943	0	21,736	0	177,618	101%	0	39,679	4,929	7	2	4,929	159	1%	4,403	2,622,799	0.979	83.8%	17,982	83%	3,425,918	99.5%	
Operation	Wet	None	None	Sep-13	521,483	17,383	50%	20,200	1,910	25,407	10,859	178,587	102%	0	45,607	43,207	60	17	43,207	1,440	11%	5,081	3,357,947	1.296	87.8%	14,978	84%	4,179,921	100.6%	
Operation	Wet	None	None	Oct-19	406,414	13,110	37%	41,378	13,496	9,315	0	177,749	102%	0	50,694	43,713	59	16	43,713	1,410	10%	3,445	2,711,896	1.013	88.2%	3,538	29%	3,338,243	100.4%	
Operation	Wet	None	None	Nov-19	164,280	5,476	16%	2,607	2,824	22,999	0	163,323	93%	0	25,607	0	0	0	0	0	0%	569	1,367,492	0.528	89.3%	883	26%	1,599,834	99.6%	
Operation	Wet	None	None	Dec-19	114,478	3,693	11%	0	0	542	0	126,502	72%	0	542	0	0	0	0	0	0%	329	971,459	0.363	89.5%	411	26%	1,130,961	99.8%	
Operation	Wet	None	None	Jan-20	77,429	2,498	7%	0	0	327	0	89,466	51%	0	327	0	0	0	0	0	0%	199	668,663	0.250	89.8%	0	100%	775,350	100.1%	
Operation	Wet	None	None	Feb-20	51,698	1,783	5%	0	0	201	0	52,463	30%	0	201	0	0	0	0	0	0%	122	446,928	0.178	89.9%	0	100%	517,830	100.2%	
Operation	Wet	None	None	Mar-20	38,082	1,228	4%	0	0	137	0	22,820	13%	0	137	0	0	0	0	0	0%	83	329,770	0.123	90.1%	0	100%	381,801	100.3%	
Operation	Wet	None	None	Apr-20	46,425	1,548	4%	27,516	7,959	393	0	36,623	21%	0	27,909	0	0	0	0	0	0%	115	379,216	0.146	90.0%	356	93%	442,704	100.8%	
Operation	Wet	None	None	May-20	709,843	22,898	65%	241,810	68,353	41,982	158,075	186,844	107%	0	283,792	141,012	190	53	141,012	4,549	34%	3,877	5,919,550	2.210	91.4%	8,371	32%	6,946,438	101.6%	
Operation	Wet	None	None	Jun-20	334,743	11,158	32%	126,831	43,845	138,233	65,655	178,864	102%	0	265,064	262,664	365	101	262,664	8,755	65%	3,754	3,342,906	1.290	98.0%	4,336	30%	3,891,409	106.3%	
Operation	Wet	Storm	None	Jul-20	1,504,165	48,521	139%	195,624	54,758	93,228	133,925	185,828	106%	0	288,852	286,372	385	107	286,372	9,238	69%	8,425	4,507,583	1.683	78.6%	26,435	27%	6,768,941	102.4%	
Operation	Wet	None	None	Aug-20	518,542	16,727	48%	85,399	27,922	140,925	27,037	177,827	102%	0	226,324	223,844	301	84	223,844	7,221	54%	3,924	2,829,755	1.057	90.4%	6,002	28%	3,620,502	105.2%	
Operation	Wet	None	None	Sep-20	521,338	17,378	50%	84,618	23,508	58,439	25,137	179,248	102%	0	143,057	140,657	195	54	140,657	4,689	35%	4,529	3,438,012	1.326	89.9%	5,154	29%	4,249,465	102.2%	
Closure & Reclamation (drawdown)	Wet	Storm	None	Jul-24	1,502,384	48,464	138%	193,256	50,871	173,690	0	0	0%	295,273	662,219	662,219	890	247	662,219	21,362	159%	8,425	5,008,517	1.870	87.4%	22,255	23%	7,263,916	109.9%	
Closure & Reclamation (drawdown)	Wet	None	None	Aug-24	518,218	16,717	48%	86,917	27,922	103,568	0	0	0%	143,403	333,888	333,888	449	125	333,888	10,771	80%	3,924	2,987,753	1.115	95.5%	5,067	23%	3,777,241	109.7%	
Closure & Reclamation (drawdown)	Wet	None	None	Sep-24	521,338	17,378	50%	86,087	23,508	81,236	0	0	0%	77,979	245,303	245,303	341	95	245,303	8,177	61%	4,529	3,597,857	1.388	94.0%	4,389	25%	4,408,545	106.1%	
Closure & Reclamation (drawdown)	Wet	None	None	Oct-24	406,047	13,098	37%	45,578	16,178	46,990	0	0	0%	38,777	131,344	131,344	177	49	131,344	4,237	32%	3,445	2,821,687	1.053	91.7%	3,008	24%	3,447,137	103.6%	
Closure & Reclamation (drawdown)	Wet	None	None	Nov-24	164,280	5,476	16%	4,076	2,824	7,522	0	0	0%	15,966	27,564	27,564	38	11	27,564	919	7%	569	1,393,796	0.538	91.0%	736	21%	1,625,991	101.2%	
Closure & Reclamation (drawdown)	Wet	None	None	Dec-24	114,478	3,693	11%	1,294	0	451	0	0	0%	7,983	9,728	9,728	13	4	9,728	314	2%	329	979,884	0.366	90.3%	343	21%	1,139,318	100.5%	
Closure & Reclamation (drawdown)	Wet	None	None	Jan-25	77,429	2,498	7%	1,294	0	273	0	0	0%	6,386	7,953	7,953	11	3	7,953	257	2%	199	675,035	0.252	90.7%	0	100%	781,721	100.9%	
Closure & Reclamation (drawdown)	Wet	None	None	Feb-25	51,698	1,846	5%	1,168	0	167	0	0	0%	4,790	6,125	6,125	9	3	6,125	219	2%	122	451,569	0.187	90.9%	0	100%	522,471	101.1%	
Closure & Reclamation (drawdown)	Wet	None	None	Mar-25	38,082	1,228	4%	1,294	0	114	0	0	0%	4,568	5,976	5,976	8	2	5,976	193	1%	83	334,165	0.125	91.3%	0	100%	386,196	101.5%	
Closure & Reclamation (drawdown)	Wet	None	None	Apr-25	46,404	1,547	4%	28,985	7,959	19,329	0	0	0%	9,134	57,447	57,447	80	22	57,447	1,915	14%	115	451,596	0.174	107.2%	339	89%	515,047	117.3%	
Closure & Reclamation (drawdown)	Wet	None	None	May-25	708,826	22,865	65%	243,328	68,353	183,504	0	0	0%	46,337	473,170	473,170	636	177	473,170	15,264	113%	3,877	6,396,410	2.388	98.7%	7,250	28%	7,421,160	108.5%	
Closure & Reclamation (drawdown)	Wet	None	None	Jun-25	334,418	11,147	32%	128,299	43,845	140,413	0	0	0%	25,048	293,760	293,760	408	113	293,760	9,792	73%	3,754	3,447,831	1.330	101.0%	3,707	25%	3,995,379	109.2%	

Stage	Hydro-logic Condition	Hydro-logic Event	Facility Condition	Month-Year	Upper Dublin Gulch Velocity Reduction Pond (W1+W26+ANN EAST)			Total Open Pit Sump Volume to MWTP	PG WRSA Seepage to Open Pit Sump	Total EP WRSA SCP Volume (to MWTP)	Excess Heap Pond to Events Pond	Net Events Pond Volume		Excess from HLF to Detox	Mine Water Feed Pond Inputs	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Total Lower Dublin Gulch Sediment Control Pond Inputs	Haggart Creek D/S of Dublin Gulch (W-4 Project)			Total Flow to Platinum Gulch incl. OP Lake Overflow (Project)		Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Project)	
					m³/mth	m³/day	% full/day					m³/mth	m³/mth										m³/mth	m³/mth	% full/mth	m³/mth	m³/mth	m³/mth	m³/day
Post-closure Monitoring	Wet	None	None	Oct-31	406,047	13,098	37%	29,400	0	0	0	0	0%	6,844	6,844	6,844	9	3	6,844	221	2%	0	2,696,722	1.007	87.7%	45,539	369%	3,401,351	102.3%
Post-closure Monitoring	Wet	None	None	Nov-31	164,280	5,476	16%	1,252	0	0	0	0	0%	0	0	0	0	0	0	0	0%	0	1,365,782	0.527	89.1%	4,812	140%	1,609,006	100.2%
Post-closure Monitoring	Wet	None	None	Dec-31	114,478	3,693	11%	1,294	0	0	0	0	0%	0	0	0	0	0	0	0	0%	0	969,692	0.362	89.4%	1,636	102%	1,130,541	99.8%
Post-closure Monitoring	Wet	None	None	Jan-32	77,429	2,498	7%	1,294	0	0	0	0	0%	0	0	0	0	0	0	0	0%	0	666,896	0.249	89.6%	1,294	1294%	774,950	100.0%
Post-closure Monitoring	Wet	None	None	Feb-32	51,698	1,783	5%	1,210	0	0	0	0	0%	0	0	0	0	0	0	0	0%	0	445,275	0.178	89.6%	1,210	1210%	517,433	100.1%
Post-closure Monitoring	Wet	None	None	Mar-32	38,082	1,228	4%	1,294	0	0	0	0	0%	0	0	0	0	0	0	0	0%	0	328,003	0.122	89.6%	1,294	1294%	381,359	100.2%
Post-closure Monitoring	Wet	None	None	Apr-32	46,404	1,547	4%	21,025	0	0	0	0	0%	4,788	4,788	4,788	7	2	4,788	160	1%	0	398,757	0.154	94.6%	29,067	7596%	509,952	116.1%
Post-closure Monitoring	Wet	None	None	May-32	708,826	22,865	65%	174,975	0	0	0	0	0%	42,213	42,213	42,213	57	16	42,213	1,362	10%	0	5,965,267	2.227	92.1%	248,917	955%	7,410,064	108.4%
Post-closure Monitoring	Wet	None	None	Jun-32	334,418	11,147	32%	84,454	0	0	0	0	0%	21,145	21,145	21,145	29	8	21,145	705	5%	0	3,175,036	1.225	93.0%	131,437	898%	3,986,550	108.9%
Post-closure Monitoring	Wet	Storm	None	Jul-32	1,502,384	48,464	138%	142,384	0	0	0	0	0%	35,824	35,824	35,824	48	13	35,824	1,156	9%	0	4,381,657	1.636	76.5%	217,978	224%	7,007,228	106.0%
Post-closure Monitoring	Wet	None	None	Aug-32	518,218	16,717	48%	58,995	0	0	0	0	0%	13,678	13,678	13,678	18	5	13,678	441	3%	0	2,667,078	0.996	85.2%	91,580	421%	3,642,421	105.8%
Post-closure Monitoring	Wet	None	None	Sep-32	521,338	17,378	50%	62,579	0	0	0	0	0%	14,115	14,115	14,115	20	5	14,115	470	3%	0	3,366,219	1.299	88.0%	89,901	505%	4,338,691	104.4%

**Table C9-4: Hydroclimatic Dry Year Summary – Scenario 3 Model Results**

Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Upper Dublin Gulch Velocity Reduction Pond (W1+W26+ANN EAST)			Total Open Pit Sump Volume to MWTP	PG WRSA Seepage to Open Pit Sump	Total EP WRSA SCP Volume (to MWTP)	Excess Heap Pond to Events Pond	Net Events Pond Volume		Excess from HLF to Detox	Mine Water Feed Pond Inputs	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Total Lower Dublin Gulch Sediment Control Pond Inputs	Haggart Creek D/S of Dublin Gulch (W-4 Project)			Total Flow to Platinum Gulch incl. OP Lake Overflow (Project)		Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Project)	
					m <sup>3</sup> /mth	m <sup>3</sup> /day	% full/day					m <sup>3</sup> /mth	m <sup>3</sup> /mth										% full/mth	m <sup>3</sup> /mth	m <sup>3</sup> /mth	m <sup>3</sup> /day	% of HC Baseline	m <sup>3</sup> /mth	% of PG Baseline Flow
Construction	Dry	None	None	Oct-12	174,244	5,621	16%	1,339	0	0	0	0	0%	0	0	0	0	0	0	0	0%	174,606	1,280,701	0.478	100.0%	4,566	91%	1,351,318	97.2%
Construction	Dry	None	None	Nov-12	92,427	3,081	9%	1,257	0	0	0	0	0%	0	0	0	0	0	0	0	0%	92,427	878,305	0.339	100.2%	1,068	91%	909,958	99.2%
Construction	Dry	None	None	Dec-12	62,498	2,016	6%	1,298	0	0	0	0	0%	0	0	0	0	0	0	0	0%	62,498	603,588	0.225	100.5%	0	100%	623,824	99.6%
Construction	Dry	None	None	Jan-13	33,650	1,085	3%	3,838	0	0	0	0	0%	0	0	0	0	0	0	0	0%	33,650	326,266	0.122	100.9%	0	100%	337,065	100.1%
Construction	Dry	None	None	Feb-13	30,021	1,072	3%	3,466	0	0	0	0	0%	0	0	0	0	0	0	0	0%	30,021	291,116	0.120	100.9%	0	100%	300,698	100.2%
Construction	Dry	None	None	Mar-13	31,697	1,022	3%	3,838	0	0	0	0	0%	0	0	0	0	0	0	0	0%	31,697	307,489	0.115	100.9%	0	100%	317,563	100.3%
Construction	Dry	None	None	Apr-13	30,260	1,009	3%	3,741	0	0	0	4,111	2%	0	3,741	0	0	0	0	0	0%	30,341	292,805	0.113	100.9%	0	100%	302,414	100.2%
Construction	Dry	None	None	May-13	127,109	4,100	12%	3,628	0	0	0	4,394	3%	0	3,628	0	0	0	0	0	0%	739	994,280	0.371	89.7%	3,433	91%	1,181,785	100.8%
Construction	Dry	None	None	Jun-13	207,361	6,912	20%	8,644	0	9,861	0	20,949	12%	0	18,505	0	0	0	0	0	0%	2,231	1,381,107	0.533	86.9%	6,723	74%	1,721,289	99.2%
Construction	Dry	None	None	Jul-13	109,278	3,525	10%	7,337	0	10,504	0	39,193	22%	0	17,841	0	0	0	0	0	0%	2,355	826,093	0.308	88.4%	1,138	55%	1,038,168	98.8%
Construction	Dry	None	None	Aug-13	59,817	1,930	6%	7,748	0	10,554	0	58,834	34%	0	18,302	0	0	0	0	0	0%	2,340	680,763	0.254	92.1%	255	32%	827,228	98.6%
Operation	Dry	None	None	Sep-13	161,490	5,383	15%	4,351	479	8,301	0	57,967	33%	0	12,651	0	0	0	0	0	0%	1,768	1,309,319	0.505	89.0%	4,489	79%	1,579,666	99.3%
Operation	Dry	None	None	Oct-19	174,240	5,621	16%	9,724	4,408	2,978	0	157,090	90%	0	12,702	0	0	0	0	0	0%	1,400	1,105,861	0.413	86.4%	1,359	27%	1,378,413	99.1%
Operation	Dry	None	None	Nov-19	92,427	3,081	9%	335	552	525	0	120,106	69%	0	860	0	0	0	0	0	0%	319	784,889	0.303	89.6%	301	26%	915,242	99.8%
Operation	Dry	None	None	Dec-19	62,498	2,016	6%	0	0	296	0	83,039	47%	0	296	0	0	0	0	0	0%	180	540,066	0.202	89.9%	0	100%	626,774	100.1%
Operation	Dry	None	None	Jan-20	33,650	1,085	3%	0	0	141	0	45,817	26%	0	141	0	0	0	0	0	0%	86	291,593	0.109	90.1%	0	100%	337,931	100.4%
Operation	Dry	None	None	Feb-20	30,021	1,035	3%	0	0	115	0	8,729	5%	0	115	0	0	0	0	0	0%	70	260,227	0.104	90.2%	0	100%	301,378	100.4%
Operation	Dry	None	None	Mar-20	31,697	1,022	3%	0	0	113	0	0	0%	0	113	0	0	0	0	0	0%	69	274,770	0.103	90.2%	0	100%	318,058	100.4%
Operation	Dry	None	None	Apr-20	30,260	1,009	3%	5,009	1,491	152	0	375	0%	0	5,160	0	0	0	0	0	0%	69	262,079	0.101	90.3%	48	48%	303,526	100.6%
Operation	Dry	None	None	May-20	127,157	4,102	12%	34,024	11,982	4,269	3,101	32,991	19%	0	38,293	0	0	0	0	0	0%	634	984,792	0.368	88.9%	656	17%	1,169,463	99.7%
Operation	Dry	None	None	Jun-20	207,375	6,912	20%	24,267	5,072	12,693	0	47,175	27%	0	36,961	0	0	0	0	0	0%	1,989	1,378,480	0.532	86.8%	1,757	19%	1,713,467	98.7%
Operation	Dry	None	None	Jul-20	109,290	3,525	10%	14,808	1,296	4,331	0	44,852	26%	0	19,139	0	0	0	0	0	0%	2,099	824,409	0.308	88.2%	12	1%	1,035,114	98.5%
Operation	Dry	None	None	Aug-20	59,827	1,930	6%	15,581	707	6,188	0	36,574	21%	0	21,768	0	0	0	0	0	0%	2,085	679,249	0.254	91.9%	0	0%	825,214	98.4%
Operation	Dry	None	None	Sep-20	161,481	5,383	15%	7,918	1,089	6,688	0	22,853	13%	0	14,606	0	0	0	0	0	0%	1,576	1,308,410	0.505	88.9%	1,339	23%	1,575,406	99.0%
Closure & Reclamation (draindown)	Dry	None	None	Jul-24	109,241	3,524	10%	18,711	3,681	30,461	0	0	0%	262,360	311,532	311,532	419	116	311,532	10,049	75%	2,099	1,146,008	0.428	122.6%	0	0%	1,356,651	129.1%
Closure & Reclamation (draindown)	Dry	None	None	Aug-24	59,785	1,929	6%	17,099	707	17,541	0	0	0%	131,840	166,480	166,480	224	62	166,480	5,370	40%	2,085	852,696	0.318	115.4%	0	0%	998,619	119.1%
Closure & Reclamation (draindown)	Dry	None	None	Sep-24	161,481	5,383	15%	9,387	1,089	14,957	0	0	0%	65,869	90,213	90,213	125	35	90,213	3,007	22%	1,576	1,405,383	0.542	95.5%	1,094	19%	1,672,133	105.1%
Closure & Reclamation (draindown)	Dry	None	None	Oct-24	174,205	5,620	16%	9,282	2,448	9,827	0	0	0%	33,327	52,436	52,436	70	20	52,436	1,691	13%	1,400	1,161,800	0.434	90.7%	1,144	23%	1,434,101	103.1%
Closure & Reclamation (draindown)	Dry	None	None	Nov-24	92,427	3,081	9%	1,804	552	1,768	0	0	0%	15,966	19,538	19,538	27	8	19,538	651	5%	319	803,167	0.310	91.7%	251	21%	933,470	101.8%
Closure & Reclamation (draindown)	Dry	None	None	Dec-24	62,498	2,016	6%	1,294	0	247	0	0	0%	7,983	9,523	9,523	13	4	9,523	307	2%	180	548,288	0.205	91.3%	0	100%	634,995	101.4%
Closure & Reclamation (draindown)	Dry	None	None	Jan-25	33,650	1,085	3%	1,294	0	117	0	0	0%	6,386	7,797	7,797	10	3	7,797	252	2%	86	297,809	0.111	92.1%	0	100%	344,147	102.2%
Closure & Reclamation (draindown)	Dry	None	None	Feb-25	30,021	1,072	3%	1,168	0	96	0	0	0%	4,790	6,054	6,054	9	3	6,054	216	2%	70	264,797	0.109	91.8%	0	100%	305,947	101.9%
Closure & Reclamation (draindown)	Dry	None	None	Mar-25	31,697	1,022	3%	1,294	0	94	0	0	0%	4,568	5,956	5,956	8	2	5,956	192	1%	69	279,145	0.104	91.6%	0	100%	322,433	101.8%
Closure & Reclamation (draindown)	Dry	None	None	Apr-25	30,260	1,009	3%	6,478	1,491	3,719	0	0	0%	5,281	15,478	15,478	21	6	15,478	516	4%	69	279,249	0.108	96.3%	48	48%	320,696	106.3%
Closure & Reclamation (draindown)	Dry	None	None	May-25	126,972	4,096	12%	35,542	11,982	33,867	0	0	0%	12,181	81,590	81,590	110	30	81,590	2,632	20%	634	1,092,977	0.408	98.6%	494	13%	1,277,302	108.9%
Closure & Reclamation (draindown)	Dry	None	None	Jun-25	207,319	6,911	20%	25,736	5,072	27,270	0	0	0%	7,369	60,375	60,375	84	23	60,375	2,012	15%	1,989	1,450,427	0.560	91.3%	1,368	15%	1,784,969	102.8%

Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Upper Dublin Gulch Velocity Reduction Pond (W1+W26+ANN EAST)			Total Open Pit Sump Volume to MWTP	PG WRSA Seepage to Open Pit Sump	Total EP WRSA SCP Volume (to MWTP)	Excess Heap Pond to Events Pond	Net Events Pond Volume		Excess from HLF to Detox	Mine Water Feed Pond Inputs	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Total Lower Dublin Gulch Sediment Control Pond Inputs	Haggart Creek D/S of Dublin Gulch (W-4 Project)			Total Flow to Platinum Gulch incl. OP Lake Overflow (Project)		Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Project)	
					m³/mth	m³/day	% full/day					m³/mth	m³/mth										m³/mth	m³/mth	% full/mth	m³/mth	m³/mth	m³/mth	m³/mth
Post-closure Monitoring	Dry	None	None	Oct-31	174,205	5,620	16%	6,834	0	0	0	0	0%	1,395	1,395	1,395	2	1	1,395	45	0%	0	1,110,293	0.415	86.7%	12,314	246%	1,407,802	101.2%
Post-closure Monitoring	Dry	None	None	Nov-31	92,427	3,081	9%	1,252	0	0	0	0	0%	0	0	0	0	0	0	0	0%	0	783,179	0.302	89.4%	2,055	176%	916,735	100.0%
Post-closure Monitoring	Dry	None	None	Dec-31	62,498	2,016	6%	1,294	0	0	0	0	0%	0	0	0	0	0	0	0	0%	0	538,299	0.201	89.6%	1,294	1294%	626,367	100.0%
Post-closure Monitoring	Dry	None	None	Jan-32	33,650	1,085	3%	1,294	0	0	0	0	0%	0	0	0	0	0	0	0	0%	0	289,826	0.108	89.6%	1,294	1294%	337,489	100.2%
Post-closure Monitoring	Dry	None	None	Feb-32	30,021	1,035	3%	1,210	0	0	0	0	0%	0	0	0	0	0	0	0	0%	0	258,574	0.103	89.6%	1,210	1210%	300,961	100.3%
Post-closure Monitoring	Dry	None	None	Mar-32	31,697	1,022	3%	1,294	0	0	0	0	0%	0	0	0	0	0	0	0	0%	0	273,003	0.102	89.6%	1,294	1294%	317,610	100.3%
Post-closure Monitoring	Dry	None	None	Apr-32	30,260	1,009	3%	4,987	0	0	0	0	0%	934	934	934	1	0	934	31	0%	0	264,526	0.102	91.2%	6,478	6478%	316,016	104.8%
Post-closure Monitoring	Dry	None	None	May-32	126,972	4,096	12%	23,560	0	0	0	0	0%	8,056	8,056	8,056	11	3	8,056	260	2%	0	1,019,257	0.381	92.0%	36,349	966%	1,272,918	108.6%
Post-closure Monitoring	Dry	None	None	Jun-32	207,319	6,911	20%	20,664	0	0	0	0	0%	3,466	3,466	3,466	5	1	3,466	116	1%	0	1,393,338	0.538	87.7%	27,673	306%	1,779,910	102.5%
Post-closure Monitoring	Dry	None	None	Jul-32	109,241	3,524	10%	15,030	0	0	0	0	0%	2,910	2,910	2,910	4	1	2,910	94	1%	0	836,920	0.312	89.5%	16,773	804%	1,084,645	103.2%
Post-closure Monitoring	Dry	None	None	Aug-32	59,785	1,929	6%	16,392	0	0	0	0	0%	2,115	2,115	2,115	3	1	2,115	68	1%	0	687,866	0.257	93.1%	17,269	2174%	866,802	103.4%
Post-closure Monitoring	Dry	None	None	Sep-32	161,481	5,383	15%	8,298	0	0	0	0	0%	2,005	2,005	2,005	3	1	2,005	67	0%	0	1,316,725	0.508	89.5%	10,609	186%	1,606,471	101.0%

**Table C9-5: Hydroclimatic Drought Events Summary – Scenario 6 Model Results**

Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Upper Dublin Gulch Velocity Reduction Pond (W1+W26+ANN EAST)			Total Open Pit Sump Volume to MWTP	PG WRSA Seepage to Open Pit Sump	Total EP WRSA SCP Volume (to MWTP)	Excess Heap Pond to Events Pond	Net Events Pond Volume		Excess from HLF to Detox	Mine Water Feed Pond Inputs	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Total Lower Dublin Gulch Sediment Control Pond Inputs	Haggart Creek D/S of Dublin Gulch (W-4 Project)			Total Flow to Platinum Gulch incl. OP Lake Overflow (Project)		Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Project)	
					m³/mth	m³/day	% full/day	m³/mth	m³/mth	m³/mth	m³/mth	m³/mth	% full/mth	m³/mth	m³/mth	m³/mth	m³/hour	L/s	m³/mth	m³/day	% full/day	m³/mth	m³/mth	m³/day	% of HC Baseline	m³/mth	% of PG Baseline Flow	m³/mth	% of HC Baseline
Construction	Dry	None	None	Oct-12	174,244	5,621	16%	1,339	0	0	0	0	0%	0	0	0	0	0	0	0	0%	174,606	1,280,701	0.478	100.0%	4,566	91%	1,351,318	97.2%
Construction	Dry	None	None	Nov-12	92,427	3,081	9%	1,257	0	0	0	0	0%	0	0	0	0	0	0	0	0%	92,427	878,305	0.339	100.2%	1,068	91%	909,958	99.2%
Construction	Dry	None	None	Dec-12	62,498	2,016	6%	1,298	0	0	0	0	0%	0	0	0	0	0	0	0	0%	62,498	603,588	0.225	100.5%	0	100%	623,824	99.6%
Construction	Dry	None	None	Jan-13	33,650	1,085	3%	3,838	0	0	0	0	0%	0	0	0	0	0	0	0	0%	33,650	326,266	0.122	100.9%	0	100%	337,065	100.1%
Construction	Dry	None	None	Feb-13	30,021	1,072	3%	3,466	0	0	0	0	0%	0	0	0	0	0	0	0	0%	30,021	291,116	0.120	100.9%	0	100%	300,698	100.2%
Construction	Dry	None	None	Mar-13	31,697	1,022	3%	3,838	0	0	0	0	0%	0	0	0	0	0	0	0	0%	31,697	307,489	0.115	100.9%	0	100%	317,563	100.3%
Construction	Dry	None	None	Apr-13	30,260	1,009	3%	3,741	0	0	0	4,111	2%	0	3,741	0	0	0	0	0	0%	30,341	292,805	0.113	100.9%	0	100%	302,414	100.2%
Construction	Dry	None	None	May-13	127,109	4,100	12%	3,628	0	0	0	4,394	3%	0	3,628	0	0	0	0	0	0%	739	994,280	0.371	89.7%	3,433	91%	1,181,785	100.8%
Construction	Dry	Drought	None	Jun-13	193,122	6,437	18%	0	0	8,914	0	9,535	5%	0	8,914	0	0	0	0	0	0%	2,200	1,221,563	0.471	86.3%	5,895	71%	1,541,066	99.1%
Construction	Dry	Drought	None	Jul-13	92,181	2,974	8%	0	0	9,356	0	18,951	11%	0	9,356	0	0	0	0	0	0%	2,313	703,944	0.263	88.4%	231	18%	891,701	98.5%
Construction	Dry	Drought	None	Aug-13	51,197	1,652	5%	48	0	9,343	0	30,276	17%	0	9,391	0	0	0	0	0	0%	2,226	605,319	0.226	92.4%	0	0%	735,268	98.6%
Operation	Dry	None	None	Sep-13	161,490	5,383	15%	4,351	479	8,301	0	30,980	18%	0	12,651	0	0	0	0	0	0%	1,768	1,309,319	0.505	89.0%	4,489	79%	1,579,666	99.3%
Operation	Dry	None	None	Oct-19	174,240	5,621	16%	9,724	4,408	2,978	0	157,090	90%	0	12,702	0	0	0	0	0	0%	1,400	1,105,861	0.413	86.4%	1,359	27%	1,378,413	99.1%
Operation	Dry	None	None	Nov-19	92,427	3,081	9%	335	552	525	0	120,106	69%	0	860	0	0	0	0	0	0%	319	784,889	0.303	89.6%	301	26%	915,242	99.8%
Operation	Dry	None	None	Dec-19	62,498	2,016	6%	0	0	296	0	83,039	47%	0	296	0	0	0	0	0	0%	180	540,066	0.202	89.9%	0	100%	626,774	100.1%
Operation	Dry	None	None	Jan-20	33,650	1,085	3%	0	0	141	0	45,817	26%	0	141	0	0	0	0	0	0%	86	291,593	0.109	90.1%	0	100%	337,931	100.4%
Operation	Dry	None	None	Feb-20	30,021	1,035	3%	0	0	115	0	8,729	5%	0	115	0	0	0	0	0	0%	70	260,227	0.104	90.2%	0	100%	301,378	100.4%
Operation	Dry	None	None	Mar-20	31,697	1,022	3%	0	0	113	0	0	0%	0	113	0	0	0	0	0	0%	69	274,770	0.103	90.2%	0	100%	318,058	100.4%
Operation	Dry	None	None	Apr-20	30,260	1,009	3%	5,009	1,491	152	0	375	0%	0	5,160	0	0	0	0	0	0%	69	262,079	0.101	90.3%	48	48%	303,526	100.6%
Operation	Dry	None	None	May-20	127,157	4,102	12%	34,024	11,982	4,269	3,101	32,991	19%	0	38,293	0	0	0	0	0	0%	634	984,792	0.368	88.9%	656	17%	1,169,463	99.7%
Operation	Dry	Drought	None	Jun-20	193,127	6,438	18%	0	4,458	8,596	0	(3,046)	-2%	0	8,596	0	0	0	0	0	0%	1,961	1,219,461	0.470	86.2%	1,343	16%	1,534,175	98.6%
Operation	Dry	Drought	None	Jul-20	92,183	2,974	8%	0	392	0	0	(6,576)	-4%	0	0	0	0	0	0	0	0%	2,062	702,897	0.262	88.3%	0	0%	890,174	98.4%
Operation	Dry	Drought	None	Aug-20	51,198	1,652	5%	0	(8)	0	0	(4,674)	-3%	0	0	0	0	0	0	0	0%	1,984	604,283	0.226	92.2%	0	0%	733,992	98.4%
Operation	Dry	None	None	Sep-20	161,481	5,383	15%	7,788	959	3,924	0	(1,117)	-1%	0	11,712	0	0	0	0	0	0%	1,576	1,308,410	0.505	88.9%	1,339	23%	1,575,406	99.0%
Closure & Reclamation (draindown)	Dry	Drought	None	Jul-24	92,175	2,973	8%	0	2,930	17,099	0	0	0%	256,998	274,097	274,097	368	102	274,097	8,842	66%	2,062	965,881	0.361	121.3%	0	0%	1,153,150	127.4%
Closure & Reclamation (draindown)	Dry	Drought	None	Aug-24	51,192	1,651	5%	0	(8)	4,482	0	0	0%	127,950	132,432	132,432	178	49	132,432	4,272	32%	1,984	728,316	0.272	111.1%	0	0%	858,018	115.0%
Closure & Reclamation (draindown)	Dry	None	None	Sep-24	161,481	5,383	15%	9,257	959	12,583	0	0	0%	65,869	87,709	87,709	122	34	87,709	2,924	22%	1,576	1,402,879	0.541	95.3%	1,094	19%	1,669,629	104.9%
Closure & Reclamation (draindown)	Dry	None	None	Oct-24	174,205	5,620	16%	9,282	2,448	9,827	0	0	0%	33,327	52,436	52,436	70	20	52,436	1,691	13%	1,400	1,161,800	0.434	90.7%	1,144	23%	1,434,101	103.1%
Closure & Reclamation (draindown)	Dry	None	None	Nov-24	92,427	3,081	9%	1,804	552	1,768	0	0	0%	15,966	19,538	19,538	27	8	19,538	651	5%	319	803,167	0.310	91.7%	251	21%	933,470	101.8%
Closure & Reclamation (draindown)	Dry	None	None	Dec-24	62,498	2,016	6%	1,294	0	247	0	0	0%	7,983	9,523	9,523	13	4	9,523	307	2%	180	548,288	0.205	91.3%	0	100%	634,995	101.4%
Closure & Reclamation (draindown)	Dry	None	None	Jan-25	33,650	1,085	3%	1,294	0	117	0	0	0%	6,386	7,797	7,797	10	3	7,797	252	2%	86	297,809	0.111	92.1%	0	100%	344,147	102.2%
Closure & Reclamation (draindown)	Dry	None	None	Feb-25	30,021	1,072	3%	1,168	0	96	0	0	0%	4,790	6,054	6,054	9	3	6,054	216	2%	70	264,797	0.109	91.8%	0	100%	305,947	101.9%
Closure & Reclamation (draindown)	Dry	None	None	Mar-25	31,697	1,022	3%	1,294	0	94	0	0	0%	4,568	5,956	5,956	8	2	5,956	192	1%	69	279,145	0.104	91.6%	0	100%	322,433	101.8%
Closure & Reclamation (draindown)	Dry	None	None	Apr-25	30,260	1,009	3%	6,478	1,491	3,719	0	0	0%	5,281	15,478	15,478	21	6	15,478	516	4%	69	279,249	0.108	96.3%	48	48%	320,696	106.3%
Closure & Reclamation (draindown)	Dry	None	None	May-25	126,972	4,096	12%	35,542	11,982	33,867	0	0	0%	12,181	81,590	81,590	110	30	81,590	2,632	20%	634	1,092,977	0.408	98.6%	494	13%	1,277,302	108.9%
Closure & Reclamation (draindown)	Dry	None	None	Jun-25	207,319	6,911	20%	25,736	5,072	27,270	0	0	0%	7,369	60,375	60,375	84	23	60,375	2,012	15%	1,989	1,450,427	0.560	91.3%	1,368	15%	1,784,969	102.8%

Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Upper Dublin Gulch Velocity Reduction Pond (W1+W26+ANN EAST)			Total Open Pit Sump Volume to MWTP	PG WRSA Seepage to Open Pit Sump	Total EP WRSA SCP Volume (to MWTP)	Excess Heap Pond to Events Pond	Net Events Pond Volume		Excess from HLF to Detox	Mine Water Feed Pond Inputs	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Total Lower Dublin Gulch Sediment Control Pond Inputs	Haggart Creek D/S of Dublin Gulch (W-4 Project)			Total Flow to Platinum Gulch incl. OP Lake Overflow (Project)		Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Project)	
					m³/mth	m³/day	% full/day					m³/mth	m³/mth										m³/mth	m³/mth	% full/mth	m³/mth	m³/mth	m³/mth	m³/mth
Post-closure Monitoring	Dry	None	None	Oct-31	174,205	5,620	16%	6,834	0	0	0	0	0%	1,395	1,395	1,395	2	1	1,395	45	0%	0	1,110,293	0.415	86.7%	12,314	246%	1,407,802	101.2%
Post-closure Monitoring	Dry	None	None	Nov-31	92,427	3,081	9%	1,252	0	0	0	0	0%	0	0	0	0	0	0	0	0%	0	783,179	0.302	89.4%	2,055	176%	916,735	100.0%
Post-closure Monitoring	Dry	None	None	Dec-31	62,498	2,016	6%	1,294	0	0	0	0	0%	0	0	0	0	0	0	0	0%	0	538,299	0.201	89.6%	1,294	1294%	626,367	100.0%
Post-closure Monitoring	Dry	None	None	Jan-32	33,650	1,085	3%	1,294	0	0	0	0	0%	0	0	0	0	0	0	0	0%	0	289,826	0.108	89.6%	1,294	1294%	337,489	100.2%
Post-closure Monitoring	Dry	None	None	Feb-32	30,021	1,035	3%	1,210	0	0	0	0	0%	0	0	0	0	0	0	0	0%	0	258,574	0.103	89.6%	1,210	1210%	300,961	100.3%
Post-closure Monitoring	Dry	None	None	Mar-32	31,697	1,022	3%	1,294	0	0	0	0	0%	0	0	0	0	0	0	0	0%	0	273,003	0.102	89.6%	1,294	1294%	317,610	100.3%
Post-closure Monitoring	Dry	None	None	Apr-32	30,260	1,009	3%	4,987	0	0	0	0	0%	934	934	934	1	0	934	31	0%	0	264,526	0.102	91.2%	6,478	6478%	316,016	104.8%
Post-closure Monitoring	Dry	None	None	May-32	126,972	4,096	12%	23,560	0	0	0	0	0%	8,056	8,056	8,056	11	3	8,056	260	2%	0	1,019,257	0.381	92.0%	36,349	966%	1,272,918	108.6%
Post-closure Monitoring	Dry	Drought	None	Jun-32	193,110	6,437	18%	0	0	0	0	0%	(1,049)	(1,049)	(1,049)	(1)	(0)	(1,049)	(35)	0%	0	1,211,963	0.468	85.6%	6,235	75%	1,546,256	99.4%	
Post-closure Monitoring	Dry	Drought	None	Jul-32	92,175	2,973	8%	0	0	0	0	0%	(2,452)	(2,452)	(2,452)	(3)	(1)	(2,452)	(79)	-1%	0	688,866	0.257	86.5%	670	52%	881,240	97.4%	
Post-closure Monitoring	Dry	Drought	None	Aug-32	51,192	1,651	5%	0	0	0	0	0%	(1,775)	(1,775)	(1,775)	(2)	(1)	(1,775)	(57)	0%	0	593,644	0.222	90.6%	19	15%	726,299	97.4%	
Post-closure Monitoring	Dry	None	None	Sep-32	161,481	5,383	15%	8,298	0	0	0	0	0%	2,005	2,005	2,005	3	1	2,005	67	0%	0	1,316,725	0.508	89.5%	10,479	184%	1,603,968	100.8%

**Table C9-6: Hydroclimatic Average Year Summary – Scenario 1 Model Results**

Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Upper Dublin Gulch Velocity Reduction Pond (W1+W26+ANN EAST)			Total Open Pit Sump Volume to MWTP	PG WRSA Seepage to Open Pit Sump	Total EP WRSA SCP Volume (to MWTP)	Excess Heap Pond to Events Pond	Net Events Pond Volume		Excess from HLF to Detox	Mine Water Feed Pond Inputs	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Total Lower Dublin Gulch Sediment Control Pond Inputs	Haggart Creek D/S of Dublin Gulch (W-4 Project)			Total Flow to Platinum Gulch incl. OP Lake Overflow (Project)		Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Project)		
					m³/mth	m³/day	% full/day					m³/mth	m³/mth									m³/mth	m³/mth	% full/mth	m³/mth	m³/mth	m³/day	% of HC Baseline	m³/mth
Operation	Average	None	None	Oct-19	281,275	9,073	26%	22,931	8,205	5,228	0	176,466	101%	0	28,159	6,994	9	3	6,994	226	2%	2,035	1,844,903	0.689	87.0%	2,161	28%	2,271,339	99.5%
Operation	Average	None	None	Nov-19	128,353	4,278	12%	1,284	1,501	9,659	0	148,660	85%	0	10,944	0	0	0	0	0	0%	444	1,076,190	0.415	89.4%	592	26%	1,257,538	99.7%
Operation	Average	None	None	Dec-19	88,488	2,854	8%	0	0	419	0	111,716	64%	0	419	0	0	0	0	0	0%	255	755,762	0.282	89.7%	206	26%	878,868	99.9%
Operation	Average	None	None	Jan-20	55,539	1,792	5%	0	0	234	0	74,587	43%	0	234	0	0	0	0	0	0%	142	480,128	0.179	89.9%	0	100%	556,640	100.2%
Operation	Average	None	None	Feb-20	40,860	1,409	4%	0	0	158	0	37,542	21%	0	158	0	0	0	0	0	0%	96	353,578	0.141	90.0%	0	100%	409,604	100.3%
Operation	Average	None	None	Mar-20	34,889	1,125	3%	0	0	125	0	7,887	5%	0	125	0	0	0	0	0	0%	76	302,270	0.113	90.1%	0	100%	349,930	100.4%
Operation	Average	None	None	Apr-20	36,840	1,228	4%	13,916	4,055	246	0	982	1%	0	14,162	0	0	0	0	0	0%	87	303,801	0.117	90.0%	156	160%	353,913	100.7%
Operation	Average	None	None	May-20	353,442	11,401	33%	117,500	33,632	17,022	64,426	135,163	77%	0	134,522	0	0	0	0	0	0%	1,947	2,815,850	1.051	89.0%	3,915	29%	3,333,992	99.5%
Operation	Average	None	None	Jun-20	261,149	8,705	25%	57,404	19,864	41,644	19,138	174,354	100%	0	99,048	53,691	75	21	53,691	1,790	13%	2,769	2,133,502	0.823	91.1%	2,936	26%	2,560,719	101.1%
Operation	Average	None	None	Jul-20	458,661	14,796	42%	43,346	11,888	26,363	16,407	174,675	100%	0	69,708	67,228	90	25	67,228	2,169	16%	3,521	1,779,496	0.664	81.8%	5,979	26%	2,484,486	101.0%
Operation	Average	None	None	Aug-20	252,049	8,131	23%	36,570	8,601	25,941	0	174,877	100%	0	62,511	57,163	77	21	57,163	1,844	14%	2,741	1,722,769	0.643	89.7%	2,669	26%	2,138,614	101.4%
Operation	Average	None	None	Sep-20	289,161	9,639	28%	43,366	10,388	22,502	0	176,456	101%	0	65,868	58,897	82	23	58,897	1,963	15%	2,752	1,993,660	0.769	89.5%	3,131	28%	2,457,804	101.2%
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-22	55,539	1,792	5%	1,294	0	195	0	173,171	99%	0	1,489	0	0	0	0	0%	142	480,221	0.179	89.9%	0	100%	556,733	100.2%	
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-22	40,860	1,459	4%	1,168	0	132	0	172,231	98%	0	1,300	0	0	0	0	0%	96	353,605	0.146	90.0%	0	100%	409,631	100.3%	
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-22	34,889	1,125	3%	1,294	0	104	0	171,149	98%	0	1,398	0	0	0	0	0%	76	302,363	0.113	90.2%	0	100%	350,023	100.4%	
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-22	36,835	1,228	4%	15,385	4,055	222	0	175,982	101%	0	15,606	9,355	13	4	9,355	312	2%	87	311,876	0.120	92.4%	152	156%	361,979	103.0%
Closure & Reclamation (hlf rinse)	Average	None	None	May-22	352,929	11,385	33%	119,018	33,632	21,863	0	178,121	102%	0	140,880	111,190	149	42	111,190	3,587	27%	1,947	2,916,020	1.089	92.2%	3,343	25%	3,433,078	102.5%
Closure & Reclamation (hlf rinse)	Average	None	None	Jun-22	260,977	8,699	25%	58,873	19,864	65,509	0	174,354	100%	0	124,382	74,963	104	29	74,963	2,499	19%	2,769	2,150,921	0.830	91.8%	2,442	21%	2,577,473	101.7%
Closure & Reclamation (hlf rinse)	Average	None	None	Jul-22	458,263	14,783	42%	44,864	11,888	27,046	0	174,675	100%	0	71,910	19,288	26	7	19,288	622	5%	3,521	1,728,567	0.645	79.5%	4,982	21%	2,432,161	98.9%
Closure & Reclamation (hlf rinse)	Average	None	None	Aug-22	251,902	8,126	23%	38,088	8,601	26,915	0	174,877	100%	0	65,003	23,938	32	9	23,938	772	6%	2,741	1,687,470	0.630	87.9%	2,227	22%	2,102,725	99.7%
Closure & Reclamation (hlf rinse)	Average	None	None	Sep-22	289,161	9,639	28%	44,835	10,388	34,688	0	176,456	101%	0	79,523	53,833	75	21	53,833	1,794	13%	2,752	1,988,686	0.767	89.2%	2,643	23%	2,452,342	101.0%
Closure & Reclamation (hlf rinse)	Average	None	None	Oct-22	281,130	9,069	26%	24,449	8,205	11,191	0	176,466	101%	0	35,640	33,160	45	12	33,160	1,070	8%	2,035	1,869,089	0.698	88.2%	1,832	24%	2,295,052	100.5%
Closure & Reclamation (hlf rinse)	Average	None	None	Nov-22	128,353	4,278	12%	2,753	1,501	4,195	0	175,000	100%	0	6,948	4,548	6	2	4,548	152	1%	444	1,080,829	0.417	89.8%	493	21%	1,262,078	100.0%
Closure & Reclamation (hlf rinse)	Average	None	None	Dec-22	88,488	2,854	8%	1,294	0	349	0	174,162	100%	0	1,642	0	0	0	0	0	0%	255	755,855	0.282	89.7%	171	21%	878,926	99.9%

**Table C9-7: Facility Condition: 7 Day Plant-Shutdown Summary – Scenario 7 Model Results**

Stage	Hydrologic Condition	Hydrologic Event	Facility Condition	Month-Year	Upper Dublin Gulch Velocity Reduction Pond (W1+W26+ANN EAST)			Total Open Pit Sump Volume to MWTP	PG WRSA Seepage to Open Pit Sump	Total EP WRSA SCP Volume (to MWTP)	Excess Heap Pond to Events Pond	Net Events Pond Volume		Excess from HLF to Detox	Mine Water Feed Pond Inputs	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Volume to Mine Water Treatment Plant	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Mine Water Treatment Plant Product Pond	Total Lower Dublin Gulch Sediment Control Pond Inputs	Haggart Creek D/S of Dublin Gulch (W-4 Project)			Total Flow to Platinum Gulch incl. OP Lake Overflow (Project)		Haggart Creek D/S of Eagle Creek and Platinum Gulch (W29 - Project)	
					m³/mth	m³/day	% full/day					m³/mth	m³/mth										% full/mth	m³/mth	m³/mth	m³/mth	m³/day	% of HC Baseline	m³/mth
Operation	Average	None	None	Oct-19	281,275	9,073	26%	22,931	8,205	5,228	0	176,466	101%	0	28,159	6,994	9	3	6,994	226	2%	2,035	1,844,903	0.689	87.0%	2,161	28%	2,271,339	99.5%
Operation	Average	None	None	Nov-19	128,353	4,278	12%	1,284	1,501	9,659	0	148,660	85%	0	10,944	0	0	0	0	0	0%	444	1,076,190	0.415	89.4%	592	26%	1,257,538	99.7%
Operation	Average	None	None	Dec-19	88,488	2,854	8%	0	0	419	0	111,716	64%	0	419	0	0	0	0	0	0%	255	755,762	0.282	89.7%	206	26%	878,868	99.9%
Operation	Average	None	None	Jan-20	55,539	1,792	5%	0	0	234	0	74,587	43%	0	234	0	0	0	0	0	0%	142	480,128	0.179	89.9%	0	100%	556,640	100.2%
Operation	Average	None	None	Feb-20	40,860	1,409	4%	0	0	158	0	37,542	21%	0	158	0	0	0	0	0	0%	96	353,578	0.141	90.0%	0	100%	409,604	100.3%
Operation	Average	None	None	Mar-20	34,889	1,125	3%	0	0	125	0	7,887	5%	0	125	0	0	0	0	0	0%	76	302,270	0.113	90.1%	0	100%	349,930	100.4%
Operation	Average	None	None	Apr-20	36,840	1,228	4%	13,916	4,055	246	0	982	1%	0	14,162	0	0	0	0	0	0%	87	303,801	0.117	90.0%	156	160%	353,913	100.7%
Operation	Average	None	7dr	May-20	353,442	11,401	33%	117,500	33,632	17,022	253,626	324,363	185%	0	134,522	0	0	0	0	0	0%	1,947	2,815,850	1.051	89.0%	3,915	29%	3,333,992	99.5%
Operation	Average	None	None	Jun-20	261,149	8,705	25%	57,404	19,864	41,644	19,138	174,354	100%	0	99,048	53,691	75	21	53,691	1,790	13%	2,769	2,133,502	0.823	91.1%	2,936	26%	2,560,719	101.1%
Operation	Average	None	None	Jul-20	458,661	14,796	42%	43,346	11,888	26,363	16,407	174,675	100%	0	69,708	67,228	90	25	67,228	2,169	16%	3,521	1,779,496	0.664	81.8%	5,979	26%	2,484,486	101.0%
Operation	Average	None	None	Aug-20	252,049	8,131	23%	36,570	8,601	25,941	0	174,877	100%	0	62,511	57,163	77	21	57,163	1,844	14%	2,741	1,722,769	0.643	89.7%	2,669	26%	2,138,614	101.4%
Operation	Average	None	None	Sep-20	289,161	9,639	28%	43,366	10,388	22,502	0	176,456	101%	0	65,868	58,897	82	23	58,897	1,963	15%	2,752	1,993,660	0.769	89.5%	3,131	28%	2,457,804	101.2%
Closure & Reclamation (hlf rinse)	Average	None	None	Jan-22	55,539	1,792	5%	1,294	0	195	0	173,171	99%	0	1,489	0	0	0	0	0	0%	142	480,221	0.179	89.9%	0	100%	556,733	100.2%
Closure & Reclamation (hlf rinse)	Average	None	None	Feb-22	40,860	1,459	4%	1,168	0	132	0	172,231	98%	0	1,300	0	0	0	0	0	0%	96	353,605	0.146	90.0%	0	100%	409,631	100.3%
Closure & Reclamation (hlf rinse)	Average	None	None	Mar-22	34,889	1,125	3%	1,294	0	104	0	171,149	98%	0	1,398	0	0	0	0	0	0%	76	302,363	0.113	90.2%	0	100%	350,023	100.4%
Closure & Reclamation (hlf rinse)	Average	None	None	Apr-22	36,835	1,228	4%	15,385	4,055	222	0	175,982	101%	0	15,606	9,355	13	4	9,355	312	2%	87	311,876	0.120	92.4%	152	156%	361,979	103.0%
Closure & Reclamation (hlf rinse)	Average	None	7dr	May-22	352,929	11,385	33%	119,018	33,632	21,863	189,200	367,321	210%	0	140,880	111,190	149	42	111,190	3,587	27%	1,947	2,916,020	1.089	92.2%	3,343	25%	3,433,078	102.5%
Closure & Reclamation (hlf rinse)	Average	None	None	Jun-22	260,977	8,699	25%	58,873	19,864	65,509	0	174,354	100%	0	124,382	74,963	104	29	74,963	2,499	19%	2,769	2,150,921	0.830	91.8%	2,442	21%	2,577,473	101.7%
Closure & Reclamation (hlf rinse)	Average	None	None	Jul-22	458,263	14,783	42%	44,864	11,888	27,046	0	174,675	100%	0	71,910	19,288	26	7	19,288	622	5%	3,521	1,728,567	0.645	79.5%	4,982	21%	2,432,161	98.9%
Closure & Reclamation (hlf rinse)	Average	None	None	Aug-22	251,902	8,126	23%	38,088	8,601	26,915	0	174,877	100%	0	65,003	23,938	32	9	23,938	772	6%	2,741	1,687,470	0.630	87.9%	2,227	22%	2,102,725	99.7%
Closure & Reclamation (hlf rinse)	Average	None	None	Sep-22	289,161	9,639	28%	44,835	10,388	34,688	0	176,456	101%	0	79,523	53,833	75	21	53,833	1,794	13%	2,752	1,988,686	0.767	89.2%	2,643	23%	2,452,342	101.0%
Closure & Reclamation (hlf rinse)	Average	None	None	Oct-22	281,130	9,069	26%	24,449	8,205	11,191	0	176,466	101%	0	35,640	33,160	45	12	33,160	1,070	8%	2,035	1,869,089	0.698	88.2%	1,832	24%	2,295,052	100.5%
Closure & Reclamation (hlf rinse)	Average	None	None	Nov-22	128,353	4,278	12%	2,753	1,501	4,195	0	175,000	100%	0	6,948	4,548	6	2	4,548	152	1%	444	1,080,829	0.417	89.8%	493	21%	1,262,078	100.0%
Closure & Reclamation (hlf rinse)	Average	None	None	Dec-22	88,488	2,854	8%	1,294	0	349	0	174,162	100%	0	1,642	0	0	0	0	0	0%	255	755,855	0.282	89.7%	171	21%	878,926	99.9%



## Figures



Figure C1-1: Open Pit – Precipitation, Evaporation and Runoff – Average Hydroclimatic Scenario 1

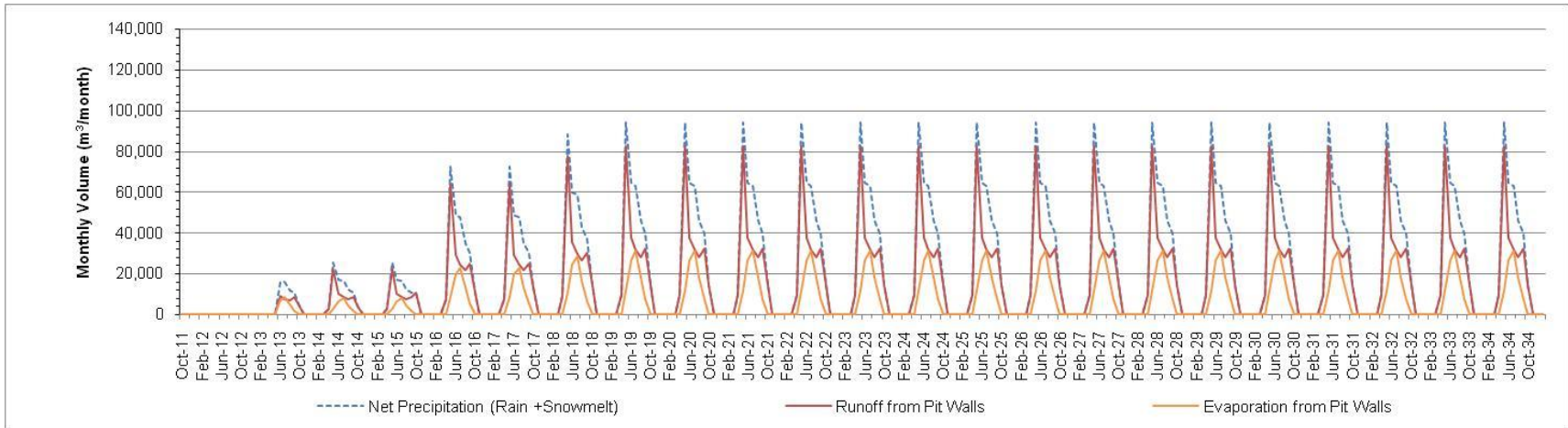


Figure C1-2: Flow from the Open Pit Sump to the MWTP – Average Hydroclimatic Scenario 1

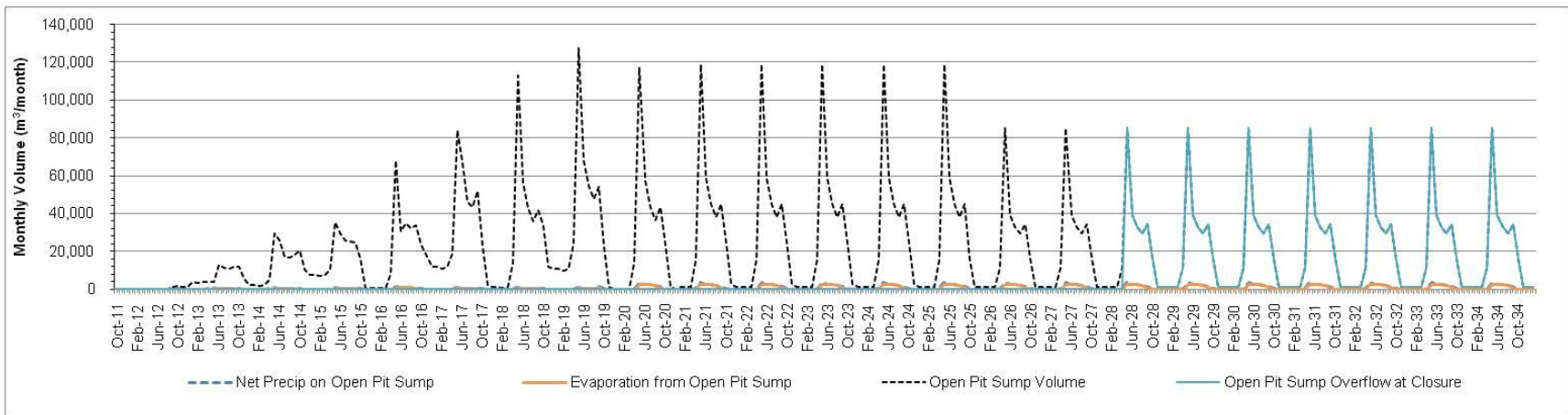


Figure C1-3: Open Pit Sump – Groundwater and Diverted Drainage from Platinum Gulch for Average Hydroclimatic Scenario 1

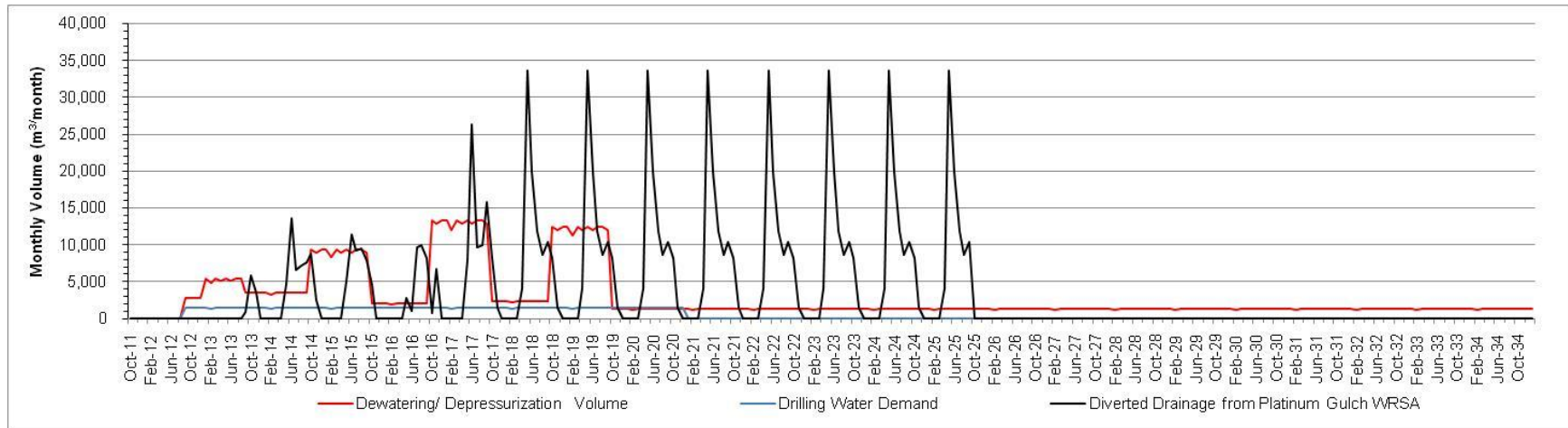


Figure C1-4: Open Pit – Comparison Flows from the Open Pit Sump for Average (1), Wet (2), Dry (3) Hydroclimatic Scenarios

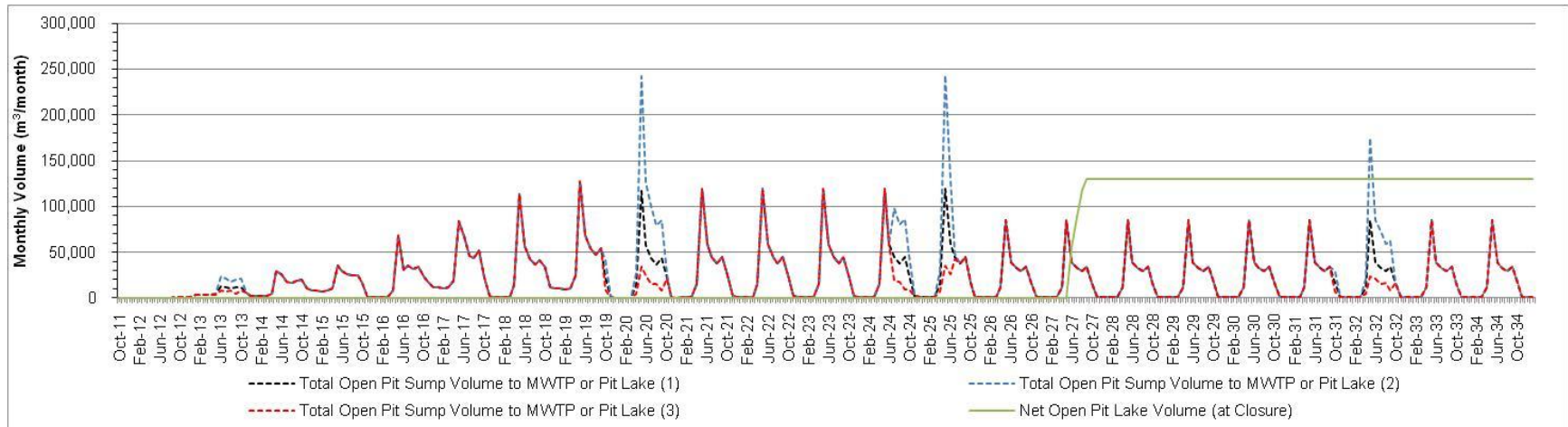


Figure C2-1: Platinum Gulch Waste Rock Storage Area – Water Balance Parameters for Disturbed Area – Average Hydroclimatic Scenario 1

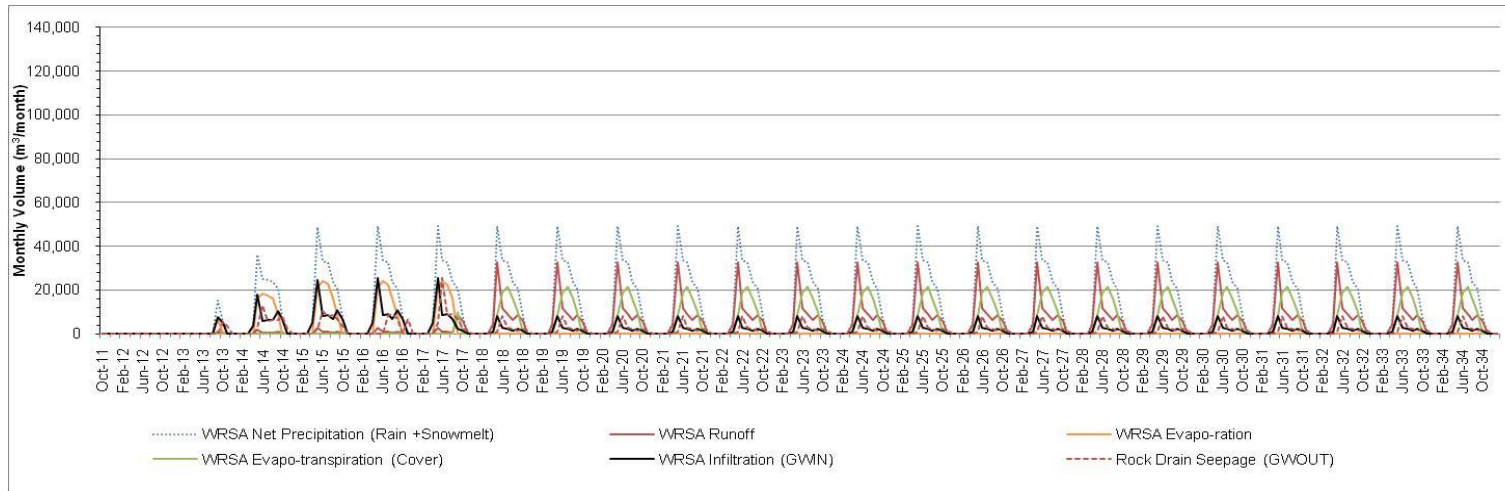
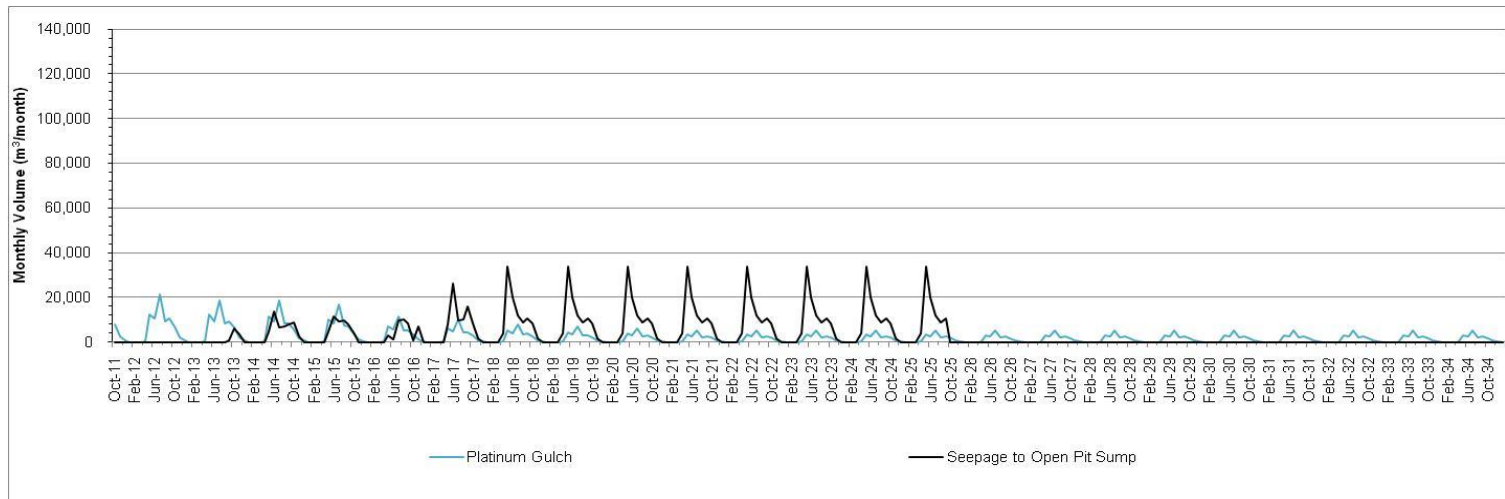


Figure C2-2: Platinum Gulch Waste Rock Storage Area – Average Hydroclimatic Scenario 1



**Figure C2-3: Platinum Gulch Waste Rock Storage Area – Water Balance Parameters for Undisturbed Area – Average Hydroclimatic Scenario 1**

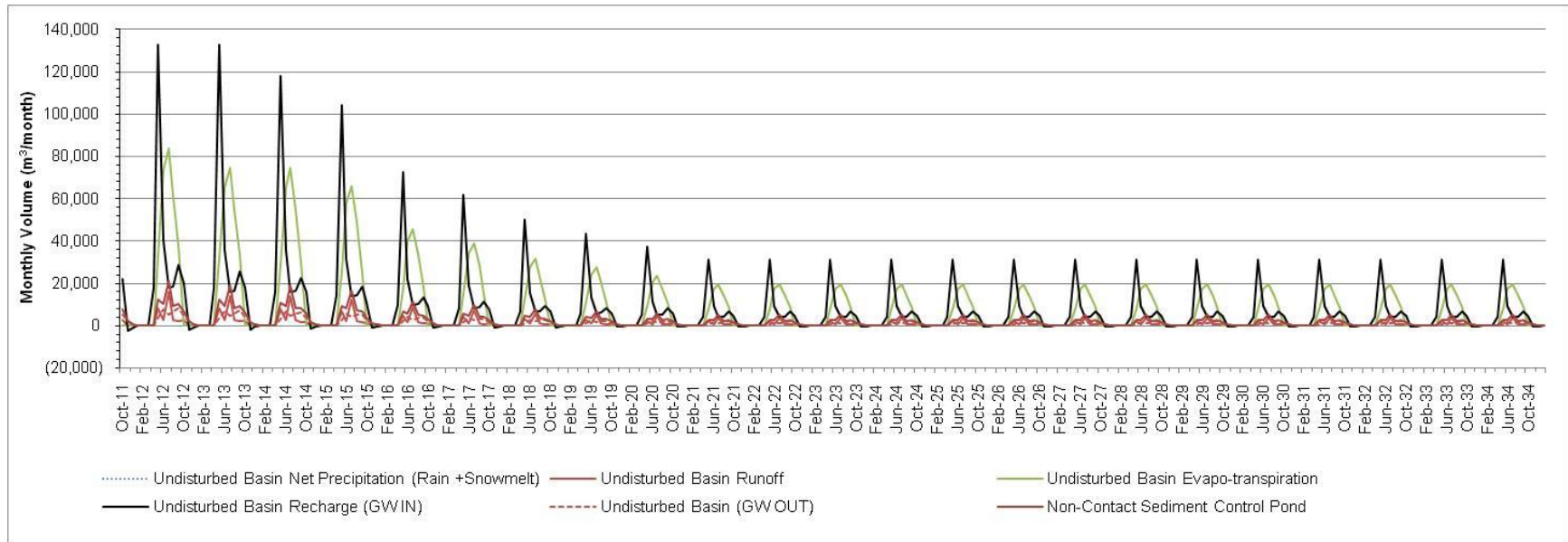


Figure C2-4: Platinum Gulch Waste Rock Storage Area – for Average (1), Wet (2), Dry (3) Hydroclimatic Scenarios

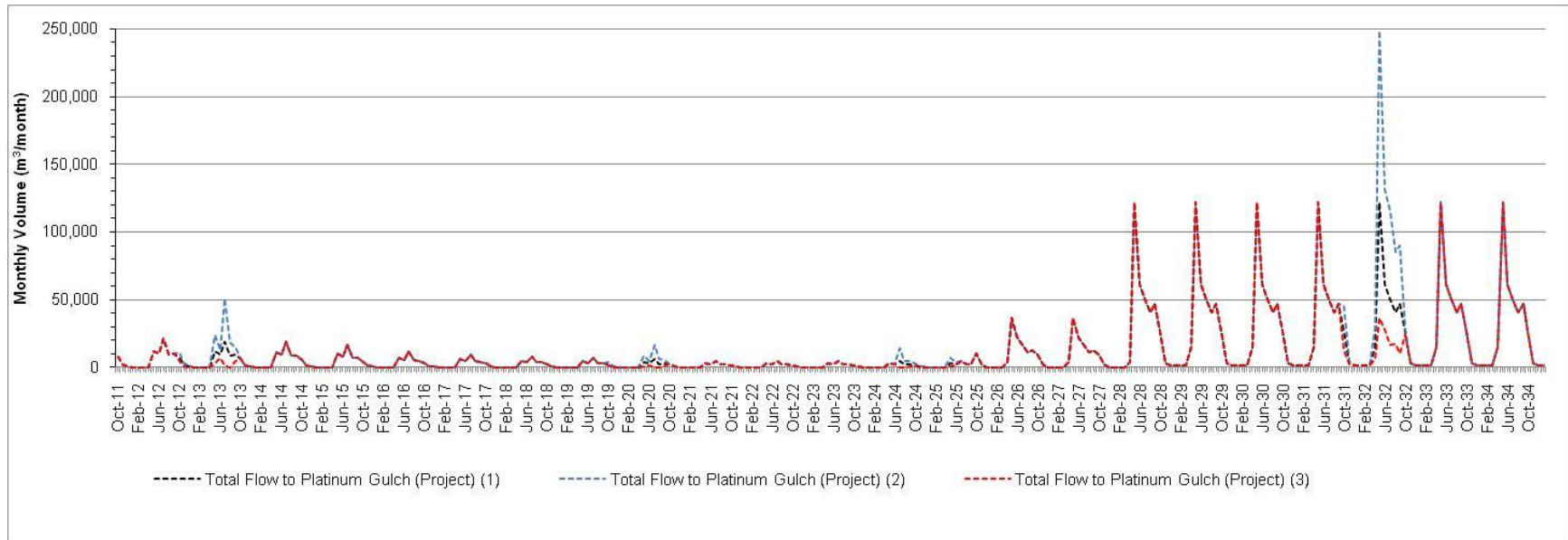


Figure C3-1: Eagle Pup Waste Rock Storage Area – Water Balance Parameters for Average Hydroclimatic Scenario 1

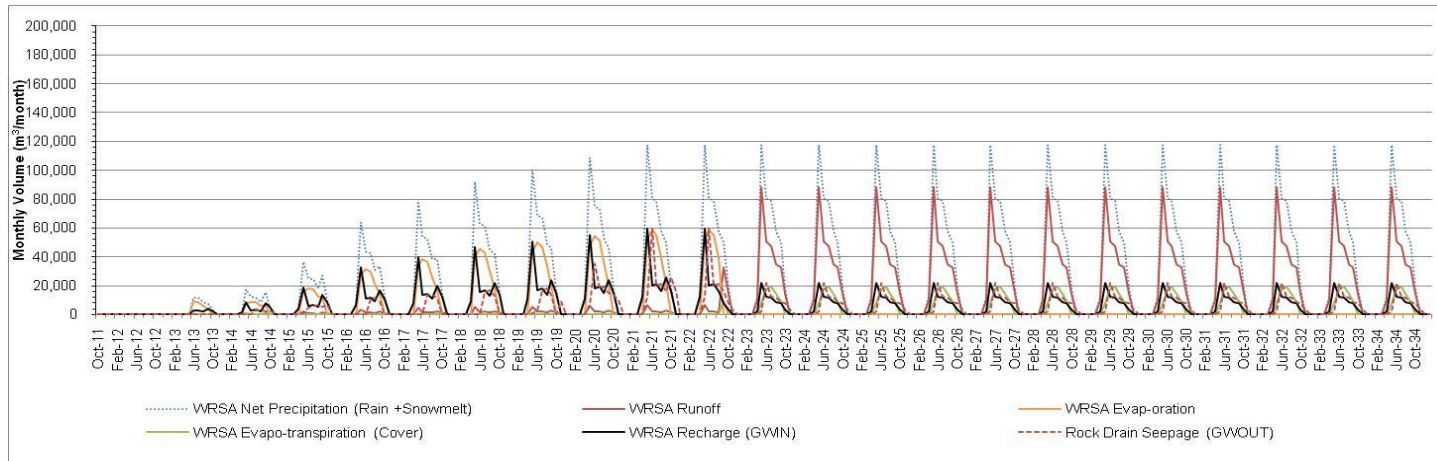


Figure C3-2: Eagle Pup Waste Rock Storage Area – Total Flow from the Eagle Pup Sediment Control Pond for Average Hydroclimatic Scenario 1

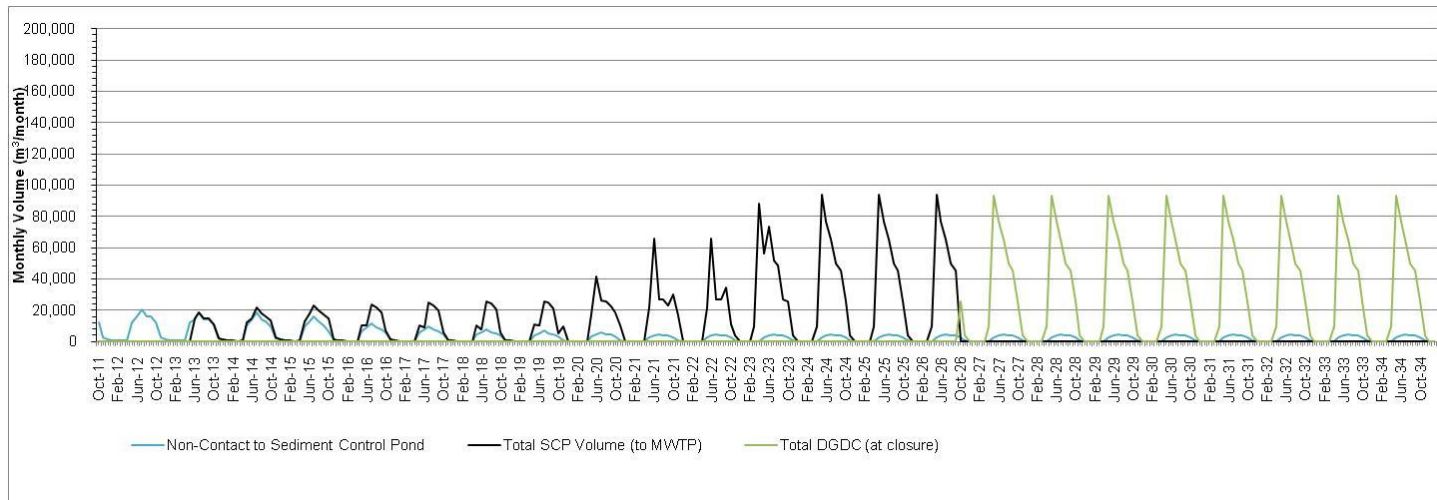




Figure C3-3: Eagle Pup Waste Rock Storage Area – Water Balance Parameters for Undisturbed Area – Average Hydroclimatic Scenario 1

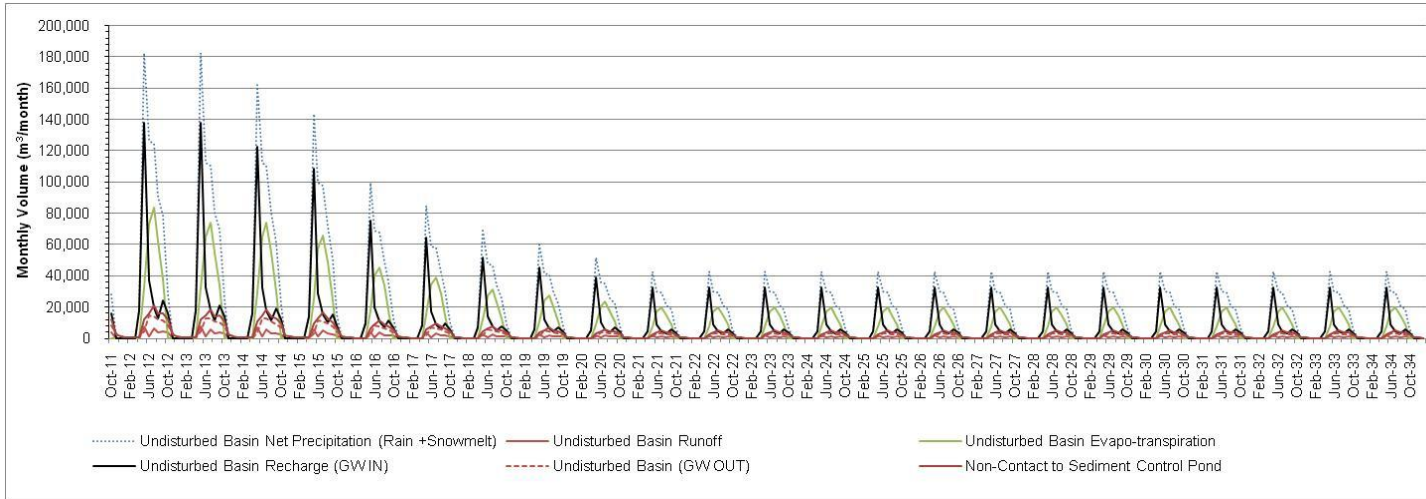


Figure C3-4: Eagle Pup Waste Rock Storage Area – Total Flow from EP SCP for Average (1), Wet (2), Dry (3) Hydroclimatic Scenarios

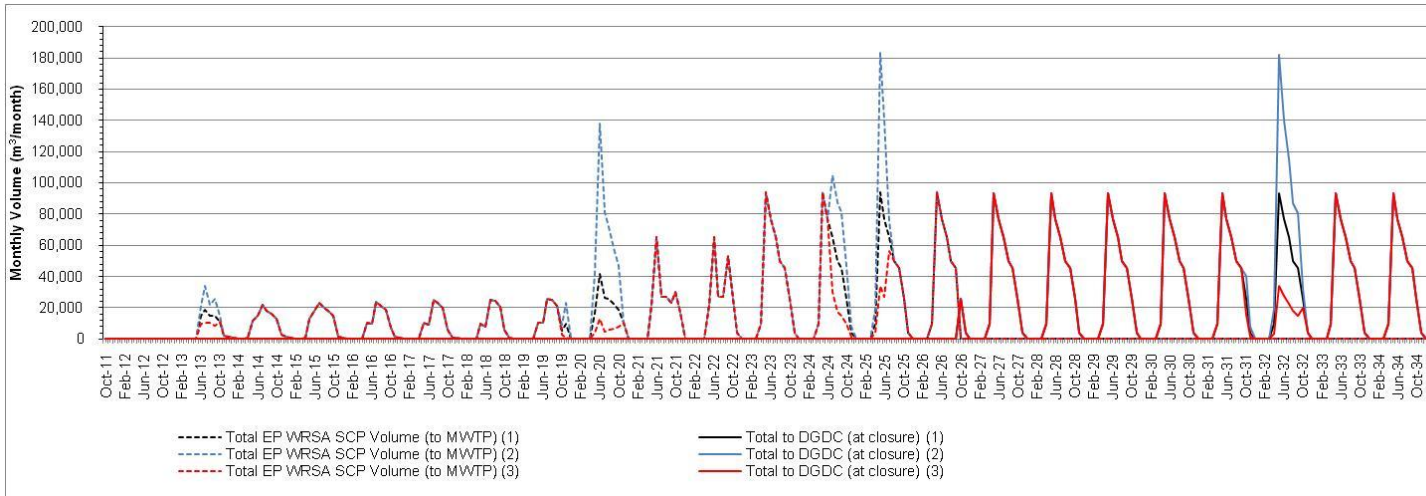


Figure C4-1: Ann Gulch Heap Leach Facility – Water Balance Parameters for Average Hydroclimatic Scenario 1

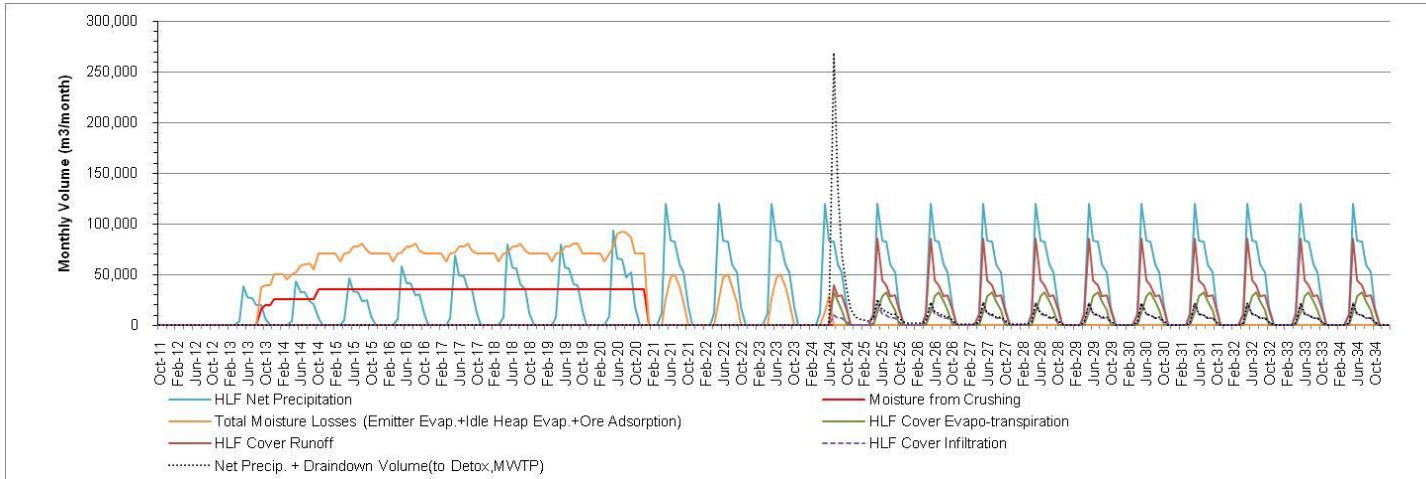


Figure C4-2: Ann Gulch Heap Leach Facility – Ponds and Facilities Flow Rates for Average Hydroclimatic Scenario 1

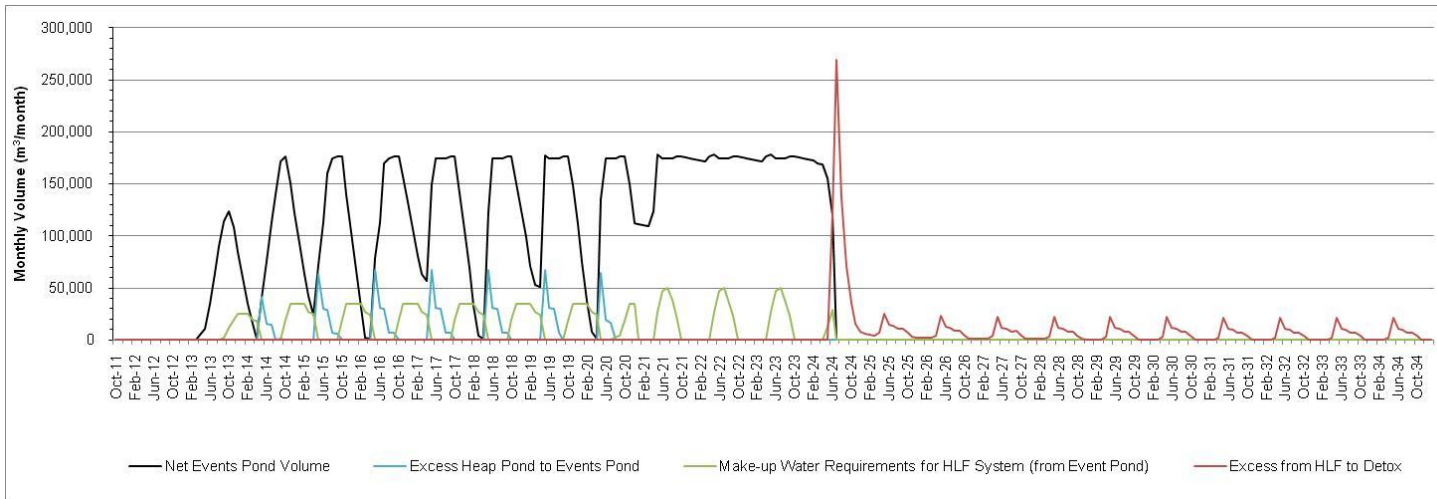


Figure C4-3: Ann Gulch Heap Leach Facility – Undisturbed Area Water Balance Parameters for Average Hydroclimatic Scenario 1

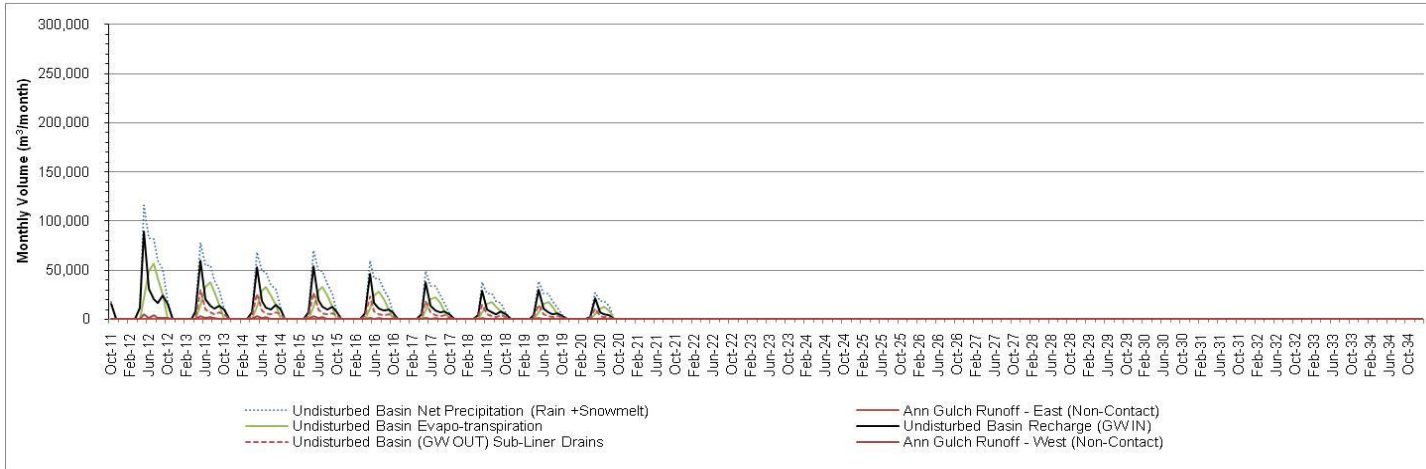


Figure C4-4: Ann Gulch Heap Leach Facility – Heap Pond, Irrigation, and ADR Recovery Rates for Average Hydroclimatic Scenario 1

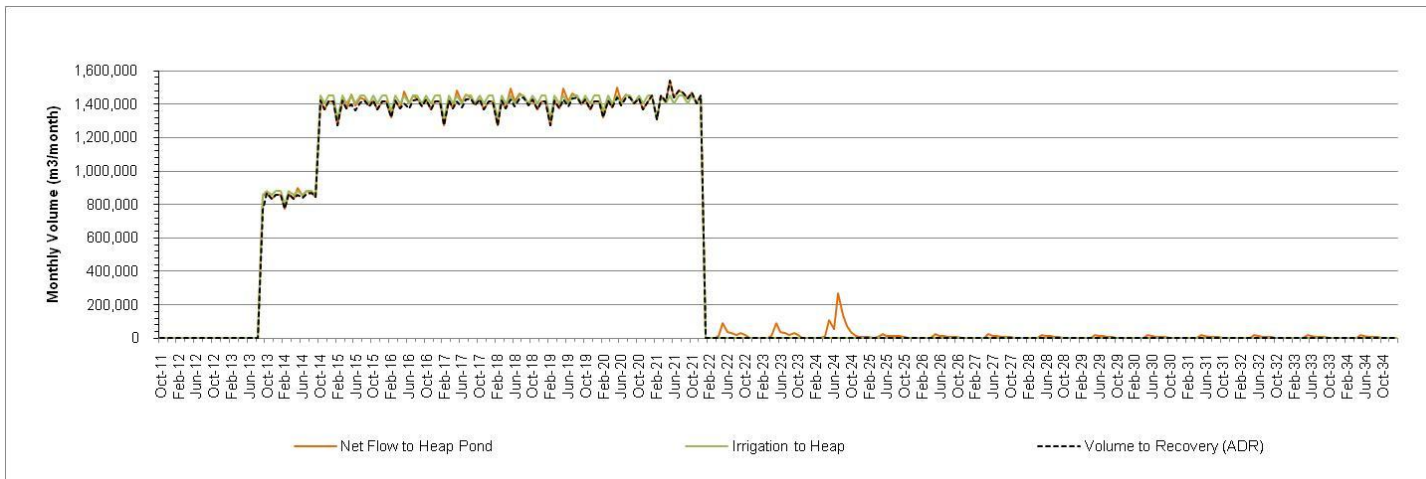


Figure C4-5: Ann Gulch Heap Leach Facility – Major Outputs and Inputs for Average (1), Wet (2), Dry (3) Hydroclimatic Scenarios

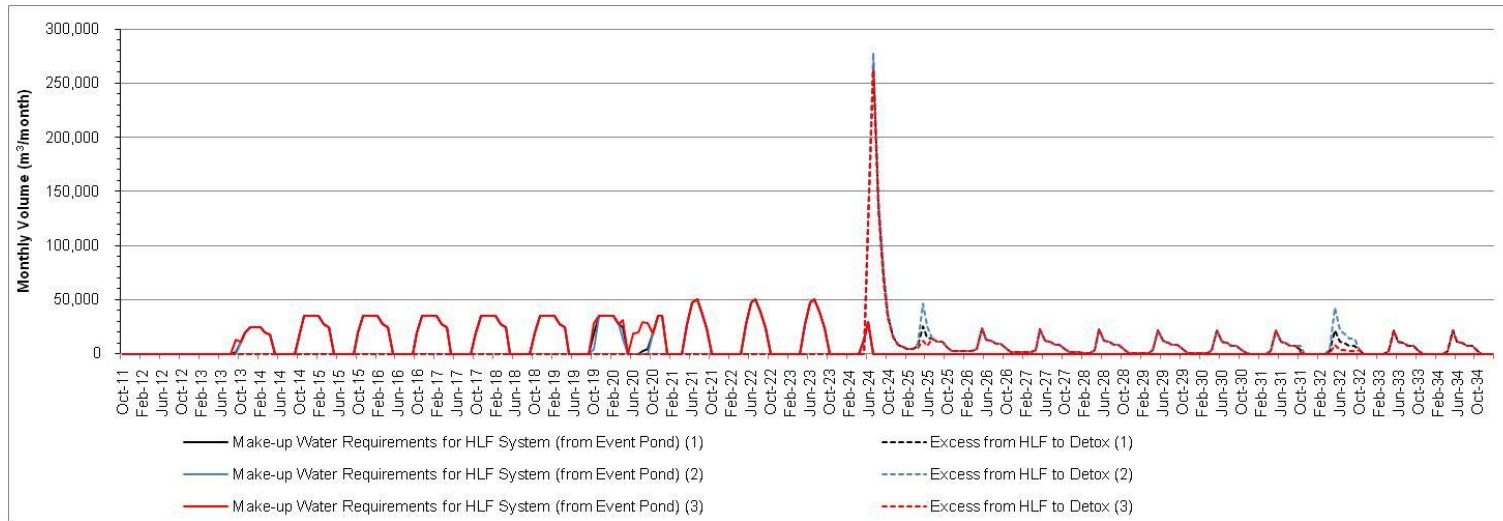


Figure C5-1: Mine Water Treatment Plant Inputs and Outputs (m³/mo) – Average Hydroclimatic Scenario 1

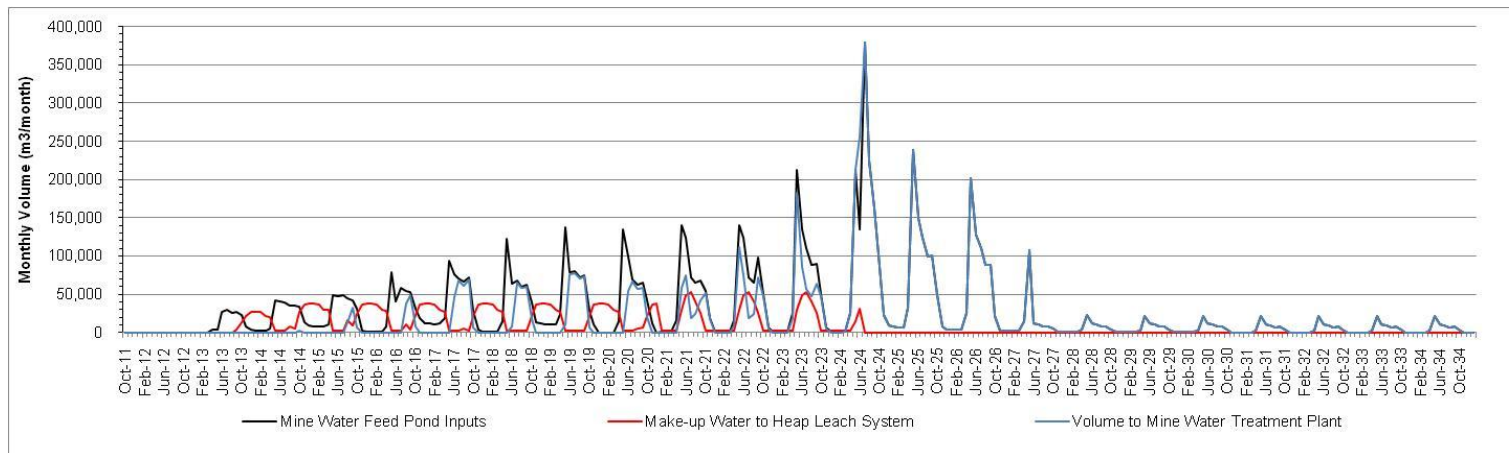


Figure C5-2: Mine Water Treatment Plant Inputs (m<sup>3</sup>/mo) for Average (1), Wet (2), Dry (3) Hydroclimatic Scenarios

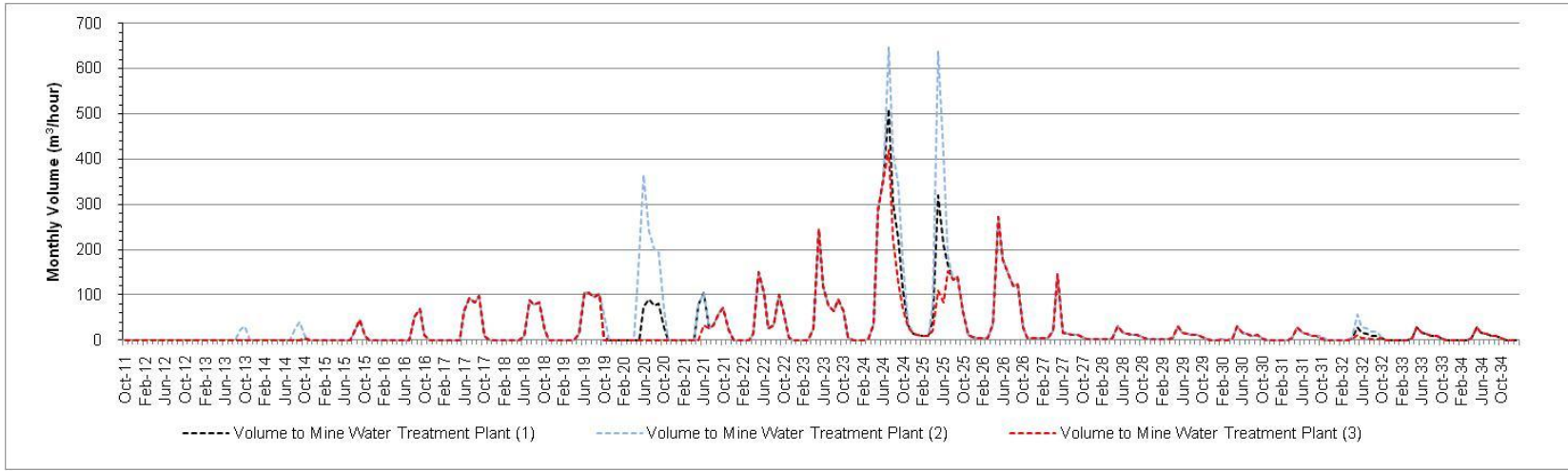
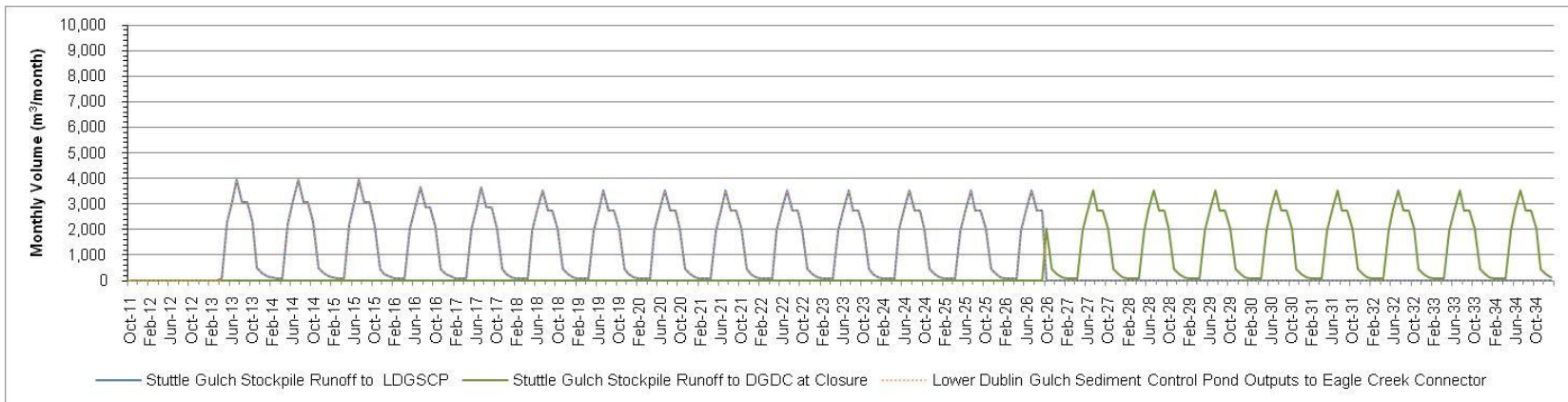
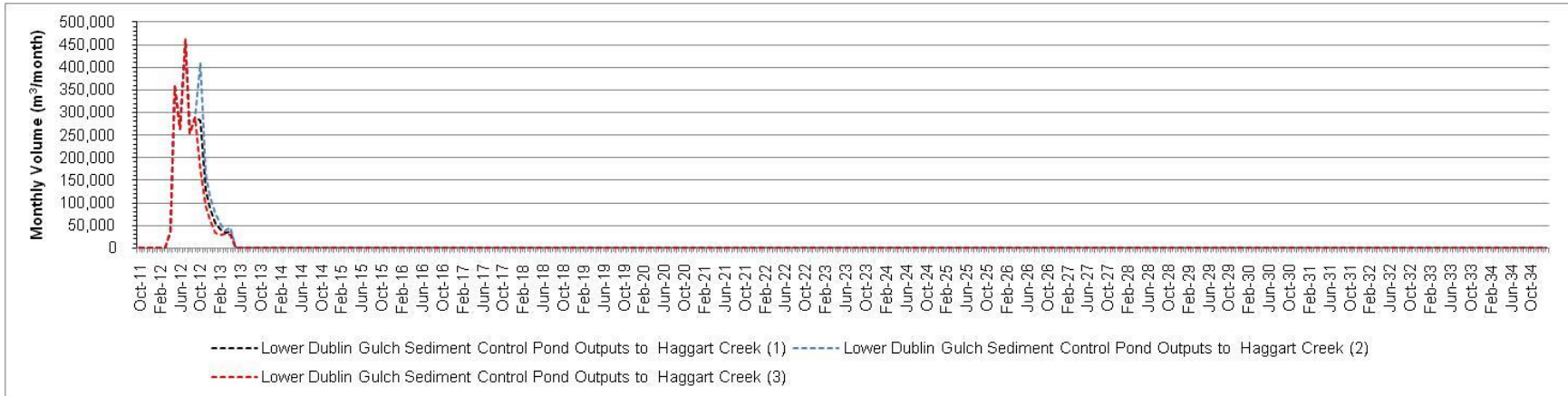


Figure C6-1: Stuttle Gulch Stockpile Area Runoff and Lower Dublin Gulch Sediment Control Pond Outputs – Average Hydroclimatic Scenario 1



**Figure C6-2: Lower Dublin Gulch Sediment Control Pond Outputs during Construction for Average (1), Wet (2), Dry (3) Hydroclimatic Scenarios**



**Figure C6-3: Lower Dublin Gulch Sediment Control Pond Outputs for Average (1), Wet (2), Dry (3) Hydroclimatic Scenarios**

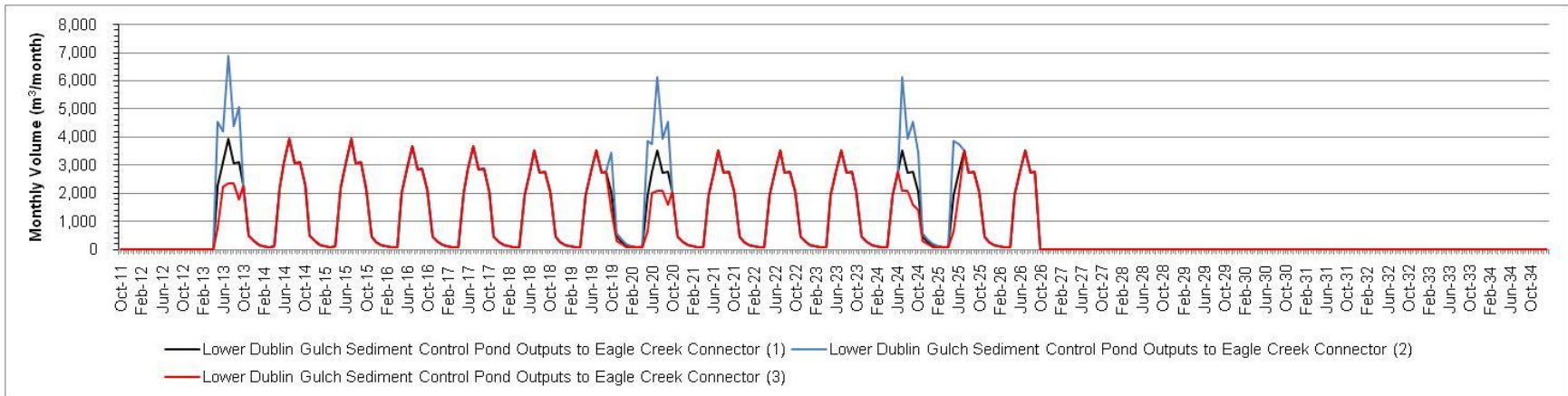


Figure C7-1: Eagle Creek Baseline Conditions – Average Hydroclimatic Scenario 1

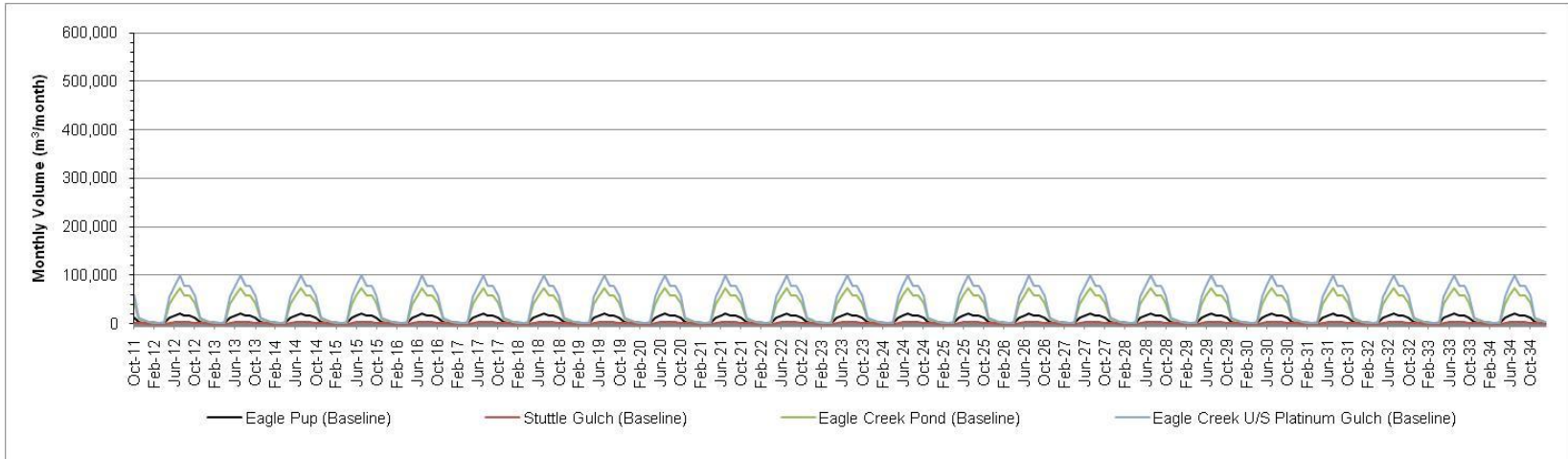


Figure C7-2: Comparison of Flows Contributing to Eagle Creek – Average Hydroclimatic Scenario 1

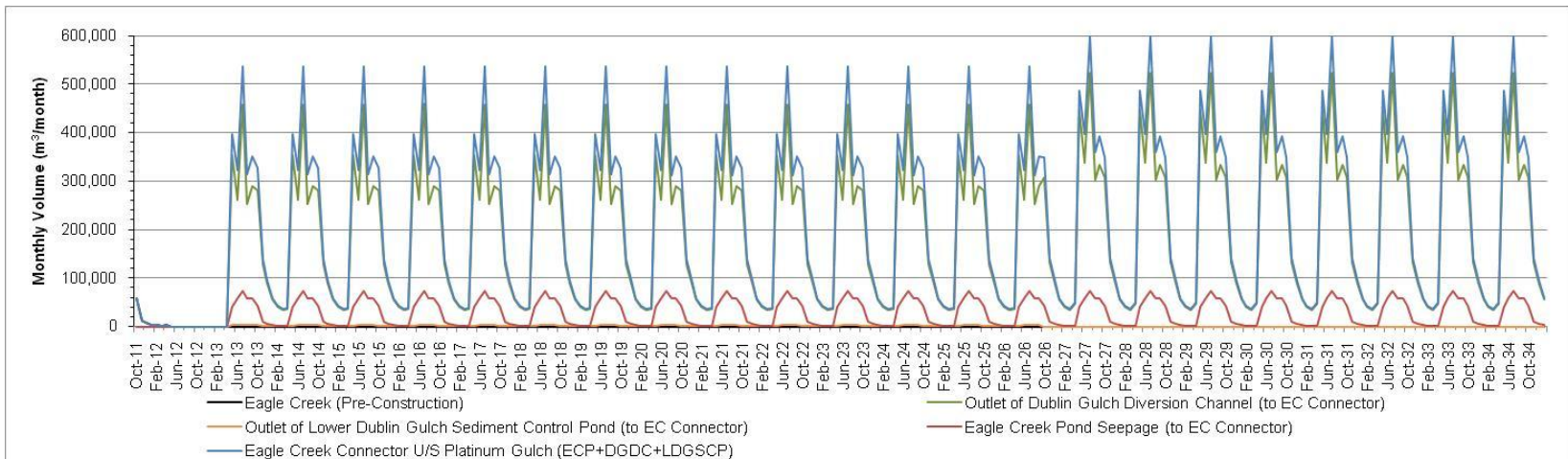


Figure C7-3: Eagle Creek Stream Flows at W27 for Average (1), Wet (2), Dry (3) Hydroclimatic Scenarios

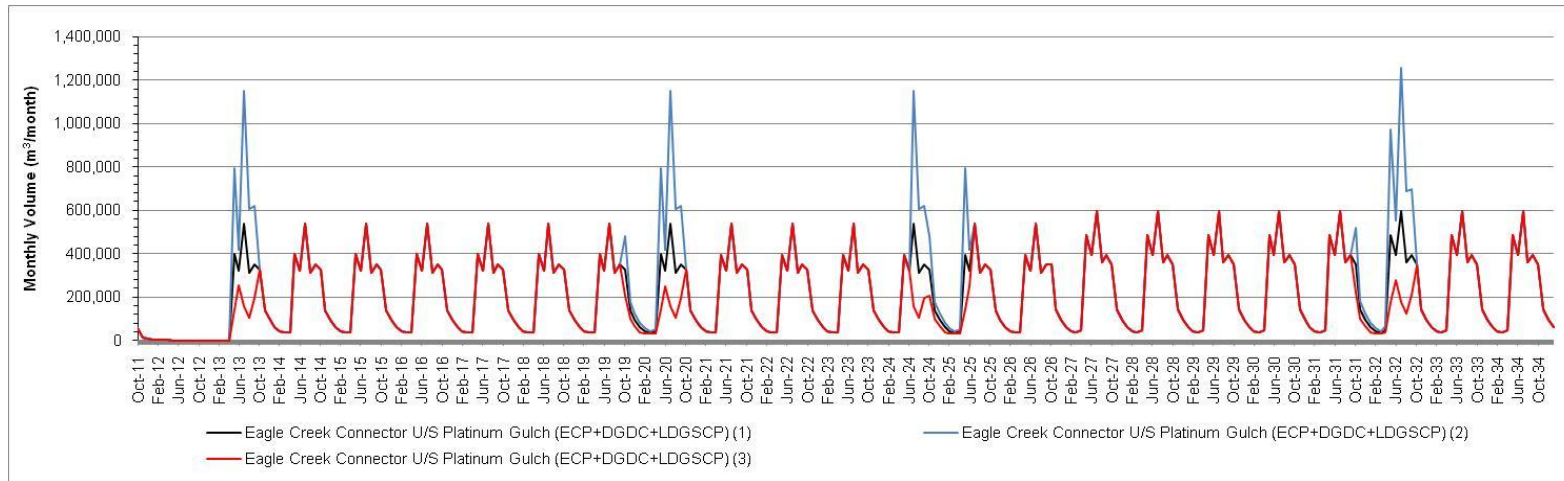


Figure C7-4: Eagle Creek Percentage of Baseline Flow at W27 for Average (1), Wet (2), Dry (3) Hydroclimatic Scenarios

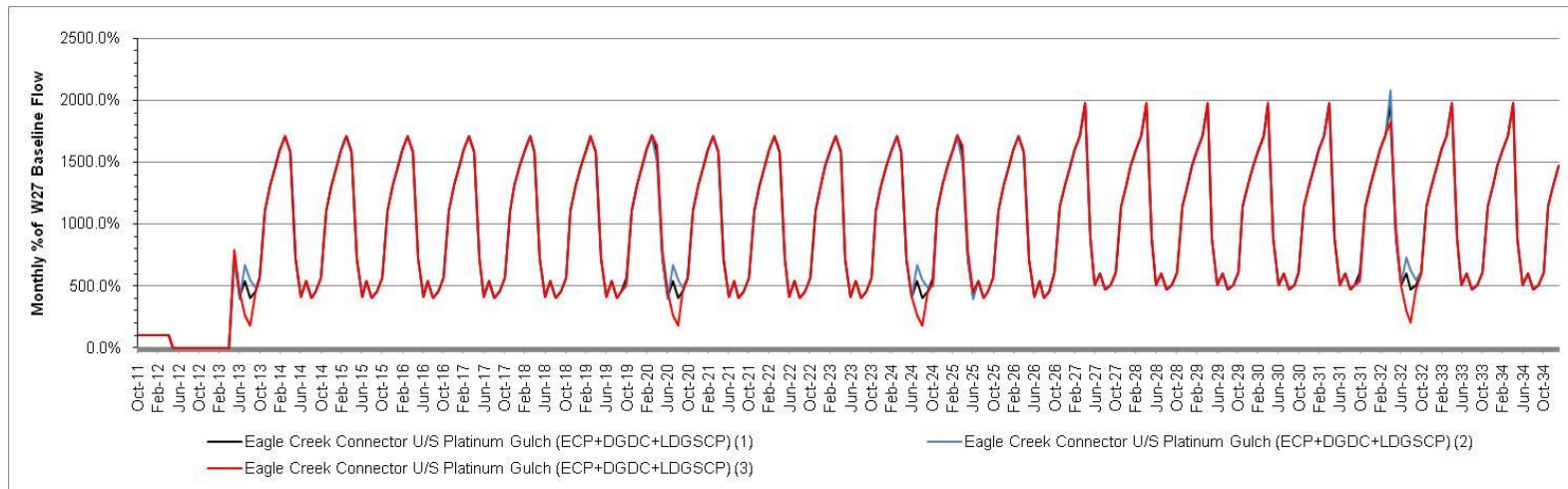




Figure C8-1: Haggart Creek Flow Components at W4 – Average Hydroclimatic Scenario 1

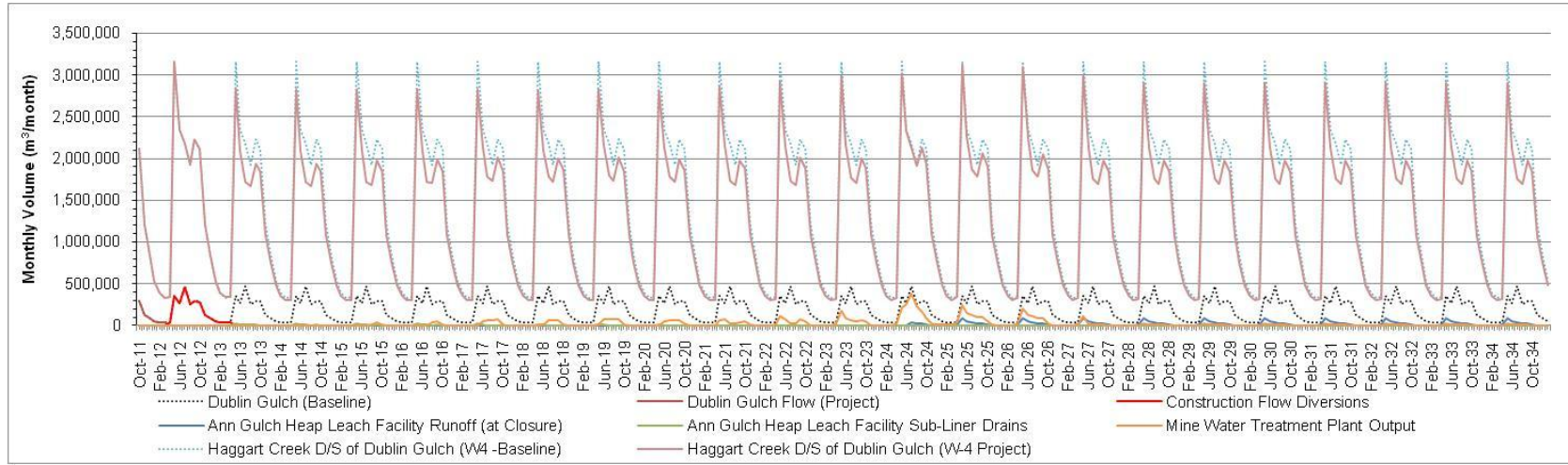


Figure C8-2: Haggart Creek Flow Components at W29 – Average Hydroclimatic Scenario 1

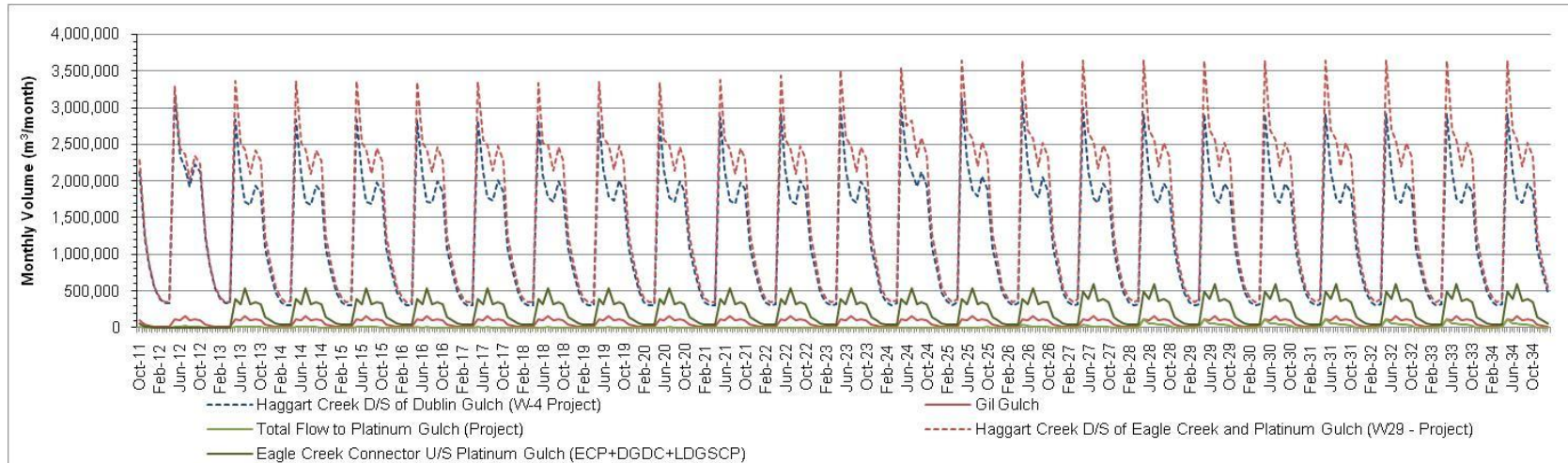


Figure C8-3: Haggart Creek Stream Flows at W4 for Average (1), Wet (2), Dry (3) Hydroclimatic Scenarios

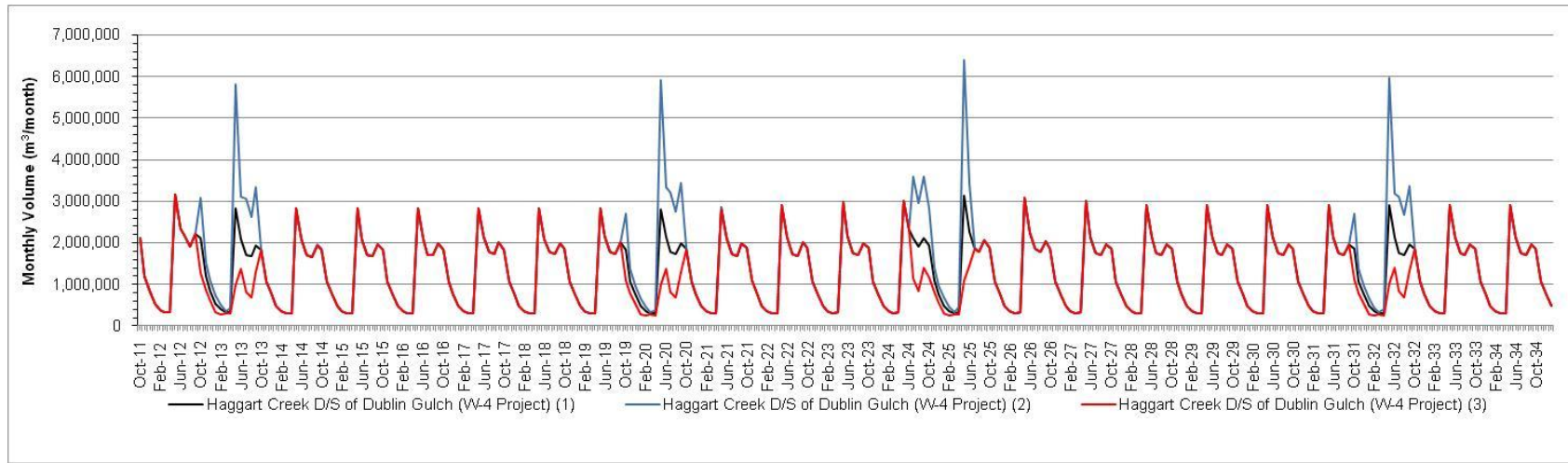


Figure C8-4: Percentage Change to Baseline Flows at Haggart Creek W4 for Average (1), Wet (2), Dry (3) Hydroclimatic Scenarios

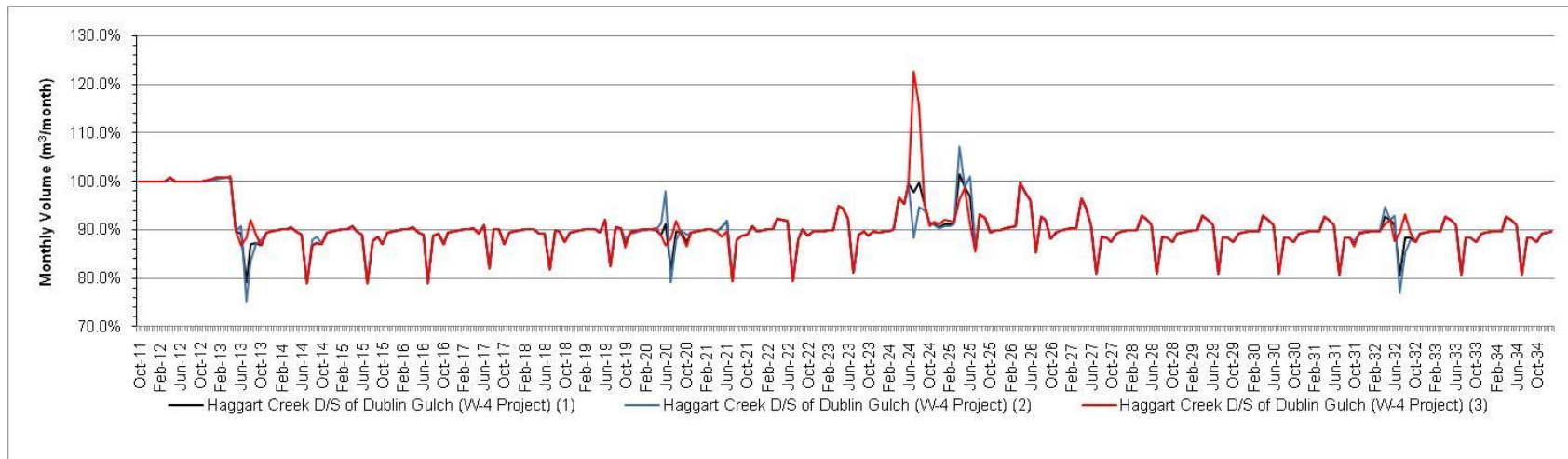


Figure C8-5: Haggart Creek Stream Flows at W29 for Average (1), Wet (2), Dry (3) Hydroclimatic Scenarios

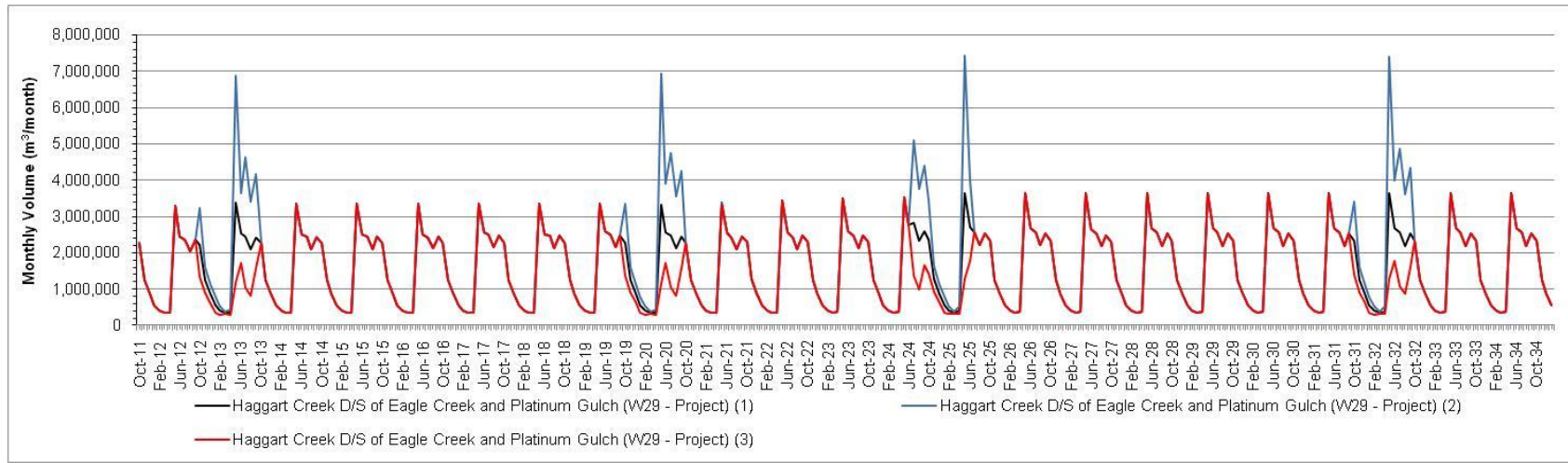


Figure C8-6: Percentage Change to Baseline Flows at Haggart Creek W29 for Average (1), Wet (2), Dry (3) Hydroclimatic Scenarios

