1A/1B Leach Stockpiles

Function	Ore stockpiles	
	Active	
Location Characteristics	No upstream issues	
	No downstream issues	
	Regional depth to ground water:	
	• 1A/1C: 100 to 580 ft., direction of flow is NE and	
	Gettysburg Pit	
	• 1B: 100 to 250 ft., direction of flow is SE	
	Medium upwind fetch, limited downwind fetch	
	In Mimbres Basin drainage	
Construction Method	End dumped	
	Top surface bermed	
Physical Characteristics	Very coarse grained	
	Medium to high saturated hydraulic conductivity	
Leach Status	Currently leached	
Existing Engineering Measures	1A and 1B are addressed concurrently, interior slopes	
	inside of the OPSDA will not be reclaimed	

Matrix of Costs Capital Cost/Facility¹

273.0
Capital Cost
\$5,073,328
-
\$299,807
\$369,915
\$2,180,121
-
\$7,923,171
\$29,023



2A/2B Leach and 2B Waste Stockpiles

Function	Ore stockpiles (2A and 2B leach)	
	Waste rock stockpile (2B waste)	
Location Characteristics	No upstream issues	
	Major channel along outslopes (i.e., Deadman Canyon)	
	Regional depth to ground water is approximately 500 ft.,	
	direction of flow is E-NE	
	Medium upwind fetch, medium downwind fetch	
	Interior slopes are inside of OPSDA	
Construction Method	End dumped	
	Top surface bermed	
Physical Characteristics	Very coarse grained	
	Medium to high saturated hydraulic conductivity	
Leach Status	Currently leached (2A leach)	
	Non-leach (2B waste)	
Existing Engineering Measures	PLS collection system to be maintained, and seepage	
	collection system to be maintained or modified to	
	accommodate new footprint; stormwater berms	
	Interior slopes of 2A Stockpile will be reclaimed, interior	
	slopes of 2B Stockpile inside of the OPSDA will not be	
	reclaimed	

Matrix of Costs Capital Cost/Facility¹

Reclaimed Area (Acres)	487.0
Item	Capital Cost
Cover Material	\$12,150,429
Truck/Shovel	-
Top/Outslope Adjustment	\$5,214,514
Revegetation (Seed & Mulch)	\$659,874
Channels, Conduits & Berms	\$3,147,224
Other	-
Capital Cost Totals	\$21,172,040
Capital Cost/Acre	\$43,475



2C, 4A, 4B, and 7B Leach Stockpiles

Function	Ore stockpiles	
Location Characteristics	No upstream issues	
	Regional depth to ground water is approximately 500 ft.,	
	direction of flow is E-NE	
	Medium upwind fetch, medium downwind fetch	
	Interior slopes are inside of OPSDA / open pit	
Construction Method	End dumped	
	Top surface bermed	
Physical Characteristics	Very coarse grained	
	Medium to high saturated hydraulic conductivity	
Leach Status	Currently leached	
Existing Engineering Measures	Interior slopes of 2C and 4A stockpiles inside of the	
	OPSDA will not be reclaimed. Slopes of all other	
	stockpiles and stockpile areas will be reclaimed.	

Matrix of Costs Capital Cost/Facility¹

Reclaimed Area (Acres)	375.0
Item	Capital Cost
Cover Material	\$8,280,108
Truck/Shovel	-
Top/Outslope Adjustment	\$2,884,950
Revegetation (Seed & Mulch)	\$508,125
Channels, Conduits & Berms	\$1,722,733
Other	-
Capital Cost Totals	\$13,395,916
Capital Cost/Acre	\$35,722



3A Leach Stockpile and 3B Waste Stockpile

Function	Ore stockpile	
Location Characteristics	No upstream issues	
	No downstream issues	
	Regional depth to ground water is approximately 100 to	
	350 ft., direction of flow is toward Main Pit and into Gila	
	River Basin to existing perched and regional collection	
	systems	
	Medium upwind fetch, medium downwind fetch	
	In Gila River Basin drainage	
Construction Method	End dumped	
	Top surface bermed	
Physical Characteristics	Very coarse grained	
	Medium to high saturated hydraulic conductivity	
Leach Status	Currently leached	
Existing Engineering Measures	PLS collection system, seepage collection system (to be	
	relocated before regrading), existing regional and perched	
	zone collection systems.	
	Interior slopes of 3B Stockpile inside of the OPSDA will	
	not be reclaimed. Slopes of all other stockpiles and	
	stockpile areas will be reclaimed.	

Matrix of Costs Capital Cost/Facility¹

Reclaimed Area (Acres)	455.0
Item	Capital Cost
Cover Material	\$10,081,768
Truck/Shovel	\$26,486,125
Top/Outslope Adjustment	\$3,062,590
Revegetation (Seed & Mulch)	\$616,525
Channels, Conduits & Berms	\$2,205,347
Other	1,967,411
Capital Cost Totals	\$44,419,767
Capital Cost/Acre	\$97,626



4C Leach Stockpile

Function	Ore stockpile	
Location Characteristics	No upstream issues	
	No downstream issues	
	Regional depth to ground water is less than 50 ft., direction	
	of flow is NE	
	Medium upwind fetch, medium downwind fetch	
Construction Method	End dumped	
Physical Characteristics	Very coarse grained	
	Medium to high saturated hydraulic conductivity	
Leach Status	Currently leached	
Existing Engineering Measures	PLS collection system, seepage collection system	

Matrix of Costs Capital Cost/Facility¹

Reclaimed Area (Acres)	183.0
Item	Capital Cost
Cover Material	\$4,409,792
Truck/Shovel	-
Top/Outslope Adjustment	\$1,648,644
Revegetation (Seed & Mulch)	\$247,965
Channels, Conduits & Berms	\$1,355,672
Other	-
Capital Cost Totals	\$7,662,072
Capital Cost/Acre	\$41,869



5A Waste/Overburden Stockpile

Function	Overburden and waste stockpile	
Location Characteristics	No upstream issues	
	No downstream issues	
	Regional depth to ground water is greater than 400 ft.,	
	direction of flow is towards Main Pit	
	Medium upwind fetch, limited downwind fetch	
	Portions of interior slopes within OPSDA	
Construction Method	End dumped	
Physical Characteristics	Coarse to very coarse grained	
	Medium to high saturated hydraulic conductivity	
Leach Status	Non-leach	
Existing Engineering Measures	Portion of interior slopes within OPSDA will not be	
	reclaimed	
	Stormwater controls	

Matrix of Costs Capital Cost/Facility¹

Reclaimed Area (Acres)	371.0
Item	Capital Cost
Cover Material	\$6,098,908
Truck/Shovel	-
Top/Outslope Adjustment	\$5,081,022
Revegetation (Seed & Mulch)	\$502,705
Channels, Conduits & Berms	\$1,721,256
Other	-
Capital Cost Totals	\$13,403,891
Capital Cost/Acre	\$36,129



6B Leach Stockpile

Function	Ore stockpile	
Location Characteristics	No upstream issues	
	No downstream issues	
	Regional depth to ground water is approximately 500 ft.,	
	direction of flow is toward Gettysburg and Main pits	
	Medium upwind fetch, medium downwind fetch	
	Within the OPSDA	
Construction Method	End dumped	
Physical Characteristics	Very coarse grained	
	Medium to high saturated hydraulic conductivity	
Leach Status	Currently leached	
Existing Engineering Measures	Stormwater controls	
	Slopes inside of the OPSDA will not be reclaimed	

Matrix of Costs Capital Cost/Facility¹

54.0
Capital Cost
\$907,137
-
\$160,333
\$73,170
\$330,891
-
\$1,471,532
\$27,251



6C Leach Stockpile

Function	Ore stockpile	
Location Characteristics	Former Gettysburg In-Pit Stockpile	
	No upstream issues	
	No downstream issues	
	Regional depth to ground water is approximately 500 ft.,	
	direction of flow is toward Gettysburg Pit	
	Medium upwind fetch, medium downwind fetch	
	Interior slopes within the OPSDA / open pit	
Construction Method	End dumped	
Physical Characteristics	Very coarse grained	
	Medium to high saturated hydraulic conductivity	
Leach Status	Currently leached	
Existing Engineering Measures	Interior slopes within the OPSDA will not be reclaimed	
_	Stormwater controls	

Matrix of Costs Capital Cost/Facility¹

Reclaimed Area (Acres)	66.0
Item	Capital Cost
Cover Material	\$1,273,384
Truck/Shovel	-
Top/Outslope Adjustment	\$299,316
Revegetation (Seed & Mulch)	\$89,430
Channels, Conduits & Berms	\$859,211
Other	-
Capital Cost Totals	\$2,521,340
Capital Cost/Acre	\$38,202



8C Sludge Disposal Area

Function	Future Sludge Disposal Site	
Location Characteristics	Inside Main Pit, former Main Pit Stockpile, will be sludge	
	disposal area during closure/post-closure	
	No upstream issues	
	No downstream issues	
	Regional depth to ground water is 1200 feet below the	
	current stockpile surface, Main Pit collects ground water	
	within pit sump	
	Limited upwind fetch, limited to downwind fetch	
	Located within OPSDA	
Construction Method	End dumped	
Physical Characteristics	In-pit dumping	
	Medium to high saturated hydraulic conductivity	
Leach Status	Non-leach	
Existing Engineering Measures	Stormwater controls	
	Located within OPSDA. Only top surface will be reclaimed	

Matrix of Costs Capital Cost/Facility¹

Reclaimed Area (Acres)	47.4
Item	Capital Cost
Cover Material	\$831,535
Truck/Shovel	-
Top/Outslope Adjustment	\$7,020
Revegetation (Seed & Mulch)	\$64,173
Channels, Conduits & Berms	-
Other	-
Capital Cost Totals	\$902,728
Capital Cost/Acre	\$19,061



9A Overburden Stockpile

Function	Overburden stockpile	
Location Characteristics	No upstream issues	
	No downstream issues	
	Regional depth to ground water is approximately 100 to	
	350 ft., direction of flow is toward Main Pit and into Gila	
	River Basin	
	Medium upwind fetch, medium downwind fetch	
	NW portion of stockpile is in Gila River Basin drainage	
Construction Method	End dumped at initial 3 to 1 scope	
Physical Characteristics	Very coarse grained	
	Medium to high saturated hydraulic conductivity	
Leach Status	Non-leach	
Existing Engineering Measures	Stormwater controls	

Matrix of Costs Capital Cost/Facility¹

Reclaimed Area (Acres)	129.0
Item	Capital Cost
Cover Material	-
Truck/Shovel	-
Top/Outslope Adjustment	\$111,418
Revegetation (Seed & Mulch)	\$174,795
Channels, Conduits & Berms	\$893,487
Other	-
Capital Cost Totals	\$1,179,701
Capital Cost/Acre	\$9,145



Savanna Pit

Function	Mined pit	
Location Characteristics	No upstream issues	
	No downstream issues	
	Main and Gettysburg pit dewatering capture zone controls	
	regional ground water level and flow direction	
Construction Method	Blasting, shoveling, and hauling rock in 50 foot benches	
Physical Characteristics	Solid, intrusive, and skarn rocks with low primary	
	permeability and medium fracture permeability	
Leach Status	Not applicable	
Existing Engineering Measures	Pit dewatering contains regional ground water,	
	All perimeter runon bermed	
	To be partially backfilled with Savanna leach Stockpile as	
	part of mine plan by EOY 2014; costs included for	
	reclamation of the interior flat area of Savanna Leach	
	Stockpile.	

Matrix of Costs Capital Cost/Facility¹

Reclaimed Area (Acres)	65.0
Item	Capital Cost
Cover Material	\$895,460
Truck/Shovel	-
Top/Outslope Adjustment	\$409,278
Revegetation (Seed & Mulch)	\$88,075
Channels, Conduits & Berms	-
Other	-
Capital Cost Totals	\$1,392,814
Capital Cost/Acre	\$21,428



San Salvador Hill Pit

Function	Mined pit	
Location Characteristics	No upstream issues	
	No downstream issues	
	Main and Gettysburg pit dewatering capture zone controls	
	regional ground water level and flow direction	
Construction Method	Blasting, shoveling, and hauling rock in 50 foot benches	
Physical Characteristics	Solid, intrusive, and skarn rocks with low primary	
	permeability and medium fracture permeability	
Leach Status	Not applicable	
Existing Engineering Measures	Pit dewatering contains regional ground water,	
	All perimeter runon bermed	
	To be partially backfilled as part of mine plan by EOY 2014;	
	costs included for reclamation of the backfilled interior flat	
	area	

Matrix of Costs Capital Cost/Facility¹

Reclaimed Area (Acres)	115.0
Item	Capital Cost
Cover Material	\$2,296,897
Truck/Shovel	\$4,475,445
Top/Outslope Adjustment	\$603,302
Revegetation (Seed & Mulch)	\$155,825
Channels, Conduits & Berms	\$647,649
Other	-
Capital Cost Totals	\$8,179,117
Capital Cost/Acre	\$71,123



Exploration Holes, Monitoring & Extraction Wells

Function	Exploration, Monitoring, Extraction
Location Characteristics	Mine Area
Construction Method	N/A
Physical Characteristics	N/A
Leach Status	N/A
Existing Engineering Measures	N/A

Matrix of Costs Capital Cost/Facility¹

Reclaimed Area (Acres)	-
Item	Capital Cost
Cover Material	-
Truck/Shovel	-
Top/Outslope Adjustment	-
Revegetation (Seed & Mulch)	-
Channels, Conduits & Berms	-
Other	\$1,092,720
Capital Cost Totals	\$1,092,720
Capital Cost/Acre	_



Fencing

Function	N/A
Location Characteristics	Pit perimeters
Construction Method	N/A
Physical Characteristics	N/A
Leach Status	N/A
Existing Engineering Measures	N/A

Matrix of Costs Capital Cost/Facility¹

Reclaimed Area (Acres)	-
Item	Capital Cost
Cover Material	-
Truck/Shovel	-
Top/Outslope Adjustment	-
Revegetation (Seed & Mulch)	-
Channels, Conduits & Berms	-
Other	1,368,619
Capital Cost Totals	\$1,368,619
Capital Cost/Acre	-



Utility Demolition

Function	Power Distribution
Location Characteristics	Mine Area
Construction Method	N/A
Physical Characteristics	Above Ground Electrical Lines, Power Poles, Telephone
	lines, and Fire Hydrants
Leach Status	N/A
Existing Engineering Measures	N/A

Matrix of Costs Capital Cost/Facility¹

Reclaimed Area (Acres)	-
Item	Capital Cost
Cover Material	-
Truck/Shovel	-
Top/Outslope Adjustment	-
Revegetation (Seed & Mulch)	-
Channels, Conduits & Berms	-
Other (Demolition)	\$108,405
Capital Cost Totals	\$108,405
Capital Cost/Acre	-



Pipeline Closures

Function	Distribution of Process Water, PLS, and Raffinate During Operational Phase and During PSE System Operation and Water Treatment
Location Characteristics	Mine Area
Construction Method	N/A
Physical Characteristics	HDPE Process Water, PLS, and Raffinate Pipelines
Leach Status	N/A
Existing Engineering Measures	N/A

Matrix of Costs Capital Cost/Facility¹

Reclaimed Area (Acres)	-
Item	Capital Cost
Cover Material	-
Truck/Shovel	-
Top/Outslope Adjustment	-
Revegetation (Seed & Mulch)	-
Channels, Conduits & Berms	-
Other	\$460,698
Capital Cost Totals	\$460,698
Capital Cost/Acre	-



1C Top (Haul Road)

Function	Haul Road
Location Characteristics	Mine Area
Construction Method	N/A
Physical Characteristics	N/A
Leach Status	N/A
Existing Engineering Measures	N/A

Matrix of Costs Capital Cost/Facility¹

Reclaimed Area (Acres)	17.0
Item	Capital Cost
Cover Material	\$302,763
Truck/Shovel	\$0
Top/Outslope Adjustment	\$0
Revegetation (Seed & Mulch)	\$23,041
Channels, Conduits & Berms	\$0
Other	\$0
Capital Cost Totals	\$325,804
Capital Cost/Acre	\$19,160



Surface Impoundments

Function	Water Management
Location Characteristics	Mine Area
Construction Method	N/A
Physical Characteristics	N/A
Leach Status	N/A
Existing Engineering Measures	N/A

Matrix of Costs Capital Cost/Facility¹

Reclaimed Area (Acres)	21.2
Item	Capital Cost
Cover Material	\$371,663
Truck/Shovel	\$0
Top/Outslope Adjustment	\$3,147
Revegetation (Seed & Mulch)	\$29,417
Channels, Conduits & Berms	\$0
Other (Demolition)	\$15,869
Capital Cost Totals	\$420,096
Capital Cost/Acre	\$19,788



Unplanned Disturbed Areas

Function	Small staging areas, utility corridors, haul roads, pull-offs,	
	stockpile expansions, or other miscellaneous unforeseen	
	changes in the mine plan.	
Location Characteristics	Mine Area	
Construction Method	N/A	
Physical Characteristics	N/A	
Leach Status	N/A	
Existing Engineering Measures	N/A	

Matrix of Costs Capital Cost/Facility¹

Reclaimed Area (Acres)	125.0
Item	Capital Cost
Cover Material	\$2,134,104
Truck/Shovel	\$0
Top/Outslope Adjustment	\$18,528
Revegetation (Seed & Mulch)	\$169,375
Channels, Conduits & Berms	\$0
Other	\$0
Capital Cost Totals	\$2,322,007
Capital Cost/Acre	\$18,576

