# **Appendix E**

# Reclamation Cost Spreadsheet – Hard Copy and Electronic

### Unit Rates

| Code | Activity                            | Base Per Unit Cost | Fuel Per Unit Cost | Units | Source                                      | Reference  |
|------|-------------------------------------|--------------------|--------------------|-------|---|--|
|      |                                     |                    | 211 21 2111 3000   |       |   | Diesel fuel cost is estimated based on a predictive equation developed by correlating U.S. No. 2 diesel retail prices  |
|      | Fuel                                | \$ 2.34            | _                  | gal   | _   | (U.S. Energy Information Administration) and FMI local fuel quotes, as agreed upon in November 2018 discussions  |
|      |                                     | 2.01               |                    | 94.   |   | with the agencies. The correlation is based on a dataset for the period from 1995-2018. Fuel cost includes direct and  |
| U1   |                                     |                    |                    |       |   | indirect costs at \$2.34/gal.  |
| U2   | Revegetation                        | \$ 820.12          | \$ 3.85            | ac    | Revegetation Unit Cost Sheet                | See unit rates calculations - Cost is based on a calculated unit rate that includes tractor rental and maintenance, fuel, scarifying, discing, drill seeding, mulching, crimping, seed, and mulch. |
| U2-1 | Revegetation - Seed Only            | \$ 210.00          | -                  | ac    | Quote                                       | Rocky Mountain Reclamation, April 2018   |
| U2-2 | Revegetation - Mulch Only           | \$ 490.00          |                    | ac    | Quote                                       | Rocky Mountain Reclamation, April 2018: \$245 per ton applied at 2 tons per acre   |
| U3   | Bench Grading Stockpile             |                    | \$ 0.37            | ft    | Bench Grading Unit Cost Sheet               | See unit rates calculations  |
| U4   | Bench Grading Tailings Pond         | \$ 1.52            | \$ 0.37            | ft    | Bench Grading Unit Cost Sheet               | See unit rates calculations  |
| U5   | Downdrain Construction              | \$ 374.38          | -                  | ft    | Downdrain Unit Cost Sheet                   | See unit rates calculations  |
| U6   | Downdrain Dissipater                | \$ 14,556.48       | -                  | ea    | Downdrain Unit Cost Sheet                   | See unit rates calculations  |
| U7   | Bench Channel Construction          | \$ 4.39            | \$ 0.94            | ft    | Bench Channel Unit Cost Sheet               | See unit rates calculations  |
| U8   | Top Channel Construction            | \$ 2.04            | \$ 0.44            | ft    | Top Channel Unit Cost Sheet                 | See unit rates calculations  |
| U9   | Erosion Control                     | \$ 2,923.36        | \$ 382.26          | day   | Modified Crew B-13A/<br>Full Site O&M Sheet | Erosion control for O&M - includes 1 foreman, 2 laborers, 1 equipment operator, 2 truck drivers, 1 loader (4 cy), 2 dump trucks (8 cy)   |
| U10  | Structure Demolition                | \$ 0.25            | -                  | cf    | Means Line Item 024116.13 0100              | Building demolition, large urban projects, mixture of types, excludes foundation demolition, dump fees   |
|      |                                     |                    |                    |       |   | Buillding footings and foundations demolition, floors, concrete slab on grade, plain concrete, 6" thick, excludes  |
| U11  | Concrete Slab Demolition            | \$ 0.62            | -                  | sf    | Means Line Item 024116.17 0400              | disposal costs and dump fees   |
| U12  | Storage Tank Demolition             | \$ 1.005.97        | -                  | ea    | Means Line Item 130505.75 0530              | Selective Demolition - Storage Tanks, steel tank, single wall, above ground, not including foundations, pumps or piping, 5,000 thru 10,000 gallon  |
| U13  | Power Line Demolition               | \$ 0.63            | -                  | ft    | Means Line Item 260505.10 0370              | Electrical Demolition - Nonmetallic sheathed cable 3 wire; assume similar enough in cost to overhead powerlines.   |
| U14  | Power Pole Demolition               | \$ 216.24          | -                  | ea    | Means Line Item 024113.80 0200              | Selective Demolition - wood utility poles 35-45 ft high  |
|      |                                     |                    |                    |       |   | Removal of underground storage tanks, petroleum storage tanks, non-leaking, remove sludge, water and remaining   |
| U15  | Sludge removal                      | \$ 306.69          | -                  | ea    | Means Line Item 026510.30 0320              | product from tank bottom of tank with vacuum truck, 9,000 - 12,000 gallon tank   |
|      |                                     |                    |                    |       |   | Layne Christensen Company, 7/31/18 Tyrone estimate is \$10,000 mobilization and demobilization plus \$5,704.94 for   |
| U16  | Well Plug & Abandon                 | \$ 10.47           | -                  | ft    | Quote                                       | one 1500 ft well   |
|      |                                     |                    |                    |       |   | Wilcox Professional Services, 8/2011, est. cost for 5 1/2 in bore, \$173,500 for 3000 ft total (\$57.83/ft). Escalated 2%  |
| U17  | Well Replacement                    | \$ 66.43           | -                  | ft    | Quote                                       | 2011-2018= \$66.43/ft  |
|      | ·                                   |                    |                    |       |   | Standard Union Crew: 1 equipment operator (crane), 1 laborer, 1 hydraulic excavator, 2 cy, approximately 40 hrs to   |
| U18  | Reinforced Concrete Wall Demolition | \$ 199.20          | -                  | hr    | Means Crew B-12C                            | demo 200 ft reinforced concrete dam.   |
| U19  | Cover Haul Road Construction        | \$ 29.88           | \$ 7.38            | ft    | Haul Road Unit Cost Sheet                   | Assume dozer construction, 1:1 original slope, 120 ft wide   |
| U20  | Disc harrow attachment, for tractor | \$ 616.33          | -                  | month | Means Line Item 015433.20 1500              | Equipment rental costs   |
| U21  | Cast-In-Place Concrete              | \$ 254.97          | -                  | су    | Means Line Item 033053.40 6200              | Structural concrete, in place, gravity retaining wall (3000 psi), includes forms and reinforcement   |
| U22  | Hazardous Waste Cleanup & Disposal  | \$ 335.20          | -                  | ton   | Means Line Item 028120.10 1120/1130         |  |
| U23  | Hazardous Waste Transportation      | \$ 4.78            | -                  | mile  | Means Line Item 028120.10 1260/1270         | Transporation to disposal site (Truckload = 80 drums or 25 cy or 18 tons); average of minimum and maximum  |
| U24  | Road Maintenance                    | \$ 4,945.96        | \$ 1,240.32        | month | Full Site O&M Sheet                         | Road maintenance for O&M - includes one 14M motor grader and one 6,000-gal water truck   |
|      |                                     | ,                  | ,                  |       |   | Groundwater monitoring for O&M - includes 1 foreman, 1 laborers, rental equipment, misc. field equipment, and  |
| U25  | Groundwater Monitoring              | \$ 2,282.94        | -                  | day   | Full Site O&M Sheet                         | aqueous chemistry  |
| h    | ·                                   |                    |                    |       | •   | · · · · · · · · · · · · · · · · · · ·  |

Location adjustment: New Mexico Las Cruces

85.4%

[1] Applied to RSM derived costs only. EquipmentWatch items and items based on local quotes adjusted at base rate RS Means Online, 2019 (bare costs, without O&P- overhead and profit)

Chino Stockpile Spreadsheet Worksheet #1 3/15/2019

Applicant Chino Mines Company Hurley, New Mexico 88043

Disturbed Surface Area (acres) 5,660

Type of Operation Existing/Surface/Copper

Current value of earthwork and O&M before escalation and discounting \$185,445,696

Stockpiles, Tailing, Reservoirs, Haul Roads and Disturbed Areas

### Demolition

Building Demolition costs are calculated in "1 BuildingDemo", "2 BuildingCover", "3 BuildingVeg", and "4BuildingHazardousWaste" and summarized on the last line of this table. This sheet calculates miscellaneous demolition costs associated with the North Mine Area, Pipeline Corridor Area, and South Mine Area.

| Item                 | Activity           | Quantity | Unit  | Unit Cost <sup>1</sup><br>(\$/unit) | Direct Item Cost | Reference                             | Means Line Item    | Description   |
|----------------------|--------------------|----------|-------|-------------------------------------|------------------|---------------------------------------|--------------------|---|
| item                 | Activity           | Quantity | Ullit | (\$/uiiit)                          | (\$)             |                                       | Wearis Line item   |   |
| NMA & SMA            | Pipelines          |          |       |                                     |                  | Means and Other<br>(See Pipeline Unit |                    | Water and sewer pipeline lengths from 2018 Chino Bluestake  |
| Reclamation          | Demolition         | 912,856  | ft    | \$3.75                              | ¢3 //10 027      | Cost Sheet)                           | 02 41 13.38 1800   | map. 50% of pipelines assumed to be reclaimed. See pipeline unit cost calculation.  |
| reciamation          | Demontion          | 312,030  | - 10  | ψ3.73                               | ψ0,+10,521       | Oost Oricety                          | 02 41 13.30 1000   |   |
| NMA & SMA            | Pipeline Corridor  |          |       |                                     |                  | See Revegetation                      |                    | See unit rates calculations. Area based on 30' corridor minus 12' for vehicles (18') multiplied by length of pipeline in Pipeline |
| Reclamation          | Area Revegetation  | 8.2      | ac    | \$823.97                            | \$6 757          | Unit Cost Sheet                       | N/A                | Corridor Area (length from pg. 249-250 of CCP).   |
| rtosiamation         | / wou revogoration | 0.2      | - 40  | ψ020.01                             | ψο,ι σ.          | 01111 0001 011001                     | 147.               | Number of power poles from 2018 Chino Bluestake map. Unit   |
| NMA & SMA Utilities  | Power Poles        |          |       |                                     |                  |                                       |                    | cost for Selective Demolition - wood utility poles 35-45 feet   |
| Reclamation          | Demolition         | 246      | ea    | \$216.24                            | \$53.195         | Means                                 | 024113.80 0200     | high.   |
|                      |                    |          |       |                                     | , ,              |                                       |                    |   |
|                      |                    |          |       |                                     |                  |                                       |                    | Wire and cable lengths from from 2018 Chino Bluestake map.  |
| NMA & SMA Utilities  | Power Lines        |          |       |                                     |                  |                                       |                    | Unit cost for Electrical Demolition - Nonmetallic sheathed cable  |
| Reclamation          | Demolition         | 318,553  | ft    | \$0.63                              | \$200,688        | Means                                 | 260505.10 0370     | 3 wire; assume similar enough in cost to overhead powerlines.   |
|                      |                    |          |       |                                     |                  |                                       |                    | See unit rates calculations - Cost is based on a calculated unit  |
|                      |                    |          |       |                                     |                  |                                       |                    | rate that includes tractor rental and maintenance, fuel.  |
| NMA & SMA Utilities  | Utility Corridors  |          |       |                                     |                  | See Revegetation                      |                    | scarifying, discing, drill seeding, mulching, crimping, seed, and   |
| Reclamation          | Revegetation       | 36.6     | ac    | \$823.97                            | \$30,128         | Unit Cost Sheet                       | N/A                | mulch.  |
|                      |                    |          |       |                                     |                  |                                       |                    |   |
|                      | Concrete Surface   |          |       |                                     |                  |                                       |                    | Standard Union Crew: 1 equipment operator (crane), 1 laborer, 1 hydraulic excavator, 2 cy, approximately 40 hrs to demo 200 ft    |
| NMA Reclamation      | Containments       | 154      | hr    | \$199.20                            | \$30.756         | Means                                 | Means Crew B-12C   | reinforced concrete dam.  |
| THINA I COIGITIATION | Contaminents       | 134      | 111   | \$199.20                            | \$30,730         | Wicans                                | Wicaria Ciew D-120 | Tomoroca controlle dam.   |
|                      | See Building Demo  |          |       |                                     |                  | See Building Demo                     |                    | Direct costs only, 20% added to buildings with extra equipment  |
| Building Demolition  | Sheets             | N/A      | N/A   | N/A                                 | \$849,760        |                                       | N/A                | removal.  |

Total Direct Cost: \$4,591,210

### Data Sources:

RS Means Online Heavy Construction Cost Data (2019)

1 - Means inlcudes Las Cruces, New Mexico, location adjustment

Material Handling Plan Summary Sheet

All activities for the Chino RCE are listed on this sheet and carried through the succeeding worksheets of the RCE. The column labeled ID contains the codes for the facility location, activity, material and equipment used for that particular row of work. The description lists the activity, top or outslope (if applicable), and the material. The source location lists the stockplie name (or sub-area) for the location of the activity. If borrow material is involved, it is transported from a borrow stockplie to a destination stockplie. Blank cells indicate that that column is not relevant to a particular activity.

- 1 Haul/Push Distance based on Golder Take-Offs 1401129-004-MTO-RevG\_07\_Chino\_MTOs\_05SEP18.xlsx or measured as shown in calc set
  2 Weighted Average Haul Grades based on Golder Take-Offs 1401129-004-MTO-RevG\_07\_Chino\_MTOs\_05SEP18.xlsx or measured as shown in calc set
  3 Grade Factors from SOW

| lis  |  |  |                        | Total Haul/Push Distance (ft) <sup>1</sup> | Grade (%) <sup>2,3</sup>  | Favinment  |
|--|--|--|------------------------|--|---------------------------|--|
| ID<br>1101-E-a-Rp1                           | Description  Rip-Outslope-Existing Ground  | Source Location 1 South Stockpile S-1  | Destination Location 2 | 389  | -28.6%                    | Equipment Cat D11T CD Multi-shank (w/ MSR-359H)                                |
| 1102-E-a-Rp1<br>1103-E-a-Rp1                 | Rip-Outslope-Existing Ground Rip-Outslope-Existing Ground  | South Stockpile S-2<br>South Stockpile S-3                                     | -<br>-                 | 1,550<br>1,840                             | -28.6%<br>-28.6%          | Cat D11T CD Multi-shank (w/ MSR-359H)<br>Cat D11T CD Multi-shank (w/ MSR-359H) |
| 1104-E-a-Rp1<br>1105-E-a-Rp1                 | Rip-Outslope-Existing Ground Rip-Outslope-Existing Ground  | South Stockpile S-4 South Stockpile S-5  | -<br>-                 | 1,204<br>2,025                             | -28.6%<br>-28.6%          | Cat D11T CD Multi-shank (w/ MSR-359H)<br>Cat D11T CD Multi-shank (w/ MSR-359H) |
| 1106-E-a-Rp1<br>1107-E-a-Rp1                 | Rip-Outslope-Existing Ground Rip-Outslope-Existing Ground  | South Stockpile S-6<br>South Stockpile S-7                                     | -<br>-                 | 2,017<br>1,206                             | -28.6%<br>-28.6%          | Cat D11T CD Multi-shank (w/ MSR-359H)<br>Cat D11T CD Multi-shank (w/ MSR-359H) |
| 1108-E-a-Rp1<br>1109-E-a-Rp1                 | Rip-Outslope-Existing Ground<br>Rip-Outslope-Existing Ground   | South Stockpile S-8<br>South Stockpile S-9(1)                                  | -                      | 893<br>158                                 | -28.6%<br>-28.6%          | Cat D11T CD Multi-shank (w/ MSR-359H)<br>Cat D11T CD Multi-shank (w/ MSR-359H) |
| 1207-E-a-Rp1                                 | Rip-Outslope-Existing Ground   | West Stockpile W-7   | -                      | -  | -28.6%                    | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 1209-E-a-Rp1<br>1210-E-a-Rp1                 | Rip-Outslope-Existing Ground<br>Rip-Outslope-Existing Ground   | West Stockpile W-8(1) West Stockpile W-8(2)                                    | -                      | 460  | -28.6%<br>-28.6%          | Cat D11T CD Multi-shank (w/ MSR-359H)<br>Cat D11T CD Multi-shank (w/ MSR-359H) |
| 1211-E-a-Rp1<br>1212-E-a-Rp1                 | Rip-Outslope-Existing Ground Rip-Outslope-Existing Ground  | West Stockpile W-9<br>West Stockpile W-10                                      | -<br>-                 | -<br>549                                   | -28.6%<br>-28.6%          | Cat D11T CD Multi-shank (w/ MSR-359H)<br>Cat D11T CD Multi-shank (w/ MSR-359H) |
| 1213-E-a-Rp1<br>1301-E-a-Rp1                 | Rip-Outslope-Existing Ground Rip-Outslope-Existing Ground  | West Stockpile W-11<br>Lambright Stockpile LB-1                                | -                      | -<br>1,357                                 | -28.6%<br>-28.6%          | Cat D11T CD Multi-shank (w/ MSR-359H)<br>Cat D11T CD Multi-shank (w/ MSR-359H) |
| 1302-E-a-Rp1<br>1303-E-a-Rp1                 | Rip-Outslope-Existing Ground<br>Rip-Outslope-Existing Ground   | Lambright Stockpile LB-2<br>Lambright Stockpile LB-3                           | -<br>-                 | 1,343<br>1,066                             | -28.6%<br>-28.6%          | Cat D11T CD Multi-shank (w/ MSR-359H)<br>Cat D11T CD Multi-shank (w/ MSR-359H) |
| 1304-E-a-Rp1                                 | Rip-Outslope-Existing Ground   | Lambright Stockpile LB-4 Lambright Stockpile LB-5                              | -                      | 1,428<br>1,344                             | -28.6%<br>-28.6%          | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 1305-E-a-Rp1<br>1306-E-a-Rp1                 | Rip-Outslope-Existing Ground Rip-Outslope-Existing Ground  | Lambright Stockpile LB-6   | -<br>-                 | 1,204                                      | -28.6%                    | Cat D11T CD Multi-shank (w/ MSR-359H)<br>Cat D11T CD Multi-shank (w/ MSR-359H) |
| 1307-E-a-Rp1<br>1308-E-a-Rp1                 | Rip-Outslope-Existing Ground Rip-Outslope-Existing Ground  | Lambright Stockpile LB-7(1) Lambright Stockpile LB-7(2)                        | -                      | 476<br>320                                 | -28.6%<br>-28.6%          | Cat D11T CD Multi-shank (w/ MSR-359H)<br>Cat D11T CD Multi-shank (w/ MSR-359H) |
| 1309-E-a-Rp1<br>1310-E-a-Rp1                 | Rip-Outslope-Existing Ground Rip-Outslope-Existing Ground  | Lambright Stockpile LB-8<br>Lambright Stockpile LB-9                           | -<br>-                 | 690<br>904                                 | -28.6%<br>-28.6%          | Cat D11T CD Multi-shank (w/ MSR-359H)<br>Cat D11T CD Multi-shank (w/ MSR-359H) |
| 1311-E-a-Rp1<br>1312-E-a-Rp1                 | Rip-Outslope-Existing Ground Rip-Outslope-Existing Ground  | Lambright Stockpile LB-10<br>Lambright Stockpile LB-11                         | -<br>-                 | 1,363<br>1,572                             | -28.6%<br>-28.6%          | Cat D11T CD Multi-shank (w/ MSR-359H)<br>Cat D11T CD Multi-shank (w/ MSR-359H) |
| 1313-E-a-Rp1<br>1314-E-a-Rp1                 | Rip-Outslope-Existing Ground Rip-Outslope-Existing Ground  | Lambright Stockpile LB-12<br>Lambright Stockpile LB-13                         | -                      | 1,700<br>1,311                             | -28.6%<br>-28.6%          | Cat D11T CD Multi-shank (w/ MSR-359H)<br>Cat D11T CD Multi-shank (w/ MSR-359H) |
| 1315-E-a-Rp1                                 | Rip-Outslope-Existing Ground   | Lambright Stockpile LB-14  | -                      | 1,110                                      | -28.6%                    | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 2316-K-a-Ex1<br>2318-K-a-Ex1                 | Perforate Liner-Reservoir 17-Existing Ground Perforate Liner-Fleming Pond-Existing Ground                      | Dams and Reservoirs Reservoir 17 Dams and Reservoirs Fleming Pond              | -<br>-                 | 100<br>100                                 | -1.0%<br>-1.0%            | Cat 319D L<br>Cat 319D L   |
| 2320-K-a-Ex1<br>2321-K-a-Ex1                 | Perforate Liner-Tailing Thickener 1-Existing Ground Perforate Liner-PLS Pond & Launder-Existing Ground         | Dams and Reservoirs Tailing Thickener 1 Dams and Reservoirs PLS Pond & Launder | -                      | 100<br>100                                 | -1.0%<br>-1.0%            | Cat 319D L<br>Cat 319D L   |
| 2323-K-a-Ex1<br>2342-K-a-Ex1                 | Perforate Liner-Raffinate Pond-Existing Ground Perforate Liner-Lower Lined Pond -Existing Ground               | Dams and Reservoirs Raffinate Pond Dams and Reservoirs Lower Lined Pond        | -                      | 100<br>100                                 | -1.0%<br>-1.0%            | Cat 319D L<br>Cat 319D L   |
| 2343-K-a-Ex1<br>2344-K-a-Ex1                 | Perforate Liner-Upper Lined Pond -Existing Ground Perforate Liner-5900 PLS Sump -Existing Ground               | Dams and Reservoirs Upper Lined Pond Dams and Reservoirs 5900 PLS Sump         | -                      | 100<br>100.0                               | -1.0%<br>-1.0%            | Cat 319D L<br>Cat 319D L   |
| 2345-K-a-Ex1                                 | Perforate Liner-6300 PLS Booster Station -Existing Ground  | Dams and Reservoirs 6300 PLS Booster Station                                   | -                      | 100.0                                      | -1.0%                     | Cat 319D L   |
| 2346-K-a-Ex1<br>1001-A-a-Dz2                 | Perforate Liner-Lee Hill #2 Booster -Existing Ground<br>Grade-Outslope-Existing Ground                         | Dams and Reservoirs Lee Hill #2 Booster<br>Triangle Stockpile T-1              | -<br>-                 | 100.0<br>703                               | -1.0%<br>-28.6%           | Cat 319D L<br>Cat D11T CD  |
| 1002-A-a-Mg1<br>1101-B-a-Dz3                 | Grade-Top-Existing Ground Dozer Assist Scraper Grading-Outslope-Existing Ground                                | Triangle Stockpile T-2<br>South Stockpile S-1                                  | -                      | 389  | -1.0%<br>-28.6%           | Cat 16M<br>Cat D9T, SU Blade   |
| 1102-B-a-Dz3<br>1103-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground Dozer Assist Scraper Grading-Outslope-Existing Ground    | South Stockpile S-2<br>South Stockpile S-3                                     | -<br>-                 | 1,550<br>1,840                             | -28.6%<br>-28.6%          | Cat D9T, SU Blade<br>Cat D9T, SU Blade   |
| 1104-B-a-Dz3<br>1105-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground Dozer Assist Scraper Grading-Outslope-Existing Ground    | South Stockpile S-4 South Stockpile S-5  | <u>-</u><br>-          | 1,204<br>2,025                             | -28.6%<br>-28.6%          | Cat D9T, SU Blade<br>Cat D9T, SU Blade<br>Cat D9T, SU Blade                    |
| 1106-B-a-Dz3                                 | Dozer Assist Scraper Grading-Outslope-Existing Ground  | South Stockpile S-6  | -<br>-                 | 2,017                                      | -28.6%                    | Cat D9T, SU Blade  |
| 1107-B-a-Dz3<br>1108-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground<br>Dozer Assist Scraper Grading-Outslope-Existing Ground | South Stockpile S-7<br>South Stockpile S-8                                     | -<br>-                 | 1,206<br>893                               | -28.6%<br>-28.6%          | Cat D9T, SU Blade<br>Cat D9T, SU Blade   |
| 1109-B-a-Dz3<br>1207-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground Dozer Assist Scraper Grading-Outslope-Existing Ground    | South Stockpile S-9(1) West Stockpile W-7                                      | -                      | 158  | -28.6%<br>-28.6%          | Cat D9T, SU Blade<br>Cat D9T, SU Blade   |
| 1209-B-a-Dz3<br>1210-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground Dozer Assist Scraper Grading-Outslope-Existing Ground    | West Stockpile W-8(1) West Stockpile W-8(2)                                    | <u>-</u>               | 460  | -28.6%<br>-28.6%          | Cat D9T, SU Blade<br>Cat D9T, SU Blade   |
| 1211-B-a-Dz3                                 | Dozer Assist Scraper Grading-Outslope-Existing Ground  | West Stockpile W-9   | -                      | -  | -28.6%                    | Cat D9T, SU Blade  |
| 1212-B-a-Dz3<br>1213-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground<br>Dozer Assist Scraper Grading-Outslope-Existing Ground | West Stockpile W-10<br>West Stockpile W-11                                     | -<br>-                 | 549  | -28.6%<br>-28.6%          | Cat D9T, SU Blade<br>Cat D9T, SU Blade   |
| 1301-B-a-Dz3<br>1302-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground Dozer Assist Scraper Grading-Outslope-Existing Ground    | Lambright Stockpile LB-1<br>Lambright Stockpile LB-2                           | -<br>-                 | 1,357<br>1,343                             | -28.6%<br>-28.6%          | Cat D9T, SU Blade<br>Cat D9T, SU Blade   |
| 1303-B-a-Dz3<br>1304-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground Dozer Assist Scraper Grading-Outslope-Existing Ground    | Lambright Stockpile LB-3<br>Lambright Stockpile LB-4                           | -                      | 1,066<br>1,428                             | -28.6%<br>-28.6%          | Cat D9T, SU Blade<br>Cat D9T, SU Blade   |
| 1305-B-a-Dz3<br>1306-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground Dozer Assist Scraper Grading-Outslope-Existing Ground    | Lambright Stockpile LB-5<br>Lambright Stockpile LB-6                           | -                      | 1,344<br>1,204                             | -28.6%<br>-28.6%          | Cat D9T, SU Blade<br>Cat D9T, SU Blade   |
| 1307-B-a-Dz3                                 | Dozer Assist Scraper Grading-Outslope-Existing Ground  | Lambright Stockpile LB-7(1)  | -                      | 476<br>320                                 | -28.6%<br>-28.6%          | Cat D9T, SU Blade  |
| 1308-B-a-Dz3<br>1309-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground Dozer Assist Scraper Grading-Outslope-Existing Ground    | Lambright Stockpile LB-7(2) Lambright Stockpile LB-8                           | -<br>-                 | 690  | -28.6%                    | Cat D9T, SU Blade<br>Cat D9T, SU Blade   |
| 1310-B-a-Dz3<br>1311-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground Dozer Assist Scraper Grading-Outslope-Existing Ground    | Lambright Stockpile LB-9<br>Lambright Stockpile LB-10                          | -                      | 904<br>1,363                               | -28.6%<br>-28.6%          | Cat D9T, SU Blade<br>Cat D9T, SU Blade   |
| 1312-B-a-Dz3<br>1313-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground Dozer Assist Scraper Grading-Outslope-Existing Ground    | Lambright Stockpile LB-11<br>Lambright Stockpile LB-12                         | -<br>-                 | 1,572<br>1,700                             | -28.6%<br>-28.6%          | Cat D9T, SU Blade<br>Cat D9T, SU Blade   |
| 1314-B-a-Dz3<br>1315-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground Dozer Assist Scraper Grading-Outslope-Existing Ground    | Lambright Stockpile LB-13<br>Lambright Stockpile LB-14                         | -<br>-                 | 1,311<br>1,110                             | -28.6%<br>-28.6%          | Cat D9T, SU Blade<br>Cat D9T, SU Blade   |
| 1101-A-a-Sc2<br>1102-A-a-Sc2                 | Grade-Outslope-Existing Ground<br>Grade-Outslope-Existing Ground   | South Stockpile S-1<br>South Stockpile S-2                                     | -                      | 4,809<br>5,418                             | 7.2%<br>8.4%              | Cat 657G<br>Cat 657G   |
| 1103-A-a-Sc2                                 | Grade-Outslope-Existing Ground   | South Stockpile S-3  | -<br>-                 | 2,633                                      | 7.6%                      | Cat 657G   |
| 1104-A-a-Sc2<br>1105-A-a-Sc2                 | Grade-Outslope-Existing Ground<br>Grade-Outslope-Existing Ground   | South Stockpile S-4<br>South Stockpile S-5                                     | -                      | 2,316<br>1,969                             | 12.7%<br>11.8%            | Cat 657G<br>Cat 657G   |
| 1106-A-a-Sc2<br>1107-A-a-Sc2                 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground  | South Stockpile S-6<br>South Stockpile S-7                                     | -<br>-                 | 1,927<br>1,927                             | 14.3%<br>14.3%            | Cat 657G<br>Cat 657G   |
| 1108-A-a-Sc2<br>1109-A-a-Sc2                 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground  | South Stockpile S-8<br>South Stockpile S-9(1)                                  | -<br>-                 | 1,761<br>479                               | 10.6%<br>7.5%             | Cat 657G<br>Cat 657G   |
| 1207-A-a-Sc2<br>1209-A-a-Sc2                 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground  | West Stockpile W-7  West Stockpile W-8(1)                                      | -<br>-                 | 3,238<br>3,238                             | 4.0%<br>4.0%              | Cat 657G<br>Cat 657G   |
| 1210-A-a-Sc2<br>1211-A-a-Sc2                 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground  | West Stockpile W-8(2) West Stockpile W-9                                       | -                      | 2,333<br>1,711                             | 4.0%<br>4.0%              | Cat 657G<br>Cat 657G   |
| 1212-A-a-Sc2                                 | Grade-Outslope-Existing Ground   | West Stockpile W-10  | -<br>-                 | 1,711                                      | 4.0%                      | Cat 657G   |
| 1213-A-a-Sc2<br>1301-A-a-Sc2                 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground  | West Stockpile W-11<br>Lambright Stockpile LB-1                                | -<br>-                 | 1,711<br>2,723                             | 4.0%<br>9.2%              | Cat 657G<br>Cat 657G   |
| 1302-A-a-Sc2<br>1303-A-a-Sc2                 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground  | Lambright Stockpile LB-2<br>Lambright Stockpile LB-3                           | -                      | 2,354<br>2,708                             | 9.5%<br>11.2%             | Cat 657G<br>Cat 657G   |
| 1304-A-a-Sc2<br>1305-A-a-Sc2                 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground  | Lambright Stockpile LB-4<br>Lambright Stockpile LB-5                           | -                      | 2,559<br>2,565                             | 14.9%<br>13.2%            | Cat 657G<br>Cat 657G   |
| 1306-A-a-Sc2<br>1307-A-a-Sc2                 | Grade-Outslope-Existing Ground<br>Grade-Outslope-Existing Ground   | Lambright Stockpile LB-6<br>Lambright Stockpile LB-7(1)                        | -<br>-                 | 2,565<br>1,631                             | 13.2%<br>10.2%            | Cat 657G<br>Cat 657G   |
| 1308-A-a-Sc2<br>1309-A-a-Sc2                 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground  | Lambright Stockpile LB-7(2)<br>Lambright Stockpile LB-8                        | -                      | 1,631<br>2,512                             | 10.2%<br>13.3%            | Cat 657G   |
| 1310-A-a-Sc2                                 | Grade-Outslope-Existing Ground   | Lambright Stockpile LB-9   | -<br>-                 | 2,900                                      | 12.2%                     | Cat 657G<br>Cat 657G   |
| 1311-A-a-Sc2<br>1312-A-a-Sc2                 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground  | Lambright Stockpile LB-10<br>Lambright Stockpile LB-11                         | -<br>-                 | 3,425<br>2,210                             | 10.5%<br>15.2%            | Cat 657G<br>Cat 657G   |
| 1313-A-a-Sc2<br>1314-A-a-Sc2                 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground  | Lambright Stockpile LB-12<br>Lambright Stockpile LB-13                         | -<br>-                 | 2,035<br>2,150                             | 15.4%<br>15.2%            | Cat 657G<br>Cat 657G   |
| 1315-A-a-Sc2<br>1110-A-a-Mg1                 | Grade-Outslope-Existing Ground Grade-Top-Existing Ground   | Lambright Stockpile LB-14<br>South Stockpile S-9(2)                            | -<br>-                 | 1,748<br>809                               | 15.4%<br>-1.0%            | Cat 657G<br>Cat 16M  |
| 1111-A-a-Mg1<br>1201-A-a-Dz2                 | Grade-Top-Existing Ground Grade-Outslope-Existing Ground   | South Stockpile S-9(3) West Stockpile W-1                                      | -<br>-                 | 648<br>837                                 | -1.0%<br>-28.6%           | Cat 16M<br>Cat D11T CD   |
| 1201-A-a-D22<br>1202-A-a-D22<br>1203-A-a-D22 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground  | West Stockpile W-2 West Stockpile W-3  | -                      | 773<br>255                                 | -28.6%<br>-28.6%          | Cat D111 CD Cat D11T CD Cat D11T CD  |
| 1204-A-a-Dz2                                 | Grade-Outslope-Existing Ground   | West Stockpile W-4   | -<br>-                 | 711  | -28.6%                    | Cat D11T CD  |
| 1205-A-a-Dz2<br>1206-A-a-Dz2                 | Grade-Outslope-Existing Ground<br>Grade-Outslope-Existing Ground   | West Stockpile W-5<br>West Stockpile W-6                                       | -                      | 696<br>718                                 | -28.6%<br>-28.6%          | Cat D11T CD<br>Cat D11T CD   |
| 1214-A-a-Dz2<br>1215-A-a-Dz2                 | Grade-Outslope-Existing Ground<br>Grade-Outslope-Existing Ground   | West Stockpile W-12<br>West Stockpile W-13(1)                                  | -<br>-                 | 670<br>213                                 | -28.6%<br>-28.6%          | Cat D11T CD<br>Cat D11T CD   |
| 1216-A-a-Dz2<br>1217-A-a-Dz2                 | Grade-Outslope-Existing Ground<br>Grade-Outslope-Existing Ground   | West Stockpile W-13(2)<br>West Stockpile W-14                                  | -<br>-                 | 429<br>456                                 | -28.6%<br>-28.6%          | Cat D11T CD<br>Cat D11T CD   |
| 1218-A-a-Dz2<br>1219-A-a-Mg1                 | Grade-Outslope-Existing Ground Grade-Top-Existing Ground   | West Stockpile W-15(1) West Stockpile W-15(2)                                  | <u>-</u><br>-          | 219<br>204                                 | -28.6%<br>-1.0%           | Cat D11T CD<br>Cat 16M   |
| 1220-A-a-Dz2                                 | Grade-Outslope-Existing Ground   | West Stockpile W-16(1)   | -<br>-                 | 248  | -28.6%                    | Cat D11T CD  |
| 1221-A-a-Mg1<br>1222-A-a-Mg1                 | Grade-Top-Existing Ground<br>Grade-Top-Existing Ground   | West Stockpile W-16(2) West Stockpile W-17(1)                                  | -<br>-                 | 131<br>747                                 | -1.0%<br>-1.0%            | Cat 16M<br>Cat 16M   |
| 1223-A-a-Mg1<br>1316-A-a-Mg1                 | Grade-Top-Existing Ground<br>Grade-Top-Existing Ground   | West Stockpile W-17(2)<br>Lambright Stockpile LB-19(1)                         | -<br>-                 | 531<br>843                                 | -1.0%<br>-1.0%            | Cat 16M<br>Cat 16M   |
| 1317-A-a-Mg1<br>1401-A-a-Dz2                 | Grade-Top-Existing Ground<br>Grade-Outslope-Existing Ground  | Lambright Stockpile LB-19(2) Southwest Lampbright SWL-15                       | -<br>-                 | 726<br>259                                 | -1.0%<br>-28.6%           | Cat 16M<br>Cat D11T CD   |
| 1402-A-a-Dz2<br>1403-A-a-Mg1                 | Grade-Outslope-Existing Ground Grade-Top-Existing Ground   | Southwest Lampbright SWL-16 Southwest Lampbright SWL-17                        | -                      | 616  | -28.6%<br>-1.0%           | Cat D11T CD<br>Cat 16M   |
| 1403-A-a-Mg1<br>1404-A-a-Dz2<br>1405-A-a-Dz2 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground  | Southwest Lampbright SWL-17(1)   | -                      | 388<br>450                                 | -28.6%<br>-28.6%          | Cat D11T CD  |
| 1406-A-a-Dz2                                 | Grade-Outslope-Existing Ground   | Southwest Lampbright SWL-17(2) Southwest Lampbright SWL-18                     | -                      | 450<br>406                                 | -28.6%                    | Cat D11T CD<br>Cat D11T CD   |
| 1601-A-a-Mg1<br>1602-A-a-Mg1                 | Grade-Top-Existing Ground Grade-Top-Existing Ground  | Northwest Stockpile NW-1(1)<br>Northwest Stockpile NW-1(2)                     | -<br>-                 | 416<br>420                                 | -1.0%<br>-1.0%            | Cat 16M<br>Cat 16M   |
| 1603-A-a-Dz2<br>1604-A-a-Mg1                 | Grade-Outslope-Existing Ground<br>Grade-Top-Existing Ground  | Northwest Stockpile NW-2(1)<br>Northwest Stockpile NW-2(2)                     | -                      | 81<br>66                                   | -28.6%<br>-1.0%           | Cat D11T CD<br>Cat 16M   |
| 1605-A-a-Mg1<br>1701-A-a-Mg1                 | Grade-Top-Existing Ground<br>Grade-Top-Existing Ground   | Northwest Stockpile NW-2(3)<br>LeeHill Stockpile LH-2                          | -<br>-                 | 66<br>319                                  | -1.0%<br>-1.0%            | Cat 16M<br>Cat 16M   |
| 1702-A-a-Mg1                                 | Grade-Top-Existing Ground  | LeeHill Stockpile LH-3   | -<br>-                 | 623  | -1.0%                     | Cat 16M  |
| 1800-A-a-Mg1<br>1901-A-a-Mg1                 | Grade-Entire Stockpile-Existing Ground Grade-Top-Existing Ground   | Northeast Stockpile North Stockpile N-1  | -                      | 679  | -1.0%<br>-1.0%            | Cat 16M<br>Cat 16M   |
| 1902-A-a-Mg1<br>1903-A-a-Mg1                 | Grade-Top-Existing Ground Grade-Top-Existing Ground  | North Stockpile N-2(1)<br>North Stockpile N-2(2)                               | -<br>-                 | 111<br>112                                 | -1.0%<br>-1.0%            | Cat 16M<br>Cat 16M   |
| 2001-A-a-Mg1<br>2002-A-a-Dz2                 | Grade-Top-Existing Ground Grade-Outslope-Existing Ground   | STS2 S-10<br>STS2 S-10(1)  | -                      | -<br>157                                   | -1.0%<br>-28.6%           | Cat 16M<br>Cat D11T CD   |
| 2003-A-a-Dz2<br>2101-A-a-Dz2                 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground  | STS2 S-10(2) Upper South US-1(1)   | -<br>-                 | 189<br>160                                 | -28.6%<br>-28.6%          | Cat D11T CD<br>Cat D11T CD   |
| 2101-A-a-D22<br>2102-A-a-Mg1<br>2201-A-a-D22 | Grade-Outslope-Existing Ground Grade-Top-Existing Ground Grade-Outslope-Existing Ground                        | Upper South US-1(2) 9 Waste Rock 9 WRS-1                                       | -                      | -<br>90                                    | -28.6%<br>-1.0%<br>-28.6% | Cat D111 CD<br>Cat 16M<br>Cat D11T CD  |
| 2202-A-a-Mg1                                 | Grade-Top-Existing Ground  | 9 Waste Rock 9 WRS-2   | -<br>-                 | -  | -1.0%                     | Cat 16M  |
| 2309-A-a-Dz2<br>2310-A-a-Dz2                 | Grade-Dam 15-Existing Ground<br>Grade-Dam 16-Existing Ground   | Dams and Reservoirs Dam 15 Dams and Reservoirs Dam 16                          | -                      | 100<br>100                                 | -1.0%<br>-1.0%            | Cat D11T CD<br>Cat D11T CD   |
| 2313-A-a-Dz2<br>2316-A-a-Dz2                 | Grade-Dam 20-Existing Ground<br>Grade-Reservoir 17-Existing Ground   | Dams and Reservoirs Dam 20<br>Dams and Reservoirs Reservoir 17                 | -                      | 100<br>100                                 | -1.0%<br>-1.0%            | Cat D11T CD<br>Cat D11T CD   |
|  |  |  |                        |  |                           |  |

Equipment

Destination Location 2 Total Haul/Push Distance (ft)<sup>1</sup> Grade (%)<sup>2,3</sup>

Description

Material Handling Plan Summary Sheet

All activities for the Chino RCE are listed on this sheet and carried through the succeeding worksheets of the RCE. The column labeled ID contains the codes for the facility location, activity, material and equipment used for that particular row of work. The description lists the activity, top or outslope (if applicable), and the material. The source location lists the stockplie name (or sub-area) for the location of the activity. If borrow material is involved, it is transported from a borrow stockplie to a destination stockplie. Blank cells indicate that that column is not relevant to a particular activity.

- 1 Haul/Push Distance based on Golder Take-Offs 1401129-004-MTO-RevG\_07\_Chino\_MTOs\_05SEP18.xlsx or measured as shown in calc set
  2 Weighted Average Haul Grades based on Golder Take-Offs 1401129-004-MTO-RevG\_07\_Chino\_MTOs\_05SEP18.xlsx or measured as shown in calc set
  3 Grade Factors from SOW

Source Location 1

|  | Description  | Source Location 1   | Destination Location 2   | Total Haul/Push Distance (ft) <sup>1</sup>   | Grade (%) <sup>2,3</sup>  | Equipment  |
|--|--|---|--|--|---|--|
| 2318-A-a-Dz2   | Grade-Fleming Pond-Existing Ground   | Dams and Reservoirs Fleming Pond  | -  | 100  | -1.0%   | Cat D11T CD  |
| 2320-A-a-Dz2   | Grade-Tailing Thickener 1-Existing Ground  | Dams and Reservoirs Tailing Thickener 1   | -  | 100  | -1.0%   | Cat D11T CD  |
| 2321-A-a-Dz2   | Grade-PLS Pond & Launder-Existing Ground   | Dams and Reservoirs PLS Pond & Launder  | -  | 100  | -1.0%   | Cat D11T CD<br>Cat D11T CD   |
| 2323-A-a-Dz2<br>2324-A-a-Dz2   | Grade-Raffinate Pond-Existing Ground Grade-Reservoir 2-Existing Ground   | Dams and Reservoirs Raffinate Pond Dams and Reservoirs Reservoir 2  | -<br>-   | 100<br>100   | -1.0%<br>-1.0%  | Cat D111 CD  |
| 2327-A-a-Dz2   | Grade-Reservoir 6-Existing Ground  | Dams and Reservoirs Reservoir 6   | -  | 100  | -1.0%   | Cat D11T CD  |
| 2328-A-a-Dz2   | Grade-Reservoir 7-Existing Ground  | Dams and Reservoirs Reservoir 7   | -  | 100  | -1.0%   | Cat D11T CD  |
| 2341-A-a-Dz2   | Grade-Elmo's Pond -Existing Ground   | Dams and Reservoirs Elmo's Pond   | -  | 100  | -1.0%   | Cat D11T CD  |
| 2342-A-a-Dz2<br>2343-A-a-Dz2   | Grade-Lower Lined Pond -Existing Ground  | Dams and Reservoirs Lower Lined Pond  | -  | 100  | -1.0%   | Cat D11T CD  |
| 2344-A-a-Dz2<br>2344-A-a-Dz2   | Grade-Upper Lined Pond -Existing Ground Grade-5900 PLS Sump -Existing Ground   | Dams and Reservoirs Upper Lined Pond Dams and Reservoirs 5900 PLS Sump  | -  | 100<br>100   | -1.0%<br>-1.0%  | Cat D11T CD<br>Cat D11T CD   |
| 2345-A-a-Dz2   | Grade-6300 PLS Booster Station -Existing Ground  | Dams and Reservoirs 6300 PLS Booster Station  | -<br>-   | 100  | -1.0%   | Cat D111 CD  |
| 2346-A-a-Dz2   | Grade-Lee Hill #2 Booster -Existing Ground   | Dams and Reservoirs Lee Hill #2 Booster   | -  | 100  | -1.0%   | Cat D11T CD  |
| 2514-A-a-Mg1   | Grade-Highway to Heaven Haul Road-Existing Ground  | Miscellaneous NMA Highway to Heaven Haul Road   | -  | -  | 0.0%  | Cat 16M  |
| 2600-A-a-Mg1   | Grade-200-Acre Unplanned Future Disturbance-Existing Ground  | Unplanned Disturbed Area  | -  | -  | 0.0%  | Cat 16M  |
| 3000-A-a-Mg1   | Grade-Entire Impoundment-Existing Ground   | Axiflo  | -  | 240  | 0.0%  | Cat 16M  |
| 3000-A-a-Dz2   | Grade-Entire Impoundment-Existing Ground   | Axiflo  | -  | 240  | 0.0%  | Cat D11T CD<br>Cat 16M   |
| 3100-A-a-Mg1<br>3200-A-a-Mg1   | Grade-Entire Impoundment-Existing Ground Grade-Entire Impoundment-Existing Ground  | Tailings Pond 6 Tailings Pond 7   | -  | -  | 0.0%<br>0.0%  | Cat 16M<br>Cat 16M   |
| 3308-A-a-Mg1   | Grade-Entire Impoundment-Existing Ground Grade-35 Acre Misc. Area-Existing Ground  | Miscellaneous SMA 35 Acre Misc. Area  | -  | -  | 0.0%  | Cat 16M<br>Cat 16M   |
| 1002-E-c-Rp1   | Rip-Top-Rough Graded Material  | Triangle Stockpile T-2  | -  | -  | -1.0%   | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 1110-E-c-Rp1   | Rip-Top-Rough Graded Material  | South Stockpile S-9(2)  | -  | 809  | -1.0%   | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 1111-E-c-Rp1   | Rip-Top-Rough Graded Material  | South Stockpile S-9(3)  | -  | 648  | -1.0%   | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 1219-E-c-Rp1   | Rip-Top-Rough Graded Material  | West Stockpile W-15(2)  | -  | 204  | -1.0%   | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 1221-E-c-Rp1   | Rip-Top-Rough Graded Material  | West Stockpile W-16(2)  | -  | 131  | -1.0%   | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 1222-E-c-Rp1   | Rip-Top-Rough Graded Material  | West Stockpile W-17(1)  | -  | 747  | -1.0%   | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 1223-E-c-Rp1<br>1316-E-c-Rp1   | Rip-Top-Rough Graded Material Rip-Top-Rough Graded Material  | West Stockpile W-17(2) Lambright Stockpile LB-19(1)   | -  | 531<br>843   | -1.0%<br>-1.0%  | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 1317-E-c-Rp1   | Rip-Top-Rough Graded Material  | Lambright Stockpile LB-19(1)  | -  | 726  | -1.0%   | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 1403-E-c-Rp1   | Rip-Top-Rough Graded Material  | Southwest Lampbright SWL-17   | -<br>-   | -  | -1.0%   | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 1500-E-c-Rp1   | Rip-Entire Stockpile-Rough Graded Material   | South and East In-Pit Stockpiles  | -  | -  | -1.0%   | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 1601-E-c-Rp1   | Rip-Top-Rough Graded Material  | Northwest Stockpile NW-1(1)   | -  | 416  | -1.0%   | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 1602-E-c-Rp1   | Rip-Top-Rough Graded Material  | Northwest Stockpile NW-1(2)   | -  | 420  | -1.0%   | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 1604-E-c-Rp1<br>1605-E-c-Rp1   | Rip-Top-Rough Graded Material Rip-Top-Rough Graded Material  | Northwest Stockpile NW-2(2) Northwest Stockpile NW-2(3)   | -  | 66<br>66   | -1.0%<br>-1.0%  | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 1701-E-c-Rp1   | Rip-Top-Rough Graded Material  | LeeHill Stockpile LH-2  | -<br>-   | 319  | -1.0%   | Cat D111 CD Multi-shank (w/ MSR-359H)  |
| 1702-E-c-Rp1   | Rip-Top-Rough Graded Material  | LeeHill Stockpile LH-3  | -  | 623  | -1.0%   | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 1800-E-c-Rp1   | Rip-Entire Stockpile-Rough Graded Material   | Northeast Stockpile   | -  | -  | -1.0%   | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 1901-E-c-Rp1   | Rip-Top-Rough Graded Material  | North Stockpile N-1   | -  | 679  | -1.0%   | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 1902-E-c-Rp1   | Rip-Top-Rough Graded Material  | North Stockpile N-2(1)  | -  | 111  | -1.0%   | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 1903-E-c-Rp1<br>2000-E-c-Rp1   | Rip-Top-Rough Graded Material Rip-Entire Stockpile-Rough Graded Material   | North Stockpile N-2(2)<br>STS2  | -  | 112  | -1.0%<br>0.0%   | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 2100-E-c-Rp1   | Rip-Entire Stockpile-Rough Graded Material   | Upper South   | -<br>-   | -  | 0.0%  | Cat D111 CD Multi-shank (w/ MSR-359H)  |
| 2202-E-c-Rp1   | Rip-Top-Rough Graded Material  | 9 Waste Rock 9 WRS-2  | -  | _  | -1.0%   | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 2309-E-c-Rp1   | Rip-Dam 15-Rough Graded Material   | Dams and Reservoirs Dam 15  | -  | 100  | -1.0%   | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 2310-E-c-Rp1   | Rip-Dam 16-Rough Graded Material   | Dams and Reservoirs Dam 16  | -  | 100.0  | -1.0%   | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 2313-E-c-Rp1   | Rip-Dam 20-Rough Graded Material   | Dams and Reservoirs Dam 20  | -  | 100  | -1.0%   | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 2316-E-c-Rp1<br>2318-E-c-Rp1   | Rip-Reservoir 17-Rough Graded Material Rip-Fleming Pond-Rough Graded Material  | Dams and Reservoirs Reservoir 17 Dams and Reservoirs Fleming Pond   | <del>-</del><br>-  | 100<br>100   | -1.0%<br>-1.0%  | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 2318-E-c-Rp1<br>2320-E-c-Rp1   | Rip-Fieming Pond-Rough Graded Material  Rip-Tailing Thickener 1-Rough Graded Material  | Dams and Reservoirs Fleming Pond  Dams and Reservoirs Tailing Thickener 1   | -  | 100  | -1.0%<br>-1.0%  | Cat D111 CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 2321-E-c-Rp1   | Rip-PLS Pond & Launder-Rough Graded Material   | Dams and Reservoirs PLS Pond & Launder  | -<br>-   | 100  | -1.0%   | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 2323-E-c-Rp1   | Rip-Raffinate Pond-Rough Graded Material   | Dams and Reservoirs Raffinate Pond  | -  | 100  | -1.0%   | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 2324-E-c-Rp1   | Rip-Reservoir 2-Rough Graded Material  | Dams and Reservoirs Reservoir 2   | -  | 100  | -1.0%   | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 2327-E-c-Rp1   | Rip-Reservoir 6-Rough Graded Material  | Dams and Reservoirs Reservoir 6   | -  | 100  | -1.0%   | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 2328-E-c-Rp1   | Rip-Reservoir 7-Rough Graded Material  | Dams and Reservoirs Reservoir 7   | -  | 100<br>100   | -1.0%   | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 2341-E-c-Rp1<br>2342-E-c-Rp1   | Rip-Elmo's Pond -Rough Graded Material Rip-Lower Lined Pond -Rough Graded Material   | Dams and Reservoirs Elmo's Pond Dams and Reservoirs Lower Lined Pond  | -  | 100  | -1.0%<br>-1.0%  | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 2343-E-c-Rp1   | Rip-Lower Lined Pond -Rough Graded Material  Rip-Upper Lined Pond -Rough Graded Material   | Dams and Reservoirs Upper Lined Pond  | -<br>-   | 100  | -1.0%   | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 2344-E-c-Rp1   | Rip-5900 PLS Sump -Rough Graded Material   | Dams and Reservoirs 5900 PLS Sump   | _  | 100  | -1.0%   | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 2345-E-c-Rp1   | Rip-6300 PLS Booster Station -Rough Graded Material  | Dams and Reservoirs 6300 PLS Booster Station  | -  | 100  | -1.0%   | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 2346-E-c-Rp1   | Rip-Lee Hill #2 Booster -Rough Graded Material   | Dams and Reservoirs Lee Hill #2 Booster   | -  | 100  | -1.0%   | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 2513-E-c-Rp1   | Rip-Chino part of Cobre Haul Road-Rough Graded Material  | Miscellaneous NMA Chino part of Cobre Haul Road   | -  | -  | 0.0%  | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 2514-E-c-Rp1   | Rip-Highway to Heaven Haul Road-Rough Graded Material  | Miscellaneous NMA Highway to Heaven Haul Road   | -  | -  | 0.0%  | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 2600-E-c-Rp1<br>3000-E-c-Rp1   | Rip-200-Acre Unplanned Future Disturbance-Rough Graded Material<br>Rip-Entire Impoundment-Rough Graded Material  | Unplanned Disturbed Area Axiflo   | -  | 240  | 0.0%<br>0.0%  | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 3100-E-c-Rp1   | Rip-Entire Impoundment-Rough Graded Material   | Tailings Pond 6   | -<br>-   | -  | 0.0%  | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 3200-E-c-Rp1   | Rip-Entire Impoundment-Rough Graded Material   | Tailings Pond 7   | -  | -  | 0.0%  | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 3301-E-c-Rp1   | Rip-Slag Pile Outslopes W side-Rough Graded Material   | Miscellaneous SMA Slag Pile Outslopes W side  | -  | -  | -28.6%  | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 3308-E-c-Rp1   | Rip-35 Acre Misc. Area-Rough Graded Material   | Miscellaneous SMA 35 Acre Misc. Area  | -  | -  | 0.0%  | Cat D11T CD Multi-shank (w/ MSR-359H)  |
| 1000-B-b-Dz2   | Dozer Assist-Cover   | Upper South   | Triangle Stockpile   | -  | 0.0%  | Cat D11T CD  |
| 1100-B-b-Dz2   | Dozer Assist-Cover   | Upper South & STS2  | South Stockpile  | -  | 0.0%<br>0.0%  | Cat D11T CD  |
| 1200-B-b-Dz2<br>1300-B-b-Dz2   | Dozer Assist-Cover Dozer Assist-Cover  | Upper South Upper South & White House   | West Stockpile<br>Lambright Stockpile  | -  | 0.0%  | Cat D11T CD<br>Cat D11T CD   |
| 1400-B-b-Dz2   | Dozer Assist-Cover   | Upper South   | Southwest Lampbright   | <u>-</u>   | 0.0%  | Cat D11T CD  |
| 1500-B-b-Dz2   | Dozer Assist-Cover   | Upper South   | South and East In-Pit Stockpiles   | -  | -1.0%   | Cat D11T CD  |
| 1600-B-b-Dz2   | Dozer Assist-Cover   | Upper South   | Northwest Stockpile  | -  | 0.0%  | Cat D11T CD  |
| 1700-B-b-Dz2   | Dozer Assist-Cover   | Upper South   | LeeHill Stockpile  | -  | -1.0%   | Cat D11T CD  |
| 1800-B-b-Dz2   | Dozer Assist-Cover   | Upper South   | Northeast Stockpile  | -  | -1.0%   | Cat D11T CD  |
| 1900-B-b-Dz2<br>2200-B-b-Dz2   | Dozer Assist-Cover Dozer Assist-Cover  | Upper South<br>STS2   | North Stockpile<br>9 Waste Rock  | -  | -1.0%<br>0.0%   | Cat D11T CD<br>Cat D11T CD   |
| 2309-B-b-Dz2   | Dozer Assist-Cover   | STS2  | Dam 15   | 100  | -1.0%   | Cat D111 CD  |
| 2310-B-b-Dz2   | Dozer Assist-Cover   | STS2  | Dam 16   | 100.0  | -1.0%   | Cat D11T CD  |
| 2313-B-b-Dz2   | Dozer Assist-Cover   | STS2  | Dam 20   | 100  | -1.0%   | Cat D11T CD  |
| 2316-B-b-Dz2   | Dozer Assist-Cover   | STS2  | Reservoir 17   | 100  | -1.0%   | Cat D11T CD  |
| 2318-B-b-Dz2   | Dozer Assist-Cover   | STS2  | Fleming Pond   | 100  | -1.0%   | Cat D11T CD  |
| 2320-B-b-Dz2   | Dozer Assist-Cover   | STS2<br>STS2  | Tailing Thickener 1  | 100  | -1.0%   | Cat D11T CD  |
| 2321-B-b-Dz2<br>2323-B-b-Dz2   | Dozer Assist-Cover Dozer Assist-Cover  | STS2  | PLS Pond & Launder<br>Raffinate Pond   | 100<br>100   | -1.0%<br>-1.0%  | Cat D11T CD<br>Cat D11T CD   |
| 2324-B-b-Dz2   | Dozer Assist-Cover   | STS2  | Reservoir 2  | 100  | -1.0%   | Cat D11T CD  |
| 2327-B-b-Dz2   | Dozer Assist-Cover   | STS2  | Reservoir 6  | 100  | -1.0%   | Cat D11T CD  |
| 2328-B-b-Dz2   | Dozer Assist-Cover   | STS2  | Reservoir 7  | 100  | -1.0%   | Cat D11T CD  |
| 2341-B-b-Dz2   | Dozer Assist-Cover   | STS2  | Elmo's Pond  | 100  | -1.0%   | Cat D11T CD  |
| 2342-B-b-Dz2   | Dozer Assist-Cover   | STS2  | Lower Lined Pond   | 100  | -1.0%   | Cat D11T CD  |
| 2343-B-b-Dz2<br>2344-B-b-Dz2   | Dozer Assist-Cover Dozer Assist-Cover  | STS2<br>STS2  | Upper Lined Pond<br>5900 PLS Sump  | 100<br>100   | -1.0%<br>-1.0%  | Cat D11T CD<br>Cat D11T CD   |
| 2345-B-b-Dz2   | Dozer Assist-Cover   | STS2  | 6300 PLS Booster Station   | 100  | -1.0%   | Cat D111 CD  |
| 2346-B-b-Dz2   | Dozer Assist-Cover   | STS2  | Lee Hill #2 Booster  | 100  |   |  |
| 2400-B-b-Dz2   | Dozer Assist-Cover   | STS2  | Ground Hog #5  | 100  | -1.0%   | Cat D11T CD  |
| 2512-B-b-Dz2   | Dozer Assist-Cover   | STS2  |  | 100  | -1.0%<br>0.0%   | Cat D11T CD<br>Cat D11T CD   |
| 2513-B-b-Dz2<br>2514-B-b-Dz2   | Dozer Assist-Cover<br>Dozer Assist-Cover   | STS2  | East Pit Access Disturbed Area   |  | -1.0%<br>0.0%<br>0.0%   | Cat D11T CD<br>Cat D11T CD   |
|  |  |   | Chino part of Cobre Haul Road  |  | -1.0%<br>0.0%<br>0.0%<br>0.0%   | Cat D11T CD<br>Cat D11T CD<br>Cat D11T CD  |
| 2515-R-h-D-2   |  | STS2  | Chino part of Cobre Haul Road<br>Highway to Heaven Haul Road   |  | -1.0%<br>0.0%<br>0.0%<br>0.0%<br>0.0%   | Cat D11T CD<br>Cat D11T CD<br>Cat D11T CD<br>Cat D11T CD   |
| 2515-B-b-Dz2<br>3307-B-b-Dz2   | Dozer Assist-Cover Dozer Assist-Cover Dozer Assist-Cover   |   | Chino part of Cobre Haul Road  |  | -1.0%<br>0.0%<br>0.0%<br>0.0%   | Cat D11T CD<br>Cat D11T CD<br>Cat D11T CD  |
| 3307-B-b-Dz2<br>2600-B-b-Dz2   | Dozer Assist-Cover<br>Dozer Assist-Cover<br>Dozer Assist-Cover   | STS2<br>STS2<br>West of Borrow E&H<br>Upper South   | Chino part of Cobre Haul Road<br>Highway to Heaven Haul Road<br>Disturbed Area Around Reservoir 5  | 100<br>-<br>-<br>-<br>-<br>-<br>-  | -1.0%<br>0.0%<br>0.0%<br>0.0%<br>0.0%<br>0.0%<br>0.0%   | Cat D11T CD  |
| 3307-B-b-Dz2<br>2600-B-b-Dz2<br>3000-B-b-Dz2   | Dozer Assist-Cover<br>Dozer Assist-Cover<br>Dozer Assist-Cover<br>Dozer Assist-Cover   | STS2<br>STS2<br>West of Borrow E&H<br>Upper South<br>Borrow Area F & North of Borrow Area F   | Chino part of Cobre Haul Road<br>Highway to Heaven Haul Road<br>Disturbed Area Around Reservoir 5<br>Filter Plant<br>Unplanned Disturbed Area<br>Axiflo  |  | -1.0%<br>0.0%<br>0.0%<br>0.0%<br>0.0%<br>0.0%<br>0.0%<br>0.0%   | Cat D11T CD  |
| 3307-B-b-Dz2<br>2600-B-b-Dz2<br>3000-B-b-Dz2<br>3100-B-b-Dz2   | Dozer Assist-Cover<br>Dozer Assist-Cover<br>Dozer Assist-Cover<br>Dozer Assist-Cover<br>Dozer Assist-Cover   | STS2<br>STS2<br>West of Borrow E&H<br>Upper South<br>Borrow Area F & North of Borrow Area F<br>Borrow Area F  | Chino part of Cobre Haul Road<br>Highway to Heaven Haul Road<br>Disturbed Area Around Reservoir 5<br>Filter Plant<br>Unplanned Disturbed Area<br>Axiflo<br>Tailings Pond 6   | 100<br>-<br>-<br>-<br>-<br>-<br>-  | -1.0%<br>0.0%<br>0.0%<br>0.0%<br>0.0%<br>0.0%<br>0.0%<br>0.0%   | Cat D11T CD  |
| 3307-B-b-Dz2<br>2600-B-b-Dz2<br>3000-B-b-Dz2<br>3100-B-b-Dz2<br>3200-B-b-Dz2   | Dozer Assist-Cover   | STS2<br>STS2<br>West of Borrow E&H<br>Upper South<br>Borrow Area F & North of Borrow Area F<br>Borrow Area F<br>West of Borrow E&H  | Chino part of Cobre Haul Road<br>Highway to Heaven Haul Road<br>Disturbed Area Around Reservoir 5<br>Filter Plant<br>Unplanned Disturbed Area<br>Axiflo<br>Tailings Pond 6<br>Tailings Pond 7  | 100<br>-<br>-<br>-<br>-<br>-<br>-  | -1.0%<br>0.0%<br>0.0%<br>0.0%<br>0.0%<br>0.0%<br>0.0%<br>0.0%   | Cat D11T CD  |
| 3307-B-b-Dz2<br>2600-B-b-Dz2<br>3000-B-b-Dz2<br>3100-B-b-Dz2<br>3200-B-b-Dz2<br>3301-B-b-Dz2   | Dozer Assist-Cover  | STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H   | Chino part of Cobre Haul Road<br>Highway to Heaven Haul Road<br>Disturbed Area Around Reservoir 5<br>Filter Plant<br>Unplanned Disturbed Area<br>Axiflo<br>Tailings Pond 6<br>Tailings Pond 7<br>Slag Pile Outslopes W side  | 100<br>-<br>-<br>-<br>-<br>-<br>-  | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD  |
| 3307-B-b-Dz2<br>2600-B-b-Dz2<br>3000-B-b-Dz2<br>3100-B-b-Dz2<br>3200-B-b-Dz2   | Dozer Assist-Cover   | STS2<br>STS2<br>West of Borrow E&H<br>Upper South<br>Borrow Area F & North of Borrow Area F<br>Borrow Area F<br>West of Borrow E&H  | Chino part of Cobre Haul Road<br>Highway to Heaven Haul Road<br>Disturbed Area Around Reservoir 5<br>Filter Plant<br>Unplanned Disturbed Area<br>Axiflo<br>Tailings Pond 6<br>Tailings Pond 7  | 100<br>-<br>-<br>-<br>-<br>-<br>-  | -1.0%<br>0.0%<br>0.0%<br>0.0%<br>0.0%<br>0.0%<br>0.0%<br>0.0%   | Cat D11T CD  |
| 3307-B-b-Dz2<br>2600-B-b-Dz2<br>3000-B-b-Dz2<br>3100-B-b-Dz2<br>3200-B-b-Dz2<br>3301-B-b-Dz2<br>3308-B-b-Dz2<br>1000-C-b-Sh1   | Dozer Assist-Cover Load-Cover Load-Cover  | STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South Upper South Upper South & STS2   | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile  | 100<br>-<br>-<br>-<br>-<br>-<br>-  | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Cat D1T CD Ca |
| 3307-B-b-Dz2<br>2600-B-b-Dz2<br>3000-B-b-Dz2<br>3100-B-b-Dz2<br>3200-B-b-Dz2<br>3301-B-D-Dz2<br>3308-B-b-Dz2<br>1000-C-b-Sh1<br>1100-C-b-Sh1<br>1200-C-b-Sh1   | Dozer Assist-Cover Lozer Assist-Cover Lozer Assist-Cover Lozer Lozer   | STS2 STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H Upper South Upper South & STS2 Upper South   | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile West Stockpile   | 100<br>-<br>-<br>-<br>-<br>-<br>-  | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Hitachi EX3600-5 Hitachi EX3600-5  |
| 3307-B-b-D22<br>2600-B-b-D22<br>3000-B-b-D22<br>3100-B-b-D22<br>3200-B-b-D22<br>3301-B-b-D22<br>3308-B-b-D22<br>1000-C-b-Sh1<br>1100-C-b-Sh1<br>1200-C-b-Sh1   | Dozer Assist-Cover Load-Cover Load-Cover Load-Cover Load-Cover Load-Cover Load-Cover   | STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South Upper South & STS2 Upper South Upper South Upper South   | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile West Stockpile Lambright Stockpile   | 100<br>-<br>-<br>-<br>-<br>-<br>-  | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Cat D1T CD Ca |
| 3307-B-b-Dz2<br>2600-B-b-Dz2<br>3000-B-b-Dz2<br>3100-B-b-Dz2<br>3200-B-b-Dz2<br>3301-B-b-Dz2<br>3308-B-b-Dz2<br>1000-C-b-Sh1<br>1200-C-b-Sh1<br>1300-C-b-Sh1<br>1400-C-b-Sh1   | Dozer Assist-Cover Load-Cover Load-Cover Load-Cover Load-Cover Load-Cover Load-Cover Load-Cover  | STS2 STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South Upper South & STS2 Upper South & White House Upper South  | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Taillings Pond 6 Taillings Pond 6 Taillings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile Lambright Stockpile Lambright Stockpile Southwest Lambright   | 100<br>-<br>-<br>-<br>-<br>-<br>-  | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Hitachi EX3600-5   |
| 3307-B-b-D22<br>2600-B-b-D22<br>3000-B-b-D22<br>3100-B-b-D22<br>3200-B-b-D22<br>3301-B-b-D22<br>3308-B-b-D22<br>1000-C-b-Sh1<br>1100-C-b-Sh1<br>1200-C-b-Sh1   | Dozer Assist-Cover Load-Cover Load-Cover Load-Cover Load-Cover Load-Cover Load-Cover   | STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South Upper South & STS2 Upper South Upper South Upper South   | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile West Stockpile Lambright Stockpile   | 100<br>-<br>-<br>-<br>-<br>-<br>-  | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Cat D1T CD Ca |
| 3307-B-b-Dz2<br>2600-B-b-Dz2<br>3000-B-b-Dz2<br>3100-B-b-Dz2<br>3200-B-b-Dz2<br>3301-B-b-Dz2<br>3308-B-b-Dz2<br>1000-C-b-Sh1<br>1200-C-b-Sh1<br>1300-C-b-Sh1<br>1500-C-b-Sh1<br>1600-C-b-Sh1<br>1700-C-b-Sh1   | Dozer Assist-Cover Load-Cover   | STS2 STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South Upper South & STS2 Upper South Upper South & White House Upper South Upper South Upper South Upper South Upper South  | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile Lambright Stockpile Lambright Stockpile Southwest Lampbright South and East In-Pit Stockpile Northwest Stockpile Leel-till Stockpile   | 100<br>-<br>-<br>-<br>-<br>-<br>-  | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Hitachi EX3600-5   |
| 3307-B-b-Dz2<br>2600-B-b-Dz2<br>3000-B-b-Dz2<br>3100-B-b-Dz2<br>3200-B-b-Dz2<br>3301-B-b-Dz2<br>3308-B-b-Dz2<br>1000-C-b-Sh1<br>1200-C-b-Sh1<br>1400-C-b-Sh1<br>1400-C-b-Sh1<br>1600-C-b-Sh1<br>1700-C-b-Sh1<br>1800-C-b-Sh1   | Dozer Assist-Cover Load-Cover  | STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South Upper South & STS2 Upper South | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile Lambright Stockpile Lambright Stockpile Southwest Lampbright South and East In-Pit Stockpile Northwest Stockpile LeeHill Stockpile Northeast Stockpile   | 100<br>-<br>-<br>-<br>-<br>-<br>-  | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Hitachi EX3600-5  |
| 3307-B-b-Dz2<br>2600-B-b-Dz2<br>3000-B-b-Dz2<br>3100-B-b-Dz2<br>3200-B-b-Dz2<br>3301-B-b-Dz2<br>3301-B-b-Dz2<br>1000-C-b-Sh1<br>1200-C-b-Sh1<br>1300-C-b-Sh1<br>1500-C-b-Sh1<br>1600-C-b-Sh1<br>1700-C-b-Sh1<br>1800-C-b-Sh1<br>1900-C-b-Sh1   | Dozer Assist-Cover Lozer Assist-Cover Lozer Assist-Cover Lozer Assist-Cover Lozer Assist-Cover Lozer   | STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South Upper South & STS2 Upper South | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile West Stockpile West Stockpile Lambright Stockpile Southwest Lampbright South and East In-Pit Stockpile Northwest Stockpile LeeHill Stockpile Northwest Stockpile Northwest Stockpile Northeast Stockpile Northeast Stockpile   | 100<br>-<br>-<br>-<br>-<br>-<br>-  | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Cat D1T CD Ca |
| 3307-B-b-Dz2<br>2600-B-b-Dz2<br>3000-B-b-Dz2<br>3100-B-b-Dz2<br>3200-B-b-Dz2<br>3301-B-b-Dz2<br>3308-B-b-Dz2<br>1000-C-b-Sh1<br>1200-C-b-Sh1<br>1400-C-b-Sh1<br>1500-C-b-Sh1<br>1600-C-b-Sh1<br>1800-C-b-Sh1<br>1800-C-b-Sh1<br>1200-C-b-Sh1<br>1200-C-b-Sh1<br>1200-C-b-Sh1   | Dozer Assist-Cover Load-Cover   | STS2 STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South Upper South & STS2 Upper South & White House Upper South STS2   | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile West Stockpile Lambright Stockpile Southwest Lampbright South and East In-Pit Stockpile Northwest Stockpile Leel-ill Stockpile Northwest Stockpile Northeast Stockpile Northeast Stockpile Northeast Stockpile Northeast Stockpile North Stockpile North Stockpile 9 Waste Rock  | 100<br>-<br>-<br>-<br>-<br>-<br>240<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>- | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Hitachi EX3600-5   |
| 3307-B-b-Dz2<br>2600-B-b-Dz2<br>3000-B-b-Dz2<br>3100-B-b-Dz2<br>3200-B-b-Dz2<br>3301-B-b-Dz2<br>3301-B-b-Dz2<br>1000-C-b-Sh1<br>1200-C-b-Sh1<br>1300-C-b-Sh1<br>1500-C-b-Sh1<br>1600-C-b-Sh1<br>1700-C-b-Sh1<br>1800-C-b-Sh1<br>1900-C-b-Sh1   | Dozer Assist-Cover Load-Cover  | STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South Upper South Upper South & STS2 Upper South STS2 STS2   | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile West Stockpile Lambright Stockpile Southwest Lampbright South and East In-Pit Stockpile Northwest Stockpile LeeHill Stockpile Northwest Stockpile Northwest Stockpile Northeast Stockpile Northeast Stockpile North Stockpile North Stockpile South and East In-Pit Stockpile North Stockpile North Stockpile North Stockpile South Stockpile North Stockpile North Stockpile North Stockpile South Stockpile North Stockpile South  | 100<br>-<br>-<br>-<br>-<br>240<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-      | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Cat D1T CD Ca |
| 3307-B-b-Dz2 2600-B-b-Dz2 3000-B-b-Dz2 3100-B-b-Dz2 3200-B-b-Dz2 3301-B-b-Dz2 3308-B-b-Dz2 1000-C-b-Sh1 1100-C-b-Sh1 1400-C-b-Sh1 1500-C-b-Sh1 1600-C-b-Sh1 1700-C-b-Sh1 1700-C-b-Sh1 1200-C-b-Sh1 1200-C-b-Sh1 1200-C-b-Sh1   | Dozer Assist-Cover Load-Cover   | STS2 STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South Upper South & STS2 Upper South & White House Upper South STS2   | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile West Stockpile Lambright Stockpile Southwest Lampbright South and East In-Pit Stockpile Northwest Stockpile Leel-ill Stockpile Northwest Stockpile Northeast Stockpile Northeast Stockpile Northeast Stockpile Northeast Stockpile North Stockpile North Stockpile 9 Waste Rock  | 100<br>-<br>-<br>-<br>-<br>-<br>240<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>- | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Cat D1 |
| 3307-B-b-Dz2 2600-B-b-Dz2 3000-B-b-Dz2 3100-B-b-Dz2 3200-B-b-Dz2 3301-B-b-Dz2 3308-B-b-Dz2 3308-B-b-Dz2 1000-C-b-Sh1 1200-C-b-Sh1 1400-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1700-C-b-Sh1 1700-C-b-Sh1 1200-C-b-Sh1 2200-C-b-Sh1 2310-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1  | Dozer Assist-Cover Load-Cover  | STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South Upper South Upper South & STS2 Upper South STS2 STS2 STS2 STS2 STS2  | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile West Stockpile Unbright Stockpile Southwest Lampbright South and East In-Pit Stockpile Southwest Lampbright South and East In-Pit Stockpile Northwest Stockpile Northwest Stockpile Northeast Stockpile Northeast Stockpile 9 Waste Rock Dam 15 Dam 16 Dam 20 Reservoir 17   | 100 240  | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Cat D1 |
| 3307-B-b-Dz2 2600-B-b-Dz2 3000-B-b-Dz2 3100-B-b-Dz2 3200-B-b-Dz2 3200-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Dz2 1000-C-b-Sh1 1100-C-b-Sh1 1200-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 200-C-b-Sh1 200-C-b-Sh1 200-C-b-Sh1 200-C-b-Sh1 200-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1  | Dozer Assist-Cover Lozer Assist- | STS2 STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South Upper South & STS2 Upper South & White House Upper South STS2 STS2 STS2 STS2 STS2 STS2 STS2   | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile West Stockpile Lambright Stockpile Lambright Stockpile Southwest Lampbright South and East In-Pit Stockpile LeeHill Stockpile Northeast Stockpile North Stockpile South and East In-Pit Stockpile Northeast Stockpile Northeast Stockpile Northeast Stockpile North Stockpile Dam 15 Dam 16 Dam 20 Reservoir 17 Fleming Pond   | 100 240  | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Hitachi EX3600-5  |
| 3307-B-b-Dz2 2600-B-b-Dz2 3000-B-b-Dz2 3100-B-b-Dz2 3100-B-b-Dz2 3200-B-b-Dz2 3301-B-b-Dz2 3308-B-b-Dz2 1000-C-b-Sh1 1200-C-b-Sh1 1200-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1600-C-b-Sh1 1700-C-b-Sh1 1200-C-b-Sh1 2309-C-b-Sh1 2310-C-b-Sh1 2313-C-b-Sh1 2318-C-b-Sh1 2318-C-b-Sh1 2318-C-b-Sh1  | Dozer Assist-Cover Load-Cover   | STS2 STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South STS2 Upper South Upper South STS2 STS2 STS2 STS2 STS2 STS2 STS2 STS   | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile West Stockpile Lambright Stockpile Southwest Lampbright South and East In-Pit Stockpile Northwest Stockpile LeeHill Stockpile Northeast Stockpile Northeast Stockpile Northeast Stockpile Northeast Stockpile Northeast Stockpile Northeast Stockpile North Stockpile North Stockpile 9 Waste Rock Dam 15 Dam 16 Dam 20 Reservoir 17 Fleming Pond Tailing Thickener 1  | 100 240  | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Hitachi EX3600-5  |
| 3307-B-b-Dz2 2600-B-b-Dz2 3000-B-b-Dz2 3100-B-b-Dz2 3200-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Dz2 1000-C-b-Sh1 1200-C-b-Sh1 1400-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1600-C-b-Sh1 200-C-b-Sh1 200-C-b-Sh1 200-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2318-C-b-Sh1 2318-C-b-Sh1 2318-C-b-Sh1  | Dozer Assist-Cover Load-Cover  | STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South Upper South & STS2 Upper South STS2 STS2 STS2 STS2 STS2 STS2 STS2 STS  | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile West Stockpile West Stockpile Southwest Lampbright Stockpile Southwest Lampbright South and East In-Pit Stockpile Northwest Stockpile Northwest Stockpile Northseast Stockpile Northseast Stockpile Northseast Stockpile North Stockpile North Stockpile North Stockpile 9 Waste Rock Dam 15 Dam 16 Dam 20 Reservoir 17 Fleming Pond Tailing Thickener 1 PLS Pond & Launder  | 100  | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Cat D1T CD Cat D1T CD Cat D1T  |
| 3307-B-b-Dz2 2600-B-b-Dz2 3000-B-b-Dz2 3100-B-b-Dz2 3100-B-b-Dz2 3200-B-b-Dz2 3301-B-b-Dz2 3308-B-b-Dz2 1000-C-b-Sh1 1100-C-b-Sh1 1200-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 200-C-b-Sh1 200-C-b-Sh1 200-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2321-C-b-Sh1   | Dozer Assist-Cover Lozer Assist- | STS2 STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South Upper South & STS2 Upper South & STS2 Upper South STS2 STS2 STS2 STS2 STS2 STS2 STS2 STS  | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile West Stockpile Lambright Stockpile Lambright Stockpile Lambright Stockpile LeeHill Stockpile Northeast Nor | 100 240  | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Hitachi EX3600-5   |
| 3307-B-b-Dz2 2600-B-b-Dz2 3000-B-b-Dz2 3100-B-b-Dz2 3200-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Dz2 1000-C-b-Sh1 1200-C-b-Sh1 1400-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1600-C-b-Sh1 200-C-b-Sh1 200-C-b-Sh1 200-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2318-C-b-Sh1 2318-C-b-Sh1 2318-C-b-Sh1  | Dozer Assist-Cover Load-Cover  | STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South Upper South & STS2 Upper South STS2 STS2 STS2 STS2 STS2 STS2 STS2 STS  | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile West Stockpile West Stockpile Southwest Lampbright Stockpile Southwest Lampbright South and East In-Pit Stockpile Northwest Stockpile Northwest Stockpile Northseast Stockpile Northseast Stockpile Northseast Stockpile North Stockpile North Stockpile North Stockpile 9 Waste Rock Dam 15 Dam 16 Dam 20 Reservoir 17 Fleming Pond Tailing Thickener 1 PLS Pond & Launder  | 100  | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Cat D1T CD Cat D1T CD Cat D1T  |
| 3307-B-b-Dz2 2600-B-b-Dz2 3000-B-b-Dz2 3100-B-b-Dz2 3100-B-b-Dz2 3200-B-b-Dz2 3301-B-b-Dz2 3308-B-b-Dz2 1000-C-b-Sh1 1200-C-b-Sh1 1200-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 200-C-b-Sh1 200-C-b-Sh1 200-C-b-Sh1 200-C-b-Sh1 200-C-b-Sh1 200-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2321-C-b-Sh1 2322-C-b-Sh1 2323-C-b-Sh1 2323-C-b-Sh1 2323-C-b-Sh1 2323-C-b-Sh1 2323-C-b-Sh1 2323-C-b-Sh1   | Dozer Assist-Cover Load-Cover  | STS2 STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South Upper South & STS2 Upper South & STS2 Upper South Upper South & White House Upper South Upper South Upper South Upper South Upper South South Upper South Upper South Upper South Upper South STS2 STS2 STS2 STS2 STS2 STS2 STS2 STS  | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile West Stockpile Lambright Stockpile Lambright Stockpile Lambright Stockpile LeeHill Stockpile Northeast Stockpile 1 Span 16 Dam 20 Reservoir 17 Fleming Pond Tailing Thickener 1 PLS Pond & Launder Raffinate Pond Reservoir 2 Reservoir 6 Reservoir 7  | 100 240  | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Hitachi EX3600-5  |
| 3307-B-b-Dz2 2600-B-b-Dz2 3000-B-b-Dz2 3100-B-b-Dz2 3100-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Dz2 3308-B-b-Dz2 3308-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Dz2 3301-C-b-Sh1 1200-C-b-Sh1 1200-C-b-Sh1 2200-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2323-C-b-Sh1   | Dozer Assist-Cover Load-Cover   | STS2 STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South STS2 STS2 STS2 STS2 STS2 STS2 STS2 STS  | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile West Stockpile Lambright Stockpile Lambright Stockpile Southwest Lampbright South and East In-Pit Stockpile Northwest Stockpile Leel-Ill Stockpile Northeast Stockpile Northeast Stockpile 1 South and East In-Pit Stockpile Northeast Stockpile Northeast Stockpile Northeast Stockpile 1 Stockpile 1 Stockpile 1 Stockpile 1 Stockpile 1 Stockpile 2 Waste Rock Dam 15 Dam 16 Dam 20 Reservoir 17 Fleming Pond Tailing Thickener 1 PLS Pond & Launder Raffinate Pond Reservoir 2 Reservoir 6 Reservoir 7 Elmo's Pond   | 100 240 240  | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Hitachi EX3600-5   |
| 3307-B-b-Dz2 2600-B-b-Dz2 3000-B-b-Dz2 3100-B-b-Dz2 3100-B-b-Dz2 3200-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Dz2 1000-C-b-Sh1 1200-C-b-Sh1 1400-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1600-C-b-Sh1 1600-C-b-Sh1 200-C-b-Sh1 200-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2323-C-b-Sh1 2324-C-b-Sh1 2328-C-b-Sh1 2328-C-b-Sh1 2328-C-b-Sh1   | Dozer Assist-Cover Load-Cover   | STS2 STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South Upper South & STS2 Upper South & Upper South Upper South & White House Upper South STS2 STS2 STS2 STS2 STS2 STS2 STS2 STS   | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile West Stockpile West Stockpile South Stockpile Southwest Lampbright South and East In-Pit Stockpile Northwest Stockpile Northwest Stockpile Northwest Stockpile Norths Stockpile North Stockpile North Stockpile North Stockpile North Stockpile 9 Waste Rock Dam 15 Dam 16 Dam 20 Reservoir 17 Fleming Pond Tailing Thickener 1 PLS Pond & Launder Raffinate Pond Reservoir 2 Reservoir 6 Reservoir 7 Elmo's Pond Lower Lined Pond Lower Lined Pond  | 100  | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Cat D1 |
| 3307-B-b-Dz2 2600-B-b-Dz2 3000-B-b-Dz2 3100-B-b-Dz2 3100-B-b-Dz2 3200-B-b-Dz2 3301-B-b-Dz2 3308-B-b-Dz2 1000-C-b-Sh1 1200-C-b-Sh1 1200-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 200-C-b-Sh1 200-C-b-Sh1 200-C-b-Sh1 200-C-b-Sh1 200-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2324-C-b-Sh1   | Dozer Assist-Cover Load-Cover   | STS2 STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South Upper South & STS2 Upper South & STS2 Upper South & White House Upper South & White House Upper South Upper South Upper South Upper South Upper South STS2 STS2 STS2 STS2 STS2 STS2 STS2 STS  | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile West Stockpile Lambright Stockpile Lambright Stockpile Southwest Lampbright South and East In-Pit Stockpile Northeast Stockpile South North Stockpile Northeast Stockpile Northeast Stockpile Stockp | 100 240  | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Cat D1 |
| 3307-B-b-Dz2 2600-B-b-Dz2 3000-B-b-Dz2 3100-B-b-Dz2 3200-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Dz2 3308-B-b-Dz2 1000-C-b-Sh1 1200-C-b-Sh1 1400-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 200-C-b-Sh1 200-C-b-Sh1 200-C-b-Sh1 2200-C-b-Sh1 2310-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2323-C-b-Sh1 2323-C-b-Sh1 2323-C-b-Sh1 2323-C-b-Sh1 2323-C-b-Sh1 2324-C-b-Sh1  | Dozer Assist-Cover Load-Cover   | STS2 STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South STS2 STS2 STS2 STS2 STS2 STS2 STS2 STS  | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile West Stockpile Lambright Stockpile Southwest Lampbright South and East In-Pit Stockpile Northwest Stockpile Northwest Stockpile Northwest Stockpile Norths Stockpile Norths Stockpile North Stockpile North Stockpile 9 Waste Rock Dam 15 Dam 16 Dam 20 Reservoir 17 Fleming Pond Tailing Thickener 1 PLS Pond & Launder Raffinate Pond Reservoir 2 Reservoir 6 Reservoir 7 Elmo's Pond Lower Lined Pond Upper Lined Pond 15900 PLS Sump   | 100 240  | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Cat D1TC Cat D1TT CD Cat D1TT  |
| 3307-B-b-Dz2 2600-B-b-Dz2 3000-B-b-Dz2 3100-B-b-Dz2 3100-B-b-Dz2 3200-B-b-Dz2 3301-B-b-Dz2 3308-B-b-Dz2 1000-C-b-Sh1 1200-C-b-Sh1 1200-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 200-C-b-Sh1 200-C-b-Sh1 200-C-b-Sh1 200-C-b-Sh1 200-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2324-C-b-Sh1   | Dozer Assist-Cover Load-Cover   | STS2 STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South Upper South & STS2 Upper South & STS2 Upper South & White House Upper South & White House Upper South Upper South Upper South Upper South Upper South STS2 STS2 STS2 STS2 STS2 STS2 STS2 STS  | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile West Stockpile Lambright Stockpile Lambright Stockpile Southwest Lampbright South and East In-Pit Stockpile Northeast Stockpile South North Stockpile Northeast Stockpile Northeast Stockpile Stockp | 100 240  | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Cat D1 |
| 3307-B-b-Dz2 2600-B-b-Dz2 3000-B-b-Dz2 3100-B-b-Dz2 3200-B-b-Dz2 3200-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Dz2 1000-C-b-Sh1 1200-C-b-Sh1 1200-C-b-Sh1 1400-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1200-C-b-Sh1 2300-C-b-Sh1 2313-C-b-Sh1 231-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2314-C-b-Sh1 2314-C-b-Sh1 2314-C-b-Sh1 2314-C-b-Sh1 2314-C-b-Sh1 2314-C-b-Sh1 2314-C-b-Sh1 2314-C-b-Sh1   | Dozer Assist-Cover Load-Cover   | STS2 STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South Upper South & STS2 Upper South STS2 STS2 STS2 STS2 STS2 STS2 STS2 STS   | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile West Stockpile West Stockpile Southwest Lambright Stockpile Southwest Lambright Stockpile Northwest Stockpile Northwest Stockpile Northwest Stockpile Northwest Stockpile Norths Stockpile Norths Stockpile Northeast Stockpile Northeast Stockpile 15 Dam 16 Dam 20 Reservoir 17 Fleming Pond Tailing Thickener 1 PLS Pond & Launder Raffinate Pond Reservoir 2 Reservoir 6 Reservoir 7 Elmo's Pond Lower Lined Pond Upper Lined Pond 5900 PLS Sump 6300 PLS Booster Station Lee Hill #2 Booster Ground Hog #5  | 100 240  | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Cat D1 |
| 3307-B-b-Dz2 2600-B-b-Dz2 3000-B-b-Dz2 3100-B-b-Dz2 3100-B-b-Dz2 3200-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Dz2 1000-C-b-Sh1 1200-C-b-Sh1 1200-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 200-C-b-Sh1 200-C-b-Sh1 2303-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2323-C-b-Sh1 2323-C-b-Sh1 2323-C-b-Sh1 2324-C-b-Sh1 2345-C-b-Sh1 2346-C-b-Sh1  | Dozer Assist-Cover Load-Cover   | STS2 STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South Upper South & STS2 Upper South & STS2 Upper South Upper South & White House Upper South STS2 STS2 STS2 STS2 STS2 STS2 STS2 STS  | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile West Stockpile Lambright Stockpile Southwest Lampbright South and East In-Pit Stockpile Northwest Stockpile LeeHill Stockpile Northwest Stockpile Northeast Stockpile Northeast Stockpile Northeast Stockpile North Stockpile North Stockpile North Stockpile North Stockpile North Stockpile 19 Waste Rock Dam 15 Dam 16 Dam 20 Reservoir 17 Fleming Pond Tailing Thickener 1 PLS Pond & Launder Raffinate Pond Reservoir 2 Reservoir 6 Reservoir 7 Elmo's Pond Lower Lined Pond Upper Lined Pond Upper Lined Pond 1900 PLS Booster Station Lee Hill #2 Booster Ground Hog #5 East Pit Access Disturbed Area  | 100 240  | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Cat D1 |
| 3307-B-b-Dz2 2600-B-b-Dz2 3000-B-b-Dz2 3100-B-b-Dz2 3100-B-b-Dz2 3200-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Sh1 1200-C-b-Sh1 1200-C-b-Sh1 1200-C-b-Sh1 1200-C-b-Sh1 1200-C-b-Sh1 12313-C-b-Sh1 12313-C-b-Sh1 12313-C-b-Sh1 12313-C-b-Sh1 12321-C-b-Sh1 12341-C-b-Sh1 12401-C-b-Sh1 12401-C-b-Sh1 12401-C-b-Sh1 12401-C-b-Sh1 12401-C-b-Sh1 12401-C-b-Sh1  | Dozer Assist-Cover Load-Cover   | STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South Upper South Upper South & STS2 Upper South STS2 STS2 STS2 STS2 STS2 STS2 STS2 STS  | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile West Stockpile Lambright Stockpile Lambright Stockpile Southwest Lampbright South and East In-Pit Stockpile Northwest Stockpile Leel-Ill Stockpile Northwest Stockpile Northwest Stockpile North Stockpile North Stockpile 9 Waste Rock Dam 15 Dam 16 Dam 20 Reservoir 17 Fleming Pond Tailing Thickener 1 PLS Pond & Launder Raffinate Pond Reservoir 2 Reservoir 6 Reservoir 6 Reservoir 7 Elmo's Pond Lower Lined Pond 5900 PLS Booster Station Lee Hill #Z Booster Ground Hog #5 East Pit Access Disturbed Area Chino part of Cobre Haul Road  | 100 240  | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Cat D1 |
| 3307-B-b-Dz2 2600-B-b-Dz2 3000-B-b-Dz2 3100-B-b-Dz2 3100-B-b-Dz2 3200-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Dz2 1000-C-b-Sh1 1200-C-b-Sh1 1200-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 200-C-b-Sh1 200-C-b-Sh1 200-C-b-Sh1 2313-C-b-Sh1  | Dozer Assist-Cover Load-Cover   | STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South Upper South & STS2 Upper South & STS2 Upper South STS2 STS2 STS2 STS2 STS2 STS2 STS2 STS   | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile West Stockpile West Stockpile Southwest Lambright Stockpile Southwest Lambright Stockpile Southwest Stockpile Northwest Stockpile Northwest Stockpile Northwest Stockpile Northwest Stockpile Norths Stockpile Norths Stockpile North Stockpile South March Stockpile North Stockpile North Stockpile South March Stockpile North Stockpile North Stockpile South March Stockpile North Stockpile North Stockpile South Stockpile North Stockpile South Stockpile North Stockpile No | 100  | -1.0% | Cat D11T CD Cat D1 |
| 3307-B-b-Dz2 2600-B-b-Dz2 3000-B-b-Dz2 3100-B-b-Dz2 3100-B-b-Dz2 3200-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Dz2 3308-B-b-Dz2 1000-C-b-Sh1 1200-C-b-Sh1 1200-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1600-C-b-Sh1 1200-C-b-Sh1 2309-C-b-Sh1 2309-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2324-C-b-Sh1 2325-C-b-Sh1 2513-C-b-Sh1  | Dozer Assist-Cover Load-Cover   | STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South Upper South & STS2 Upper South & STS2 Upper South STS2 STS2 STS2 STS2 STS2 STS2 STS2 STS   | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile West Stockpile Lambright Stockpile Lambright Stockpile Southwest Lampbright South and East In-Pit Stockpile Northwest Stockpile Leel-Ill Stockpile Northwest Stockpile Northwest Stockpile North Stockpile North Stockpile 9 Waste Rock Dam 15 Dam 16 Dam 20 Reservoir 17 Fleming Pond Tailing Thickener 1 PLS Pond & Launder Raffinate Pond Reservoir 2 Reservoir 6 Reservoir 6 Reservoir 7 Elmo's Pond Lower Lined Pond 5900 PLS Booster Station Lee Hill #Z Booster Ground Hog #5 East Pit Access Disturbed Area Chino part of Cobre Haul Road  | 100  | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Cat D1 |
| 3307-B-b-Dz2 2600-B-b-Dz2 3000-B-b-Dz2 3100-B-b-Dz2 3100-B-b-Dz2 3200-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Dz2 1000-C-b-Sh1 1200-C-b-Sh1 1200-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 200-C-b-Sh1 200-C-b-Sh1 200-C-b-Sh1 2313-C-b-Sh1  | Dozer Assist-Cover Load-Cover   | STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South Upper South & STS2 Upper South & STS2 Upper South STS2 STS2 STS2 STS2 STS2 STS2 STS2 STS   | Chino part of Cobre Haul Road Highway to Heaven Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile West Stockpile Lambright Stockpile Lambright Stockpile Southwest Lampbright South and East In-Pit Stockpile Northwest Stockpile Northwest Stockpile Northwest Stockpile Northeast Stockpile Northeast Stockpile Northeast Stockpile Northeast Stockpile North Stockpile 9 Waste Rock Dam 15 Dam 16 Dam 20 Reservoir 17 Fleming Pond Tailing Thickener 1 PLS Pond & Launder Raffinate Pond Reservoir 2 Reservoir 6 Reservoir 7 Elmo's Pond Lower Lined Pond Upper Lined Pond 5900 PLS Sump 6300 PLS Booster Station Lee Hill #2 Booster Ground Hog #5 East Pit Access Disturbed Area Chino part of Cobre Haul Road Disturbed Area Around Reservoir 5 Reservoir 5 Cast Pit Access Disturbed Area Chino part of Cobre Haul Road Disturbed Area Around Reservoir 5   | 100  | -1.0% | Cat D11T CD Cat D1 |
| 3307-B-b-Dz2 2600-B-b-Dz2 3000-B-b-Dz2 3100-B-b-Dz2 3100-B-b-Dz2 3100-B-b-Dz2 3200-B-b-Dz2 3301-B-b-Dz2 3308-B-b-Dz2 1000-C-b-Sh1 1200-C-b-Sh1 1200-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1200-C-b-Sh1 1200-C-b-Sh1 1200-C-b-Sh1 1200-C-b-Sh1 1200-C-b-Sh1 1200-C-b-Sh1 1201-C-b-Sh1 12313-C-b-Sh1 12313-C-b-Sh1 12313-C-b-Sh1 12313-C-b-Sh1 12313-C-b-Sh1 12321-C-b-Sh1   | Dozer Assist-Cover Load-Cover  | STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South STS2 STS2 STS2 STS2 STS2 STS2 STS2 STS   | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile West Stockpile Lambright Stockpile Lambright Stockpile Southwest Lampbright South and East In-Pit Stockpile Northwest Stockpile Northwest Stockpile Northwest Stockpile Northwest Stockpile North Stockpile North Stockpile North Stockpile North Stockpile 9 Waste Rock Dam 15 Dam 16 Dam 20 Reservoir 17 Fleming Pond Tailing Thickener 1 PLS Pond & Launder Raffinate Pond Reservoir 2 Reservoir 2 Reservoir 6 Reservoir 7 Elmo's Pond Lower Lined Pond Upper Lined Pond 5900 PLS Sump 6300 PLS Booster Ground Hog #5 East Pit Access Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo  | 100  | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Cat D1 |
| 3307-B-b-Dz2 2600-B-b-Dz2 3000-B-b-Dz2 3100-B-b-Dz2 3200-B-b-Dz2 3200-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Dz2 1000-C-b-Sh1 1200-C-b-Sh1 1400-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1200-C-b-Sh1 2200-C-b-Sh1 2310-C-b-Sh1 2310-C-b-Sh1 2313-C-b-Sh1  | Dozer Assist-Cover Load-Cover   | STS2 STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South STS2 STS2 STS2 STS2 STS2 STS2 STS2 STS  | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile West Stockpile Lambright Stockpile Lambright Stockpile Southwest Lampbright South and East In-Pit Stockpile Northwest Stockpile Northwest Stockpile Northwest Stockpile Norths Stockpile Norths Stockpile Northeast Stockpile North Stockpile 9 Waste Rock Dam 15 Dam 16 Dam 20 Reservoir 17 Fleming Pond Tailing Thickener 1 PLS Pond & Launder Raffinate Pond Reservoir 2 Reservoir 2 Reservoir 6 Reservoir 7 Elmo's Pond Lower Lined Pond Upper Lined Pond Upper Lined Pond Upper Lined Pond S900 PLS Bump 6300 PLS Booster Station Lee Hill #2 Booster Ground Hog #5 East Pit Access Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6  | 100  | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Cat D1T CD Cat D1T |
| 3307-B-b-Dz2 2600-B-b-Dz2 3000-B-b-Dz2 3100-B-b-Dz2 3100-B-b-Dz2 3200-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Dz2 1000-C-b-Sh1 1200-C-b-Sh1 1200-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1600-C-b-Sh1 1200-C-b-Sh1 2300-C-b-Sh1 2300-C-b-Sh1 2300-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2323-C-b-Sh1 2324-C-b-Sh1 2324-C-b-Sh1 2324-C-b-Sh1 2324-C-b-Sh1 2325-C-b-Sh1 2345-C-b-Sh1 2351-C-b-Sh1 2515-C-b-Sh1 2515-C-b-Sh1 2515-C-b-Sh1 2515-C-b-Sh1 2500-C-b-Sh1 3000-C-b-Sh1  | Dozer Assist-Cover Load-Cover  | STS2 STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South Upper South & STS2 Upper South & STS2 Upper South STS2 STS2 STS2 STS2 STS2 STS2 STS2 STS  | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile West Stockpile West Stockpile South Stockpile South stockpile Southwest Lampbright South and East In-Pit Stockpile Northwest Stockpile Northwest Stockpile Northwest Stockpile North Stockpile 9 Waste Rock Dam 15 Dam 16 Dam 20 Reservoir 17 Fleming Pond Tailing Thickener 1 PLS Pond & Launder Raffinate Pond Reservoir 6 Reservoir 6 Reservoir 7 Elmo's Pond Lower Lined Pond Upper Lined Pond Upper Lined Pond 19900 PLS Booster Ground Hog #5 East Pit Access Disturbed Area Chino part of Cobre Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7  | 100  | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Cat D1 |
| 3307-B-b-Dz2 2600-B-b-Dz2 3000-B-b-Dz2 3100-B-b-Dz2 3100-B-b-Dz2 3200-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Sh1 1200-C-b-Sh1 1200-C-b-Sh1 1200-C-b-Sh1 2310-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2321-C-b-Sh1 2322-C-b-Sh1 2322-C-b-Sh1 2322-C-b-Sh1 2324-C-b-Sh1 2345-C-b-Sh1 | Dozer Assist-Cover Load-Cover   | STS2 STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South Upper South & STS2 Upper South & White House Upper South & White House Upper South Upper South Upper South Upper South Upper South STS2 STS2 STS2 STS2 STS2 STS2 STS2 STS   | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile West Stockpile Lambright Stockpile Lambright Stockpile Southwest Lampbright South and East In-Pit Stockpile Northwest Stockpile Northwest Stockpile Northwest Stockpile Northwest Stockpile Northwest Stockpile North Stockpile North Stockpile 9 Waste Rock Dam 15 Dam 16 Dam 20 Reservoir 17 Fleming Pond Tailing Thickener 1 PLS Pond & Launder Raffinate Pond Reservoir 2 Reservoir 6 Reservoir 2 Reservoir 6 Reservoir 7 Elmo's Pond Lower Lined Pond Upper Lined Pond 5900 PLS Booster Station Lee Hill #2 Booster Ground Hog #5 East Pit Access Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side   | 100  | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Cat D1 |
| 3307-B-b-Dz2 2600-B-b-Dz2 3000-B-b-Dz2 3100-B-b-Dz2 3100-B-b-Dz2 3200-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Dz2 3301-B-b-Dz2 1000-C-b-Sh1 1200-C-b-Sh1 1200-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1500-C-b-Sh1 1600-C-b-Sh1 1200-C-b-Sh1 2300-C-b-Sh1 2300-C-b-Sh1 2300-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2313-C-b-Sh1 2323-C-b-Sh1 2324-C-b-Sh1 2324-C-b-Sh1 2324-C-b-Sh1 2324-C-b-Sh1 2325-C-b-Sh1 2345-C-b-Sh1 2351-C-b-Sh1 2515-C-b-Sh1 2515-C-b-Sh1 2515-C-b-Sh1 2515-C-b-Sh1 2500-C-b-Sh1 3000-C-b-Sh1  | Dozer Assist-Cover Load-Cover  | STS2 STS2 STS2 West of Borrow E&H Upper South Borrow Area F & North of Borrow Area F Borrow Area F West of Borrow E&H West of Borrow E&H West of Borrow E&H Upper South Upper South & STS2 Upper South & STS2 Upper South STS2 STS2 STS2 STS2 STS2 STS2 STS2 STS  | Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 Slag Pile Outslopes W side 35 Acre Misc. Area Triangle Stockpile South Stockpile West Stockpile West Stockpile South Stockpile South stockpile Southwest Lampbright South and East In-Pit Stockpile Northwest Stockpile Northwest Stockpile Northwest Stockpile North Stockpile 9 Waste Rock Dam 15 Dam 16 Dam 20 Reservoir 17 Fleming Pond Tailing Thickener 1 PLS Pond & Launder Raffinate Pond Reservoir 6 Reservoir 6 Reservoir 7 Elmo's Pond Lower Lined Pond Upper Lined Pond Upper Lined Pond 19900 PLS Booster Ground Hog #5 East Pit Access Disturbed Area Chino part of Cobre Haul Road Disturbed Area Around Reservoir 5 Filter Plant Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7  | 100  | -1.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%  | Cat D11T CD Cat D1 |

Material Handling Plan Summary Sheet

All activities for the Chino RCE are listed on this sheet and carried through the succeeding worksheets of the RCE. The column labeled ID contains the codes for the facility location, activity, material and equipment used for that particular row of work. The description lists the activity, top or outslope (if applicable), and the material. The source location lists the stockplie name (or sub-area) for the location of the activity. If borrow material is involved, it is transported from a borrow stockplie to a destination stockplie. Blank cells indicate that that column is not relevant to a particular activity.

- 1 Haul/Push Distance based on Golder Take-Offs 1401129-004-MTO-RevG\_07\_Chino\_MTOs\_05SEP18.xlsx or measured as shown in calc set
  2 Weighted Average Haul Grades based on Golder Take-Offs 1401129-004-MTO-RevG\_07\_Chino\_MTOs\_05SEP18.xlsx or measured as shown in calc set
  3 Grade Factors from SOW

| F                            |  |   | <u> </u>  | T   |                                  |  |
|------------------------------|--|---|---|---|----------------------------------|--|
| ID<br>1100-D-b-Tk4           | Description Haul-Cover   | Source Location 1 Upper South & STS2  | Destination Location 2 South Stockpile                | Total Haul/Push Distance (ft) <sup>1</sup><br>8,173 | Grade (%) <sup>2,3</sup><br>2.3% | Equipment  Komatsu 730E                      |
| 1200-D-b-Tk4                 | Haul-Cover   | Upper South Upper South & White House   | West Stockpile  | 22,486  | 1.0%                             | Komatsu 730E                                 |
| 1300-D-b-Tk4                 | Haul-Cover   |   | Lambright Stockpile                                   | 17,438  | 7.0%                             | Komatsu 730E                                 |
| 1400-D-b-Tk4<br>1500-D-b-Tk4 | Haul-Cover<br>Haul-Cover   | Upper South Upper South   | Southwest Lampbright South and East In-Pit Stockpiles | 17,323<br>21,949                                    | 6.3%<br>5.5%                     | Komatsu 730E<br>Komatsu 730E<br>Komatsu 730E |
| 1600-D-b-Tk4                 | Haul-Cover   | Upper South   | Northwest Stockpile                                   | 23,749  | 1.9%                             | Komatsu 730E                                 |
| 1700-D-b-Tk4                 | Haul-Cover   | Upper South   | LeeHill Stockpile                                     | 25,168  | 0.8%                             | Komatsu 730E                                 |
| 1800-D-b-Tk4                 | Haul-Cover   | Upper South   | Northeast Stockpile                                   | 29,443  | 3.8%                             | Komatsu 730E                                 |
| 1900-D-b-Tk4                 | Haul-Cover   | Upper South   | North Stockpile                                       | 27,241  | 3.3%                             | Komatsu 730E                                 |
| 2200-D-b-Tk4                 | Haul-Cover   | STS2  | 9 Waste Rock  | 5,132   | 4.4%                             | Komatsu 730E                                 |
| 2309-D-b-Tk4                 | Haul-Cover   | STS2  | Dam 15  | 22,486  | 1.0%                             | Komatsu 730E                                 |
| 2310-D-b-Tk4                 | Haul-Cover   | STS2  | Dam 16  | 22,485.7  | 1.0%                             | Komatsu 730E                                 |
| 2313-D-b-Tk4                 | Haul-Cover   | STS2  | Dam 20  | 22,486  | 1.0%                             | Komatsu 730E                                 |
| 2316-D-b-Tk4                 | Haul-Cover   | STS2  | Reservoir 17  | 8,173   | 2.3%                             | Komatsu 730E                                 |
| 2318-D-b-Tk4                 | Haul-Cover   | STS2  | Fleming Pond  | 17,438  | 7.0%                             | Komatsu 730E                                 |
| 2320-D-b-Tk4                 | Haul-Cover   | STS2  |   | 21,949  | 5.5%                             | Komatsu 730E                                 |
| 2321-D-b-Tk4                 | Haul-Cover   | STS2  | Tailing Thickener 1 PLS Pond & Launder                | 17,438  | 7.0%                             | Komatsu 730E                                 |
| 2323-D-b-Tk4                 | Haul-Cover   | STS2  | Raffinate Pond  | 22,828  | 7.7%                             | Komatsu 730E                                 |
| 2324-D-b-Tk4                 | Haul-Cover   | STS2  | Reservoir 2   | 8,173   | 2.3%                             | Komatsu 730E                                 |
| 2327-D-b-Tk4                 | Haul-Cover   | STS2  | Reservoir 6   | 25,168  | 0.8%                             | Komatsu 730E                                 |
| 2328-D-b-Tk4                 | Haul-Cover   | STS2  | Reservoir 7   | 25,168  | 0.8%                             | Komatsu 730E                                 |
| 2341-D-b-Tk4                 | Haul-Cover   | STS2  | Elmo's Pond   | 5,509   | -0.2%                            | Komatsu 730E                                 |
| 2342-D-b-Tk4                 | Haul-Cover   | STS2  | Lower Lined Pond                                      | 5,509   | -0.2%                            | Komatsu 730E                                 |
| 2343-D-b-Tk4                 | Haul-Cover   | STS2  | Upper Lined Pond                                      | 5,509   | -0.2%                            | Komatsu 730E                                 |
| 2344-D-b-Tk4                 | Haul-Cover   | STS2  | 5900 PLS Sump   | 21,949  | 5.5%                             | Komatsu 730E                                 |
| 2345-D-b-Tk4                 | Haul-Cover   | STS2  | 6300 PLS Booster Station                              | 21,949  | 5.5%                             | Komatsu 730E                                 |
| 2346-D-b-Tk4                 | Haul-Cover   | STS2  | Lee Hill #2 Booster                                   | 21,949  | 5.5%                             | Komatsu 730E                                 |
| 2400-D-b-Tk4                 | Haul-Cover   | STS2  | Ground Hog #5   | 21,500  | -2.8%                            | Komatsu 730E                                 |
| 2512-D-b-Tk4                 | Haul-Cover   | STS2  | East Pit Access Disturbed Area                        | 12,024  | 1.1%                             | Komatsu 730E                                 |
| 2513-D-b-Tk4                 | Haul-Cover   | STS2  | Chino part of Cobre Haul Road                         | 3,179   | 1.3%                             | Komatsu 730E                                 |
| 2514-D-b-Tk4                 | Haul-Cover   | STS2  | Highway to Heaven Haul Road                           | 12,024  | 1.1%                             | Komatsu 730E                                 |
| 2515-D-b-Tk4                 | Haul-Cover   | STS2  | Disturbed Area Around Reservoir 5                     | 11,000  | 4.9%                             | Komatsu 730E                                 |
| 3307-D-b-Tk4                 | Haul-Cover   | West of Borrow E&H  | Filter Plant  | 12,024  | 1.1%                             | Komatsu 730E                                 |
| 2600-D-b-Tk4                 | Haul-Cover   | Upper South   | Unplanned Disturbed Area                              | 12,024  | 1.1%                             | Komatsu 730E                                 |
| 3000-D-b-Tk4                 | Haul-Cover   | Borrow Area F & North of Borrow Area F  | Axiflo Tailings Pond 6                                | 5,128   | -0.6%                            | Komatsu 730E                                 |
| 3100-D-b-Tk4                 | Haul-Cover   | Borrow Area F   |   | 10,300  | 0.1%                             | Komatsu 730E                                 |
| 3200-D-b-Tk4                 | Haul-Cover   | West of Borrow E&H  | Tailings Pond 7 Slag Pile Outslopes W side            | 8,800   | -0.2%                            | Komatsu 730E                                 |
| 3301-D-b-Tk4                 | Haul-Cover   | West of Borrow E&H  |   | 12,024  | 1.1%                             | Komatsu 730E                                 |
| 3308-D-b-Tk4                 | Haul-Cover   | West of Borrow E&H  | 35 Acre Misc. Area                                    | 12,024  | 1.1%                             | Komatsu 730E                                 |
| 1001-A-d-Mg1                 | Grade-Outslope-Placed Cover  | Triangle Stockpile T-1  | -   | 703   | -28.6%                           | Cat 16M                                      |
| 1002-A-d-Mg1                 | Grade-Top-Placed Cover   | Triangle Stockpile T-2  | -   |   | -1.0%                            | Cat 16M                                      |
| 1101-A-d-Mg1                 | Grade-Outslope-Placed Cover  | South Stockpile S-1   | -   | 389   | -28.6%                           | Cat 16M                                      |
| 1102-A-d-Mg1                 | Grade-Outslope-Placed Cover  | South Stockpile S-2   | -   | 1,550   | -28.6%                           | Cat 16M                                      |
| 1103-A-d-Mg1                 | Grade-Outslope-Placed Cover  | South Stockpile S-3   | -   | 1,840   | -28.6%                           | Cat 16M                                      |
| 1104-A-d-Mg1                 | Grade-Outslope-Placed Cover  | South Stockpile S-4   |   | 1,204   | -28.6%                           | Cat 16M                                      |
| 1105-A-d-Mg1<br>1106-A-d-Mg1 | Grade-Outslope-Placed Cover Grade-Outslope-Placed Cover  | South Stockpile S-5 South Stockpile S-6   | -<br>-  | 2,025<br>2,017                                      | -28.6%<br>-28.6%                 | Cat 16M<br>Cat 16M                           |
| 1107-A-d-Mg1<br>1108-A-d-Mg1 | Grade-Outslope-Placed Cover Grade-Outslope-Placed Cover Grade-Outslope-Placed Cover  | South Stockpile S-7<br>South Stockpile S-8  | -<br>-  | 1,206<br>893  | -28.6%<br>-28.6%                 | Cat 16M<br>Cat 16M<br>Cat 16M                |
| 1109-A-d-Mg1                 | Grade-Outslope-Placed Cover  | South Stockpile S-9(1)  | -<br>-  | 158   | -28.6%                           | Cat 16M                                      |
| 1110-A-d-Mg1                 | Grade-Top-Placed Cover   | South Stockpile S-9(2)  | -   | 809   | -1.0%                            | Cat 16M                                      |
| 1111-A-d-Mg1                 | Grade-Top-Placed Cover   | South Stockpile S-9(3)  |   | 648   | -1.0%                            | Cat 16M                                      |
| 1201-A-d-Mg1<br>1202-A-d-Mg1 | Grade-Outslope-Placed Cover<br>Grade-Outslope-Placed Cover   | West Stockpile W-1 West Stockpile W-2   | -   | 837<br>773  | -28.6%<br>-28.6%                 | Cat 16M<br>Cat 16M                           |
| 1203-A-d-Mg1                 | Grade-Outslope-Placed Cover  | West Stockpile W-3  | <del>-</del>  | 255   | -28.6%                           | Cat 16M                                      |
| 1204-A-d-Mg1                 | Grade-Outslope-Placed Cover  | West Stockpile W-4  | -   | 711   | -28.6%                           | Cat 16M                                      |
| 1205-A-d-Mg1<br>1206-A-d-Mg1 | Grade-Outslope-Placed Cover<br>Grade-Outslope-Placed Cover   | West Stockpile W-5 West Stockpile W-6   | -<br>-  | 696<br>718  | -28.6%<br>-28.6%                 | Cat 16M<br>Cat 16M<br>Cat 16M                |
| 1207-A-d-Mg1<br>1209-A-d-Mg1 | Grade-Outslope-Placed Cover  | West Stockpile W-7  | -   | -   | -28.6%                           | Cat 16M                                      |
| 1210-A-d-Mg1                 | Grade-Outslope-Placed Cover<br>Grade-Outslope-Placed Cover   | West Stockpile W-8(1) West Stockpile W-8(2)   | -<br>-  | 460   | -28.6%<br>-28.6%                 | Cat 16M<br>Cat 16M                           |
| 1211-A-d-Mg1                 | Grade-Outslope-Placed Cover  | West Stockpile W-9  | -   | -   | -28.6%                           | Cat 16M                                      |
| 1212-A-d-Mg1                 | Grade-Outslope-Placed Cover  | West Stockpile W-10   | -   | 549   | -28.6%                           | Cat 16M                                      |
| 1213-A-d-Mg1                 | Grade-Outslope-Placed Cover  | West Stockpile W-11   | -   | -   | -28.6%                           | Cat 16M                                      |
| 1214-A-d-Mg1                 | Grade-Outslope-Placed Cover  | West Stockpile W-12   | -   | 670   | -28.6%                           | Cat 16M                                      |
| 1215-A-d-Mg1                 | Grade-Outslope-Placed Cover  | West Stockpile W-13(1)  | -   | 213   | -28.6%                           | Cat 16M                                      |
| 1216-A-d-Mg1                 | Grade-Outslope-Placed Cover  | West Stockpile W-13(2)  | -   | 429   | -28.6%                           | Cat 16M                                      |
| 1217-A-d-Mg1<br>1218-A-d-Mg1 | Grade-Outslope-Placed Cover<br>Grade-Outslope-Placed Cover   | West Stockpile W-14 West Stockpile W-15(1)  | -   | 456<br>219  | -28.6%<br>-28.6%                 | Cat 16M<br>Cat 16M                           |
| 1219-A-d-Mg1                 | Grade-Top-Placed Cover   | West Stockpile W-15(2)  | -<br>-  | 204   | -1.0%                            | Cat 16M                                      |
| 1220-A-d-Mg1<br>1221-A-d-Mg1 | Grade-Outslope-Placed Cover<br>Grade-Top-Placed Cover  | West Stockpile W-16(1) West Stockpile W-16(2)   | -   | 248<br>131  | -28.6%<br>-1.0%                  | Cat 16M<br>Cat 16M                           |
| 1222-A-d-Mg1<br>1223-A-d-Mg1 | Grade-Top-Placed Cover<br>Grade-Top-Placed Cover   | West Stockpile W-17(1) West Stockpile W-17(2)   | -   | 747<br>531  | -1.0%<br>-1.0%                   | Cat 16M<br>Cat 16M                           |
| 1301-A-d-Mg1                 | Grade-Outslope-Placed Cover  | Lambright Stockpile LB-1  | -   | 1,357   | -28.6%                           | Cat 16M                                      |
| 1302-A-d-Mg1                 | Grade-Outslope-Placed Cover  | Lambright Stockpile LB-2  | -   | 1,343   | -28.6%                           | Cat 16M                                      |
| 1303-A-d-Mg1                 | Grade-Outslope-Placed Cover  | Lambright Stockpile LB-3  | <u>-</u>  | 1,066   | -28.6%                           | Cat 16M                                      |
| 1304-A-d-Mg1                 | Grade-Outslope-Placed Cover  | Lambright Stockpile LB-4  | -   | 1,428   | -28.6%                           | Cat 16M                                      |
| 1305-A-d-Mg1<br>1306-A-d-Mg1 | Grade-Outslope-Placed Cover Grade-Outslope-Placed Cover  | Lambright Stockpile LB-5<br>Lambright Stockpile LB-6  | -   | 1,344<br>1,204                                      | -28.6%<br>-28.6%                 | Cat 16M<br>Cat 16M<br>Cat 16M                |
| 1307-A-d-Mg1                 | Grade-Outslope-Placed Cover  | Lambright Stockpile LB-7(1)   | -   | 476   | -28.6%                           | Cat 16M                                      |
| 1308-A-d-Mg1                 | Grade-Outslope-Placed Cover  | Lambright Stockpile LB-7(2)   | -   | 320   | -28.6%                           | Cat 16M                                      |
| 1309-A-d-Mg1                 | Grade-Outslope-Placed Cover  | Lambright Stockpile LB-8  |   | 690   | -28.6%                           | Cat 16M                                      |
| 1310-A-d-Mg1                 | Grade-Outslope-Placed Cover  | Lambright Stockpile LB-9  | -   | 904   | -28.6%                           | Cat 16M                                      |
| 1311-A-d-Mg1                 | Grade-Outslope-Placed Cover  | Lambright Stockpile LB-10   |   | 1,363   | -28.6%                           | Cat 16M                                      |
| 1312-A-d-Mg1                 | Grade-Outslope-Placed Cover  | Lambright Stockpile LB-11   | -   | 1,572   | -28.6%                           | Cat 16M                                      |
| 1313-A-d-Mg1                 | Grade-Outslope-Placed Cover  | Lambright Stockpile LB-12   | -   | 1,700   | -28.6%                           | Cat 16M                                      |
| 1314-A-d-Mg1                 | Grade-Outslope-Placed Cover  | Lambright Stockpile LB-13   | -   | 1,311   | -28.6%                           | Cat 16M                                      |
| 1315-A-d-Mg1                 | Grade-Outslope-Placed Cover  | Lambright Stockpile LB-14   | -   | 1,110   | -28.6%                           | Cat 16M                                      |
| 1316-A-d-Mg1                 | Grade-Top-Placed Cover   | Lambright Stockpile LB-19(1)  | -   | 843   | -1.0%                            | Cat 16M                                      |
| 1317-A-d-Mg1                 | Grade-Top-Placed Cover   | Lambright Stockpile LB-19(2)  |   | 726   | -1.0%                            | Cat 16M                                      |
| 1401-A-d-Mg1                 | Grade-Outslope-Placed Cover  | Southwest Lampbright SWL-15   | -   | 259<br>616  | -28.6%<br>-28.6%                 | Cat 16M<br>Cat 16M<br>Cat 16M                |
| 1402-A-d-Mg1<br>1403-A-d-Mg1 | Grade-Outslope-Placed Cover<br>Grade-Top-Placed Cover  | Southwest Lampbright SWL-16<br>Southwest Lampbright SWL-17  | -<br>-  | -   | -1.0%                            | Cat 16M                                      |
| 1404-A-d-Mg1                 | Grade-Outslope-Placed Cover  | Southwest Lampbright SWL-17(1)  | -   | 388   | -28.6%                           | Cat 16M                                      |
| 1405-A-d-Mg1                 | Grade-Outslope-Placed Cover  | Southwest Lampbright SWL-17(2)  | -   | 450   | -28.6%                           | Cat 16M                                      |
| 1406-A-d-Mg1<br>1500-A-d-Mg1 | Grade-Outslope-Placed Cover<br>Grade-Entire Stockpile-Placed Cover   | Southwest Lampbright SWL-18 South and East In-Pit Stockpiles  | -<br>-  | 406   | -28.6%<br>-1.0%                  | Cat 16M<br>Cat 16M                           |
| 1601-A-d-Mg1                 | Grade-Top-Placed Cover   | Northwest Stockpile NW-1(1)   | -   | 416   | -1.0%                            | Cat 16M                                      |
| 1602-A-d-Mg1                 | Grade-Top-Placed Cover   | Northwest Stockpile NW-1(2)   | -   | 420   | -1.0%                            | Cat 16M                                      |
| 1603-A-d-Mg1                 | Grade-Outslope-Placed Cover  | Northwest Stockpile NW-2(1)   | -   | 81  | -28.6%                           | Cat 16M                                      |
| 1604-A-d-Mg1                 | Grade-Top-Placed Cover   | Northwest Stockpile NW-2(2)   |   | 66  | -1.0%                            | Cat 16M                                      |
| 1605-A-d-Mg1                 | Grade-Top-Placed Cover   | Northwest Stockpile NW-2(3)   | -<br>-  | 66  | -1.0%                            | Cat 16M                                      |
| 1701-A-d-Mg1<br>1702-A-d-Mg1 | Grade-Top-Placed Cover Grade-Top-Placed Cover  | LeeHill Stockpile LH-2<br>LeeHill Stockpile LH-3  | -   | 319<br>623  | -1.0%<br>-1.0%                   | Cat 16M<br>Cat 16M                           |
| 1800-A-d-Mg1                 | Grade-Entire Stockpile-Placed Cover  | Northeast Stockpile   | <del>-</del>  | 679   | -1.0%                            | Cat 16M                                      |
| 1901-A-d-Mg1                 | Grade-Top-Placed Cover   | North Stockpile N-1   | -   |   | -1.0%                            | Cat 16M                                      |
| 1902-A-d-Mg1                 | Grade-Top-Placed Cover   | North Stockpile N-2(1)  | -   | 111   | -1.0%                            | Cat 16M                                      |
| 1903-A-d-Mg1                 | Grade-Top-Placed Cover   | North Stockpile N-2(2)  | -   | 112   | -1.0%                            | Cat 16M                                      |
| 2201-A-d-Mg1                 | Grade-Outslope-Placed Cover  | 9 Waste Rock 9 WRS-1  | -   | 90  | -28.6%                           | Cat 16M                                      |
| 2202-A-d-Mg1                 | Grade-Top-Placed Cover   | 9 Waste Rock 9 WRS-2  | -   |   | -1.0%                            | Cat 16M                                      |
| 2309-A-d-Mg1<br>2310-A-d-Mg1 | Grade-Dam 15-Placed Cover<br>Grade-Dam 16-Placed Cover   | Dams and Reservoirs Dam 15 Dams and Reservoirs Dam 16   | -<br>-  | 100<br>100.0  | -1.0%<br>-1.0%                   | Cat 16M<br>Cat 16M<br>Cat 16M                |
| 2313-A-d-Mg1                 | Grade-Dam 20-Placed Cover  | Dams and Reservoirs Dam 20  | -<br>-  | 100   | -1.0%                            | Cat 16M                                      |
| 2316-A-d-Mg1<br>2318-A-d-Mg1 | Grade-Reservoir 17-Placed Cover Grade-Fleming Pond-Placed Cover  | Dams and Reservoirs Reservoir 17 Dams and Reservoirs Fleming Pond                                   | -   | 100<br>100  | -1.0%<br>-1.0%                   | Cat 16M<br>Cat 16M                           |
| 2320-A-d-Mg1                 | Grade-Tailing Thickener 1-Placed Cover   | Dams and Reservoirs Tailing Thickener 1 Dams and Reservoirs PLS Pond & Launder                      | <del>-</del>  | 100   | -1.0%                            | Cat 16M                                      |
| 2321-A-d-Mg1                 | Grade-PLS Pond & Launder-Placed Cover  |   | -   | 100   | -1.0%                            | Cat 16M                                      |
| 2323-A-d-Mg1                 | Grade-Raffinate Pond-Placed Cover  | Dams and Reservoirs Raffinate Pond  | -   | 100   | -1.0%                            | Cat 16M                                      |
| 2324-A-d-Mg1                 | Grade-Reservoir 2-Placed Cover   | Dams and Reservoirs Reservoir 2   |   | 100   | -1.0%                            | Cat 16M                                      |
| 2327-A-d-Mg1                 | Grade-Reservoir 6-Placed Cover   | Dams and Reservoirs Reservoir 6 Dams and Reservoirs Reservoir 7                                     | -   | 100   | -1.0%                            | Cat 16M                                      |
| 2328-A-d-Mg1                 | Grade-Reservoir 7-Placed Cover   |   | -   | 100   | -1.0%                            | Cat 16M                                      |
| 2341-A-d-Mg1<br>2342-A-d-Mg1 | Grade-Elmo's Pond -Placed Cover Grade-Lower Lined Pond -Placed Cover   | Dams and Reservoirs Elmo's Pond Dams and Reservoirs Lower Lined Pond                                | -<br>-  | 100<br>100<br>100                                   | -1.0%<br>-1.0%<br>-1.0%          | Cat 16M<br>Cat 16M<br>Cat 16M                |
| 2343-A-d-Mg1                 | Grade-Upper Lined Pond -Placed Cover   | Dams and Reservoirs Upper Lined Pond  | -<br>-  | 100   | -1.0%                            | Cat 16M                                      |
| 2344-A-d-Mg1<br>2345-A-d-Mg1 | Grade-5900 PLS Sump -Placed Cover<br>Grade-6300 PLS Booster Station -Placed Cover  | Dams and Reservoirs 5900 PLS Sump Dams and Reservoirs 6300 PLS Booster Station                      | -   | 100<br>100  | -1.0%<br>-1.0%                   | Cat 16M<br>Cat 16M                           |
| 2346-A-d-Mg1                 | Grade-Lee Hill #2 Booster -Placed Cover  | Dams and Reservoirs Lee Hill #2 Booster   | -   | 100   | -1.0%                            | Cat 16M                                      |
| 2400-A-d-Mg1                 | Grade-Previously Reclaimed-Placed Cover  | Ground Hog #5   |   | 100   | 0.0%                             | Cat 16M                                      |
| 2512-A-d-Mg1<br>2513-A-d-Mg1 | Grade-East Pit Access Disturbed Area-Placed Cover<br>Grade-Chino part of Cobre Haul Road-Placed Cover                            | Miscellaneous NMA East Pit Access Disturbed Area<br>Miscellaneous NMA Chino part of Cobre Haul Road | -   | -   | 0.0%<br>0.0%                     | Cat 16M<br>Cat 16M                           |
| 2514-A-d-Mg1                 | Grade-Highway to Heaven Haul Road-Placed Cover   | Miscellaneous NMA Highway to Heaven Haul Road   | <del>-</del>  |   | 0.0%                             | Cat 16M                                      |
| 2515-A-d-Mg1                 | Grade-Disturbed Area Around Reservoir 5-Placed Cover   | Miscellaneous NMA Disturbed Area Around Reservoir 5   | -   |   | 0.0%                             | Cat 16M                                      |
| 3307-A-d-Mg1<br>2600-A-d-Mg1 | Grade-Filter Plant-Placed Cover Grade-200-Acre Unplanned Future Disturbance-Placed Cover   | Miscellaneous NMA Filter Plant Unplanned Disturbed Area   | -   | -   | 0.0%<br>0.0%                     | Cat 16M<br>Cat 16M<br>Cat 16M                |
| 3000-A-d-Sc2                 | Grade-Entire Impoundment-Placed Cover  | Axiflo  | -<br>-  | 5,128<br>10,300                                     | -0.6%                            | Cat 657G                                     |
| 3100-A-d-Sc2<br>3200-A-d-Sc2 | Grade-Entire Impoundment-Placed Cover Grade-Entire Impoundment-Placed Cover  | Tailings Pond 6 Tailings Pond 7   | -   | 10,300<br>8,800                                     | 0.1%<br>-0.2%                    | Cat 657G<br>Cat 657G                         |
| 3301-A-d-Sc2<br>3308-A-d-Mg1 | Grade-Slag Pile Outslopes W side-Placed Cover<br>Grade-35 Acre Misc. Area-Placed Cover   | Miscellaneous SMA Slag Pile Outslopes W side<br>Miscellaneous SMA 35 Acre Misc. Area                | <del>-</del>  | 12,024  | 1.1%<br>0.0%                     | Cat 657G<br>Cat 16M                          |
| 1000-F-e-U3<br>1100-F-e-U3   | Grade Benches-Entire Stockpile-Final Grade<br>Grade Benches-Entire Stockpile-Final Grade   | Triangle Stockpile<br>South Stockpile   | -   | -   | 0.0%<br>0.0%                     | -<br>-                                       |
| 1200-F-e-U3<br>1300-F-e-U3   | Grade Benches-Entire Stockpile-Final Grade Grade Benches-Entire Stockpile-Final Grade  | West Stockpile<br>Lambright Stockpile   | <del>-</del>  | -   | 0.0%<br>0.0%                     | -  |
| 2000-F-e-U3<br>2100-F-e-U3   | Grade Benches-Entire Stockpile-Final Grade Grade Benches-Entire Stockpile-Final Grade Grade Benches-Entire Stockpile-Final Grade | STS2 Upper South  | -<br>-  | -   | 0.0%<br>0.0%<br>0.0%             | Ξ.   |
| 2200-F-e-U3                  | Grade Benches-Entire Stockpile-Final Grade   | 9 Waste Rock  | -<br>-  | -   | 0.0%                             | -<br>-                                       |
| 3000-F-e-U4<br>3100-F-e-U4   | Grade Benches-Entire Impoundment-Final Grade Grade Benches-Entire Impoundment-Final Grade  | Axiflo Tailings Pond 6  | -   | 240   | 0.0%<br>0.0%                     | -<br>-                                       |
| 3200-F-e-U4                  | Grade Benches-Entire Impoundment-Final Grade   | Tailings Pond 7   | -   | -   | 0.0%                             | -  |

Equipment

Destination Location 2 Total Haul/Push Distance (ft)<sup>1</sup> Grade (%)<sup>2,3</sup>

Description

Material Handling Plan Summary Sheet

All activities for the Chino RCE are listed on this sheet and carried through the succeeding worksheets of the RCE. The column labeled ID contains the codes for the facility location, activity, material and equipment used for that particular row of work. The description lists the activity, top or outslope (if applicable), and the material. The source location lists the stockplie name (or sub-area) for the location of the activity. If borrow material is involved, it is transported from a borrow stockplie to a destination stockplie. Blank cells indicate that that column is not relevant to a particular activity.

- 1 Haul/Push Distance based on Golder Take-Offs 1401129-004-MTO-RevG\_07\_Chino\_MTOs\_05SEP18.xlsx or measured as shown in calc set
  2 Weighted Average Haul Grades based on Golder Take-Offs 1401129-004-MTO-RevG\_07\_Chino\_MTOs\_05SEP18.xlsx or measured as shown in calc set
  3 Grade Factors from SOW

Source Location 1

| ID   | Description  |
|--|--|
| 1100-G-e-U5  | Construct Downdrains-Entire Stockpile-Final Grade  |
| 1200-G-e-U5  | Construct Downdrains-Entire Stockpile-Final Grade  |
| 1300-G-e-U5  | Construct Downdrains-Entire Stockpile-Final Grade  |
| 2200-G-e-U5  | Construct Downdrains-Entire Stockpile-Final Grade  |
| 3100-G-e-U5  | Construct Downdrains-Entire Impoundment-Final Grade  |
| 3200-G-e-U5  | Construct Downdrains-Entire Impoundment-Final Grade  |
| 1100-Gb-e-U6   | Construct Downdrain Dissipators-Entire Stockpile-Final Grade   |
| 1200-Gb-e-U6   | Construct Downdrain Dissipators-Entire Stockpile-Final Grade Construct Downdrain Dissipators-Entire Stockpile-Final Grade  |
| 1300-Gb-e-U6<br>1000-H-e-U7  | Construct Downdrain Dissipators-Entire Stockpile-Final Grade  Construct Bench Channels-Entire Stockpile-Final Grade  |
| 1100-H-e-U7  | Construct Bench Channels-Entire Stockpile-Final Grade  |
| 1200-H-e-U7  | Construct Bench Channels-Entire Stockpile-Final Grade  |
| 1300-H-e-U7  | Construct Bench Channels-Entire Stockpile-Final Grade  |
| 2000-H-e-U7  | Construct Bench Channels-Entire Stockpile-Final Grade  |
| 2100-H-e-U7  | Construct Bench Channels-Entire Stockpile-Final Grade  |
| 2200-H-e-U7  | Construct Bench Channels-Entire Stockpile-Final Grade  |
| 2514-H-e-U7  | Construct Bench Channels-Highway to Heaven Haul Road-Final Grade   |
| 3000-H-e-U7  | Construct Bench Channels-Entire Impoundment-Final Grade  |
| 3100-H-e-U7  | Construct Bench Channels-Entire Impoundment-Final Grade  |
| 3200-H-e-U7  | Construct Bench Channels-Entire Impoundment-Final Grade  |
| 2200-I-e-U8  | Construct Top Channels-Entire Stockpile-Final Grade  |
| 1000-J-e-U2  | Revegetate-Entire Stockpile-Final Grade  |
| 1100-J-e-U2  | Revegetate-Entire Stockpile-Final Grade  |
| 1200-J-e-U2  | Revegetate-Entire Stockpile-Final Grade  |
| 1300-J-e-U2  | Revegetate-Entire Stockpile-Final Grade  |
| 1400-J-e-U2  | Revegetate-Entire Stockpile-Final Grade  |
| 1500-J-e-U2  | Revegetate-Entire Stockpile-Final Grade  |
| 1600-J-e-U2  | Revegetate-Entire Stockpile-Final Grade  |
| 1700-J-e-U2<br>1800-J-e-U2   | Revegetate-Entire Stockpile-Final Grade Revegetate-Entire Stockpile-Final Grade  |
| 1900-J-e-U2  | Revegetate-Entire Stockpile-Final Grade Revegetate-Entire Stockpile-Final Grade  |
| 2000-J-e-U2  | Revegetate-Entire Stockpile-Final Grade  |
| 2100-J-e-U2  | Revegetate-Entire Stockpile-Final Grade  |
| 2200-J-e-U2  | Revegetate-Entire Stockpile-Final Grade  |
| 2309-J-e-U2  | Revegetate-Dam 15-Final Grade  |
| 2310-J-e-U2  | Revegetate-Dam 16-Final Grade  |
| 2313-J-e-U2  | Revegetate-Dam 20-Final Grade  |
| 2316-J-e-U2  | Revegetate-Reservoir 17-Final Grade  |
| 2318-J-e-U2  | Revegetate-Fleming Pond-Final Grade  |
| 2320-J-e-U2  | Revegetate-Tailing Thickener 1-Final Grade   |
| 2321-J-e-U2  | Revegetate-PLS Pond & Launder-Final Grade  |
| 2323-J-e-U2  | Revegetate-Raffinate Pond-Final Grade  |
| 2324-J-e-U2  | Revegetate-Reservoir 2-Final Grade   |
| 2327-J-e-U2  | Revegetate-Reservoir 6-Final Grade   |
| 2328-J-e-U2<br>2341-J-e-U2   | Revegetate-Reservoir 7-Final Grade Revegetate-Elmo's Pond -Final Grade   |
| 2341-J-e-U2<br>2342-J-e-U2   | Revegetate-Limb's Pond -Final Grade Revegetate-Lower Lined Pond -Final Grade   |
| 2342-J-e-U2<br>2343-J-e-U2   | Revegetate-Upper Lined Pond -Final Grade   |
| 2344-J-e-U2  | Revegetate-5900 PLS Sump -Final Grade  |
| 2345-J-e-U2  | Revegetate-6300 PLS Booster Station -Final Grade   |
| 2346-J-e-U2  | Revegetate-Lee Hill #2 Booster -Final Grade  |
| 2400-J-e-U2  | Revegetate-Previously Reclaimed-Final Grade  |
| 2502-J-e-U2  | Revegetate-Northwest Haul Road-Final Grade   |
| 2512-J-e-U2  | Revegetate-East Pit Access Disturbed Area-Final Grade  |
| 2513-J-e-U2  | Revegetate-Chino part of Cobre Haul Road-Final Grade   |
| 2514-J-e-U2  | Revegetate-Highway to Heaven Haul Road-Final Grade   |
| 2515-J-e-U2  | Revegetate-Disturbed Area Around Reservoir 5-Final Grade   |
| 3307-J-e-U2  | Revegetate-Filter Plant-Final Grade  |
| 2600-J-e-U2  | Revegetate-200-Acre Unplanned Future Disturbance-Final Grade   |
| 3000-J-e-U2  | Revegetate-Entire Impoundment-Final Grade  |
| 3100-J-e-U2  | Revegetate-Entire Impoundment-Final Grade  |
| 3200-J-e-U2  | Revegetate-Entire Impoundment-Final Grade  |
| 3301-J-e-U2  | Revegetate-Slag Pile Outslopes W side-Final Grade  |
| 3308-J-e-U2  | Revegetate-35 Acre Misc. Area-Final Grade  |
| 5001-E-d-Rp1   | Rip-Cover Source   |
| 5105-E-d-Rp1   | Rip-Cover Source   |
| 5106-E-d-Rp1   | Rip-Cover Source   |
| 5107-E-d-Rp1   | Rip-Cover Source   |
| 5108-E-d-Rp1   | Rip-Cover Source   |
| 5109-E-d-Rp1<br>5001-J-d-U2  | Rip-Cover Source Revegetate-Cover Source   |
| 5105-J-d-U2  | Revegetate-Cover Source  |
| 5106-J-d-U2  | Revegetate-Cover Source  |
| 5107-J-d-U2  | Revegetate-Cover Source  |
| 5108-J-d-U2  | Revegetate-Cover Source  |
| 5109-J-d-U2  | Revegetate-Cover Source  |
| 1000-M-e-U   | Post-Closure O&M-Entire Stockpile-Final Grade  |
| 1100-M-e-U   | Post-Closure O&M-Entire Stockpile-Final Grade  |
| 1200-M-e-U   | Post-Closure O&M-Entire Stockpile-Final Grade  |
| 1300-M-e-U   | Post-Closure O&M-Entire Stockpile-Final Grade  |
| 1400-M-e-U   | Post-Closure O&M-Entire Stockpile-Final Grade  |
| 1500-M-e-U   | Post-Closure O&M-Entire Stockpile-Final Grade  |
| 1600-M-e-U   | Post-Closure O&M-Entire Stockpile-Final Grade  |
| 1700-M-e-U   | Post-Closure O&M-Entire Stockpile-Final Grade  |
| 1800-M-e-U   | Post-Closure O&M-Entire Stockpile-Final Grade  |
| 1900-M-e-U   | Post-Closure O&M-Entire Stockpile-Final Grade  |
| 2000-M-e-U   | Post-Closure O&M-Entire Stockpile-Final Grade  |
| 2100-M-e-U   | Post-Closure O&M-Entire Stockpile-Final Grade  |
| 2200-M-e-U   | Post-Closure O&M-Entire Stockpile-Final Grade  |
| 2309-M-e-U   | Post-Closure O&M-Dam 15-Final Grade  |
| 2310-M-e-U   | Post-Closure O&M-Dam 16-Final Grade  |
| 2313-M-e-U<br>2316-M-e-U   | Post-Closure O&M-Dam 20-Final Grade Post-Closure O&M-Reservoir 17-Final Grade  |
| 2318-M-e-U   | Post-Closure O&M-Fleming Pond-Final Grade  |
| 2320-M-e-U   | Post-Closure O&M-Tailing Thickener 1-Final Grade   |
| 2321-M-e-U   | Post-Closure O&M-PLS Pond & Launder-Final Grade  |
| 2323-M-e-U   | Post-Closure O&M-Raffinate Pond-Final Grade  |
| 2324-M-e-U   | Post-Closure O&M-Reservoir 2-Final Grade   |
| 2327-M-e-U   | Post-Closure O&M-Reservoir 6-Final Grade   |
| 2328-M-e-U   | Post-Closure O&M-Reservoir 7-Final Grade   |
| 2341-M-e-U   | Post-Closure O&M-Elmo's Pond -Final Grade  |
| 2342-M-e-U   | Post-Closure O&M-Lower Lined Pond -Final Grade   |
| 2343-M-e-U   | Post-Closure O&M-Upper Lined Pond -Final Grade   |
| 2344-M-e-U   | Post-Closure O&M-5900 PLS Sump -Final Grade  |
| 2345-M-e-U   | Post-Closure O&M-6300 PLS Booster Station -Final Grade   |
| 2346-M-e-U   | Post-Closure O&M-Lee Hill #2 Booster -Final Grade  |
| 2502-M-e-U   | Post-Closure O&M-Northwest Haul Road-Final Grade   |
| 2512-M-e-U   | Post-Closure O&M-East Pit Access Disturbed Area-Final Grade  |
| 2513-M-e-U   | Post-Closure O&M-Chino part of Cobre Haul Road-Final Grade   |
| 2514-M-e-U   | Post-Closure O&M-Highway to Heaven Haul Road-Final Grade   |
| 2515-M-e-U<br>3307-M-e-U   | Post-Closure O&M-Disturbed Area Around Reservoir 5-Final Grade   |
| 3307-M-e-U<br>2600-M-e-U   | Post-Closure O&M-Filter Plant-Final Grade Post-Closure O&M-200-Acre Unplanned Future Disturbance-Final Grade   |
| 3000-M-e-U   | . Secondario Cami 200-Acid Chipianneu Future Distribance-Fillai Gfage  |
|  |  |
| 3100-M-e-U<br>3106-M-e-U   | Post-Closure O&M-Entire Impoundment-Final Grade  |
| 3200-M-e-U   | Post-Closure O&M-Entire Impoundment-Final Grade<br>Post-Closure O&M-Entire Impoundment-Final Grade   |
|  | Post-Closure O&M-Entire Impoundment-Final Grade<br>Post-Closure O&M-Entire Impoundment-Final Grade<br>Post-Closure O&M-Previously Reclaimed-Final Grade  |
| 3301-M-e-U   | Post-Closure O&M-Entire Impoundment-Final Grade<br>Post-Closure O&M-Entire Impoundment-Final Grade<br>Post-Closure O&M-Previously Reclaimed-Final Grade<br>Post-Closure O&M-Entire Impoundment-Final Grade   |
| 3301-M-e-U<br>2400-M-e-U   | Post-Closure O&M-Entire Impoundment-Final Grade<br>Post-Closure O&M-Entire Impoundment-Final Grade<br>Post-Closure O&M-Previously Reclaimed-Final Grade  |
|  | Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Slag Pile Outslopes W side-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade  |
| 2400-M-e-U   | Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Slag Pile Outslopes W side-Final Grade  |
| 2400-M-e-U<br>3302-M-e-U   | Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Slag Pile Outslopes W side-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade  |
| 2400-M-e-U<br>3302-M-e-U<br>3303-M-e-U<br>3304-M-e-U<br>3305-M-e-U   | Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Siag Pile Outslopes W side-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade  |
| 2400-M-e-U<br>3302-M-e-U<br>3303-M-e-U<br>3304-M-e-U<br>3305-M-e-U<br>3306-M-e-U   | Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-Sag Pile Outslopes W side-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade   |
| 2400-M-e-U<br>3302-M-e-U<br>3303-M-e-U<br>3304-M-e-U<br>3305-M-e-U<br>3306-M-e-U<br>3308-M-e-U   | Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Slag Pile Outslopes W side-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade  |
| 2400-M-e-U<br>3302-M-e-U<br>3303-M-e-U<br>3304-M-e-U<br>3305-M-e-U<br>3308-M-e-U<br>5005-M-e-U   | Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-Stag Pile Outslopes W side-Final Grade Post-Closure O&M-Stag Pile Outslopes W side-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-Haul Road   |
| 2400-M-e-U<br>3302-M-e-U<br>3303-M-e-U<br>3304-M-e-U<br>3305-M-e-U<br>3306-M-e-U<br>5005-M-e-U<br>1200-N-e-U16   | Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-S Acre Misc. Area-Final Grade Post-Closure O&M-Haul Road Plug and Abandon Well-Entire Stockpile-Final Grade   |
| 2400-M-e-U<br>3302-M-e-U<br>3303-M-e-U<br>3304-M-e-U<br>3305-M-e-U<br>3308-M-e-U<br>5005-M-e-U<br>1200-N-e-U116<br>1200-O-e-U17  | Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Stap Pile Outslopes W side-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-Breviously Reclaimed-Final Grade Post-Closure O&M-S5 Acre Misc. Area-Final Grade Replace Well-Entire Stockpile-Final Grade Replace Well-Entire Stockpile-Final Grade  |
| 2400-M-e-U<br>3302-M-e-U<br>3303-M-e-U<br>3304-M-e-U<br>3305-M-e-U<br>3308-M-e-U<br>5005-M-e-U<br>1200-N-e-U16<br>1200-P-b-Comb1   | Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-Slag Pile Outslopes W side-Final Grade Post-Closure O&M-Slag Pile Outslopes W side-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-Haul Road Plug and Abandon Well-Entire Stockpile-Final Grade Replace Well-Entire Stockpile-Final Grade Road Maintenance   |
| 2400-M-e-U<br>3302-M-e-U<br>3303-M-e-U<br>3304-M-e-U<br>3305-M-e-U<br>3308-M-e-U<br>5005-M-e-U<br>1200-N-e-U16<br>1200-C-e-U17<br>1000-P-b-Comb1   | Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-Breviously Reclaimed-Final Grade Post-Closure O&M-Haul Road Plug and Abandon Well-Entire Stockpile-Final Grade Replace Well-Entire Stockpile-Final Grade Replace Mell-Entire Stockpile-Final Grade Road Maintenance Road Maintenance  |
| 2400-M-e-U<br>3302-M-e-U<br>3303-M-e-U<br>3305-M-e-U<br>3305-M-e-U<br>3306-M-e-U<br>5005-M-e-U<br>1200-N-e-U17<br>1000-P-b-Comb1<br>1100-P-b-Comb1<br>1200-P-b-Comb1   | Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Slag Pile Outslopes W side-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-Breviously Reclaimed-Final Grade Post-Closure O&M-Breviously Reclaimed-Final Grade Rost Closure O&M-So Grade Rost Grade Rost Mell-Entire Stockpile-Final Grade Road Maintenance Road Maintenance Road Maintenance   |
| 2400-M-e-U<br>3302-M-e-U<br>3303-M-e-U<br>3305-M-e-U<br>3306-M-e-U<br>3306-M-e-U<br>1200-N-e-U16<br>1200-O-e-U17<br>1000-P-b-Comb1<br>1100-P-b-Comb1<br>1300-P-b-Comb1   | Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-Slag Pile Outslopes W side-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-Haul Road Plug and Abandon Well-Entire Stockpile-Final Grade Road Maintenance Road Maintenance Road Maintenance Road Maintenance  |
| 2400-M-e-U<br>3302-M-e-U<br>3303-M-e-U<br>3305-M-e-U<br>3306-M-e-U<br>3306-M-e-U<br>5005-M-e-U<br>1200-N-e-U16<br>1200-C-e-U17<br>1000-P-b-Comb1<br>1200-P-b-Comb1<br>1300-P-b-Comb1<br>1300-P-b-Comb1   | Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-Breviously Reclaimed-Final Grade Post-Closure O&M-Isoure Description Final Grade Post-Closure O&M-Isoure Stockpile-Final Grade Road Maintenance Road Maintenance Road Maintenance Road Maintenance Road Maintenance Road Maintenance  |
| 2400-M-e-U<br>3302-M-e-U<br>3303-M-e-U<br>3305-M-e-U<br>3305-M-e-U<br>3306-M-e-U<br>5005-M-e-U<br>1200-N-e-U16<br>1200-P-b-Comb1<br>1100-P-b-Comb1<br>1300-P-b-Comb1<br>1300-P-b-Comb1   | Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Stag Pile Outslopes W side-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-Breviously Reclaimed-Final Grade Post-Closure O&M-Breviously Reclaimed-Final Grade Rost-Closure O&M-Breviously Reclaimed-Final Grade Rost Glosure O&M-Breviously Reclaimed-Final Grade Rost Glosure O&M-Breviously Reclaimed-Final Grade Rost Maintenance Road Maintenance Road Maintenance Road Maintenance Road Maintenance Road Maintenance Road Maintenance   |
| 2400-M-e-U<br>3302-M-e-U<br>3303-M-e-U<br>3305-M-e-U<br>3305-M-e-U<br>3306-M-e-U<br>1200-N-e-U17<br>1000-P-b-Comb1<br>1100-P-b-Comb1<br>1300-P-b-Comb1<br>1500-P-b-Comb1<br>1500-P-b-Comb1   | Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-S Acre Misc. Area-Final Grade Post-Closure O&M-Haul Road Plug and Abandon Well-Entire Stockpile-Final Grade Replace Well-Entire Stockpile-Final Grade Replace Well-Entire Stockpile-Final Grade Road Maintenance  |
| 2400-M-e-U<br>3302-M-e-U<br>3303-M-e-U<br>3304-M-e-U<br>3306-M-e-U<br>3306-M-e-U<br>5005-M-e-U<br>1200-N-e-U16<br>1200-P-b-Comb1<br>1300-P-b-Comb1<br>1300-P-b-Comb1<br>1300-P-b-Comb1<br>1500-P-b-Comb1<br>1500-P-b-Comb1<br>1500-P-b-Comb1   | Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-Breviously Reclaimed-Final Grade Post-Closure O&M-Breviously Reclaimed-Final Grade Post-Closure O&M-Breviously Reclaimed-Final Grade Post-Closure O&M-Breviously Reclaimed-Final Grade Rost-Closure O&M-Breviously Reclaimed-Final Grade Rost-Closure O&M-Breviously Reclaimed-Final Grade Rost-Closure O&M-Breviously Reclaimed-Final Grade Rost-Closure O&M-Stockelle-Final Grade Rost-Closure O&M-Breviously Reclaimed-Final Grade Rost-Closure O&M-Previously Reclaimed-Final Grade Rost-Closure O& |
| 2400-M-e-U<br>3302-M-e-U<br>3303-M-e-U<br>3304-M-e-U<br>3305-M-e-U<br>3306-M-e-U<br>5005-M-e-U<br>1200-N-e-U16<br>1200-P-b-Comb1<br>1100-P-b-Comb1<br>1300-P-b-Comb1<br>1400-P-b-Comb1<br>1500-P-b-Comb1<br>1600-P-b-Comb1   | Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Slag Pile Outslopes W side-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-Box Previously Reclaimed-Final Grade Post-Closure O&M-Box Previously Reclaimed-Final Grade Rost-Closure O&M-Box Previously Reclaimed-Final Grade Rost Closure O&M-Box Previously Reclaimed-Final Grade Rost Grade Rost M-Box Previously Reclaimed-Final Grade Rost Closure O&M-Box Previously Reclaimed-Final Grade Rost Maintenance  |
| 2400-M-e-U 3302-M-e-U 3303-M-e-U 3303-M-e-U 3305-M-e-U 3306-M-e-U 1200-N-e-U17 1000-P-b-Comb1 1100-P-b-Comb1 1200-P-b-Comb1 1500-P-b-Comb1 1500-P-b-Comb1 1500-P-b-Comb1 1700-P-b-Comb1 1800-P-b-Comb1 1800-P-b-Comb1 1800-P-b-Comb1 1800-P-b-Comb1 1900-P-b-Comb1   | Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-Haul Road Plug and Abandon Well-Entire Stockpile-Final Grade Replace Well-Entire Stockpile-Final Grade Replace Well-Entire Stockpile-Final Grade Road Maintenance  |
| 2400-M-e-U 3302-M-e-U 3303-M-e-U 3304-M-e-U 3305-M-e-U 3306-M-e-U 3308-M-e-U 5005-M-e-U16 1200-N-e-U16 1200-P-b-Comb1 1300-P-b-Comb1 1300-P-b-Comb1 1500-P-b-Comb1 1500-P-b-Comb1 1500-P-b-Comb1 1600-P-b-Comb1 1700-P-b-Comb1   | Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-S5 Acre Misc. Area-Final Grade Post-Closure O&M-Haul Road Plug and Abandon Well-Entire Stockpile-Final Grade Replace Well-Entire Stockpile-Final Grade Road Maintenance  |
| 2400-M-e-U 3302-M-e-U 3303-M-e-U 3303-M-e-U 3305-M-e-U 3306-M-e-U 1200-N-e-U17 1000-P-b-Comb1 1100-P-b-Comb1 1200-P-b-Comb1 1500-P-b-Comb1 1500-P-b-Comb1 1500-P-b-Comb1 1700-P-b-Comb1 1700-P-b-Comb1 1200-P-b-Comb1 12 | Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-So Are Misc. Area-Final Grade Post-Closure O&M-Binal Grade Post-Closure O&M-Binal Grade Road Maintenance  |
| 2400-M-e-U 3302-M-e-U 3303-M-e-U 3303-M-e-U 3305-M-e-U 3306-M-e-U 15005-M-e-U 1200-N-e-U16 1200-P-b-Comb1 1100-P-b-Comb1 1400-P-b-Comb1 1500-P-b-Comb1 1500-P-b-Comb1 1500-P-b-Comb1 1200-P-b-Comb1 1200-P-b-Comb1 1200-P-b-Comb1 1200-P-b-Comb1 1200-P-b-Comb1 1200-P-b-Comb1 1200-P-b-Comb1 1200-P-b-Comb1 1300-P-b-Comb1 1300-P-b-Comb1 1300-P-b-Comb1 1300-P-b-Comb1 1300-P-b-Comb1 1300-P-b-Comb1 1309-P-b-Comb1 1309- | Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-Base State State Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-Base State Post-Closure O&M-Haul Road Plug and Abandon Well-Entire Stockpile-Final Grade Replace Well-Entire Stockpile-Final Grade Replace Well-Entire Stockpile-Final Grade Road Maintenance   |
| 2400-M-e-U 3302-M-e-U 3303-M-e-U 3303-M-e-U 3305-M-e-U 3306-M-e-U 3308-M-e-U 5005-M-e-U16 1200-N-e-U16 1200-P-b-Comb1 1300-P-b-Comb1 1300-P-b-Comb1 1500-P-b-Comb1 1500-P-b-Comb1 1500-P-b-Comb1 1700-P-b-Comb1 1200-P-b-Comb1 2309-P-b-Comb1 2309-P-b-Comb1 2313-P-b-Comb1  | Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Rost-Closure O&M-Previously Reclaimed-Final Grade Ro |
| 2400-M-e-U 3302-M-e-U 3303-M-e-U 3303-M-e-U 3305-M-e-U 3306-M-e-U 1200-N-e-U17 1000-P-b-Comb1 1100-P-b-Comb1 1200-P-b-Comb1 1500-P-b-Comb1 1500-P-b-Comb1 1500-P-b-Comb1 1500-P-b-Comb1 1200-P-b-Comb1 1200-P-b-Comb1 1300-P-b-Comb1 1200-P-b-Comb1 1201-P-b-Comb1 1201-P-b-Comb1 1201-P-b-Comb1 1201-P-b-Comb1 1201-P-b-Comb1   | Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-Haul Road Plug and Abandon Well-Entire Stockpile-Final Grade Replace Well-Entire Stockpile-Final Grade Replace Well-Entire Stockpile-Final Grade Road Maintenance   |
| 2400-M-e-U 3302-M-e-U 3303-M-e-U 3303-M-e-U 3305-M-e-U 3306-M-e-U 1200-N-e-U16 1200-N-e-U16 1200-P-b-Comb1 1200-P-b-Comb1 1500-P-b-Comb1 1500-P-b-Comb1 1500-P-b-Comb1 1500-P-b-Comb1 1200-P-b-Comb1 1200-P-b-Comb1 1200-P-b-Comb1 1300-P-b-Comb1 1300-P-b-Comb1 1300-P-b-Comb1 1200-P-b-Comb1 1200-P-b-Comb1 1200-P-b-Comb1 1200-P-b-Comb1 1200-P-b-Comb1 1200-P-b-Comb1 1210-P-b-Comb1 12313-P-b-Comb1 12310-P-b-Comb1 12318-P-b-Comb1 12310-P-b-Comb1 12318-P-b-Comb1 12318 | Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-35 Acre Misc. Area-Final Grade Post-Closure O&M-40-10-10-10-10-10-10-10-10-10-10-10-10-10   |
| 2400-M-e-U 3302-M-e-U 3303-M-e-U 3303-M-e-U 3305-M-e-U 3306-M-e-U 1200-N-e-U17 1000-P-b-Comb1 1100-P-b-Comb1 1200-P-b-Comb1 1500-P-b-Comb1 1500-P-b-Comb1 1500-P-b-Comb1 1500-P-b-Comb1 1200-P-b-Comb1 1200-P-b-Comb1 1300-P-b-Comb1 1200-P-b-Comb1 1201-P-b-Comb1 1201-P-b-Comb1 1201-P-b-Comb1 1201-P-b-Comb1 1201-P-b-Comb1   | Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-Haul Road Plug and Abandon Well-Entire Stockpile-Final Grade Replace Well-Entire Stockpile-Final Grade Replace Well-Entire Stockpile-Final Grade Road Maintenance   |
| 2400-M-e-U 3302-M-e-U 3303-M-e-U 3303-M-e-U 3305-M-e-U 3306-M-e-U 3306-M-e-U 5005-M-e-U 16 1200-N-e-U16 1200-P-b-Comb1 1300-P-b-Comb1 1300-P-b-Comb1 1500-P-b-Comb1 1500-P-b-Comb1 1200-P-b-Comb1 1200-P-b-Comb1 1300-P-b-Comb1 1300-P-b-Comb1 1300-P-b-Comb1 1300-P-b-Comb1 1300-P-b-Comb1 1300-P-b-Comb1 1300-P-b-Comb1 1200-P-b-Comb1 1200-P-b-Comb1 1310-P-b-Comb1 2313-P-b-Comb1 2323-P-b-Comb1  | Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Rost-Closure O&M-Previously Reclaimed-Final Grade Ro |
| 2400-M-e-U 3302-M-e-U 3303-M-e-U 3303-M-e-U 3305-M-e-U 3306-M-e-U 1200-N-e-U17 1000-P-b-Comb1 1100-P-b-Comb1 1200-P-b-Comb1 1230-P-b-Comb1 2313-P-b-Comb1 2313-P-b-Comb1 2313-P-b-Comb1 2321-P-b-Comb1 2321-P-b-Comb1   | Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Rost-Closure O&M-Previously Reclaimed-Final Grade Rost |
| 2400-M-e-U 3302-M-e-U 3303-M-e-U 3303-M-e-U 3305-M-e-U 3306-M-e-U 3306-M-e-U 15005-M-e-U 17000-P-b-Comb1 1100-P-b-Comb1 1200-P-b-Comb1 1500-P-b-Comb1 1500-P-b-Comb1 1500-P-b-Comb1 1500-P-b-Comb1 1300-P-b-Comb1 1300-P-b-Comb1 1300-P-b-Comb1 1300-P-b-Comb1 1300-P-b-Comb1 1300-P-b-Comb1 1300-P-b-Comb1 1300-P-b-Comb1 220-P-b-Comb1 2313-P-b-Comb1 2313-P-b-Comb1 2313-P-b-Comb1 2314-P-b-Comb1 2323-P-b-Comb1   | Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Post-Closure O&M-Haul Road Plug and Abandon Well-Entire Stockpile-Final Grade Replace Well-Entire Stockpile-Final Grade Replace Well-Entire Stockpile-Final Grade Replace Well-Entire Stockpile-Final Grade Road Maintenance   |
| 2400-M-e-U 3302-M-e-U 3303-M-e-U 3303-M-e-U 3304-M-e-U 3306-M-e-U 3308-M-e-U 1200-N-e-U17 1000-P-b-Comb1 1100-P-b-Comb1 1200-P-b-Comb1 1200-P-b-Comb1 1200-P-b-Comb1 1200-P-b-Comb1 1200-P-b-Comb1 1200-P-b-Comb1 1200-P-b-Comb1 1200-P-b-Comb1 2300-P-b-Comb1 2300-P-b-Comb1 2318-P-b-Comb1 2318-P-b-Comb1 2318-P-b-Comb1 2318-P-b-Comb1 2318-P-b-Comb1 2321-P-b-Comb1  | Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Entire Impoundment-Final Grade Post-Closure O&M-Previously Reclaimed-Final Grade Rost-Closure O&M-Previously Reclaimed-Final Grade Rost |

Material Handling Plan Summary Sheet
All activities for the Chino RCE are listed on this sheet and carried through the succeeding worksheets of the RCE. The column labeled ID contains the codes for the facility location, activity, material and equipment used for that particular row of work. The description lists the activity, top or outslope (if applicable), and the material. The source location lists the stockplie name (or sub-area) for the location of the activity. If borrow material is involved, it is transported from a borrow stockplie to a destination stockplie. Blank cells indicate that that column is not relevant to a particular activity.

- Haul/Push Distance based on Golder Take-Offs 1401129-004-MTO-RevG\_07\_Chino\_MTOs\_05SEP18.xlsx or measured as shown in calc set
   Weighted Average Haul Grades based on Golder Take-Offs 1401129-004-MTO-RevG\_07\_Chino\_MTOs\_05SEP18.xlsx or measured as shown in calc set
   Grade Entre from SON.

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|-----|--------|----------|-------|--------|-----|
| 3 - | Grade  | Factors  | from  | SOV    | /   |

| ID             | Description                   | Source Location 1                      | Destination Location 2            | Total Haul/Push Distance (ft) <sup>1</sup> | Grade (%) <sup>2,3</sup> | Equipment                                       |
|----------------|-------------------------------|--|-----------------------------------|--|--------------------------|---|
| 2341-P-b-Comb1 | Road Maintenance              | STS2                                   | Elmo's Pond                       | 100  | -1.0%                    | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  |
| 2342-P-b-Comb1 | Road Maintenance              | STS2                                   | Lower Lined Pond                  | 100  | -1.0%                    | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal. |
| 2343-P-b-Comb1 | Road Maintenance              | STS2                                   | Upper Lined Pond                  | 100  | -1.0%                    | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal. |
| 2344-P-b-Comb1 | Road Maintenance              | STS2                                   | 5900 PLS Sump                     | 100  | -1.0%                    | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal. |
| 2345-P-b-Comb1 | Road Maintenance              | STS2                                   | 6300 PLS Booster Station          | 100  | -1.0%                    | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal. |
| 2346-P-b-Comb1 | Road Maintenance              | STS2                                   | Lee Hill #2 Booster               | 100  | -1.0%                    | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal. |
| 2400-P-b-Comb1 | Road Maintenance              | STS2                                   | Ground Hog #5                     | 100  | 0.0%                     | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal. |
| 2512-P-b-Comb1 | Road Maintenance              | STS2                                   | East Pit Access Disturbed Area    | -  | 0.0%                     | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  |
| 2513-P-b-Comb1 | Road Maintenance              | STS2                                   | Chino part of Cobre Haul Road     | -  | 0.0%                     | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal. |
| 2514-P-b-Comb1 | Road Maintenance              | STS2                                   | Highway to Heaven Haul Road       | -  | 0.0%                     | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal. |
| 2515-P-b-Comb1 | Road Maintenance              | STS2                                   | Disturbed Area Around Reservoir 5 | -  | 0.0%                     | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal. |
| 3307-P-b-Comb1 | Road Maintenance              | West of Borrow E&H                     | Filter Plant                      | -  | 0.0%                     | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal. |
| 2600-P-b-Comb1 | Road Maintenance              | Upper South                            | Unplanned Disturbed Area          | -  | 0.0%                     | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal. |
| 3000-P-b-Comb1 | Road Maintenance              | Borrow Area F & North of Borrow Area F | Axiflo                            | 240  | 0.0%                     | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal. |
| 3100-P-b-Comb1 | Road Maintenance              | Borrow Area F                          | Tailings Pond 6                   | -  | 0.0%                     | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal. |
| 3200-P-b-Comb1 | Road Maintenance              | West of Borrow E&H                     | Tailings Pond 7                   | -  | 0.0%                     | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal. |
| 3301-P-b-Comb1 | Road Maintenance              | West of Borrow E&H                     | Slag Pile Outslopes W side        | -  | -28.6%                   | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal. |
| 3308-P-b-Comb1 | Road Maintenance              | West of Borrow E&H                     | 35 Acre Misc. Area                | -  | 0.0%                     | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal. |
| 5005-Q-c-U19   | Construct Haul Road-Haul Road | Upper South & White House              | -                                 | 17,438                                     | 7.0%                     | -   |
| 5005-E-c-Rp1   | Rip-Haul Road                 | Upper South & White House              | -                                 | -  | 0.0%                     | Cat D11T CD Multi-shank (w/ MSR-359H)           |
| 5005-J-e-U2    | Revegetate-Haul Road          | Upper South & White House              | -                                 | -  | 0.0%                     | -   |

Notes:
Groundhog #5 (Item 2400) previously reclaimed - add 1 ft of cover and continue O&M
Tailings Ponds #1, 2, B, C, 4E, 4W - continue O&M (no other activities)
Santa Rita (Item 1500) has already been rough graded
Slag pile (Item 301) has already been rough graded
Dozer assist for West, South, and Lampbright scrapers
Scrapers used for grading cover at tailings and Axillo assist themselves
Borrow stockpiles are ripped and revegetated
Scrapers don't need dozer assist for tailings cover grading
Rip at South Stockpile, Lampbright, and sections of West Stockpile before rough grading with scraper
Rip rough grade on tops of stockpiles before placing cover
List load directly before hauf for hauling calculations and list push dozer assist directly before scraper for dozer assist calculations

- Assumptions:

  1 Acres and volumes based on Golder Take-Offs 1401129-004-MTO-RevG\_07\_Chino\_MTOs\_05SEP18.xlsx

  2 Cover Material Swell: The 'Loose Volume' is calculated based on the acreage to be covered, 3 ft of cover, and accounts for appropriate swell factor.

  3 8% swell factor is estimated for cover obtained from a mine stockpile because it is placed loose and is looser than cover borrowed from a natural deposit.

  4 Has been agreed upon with State agencies that swell occurs when cover material is moved from source to haul truck but not from the truck to placement on stockpile

|                              | I  | 1   |                        | ī                      | I                | Ī   | 1 1                           |  |
|------------------------------|--|---|------------------------|------------------------|------------------|---|-------------------------------|--|
| ID                           | Description  | Source Location 1   | Destination Location 2 | Area (ac) <sup>1</sup> | Cover Depth (in) | Bank/Stockpile<br>Volume (bcy) <sup>1,4</sup> | Swell Factor (%) <sup>3</sup> | Loose/Stockpile<br>Volume (lcy) <sup>2</sup> |
| 1101-E-a-Rp1<br>1102-E-a-Rp1 | Rip-Outslope-Existing Ground<br>Rip-Outslope-Existing Ground   | South Stockpile S-1<br>South Stockpile S-2  | -                      | 6.4<br>86.9            |                  | -   | 0%<br>0%                      | -  |
| 1103-E-a-Rp1<br>1104-E-a-Rp1 | Rip-Outslope-Existing Ground Rip-Outslope-Existing Ground  | South Stockpile S-3<br>South Stockpile S-4  | -                      | 76.0<br>37.9           | -                | -   | 0%<br>0%                      | -  |
| 1105-E-a-Rp1                 | Rip-Outslope-Existing Ground   | South Stockpile S-5   | -                      | 82.6<br>91.2           | -                | -   | 0%<br>0%                      | -  |
| 1106-E-a-Rp1<br>1107-E-a-Rp1 | Rip-Outslope-Existing Ground Rip-Outslope-Existing Ground  | South Stockpile S-6<br>South Stockpile S-7  | -                      | 47.6                   | -                | -   | 0%                            | -  |
| 1108-E-a-Rp1<br>1109-E-a-Rp1 | Rip-Outslope-Existing Ground Rip-Outslope-Existing Ground  | South Stockpile S-8<br>South Stockpile S-9(1)                                     | -                      | 67.8<br>2.6            | -                | -   | 0%<br>0%                      | -  |
| 1207-E-a-Rp1<br>1209-E-a-Rp1 | Rip-Outslope-Existing Ground Rip-Outslope-Existing Ground  | West Stockpile W-7<br>West Stockpile W-8(1)                                       | -                      | 33.2<br>33.9           | -                | -   | 0%<br>0%                      | -  |
| 1210-E-a-Rp1<br>1211-E-a-Rp1 | Rip-Outslope-Existing Ground Rip-Outslope-Existing Ground  | West Stockpile W-8(2) West Stockpile W-9  | -                      | 33.9<br>27.1           | -                | -   | 0%<br>0%                      |  |
| 1212-E-a-Rp1<br>1213-E-a-Rp1 | Rip-Outslope-Existing Ground<br>Rip-Outslope-Existing Ground   | West Stockpile W-10<br>West Stockpile W-11  | -                      | 21.5<br>23.9           | -                | -<br>-  | 0%<br>0%                      | -  |
| 1301-E-a-Rp1<br>1302-E-a-Rp1 | Rip-Outslope-Existing Ground<br>Rip-Outslope-Existing Ground   | Lambright Stockpile LB-1<br>Lambright Stockpile LB-2                              | -                      | 71.4<br>38.3           | -                | -   | 0%<br>0%                      | -  |
| 1303-E-a-Rp1<br>1304-E-a-Rp1 | Rip-Outslope-Existing Ground<br>Rip-Outslope-Existing Ground   | Lambright Stockpile LB-3<br>Lambright Stockpile LB-4                              | -                      | 33.2<br>41.6           | -                | -   | 0%<br>0%                      | -  |
| 1305-E-a-Rp1                 | Rip-Outslope-Existing Ground   | Lambright Stockpile LB-5  | -                      | 57.7<br>14.2           | -                | -   | 0%<br>0%                      | -  |
| 1306-E-a-Rp1<br>1307-E-a-Rp1 | Rip-Outslope-Existing Ground Rip-Outslope-Existing Ground  | Lambright Stockpile LB-6 Lambright Stockpile LB-7(1)                              | -                      | 11.0                   | -                | -   | 0%                            | -  |
| 1308-E-a-Rp1<br>1309-E-a-Rp1 | Rip-Outslope-Existing Ground Rip-Outslope-Existing Ground  | Lambright Stockpile LB-7(2)<br>Lambright Stockpile LB-8                           | -                      | 6.9<br>35.5            | -                | -   | 0%<br>0%                      | -  |
| 1310-E-a-Rp1<br>1311-E-a-Rp1 | Rip-Outslope-Existing Ground Rip-Outslope-Existing Ground  | Lambright Stockpile LB-9<br>Lambright Stockpile LB-10                             | -                      | 47.5<br>60.6           | -                | -   | 0%<br>0%                      | -  |
| 1312-E-a-Rp1<br>1313-E-a-Rp1 | Rip-Outslope-Existing Ground<br>Rip-Outslope-Existing Ground   | Lambright Stockpile LB-11<br>Lambright Stockpile LB-12                            | -                      | 35.3<br>119.3          | -                | -   | 0%<br>0%                      | -  |
| 1314-E-a-Rp1<br>1315-E-a-Rp1 | Rip-Outslope-Existing Ground Rip-Outslope-Existing Ground  | Lambright Stockpile LB-13<br>Lambright Stockpile LB-14                            | -                      | 83.7<br>51.6           | -                | -<br>-  | 0%<br>0%                      | -  |
| 2316-K-a-Ex1<br>2318-K-a-Ex1 | Perforate Liner-Reservoir 17-Existing Ground Perforate Liner-Fleming Pond-Existing Ground                      | Dams and Reservoirs Reservoir 17 Dams and Reservoirs Fleming Pond                 | -                      | 3.4<br>0.8             | -                | -   | 0%<br>0%                      | -  |
| 2320-K-a-Ex1<br>2321-K-a-Ex1 | Perforate Liner-Tailing Thickener 1-Existing Ground Perforate Liner-PLS Pond & Launder-Existing Ground         | Dams and Reservoirs Tailing Thickener 1 Dams and Reservoirs PLS Pond & Launder    | -                      | 2.6<br>0.3             | -                | -   | 0%<br>0%                      | -  |
| 2323-K-a-Ex1                 | Perforate Liner-Raffinate Pond-Existing Ground   | Dams and Reservoirs Raffinate Pond  | -                      | 0.1                    | -                | -   | 0%                            | -  |
| 2342-K-a-Ex1<br>2343-K-a-Ex1 | Perforate Liner-Lower Lined Pond -Existing Ground Perforate Liner-Upper Lined Pond -Existing Ground            | Dams and Reservoirs Lower Lined Pond Dams and Reservoirs Upper Lined Pond         | -                      | 2.2<br>0.4             | -                | -   | 0%<br>0%                      | -  |
| 2344-K-a-Ex1<br>2345-K-a-Ex1 | Perforate Liner-5900 PLS Sump -Existing Ground Perforate Liner-6300 PLS Booster Station -Existing Ground       | Dams and Reservoirs 5900 PLS Sump<br>Dams and Reservoirs 6300 PLS Booster Station | -                      | 0.6<br>0.0             | -                | -   | 0%<br>0%                      | -  |
| 2346-K-a-Ex1<br>1001-A-a-Dz2 | Perforate Liner-Lee Hill #2 Booster -Existing Ground<br>Grade-Outslope-Existing Ground                         | Dams and Reservoirs Lee Hill #2 Booster<br>Triangle Stockpile T-1                 | -                      | 0.1                    | -                | 3,074,286                                     | 0%<br>0%                      | 3,074,286                                    |
| 1002-A-a-Mg1<br>1101-B-a-Dz3 | Grade-Top-Existing Ground Dozer Assist Scraper Grading-Outslope-Existing Ground                                | Triangle Stockpile T-2<br>South Stockpile S-1                                     | -                      | 4.8<br>6.4             | -                | -<br>348,051                                  | 0%<br>0%                      | 348,051                                      |
| 1102-B-a-Dz3<br>1103-B-a-Dz3 | Dozer Assist Scraper Grading-Outslope-Existing Ground Dozer Assist Scraper Grading-Outslope-Existing Ground    | South Stockpile S-2<br>South Stockpile S-3  | -                      | 86.9<br>76.0           | -                | 4,690,126<br>4,101,997                        | 0%<br>0%                      | 4,690,126<br>4,101,997                       |
| 1104-B-a-Dz3<br>1105-B-a-Dz3 | Dozer Assist Scraper Grading-Outslope-Existing Ground Dozer Assist Scraper Grading-Outslope-Existing Ground    | South Stockpile S-4 South Stockpile S-5   | -                      | 37.9<br>82.6           | -                | 2,044,550<br>4,461,300                        | 0%<br>0%                      | 2,044,550<br>4,461,300                       |
| 1106-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground  | South Stockpile S-6   | -                      | 91.2<br>47.6           | -                | 4,922,868                                     | 0%                            | 4,922,868                                    |
| 1107-B-a-Dz3<br>1108-B-a-Dz3 | Dozer Assist Scraper Grading-Outslope-Existing Ground Dozer Assist Scraper Grading-Outslope-Existing Ground    | South Stockpile S-7 South Stockpile S-8   | -                      | 67.8                   | -                | 2,572,155<br>3,660,779                        | 0%<br>0%                      | 2,572,155<br>3,660,779                       |
| 1109-B-a-Dz3<br>1207-B-a-Dz3 | Dozer Assist Scraper Grading-Outslope-Existing Ground<br>Dozer Assist Scraper Grading-Outslope-Existing Ground | South Stockpile S-9(1) West Stockpile W-7   | -                      | 2.6<br>33.2            | -                | 137,679<br>2,249,293                          | 0%<br>0%                      | 137,679<br>2,249,293                         |
| 1209-B-a-Dz3<br>1210-B-a-Dz3 | Dozer Assist Scraper Grading-Outslope-Existing Ground<br>Dozer Assist Scraper Grading-Outslope-Existing Ground | West Stockpile W-8(1) West Stockpile W-8(2)                                       | -                      | 33.9<br>33.9           | -                | 347,445<br>2,250,301                          | 0%<br>0%                      | 347,445<br>2,250,301                         |
| 1211-B-a-Dz3<br>1212-B-a-Dz3 | Dozer Assist Scraper Grading-Outslope-Existing Ground Dozer Assist Scraper Grading-Outslope-Existing Ground    | West Stockpile W-9<br>West Stockpile W-10   | -                      | 27.1<br>21.5           | -                | 1,195,526<br>640,632                          | 0%<br>0%                      | 1,195,526<br>640,632                         |
| 1213-B-a-Dz3<br>1301-B-a-Dz3 | Dozer Assist Scraper Grading-Outslope-Existing Ground Dozer Assist Scraper Grading-Outslope-Existing Ground    | West Stockpile W-11<br>Lambright Stockpile LB-1                                   | -                      | 23.9<br>71.4           | -                | 4,495,590<br>2,592,130                        | 0%<br>0%                      | 4,495,590<br>2,592,130                       |
| 1302-B-a-Dz3<br>1303-B-a-Dz3 | Dozer Assist Scraper Grading-Outslope-Existing Ground Dozer Assist Scraper Grading-Outslope-Existing Ground    | Lambright Stockpile LB-2<br>Lambright Stockpile LB-3                              | -                      | 38.3<br>33.2           | -                | 1,391,371<br>1,204,331                        | 0%<br>0%                      | 1,391,371<br>1,204,331                       |
| 1304-B-a-Dz3<br>1305-B-a-Dz3 | Dozer Assist Scraper Grading-Outslope-Existing Ground Dozer Assist Scraper Grading-Outslope-Existing Ground    | Lambright Stockpile LB-4 Lambright Stockpile LB-5                                 | -                      | 41.6<br>57.7           | -                | 1,511,967<br>2,096,307                        | 0%<br>0%                      | 1,511,967<br>2,096,307                       |
| 1306-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground  | Lambright Stockpile LB-6  | -                      | 14.2                   | -                | 514,292                                       | 0%                            | 514,292                                      |
| 1307-B-a-Dz3<br>1308-B-a-Dz3 | Dozer Assist Scraper Grading-Outslope-Existing Ground Dozer Assist Scraper Grading-Outslope-Existing Ground    | Lambright Stockpile LB-7(1) Lambright Stockpile LB-7(2)                           | -                      | 11.0<br>6.9            | -                | 400,870<br>251,168                            | 0%<br>0%                      | 400,870<br>251,168                           |
| 1309-B-a-Dz3<br>1310-B-a-Dz3 | Dozer Assist Scraper Grading-Outslope-Existing Ground<br>Dozer Assist Scraper Grading-Outslope-Existing Ground | Lambright Stockpile LB-8<br>Lambright Stockpile LB-9                              | -                      | 35.5<br>47.5           | -                | 1,287,895<br>1,723,541                        | 0%<br>0%                      | 1,287,895<br>1,723,541                       |
| 1311-B-a-Dz3<br>1312-B-a-Dz3 | Dozer Assist Scraper Grading-Outslope-Existing Ground Dozer Assist Scraper Grading-Outslope-Existing Ground    | Lambright Stockpile LB-10<br>Lambright Stockpile LB-11                            | -<br>-                 | 60.6<br>35.3           | -                | 2,199,892<br>1,280,563                        | 0%<br>0%                      | 2,199,892<br>1,280,563                       |
| 1313-B-a-Dz3<br>1314-B-a-Dz3 | Dozer Assist Scraper Grading-Outslope-Existing Ground Dozer Assist Scraper Grading-Outslope-Existing Ground    | Lambright Stockpile LB-12<br>Lambright Stockpile LB-13                            | -                      | 119.3<br>83.7          | -                | 4,330,838<br>3,039,282                        | 0%<br>0%                      | 4,330,838<br>3,039,282                       |
| 1315-B-a-Dz3<br>1101-A-a-Sc2 | Dozer Assist Scraper Grading-Outslope-Existing Ground<br>Grade-Outslope-Existing Ground                        | Lambright Stockpile LB-14<br>South Stockpile S-1                                  | -                      | 51.6<br>-              | -                | 1,875,436<br>348,051                          | 0%<br>0%                      | 1,875,436<br>348,051                         |
| 1102-A-a-Sc2<br>1103-A-a-Sc2 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground  | South Stockpile S-2<br>South Stockpile S-3  | -                      | -                      | -                | 4,690,126<br>4,101,997                        | 0%<br>0%                      | 4,690,126<br>4,101,997                       |
| 1104-A-a-Sc2<br>1105-A-a-Sc2 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground  | South Stockpile S-4 South Stockpile S-5   | -                      | -                      | -                | 2,044,550<br>4,461,300                        | 0%<br>0%                      | 2,044,550<br>4,461,300                       |
| 1106-A-a-Sc2                 | Grade-Outslope-Existing Ground   | South Stockpile S-6   | -                      | -                      | -                | 4,922,868                                     | 0%                            | 4,922,868                                    |
| 1107-A-a-Sc2<br>1108-A-a-Sc2 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground  | South Stockpile S-7<br>South Stockpile S-8  | -                      | -                      | -                | 2,572,155<br>3,660,779                        |                               | 2,572,155<br>3,660,779                       |
| 1109-A-a-Sc2<br>1207-A-a-Sc2 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground  | South Stockpile S-9(1) West Stockpile W-7   | -                      | -                      | -                | 137,679<br>2,249,293                          | 0%<br>0%                      | 137,679<br>2,249,293                         |
| 1209-A-a-Sc2<br>1210-A-a-Sc2 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground  | West Stockpile W-8(1) West Stockpile W-8(2)                                       | -<br>-                 | -                      | -                | 347,445<br>2,250,301                          | 0%<br>0%                      | 347,445<br>2,250,301                         |
| 1211-A-a-Sc2<br>1212-A-a-Sc2 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground  | West Stockpile W-9<br>West Stockpile W-10   | -                      | -                      | -                | 1,195,526<br>640,632                          | 0%<br>0%                      | 1,195,526<br>640,632                         |
| 1213-A-a-Sc2<br>1301-A-a-Sc2 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground  | West Stockpile W-11<br>Lambright Stockpile LB-1                                   | -                      | -                      | -                | 4,495,590<br>2,592,130                        | 0%<br>0%                      | 4,495,590<br>2,592,130                       |
| 1302-A-a-Sc2<br>1303-A-a-Sc2 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground  | Lambright Stockpile LB-2<br>Lambright Stockpile LB-3                              | -                      | -                      | -                | 1,391,371<br>1,204,331                        | 0%<br>0%                      | 1,391,371<br>1,204,331                       |
| 1304-A-a-Sc2                 | Grade-Outslope-Existing Ground   | Lambright Stockpile LB-4  | -                      | -                      | -                | 1,511,967                                     | 0%<br>0%                      | 1,511,967<br>2,096,307                       |
| 1305-A-a-Sc2<br>1306-A-a-Sc2 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground Crade-Outslope-Existing Ground                   | Lambright Stockpile LB-5 Lambright Stockpile LB-6 Lambright Stockpile LB-7(1)     | -                      | -                      | -                | 2,096,307<br>514,292                          | 0%                            | 514,292                                      |
| 1307-A-a-Sc2<br>1308-A-a-Sc2 | Grade-Outslope-Existing Ground<br>Grade-Outslope-Existing Ground   | Lambright Stockpile LB-7(1) Lambright Stockpile LB-7(2)                           | -<br>-                 | -                      | -                | 400,870<br>251,168                            | 0%<br>0%                      | 400,870<br>251,168                           |
| 1309-A-a-Sc2<br>1310-A-a-Sc2 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground  | Lambright Stockpile LB-8<br>Lambright Stockpile LB-9                              | -                      | -                      | -                | 1,287,895<br>1,723,541                        | 0%<br>0%                      | 1,287,895<br>1,723,541                       |
| 1311-A-a-Sc2<br>1312-A-a-Sc2 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground  | Lambright Stockpile LB-10<br>Lambright Stockpile LB-11                            | -                      |                        | -                | 2,199,892<br>1,280,563                        | 0%<br>0%                      | 2,199,892<br>1,280,563                       |
| 1313-A-a-Sc2<br>1314-A-a-Sc2 | Grade-Outslope-Existing Ground<br>Grade-Outslope-Existing Ground   | Lambright Stockpile LB-12<br>Lambright Stockpile LB-13                            | -                      | -                      | -                | 4,330,838<br>3,039,282                        | 0%                            | 4,330,838<br>3,039,282                       |
| 1315-A-a-Sc2<br>1110-A-a-Mg1 | Grade-Outslope-Existing Ground Grade-Top-Existing Ground   | Lambright Stockpile LB-14 South Stockpile S-9(2)                                  | -                      | 45.8                   | -                | 1,875,436                                     | 0%<br>0%                      | 1,875,436                                    |
| 1111-A-a-Mg1                 | Grade-Top-Existing Ground  | South Stockpile S-9(3)  | -                      | 39.8                   | -                | -   | 0%<br>0%<br>0%                | 1 200 000                                    |
| 1201-A-a-Dz2<br>1202-A-a-Dz2 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground Crade-Outslope-Existing Ground                   | West Stockpile W-1 West Stockpile W-2 West Stockpile W-2                          | -<br>-                 | -                      | -                | 1,208,008<br>1,179,800                        | 0%                            | 1,208,008<br>1,179,800                       |
| 1203-A-a-Dz2<br>1204-A-a-Dz2 | Grade-Outslope-Existing Ground<br>Grade-Outslope-Existing Ground   | West Stockpile W-3<br>West Stockpile W-4  | -<br>-                 | -                      | -                | 927,306<br>885,787                            | 0%<br>0%                      | 927,306<br>885,787                           |
| 1205-A-a-Dz2<br>1206-A-a-Dz2 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground  | West Stockpile W-5<br>West Stockpile W-6  | -                      | -                      | -                | 1,159,889<br>1,128,263                        | 0%<br>0%                      | 1,159,889<br>1,128,263                       |
| 1214-A-a-Dz2<br>1215-A-a-Dz2 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground  | West Stockpile W-12<br>West Stockpile W-13(1)                                     | -                      | -                      | -                | 200,360<br>76,881                             | 0%<br>0%                      | 200,360<br>76,881                            |
| 1216-A-a-Dz2<br>1217-A-a-Dz2 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground  | West Stockpile W-13(2) West Stockpile W-14  | -                      |                        | -                | 296,870<br>249,433                            | 0%<br>0%                      | 296,870<br>249,433                           |
| 1218-A-a-Dz2<br>1219-A-a-Mg1 | Grade-Outslope-Existing Ground Grade-Top-Existing Ground   | West Stockpile W-15(1) West Stockpile W-15(2)                                     | -                      | -<br>6.2               | -                | 166,736                                       | 0%<br>0%                      | 166,736                                      |
| 1220-A-a-Dz2                 | Grade-Outslope-Existing Ground   | West Stockpile W-16(1)  | -                      | -                      | -                | 166,583                                       | 0%                            | 166,583                                      |
| 1221-A-a-Mg1<br>1222-A-a-Mg1 | Grade-Top-Existing Ground<br>Grade-Top-Existing Ground   | West Stockpile W-16(2) West Stockpile W-17(1)                                     | -                      | 6.9<br>55.7            | -                | -   | 0%<br>0%                      | -  |
| 1223-A-a-Mg1<br>1316-A-a-Mg1 | Grade-Top-Existing Ground Grade-Top-Existing Ground  | West Stockpile W-17(2) Lambright Stockpile LB-19(1)                               | -                      | 28.4<br>35.1           | -                | -   | 0%<br>0%                      | -  |
| 1317-A-a-Mg1<br>1401-A-a-Dz2 | Grade-Top-Existing Ground Grade-Outslope-Existing Ground   | Lambright Stockpile LB-19(2)<br>Southwest Lampbright SWL-15                       | -                      | 42.5<br>-              | -                | 303,576                                       | 0%<br>0%                      | 303,576                                      |
| 1402-A-a-Dz2<br>1403-A-a-Mg1 | Grade-Outslope-Existing Ground Grade-Top-Existing Ground   | Southwest Lampbright SWL-16<br>Southwest Lampbright SWL-17                        | -                      | -<br>5.2               | -                | 531,879<br>-                                  | 0%<br>0%                      | 531,879<br>-                                 |
| 1404-A-a-Dz2<br>1405-A-a-Dz2 | Grade-Outslope-Existing Ground<br>Grade-Outslope-Existing Ground   | Southwest Lampbright SWL-17(1)<br>Southwest Lampbright SWL-17(2)                  | -                      | -                      | -                | 405,644<br>446,539                            | 0%<br>0%                      | 405,644<br>446,539                           |
| 1406-A-a-Dz2<br>1601-A-a-Mg1 | Grade-Outslope-Existing Ground Grade-Top-Existing Ground   | Southwest Lampbright SWL-18<br>Northwest Stockpile NW-1(1)                        | -                      | -<br>1.7               | -                | 450,060                                       | 0%<br>0%                      | 450,060                                      |
| 1602-A-a-Mg1<br>1603-A-a-Dz2 | Grade-Top-Existing Ground Grade-Outslope-Existing Ground   | Northwest Stockpile NW-1(2) Northwest Stockpile NW-2(1)                           | -                      | 1.8                    | -                | -<br>19,428                                   | 0%                            | -<br>19,428                                  |
| . 500 /1 G-DZZ               |  | 2.00.p.10 2(1)  |                        | -                      | -                | 13,420  | J /0                          | 13,420                                       |

- Assumptions:

  1 Acres and volumes based on Golder Take-Offs 1401129-004-MTO-RevG\_07\_Chino\_MTOs\_05SEP18.xlsx

  2 Cover Material Swell: The 'Loose Volume' is calculated based on the acreage to be covered, 3 ft of cover, and accounts for appropriate swell factor.

  3 8% swell factor is estimated for cover obtained from a mine stockpile because it is placed loose and is looser than cover borrowed from a natural deposit.

  4 Has been agreed upon with State agencies that swell occurs when cover material is moved from source to haul truck but not from the truck to placement on stockpile

| ID   | Description   | Source Location 1  | Destination Location 2   | Area (ac) <sup>1</sup> | Cover Depth (in)  | Bank/Stockpile<br>Volume (bcy) <sup>1,4</sup> | Swell Factor (%) <sup>3</sup> | Loose/Stockpile<br>Volume (lcy) <sup>2</sup> |
|--|---|--|--|------------------------|-------------------|---|-------------------------------|--|
| 1604-A-a-Mg1<br>1605-A-a-Mg1                 | Grade-Top-Existing Ground Grade-Top-Existing Ground   | Northwest Stockpile NW-2(2)<br>Northwest Stockpile NW-2(3)   | -  | 0.3<br>0.3             | -                 | -   | 0%<br>0%                      | -  |
| 1701-A-a-Mg1<br>1702-A-a-Mg1<br>1800-A-a-Mg1 | Grade-Top-Existing Ground Grade-Top-Existing Ground Grade-Entire Stockpile-Existing Ground  | LeeHill Stockpile LH-2<br>LeeHill Stockpile LH-3<br>Northeast Stockpile  | -  | 22.4<br>3.0<br>12.2    | -<br>-            | -   | 0%<br>0%<br>0%                | -  |
| 1901-A-a-Mg1<br>1902-A-a-Mg1                 | Grade-Top-Existing Ground Grade-Top-Existing Ground   | North Stockpile N-1 North Stockpile N-2(1)   | -  | 6.6<br>0.2             | -                 |   | 0%<br>0%                      | -  |
| 1903-A-a-Mg1<br>2001-A-a-Mg1                 | Grade-Top-Existing Ground Grade-Top-Existing Ground   | North Stockpile N-2(2)<br>STS2 S-10  | -  | 0.2<br>52.7            | -                 | -   | 0%<br>0%                      | -  |
| 2002-A-a-Dz2<br>2003-A-a-Dz2                 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground   | STS2 S-10(1)<br>STS2 S-10(2)   | -  | -                      | -                 | 12,730<br>225,294                             | 0%<br>0%                      | 12,730<br>225,294                            |
| 2101-A-a-Dz2<br>2102-A-a-Mg1                 | Grade-Outslope-Existing Ground Grade-Top-Existing Ground  | Upper South US-1(1) Upper South US-1(2)  | -  | -<br>36.0              | -                 | 1,657,692                                     | 0%<br>0%                      | 1,657,692                                    |
| 2201-A-a-Dz2<br>2202-A-a-Mg1                 | Grade-Outslope-Existing Ground Grade-Top-Existing Ground  | 9 Waste Rock 9 WRS-1<br>9 Waste Rock 9 WRS-2   | -  | 95.5                   | -                 | 399,767                                       | 0%<br>0%                      | 399,767                                      |
| 2309-A-a-Dz2<br>2310-A-a-Dz2                 | Grade-Dam 15-Existing Ground<br>Grade-Dam 16-Existing Ground  | Dams and Reservoirs Dam 15<br>Dams and Reservoirs Dam 16   | -  | -                      | -                 | 780<br>780                                    | 0%<br>0%                      | 780<br>780                                   |
| 2313-A-a-Dz2<br>2316-A-a-Dz2                 | Grade-Dam 20-Existing Ground<br>Grade-Reservoir 17-Existing Ground  | Dams and Reservoirs Dam 20<br>Dams and Reservoirs Reservoir 17   | -<br>-   | -                      | -<br>-            | 1,845<br>16,559                               | 0%<br>0%                      | 1,845<br>16,559                              |
| 2318-A-a-Dz2<br>2320-A-a-Dz2                 | Grade-Fleming Pond-Existing Ground Grade-Tailing Thickener 1-Existing Ground  | Dams and Reservoirs Fleming Pond Dams and Reservoirs Tailing Thickener 1   | -  | -                      | -                 | 4,071<br>12,880                               | 0%<br>0%                      | 4,071<br>12,880                              |
| 2321-A-a-Dz2<br>2323-A-a-Dz2                 | Grade-PLS Pond & Launder-Existing Ground Grade-Raffinate Pond-Existing Ground   | Dams and Reservoirs PLS Pond & Launder<br>Dams and Reservoirs Raffinate Pond   | -<br>-   | -                      | -<br>-            | 1,555<br>829                                  | 0%<br>0%                      | 1,555<br>829                                 |
| 2324-A-a-Dz2<br>2327-A-a-Dz2                 | Grade-Reservoir 2-Existing Ground<br>Grade-Reservoir 6-Existing Ground  | Dams and Reservoirs Reservoir 2<br>Dams and Reservoirs Reservoir 6   | -<br>-   | -                      | -<br>-            | 1,361<br>55,956                               | 0%<br>0%                      | 1,361<br>55,956                              |
| 2328-A-a-Dz2<br>2341-A-a-Dz2                 | Grade-Reservoir 7-Existing Ground<br>Grade-Elmo's Pond -Existing Ground   | Dams and Reservoirs Reservoir 7 Dams and Reservoirs Elmo's Pond  | -<br>-   | -                      |                   | 36,161<br>6,002                               | 0%<br>0%                      | 36,161<br>6,002                              |
| 2342-A-a-Dz2<br>2343-A-a-Dz2                 | Grade-Lower Lined Pond -Existing Ground Grade-Upper Lined Pond -Existing Ground   | Dams and Reservoirs Lower Lined Pond<br>Dams and Reservoirs Upper Lined Pond   | -  | -                      |                   | 10,793<br>1,984                               | 0%<br>0%                      | 10,793<br>1,984                              |
| 2344-A-a-Dz2<br>2345-A-a-Dz2                 | Grade-5900 PLS Sump -Existing Ground Grade-6300 PLS Booster Station -Existing Ground  | Dams and Reservoirs 5900 PLS Sump<br>Dams and Reservoirs 6300 PLS Booster Station  | -  | -                      |                   | 2,759<br>145                                  | 0%<br>0%                      | 2,759<br>145                                 |
| 2346-A-a-Dz2<br>2514-A-a-Mg1                 | Grade-Lee Hill #2 Booster -Existing Ground Grade-Highway to Heaven Haul Road-Existing Ground  | Dams and Reservoirs Lee Hill #2 Booster<br>Miscellaneous NMA Highway to Heaven Haul Road   | -  | 32.4                   | -                 | 678<br>-                                      | 0%<br>0%                      | 678<br>-                                     |
| 2600-A-a-Mg1<br>3000-A-a-Mg1                 | Grade-200-Acre Unplanned Future Disturbance-Existing Ground<br>Grade-Entire Impoundment-Existing Ground   | Unplanned Disturbed Area<br>Axiflo   | <del>-</del>   | 200.0<br>97.1          | -<br>-            | ÷   | 0%<br>0%                      | -<br>-                                       |
| 3000-A-a-Dz2<br>3100-A-a-Mg1                 | Grade-Entire Impoundment-Existing Ground Grade-Entire Impoundment-Existing Ground   | Axiflo Tailings Pond 6   | -<br>-   | 261.7                  | -                 | 296   | 0%<br>0%                      | 296<br>-                                     |
| 3200-A-a-Mg1<br>3308-A-a-Mg1                 | Grade-Entire Impoundment-Existing Ground Grade-35 Acre Misc. Area-Existing Ground   | Tailings Pond 7 Miscellaneous SMA 35 Acre Misc. Area   | -  | 1,660.5<br>35.0        | -                 | -   | 0%<br>0%                      | -  |
| 1002-E-c-Rp1<br>1110-E-c-Rp1                 | Rip-Top-Rough Graded Material<br>Rip-Top-Rough Graded Material  | Triangle Stockpile T-2 South Stockpile S-9(2)  | -  | 4.8<br>45.8            |                   | -   | 0%<br>0%                      | -  |
| 1111-E-c-Rp1<br>1219-E-c-Rp1                 | Rip-Top-Rough Graded Material Rip-Top-Rough Graded Material   | South Stockpile S-9(3) West Stockpile W-15(2)  | -  | 39.8<br>6.2            | -<br>-            | -   | 0%<br>0%                      | -  |
| 1221-E-c-Rp1<br>1222-E-c-Rp1                 | Rip-Top-Rough Graded Material<br>Rip-Top-Rough Graded Material  | West Stockpile W-16(2) West Stockpile W-17(1)  | -  | 6.9<br>55.7            | -<br>-            | -   | 0%<br>0%                      | -  |
| 1223-E-c-Rp1<br>1316-E-c-Rp1                 | Rip-Top-Rough Graded Material Rip-Top-Rough Graded Material   | West Stockpile W-17(2) Lambright Stockpile LB-19(1)  | -  | 28.4<br>35.1           | -<br>-            | -   | 0%<br>0%                      | -  |
| 1317-E-c-Rp1<br>1403-E-c-Rp1<br>1500-E-c-Rp1 | Rip-Top-Rough Graded Material<br>Rip-Top-Rough Graded Material<br>Rip-Entire Stockpile-Rough Graded Material  | Lambright Stockpile LB-19(2) Southwest Lampbright SWL-17 South and Fact in Bit Stockpiles  | -  | 42.5<br>5.2<br>46.0    | -<br>-            | -   | 0%<br>0%<br>0%                | -  |
| 1601-E-c-Rp1<br>1602-E-c-Rp1                 | Rip-Top-Rough Graded Material Rip-Top-Rough Graded Material   | South and East In-Pit Stockpiles<br>Northwest Stockpile NW-1(1)<br>Northwest Stockpile NW-1(2)                                       | -  | 1.7<br>1.8             | -<br>-            | -   | 0%<br>0%                      | -  |
| 1604-E-c-Rp1<br>1605-E-c-Rp1                 | Rip-Top-Rough Graded Material Rip-Top-Rough Graded Material   | Northwest Stockpile NW-2(2) Northwest Stockpile NW-2(3)  | -  | 0.3<br>0.3             | -                 |   | 0%<br>0%                      | -  |
| 1701-E-c-Rp1<br>1702-E-c-Rp1                 | Rip-Top-Rough Graded Material Rip-Top-Rough Graded Material Rip-Top-Rough Graded Material   | LeeHill Stockpile LH-2<br>LeeHill Stockpile LH-3   | -  | 22.4<br>3.0            | -                 | -   | 0%<br>0%                      | -  |
| 1800-E-c-Rp1<br>1901-E-c-Rp1                 | Rip-Entire Stockpile-Rough Graded Material<br>Rip-Top-Rough Graded Material   | Northeast Stockpile North Stockpile N-1  | -  | 12.2<br>6.6            | -                 | -   | 0%<br>0%                      | -  |
| 1902-E-c-Rp1<br>1903-E-c-Rp1                 | Rip-Top-Rough Graded Material<br>Rip-Top-Rough Graded Material  | North Stockpile N-2(1)<br>North Stockpile N-2(2)   | -  | 0.2<br>0.2             | -                 | -   | 0%<br>0%                      | -<br>-                                       |
| 2000-E-c-Rp1<br>2100-E-c-Rp1                 | Rip-Entire Stockpile-Rough Graded Material<br>Rip-Entire Stockpile-Rough Graded Material  | STS2<br>Upper South  | -<br>-   | 83.8<br>142.7          | -<br>-            | -   | 0%<br>0%                      | -  |
| 2202-E-c-Rp1<br>2309-E-c-Rp1                 | Rip-Top-Rough Graded Material<br>Rip-Dam 15-Rough Graded Material   | 9 Waste Rock 9 WRS-2<br>Dams and Reservoirs Dam 15   | -<br>-   | 95.5<br>0.1            | -<br>-            | -   | 0%<br>0%                      | -  |
| 2310-E-c-Rp1<br>2313-E-c-Rp1                 | Rip-Dam 16-Rough Graded Material<br>Rip-Dam 20-Rough Graded Material  | Dams and Reservoirs Dam 16<br>Dams and Reservoirs Dam 20   | -  | 0.1<br>0.3             |                   | -   | 0%<br>0%                      | -  |
| 2316-E-c-Rp1<br>2318-E-c-Rp1                 | Rip-Reservoir 17-Rough Graded Material<br>Rip-Fleming Pond-Rough Graded Material  | Dams and Reservoirs Reservoir 17 Dams and Reservoirs Fleming Pond  | -  | 3.4<br>0.8             | <del>-</del><br>- | -   | 0%<br>0%                      | -  |
| 2320-E-c-Rp1<br>2321-E-c-Rp1                 | Rip-Tailing Thickener 1-Rough Graded Material Rip-PLS Pond & Launder-Rough Graded Material  | Dams and Reservoirs Tailing Thickener 1 Dams and Reservoirs PLS Pond & Launder   | -  | 2.6<br>0.3             |                   | -   | 0%<br>0%                      | -  |
| 2323-E-c-Rp1<br>2324-E-c-Rp1                 | Rip-Raffinate Pond-Rough Graded Material<br>Rip-Reservoir 2-Rough Graded Material   | Dams and Reservoirs Raffinate Pond<br>Dams and Reservoirs Reservoir 2  | -<br>-   | 0.1<br>0.2             | -                 | -   | 0%<br>0%                      | -  |
| 2327-E-c-Rp1<br>2328-E-c-Rp1                 | Rip-Reservoir 6-Rough Graded Material Rip-Reservoir 7-Rough Graded Material   | Dams and Reservoirs Reservoir 6 Dams and Reservoirs Reservoir 7  | -<br>-   | 1.5<br>2.4             | -                 | -   | 0%<br>0%                      | -  |
| 2341-E-c-Rp1<br>2342-E-c-Rp1                 | Rip-Elmo's Pond -Rough Graded Material Rip-Lower Lined Pond -Rough Graded Material  | Dams and Reservoirs Elmo's Pond Dams and Reservoirs Lower Lined Pond   | -  | 1.2<br>2.2             | -<br>-            | -   | 0%<br>0%                      | -  |
| 2343-E-c-Rp1<br>2344-E-c-Rp1                 | Rip-Upper Lined Pond -Rough Graded Material Rip-5900 PLS Sump -Rough Graded Material  | Dams and Reservoirs Upper Lined Pond Dams and Reservoirs 5900 PLS Sump Dams and Reservoirs 6300 PLS Reservoirs Station               | -  | 0.4<br>0.6             | -<br>-            | -   | 0%<br>0%                      | -  |
| 2345-E-c-Rp1<br>2346-E-c-Rp1<br>2513-E-c-Rp1 | Rip-6300 PLS Booster Station -Rough Graded Material Rip-Lee Hill #2 Booster -Rough Graded Material  | Dams and Reservoirs 6300 PLS Booster Station Dams and Reservoirs Lee Hill #2 Booster Miscellaneous NMA Chino part of Cobre Haul Road | -<br>-   | 0.0<br>0.1<br>3.2      | -<br>-            | -   | 0%<br>0%<br>0%                | -  |
| 2513-E-c-Rp1<br>2514-E-c-Rp1<br>2600-E-c-Rp1 | Rip-Chino part of Cobre Haul Road-Rough Graded Material<br>Rip-Highway to Heaven Haul Road-Rough Graded Material<br>Rip-200-Acre Unplanned Future Disturbance-Rough Graded Material | Miscellaneous NMA Highway to Heaven Haul Road Unplanned Disturbed Area   | -  | 32.4<br>200.0          | -<br>-            | -   | 0%<br>0%                      | -<br>-                                       |
| 3000-E-c-Rp1<br>3100-E-c-Rp1                 | Rip-Entire Impoundment-Rough Graded Material Rip-Entire Impoundment-Rough Graded Material   | Axiflo Tailings Pond 6   | -  | 97.1<br>261.7          | -                 |   | 0%<br>0%                      | -  |
| 3200-E-c-Rp1<br>3301-E-c-Rp1                 | Rip-Entire Impoundment-Rough Graded Material Rip-Slag Pile Outslopes W side-Rough Graded Material   | Tailings Pond 7 Miscellaneous SMA Slag Pile Outslopes W side   | -  | 1,660.5<br>8.2         | -                 | -   | 0%<br>0%                      | -  |
| 3308-E-c-Rp1<br>1000-B-b-Dz2                 | Rip-35 Acre Misc. Area-Rough Graded Material<br>Dozer Assist-Cover  | Miscellaneous SMA 35 Acre Misc. Area   | -<br>Triangle Stockpile  | 35.0<br>81.5           | -<br>36           | -<br>365,390                                  | 0%<br>8%                      | -<br>394,621                                 |
| 1100-B-b-Dz2<br>1200-B-b-Dz2                 | Dozer Assist-Cover Dozer Assist-Cover   | Upper South & STS2   | South Stockpile West Stockpile                                   | 584.6<br>626.4         | 36<br>36          | 2,619,882<br>2,807,337                        | 8%<br>8%                      | 2,829,473<br>3,031,924                       |
| 1300-B-b-Dz2<br>1400-B-b-Dz2                 | Dozer Assist-Cover Dozer Assist-Cover   | Upper South & White House  | Lambright Stockpile<br>Southwest Lampbright                      | 785.4<br>94.3          | 36<br>36          | 3,519,638<br>422,593                          | 8%<br>8%                      | 3,801,209<br>456,400                         |
| 1500-B-b-Dz2<br>1600-B-b-Dz2                 | Dozer Assist-Cover<br>Dozer Assist-Cover  | Upper South  | South and East In-Pit Stockpiles<br>Northwest Stockpile          | 46.0<br>8.2            | 36<br>36          | 206,148<br>36,834                             | 8%<br>8%                      | 222,640<br>39,781                            |
| 1700-B-b-Dz2<br>1800-B-b-Dz2                 | Dozer Assist-Cover<br>Dozer Assist-Cover  | Upper South  | LeeHill Stockpile<br>Northeast Stockpile                         | 25.4<br>12.2           | 36<br>36          | 113,856<br>54,883                             | 8%<br>8%                      | 122,964<br>59,273                            |
| 1900-B-b-Dz2<br>2200-B-b-Dz2                 | Dozer Assist-Cover<br>Dozer Assist-Cover  | STS2   | North Stockpile<br>9 Waste Rock                                  | 6.9<br>161.2           | 36<br>36          | 30,960<br>722,415                             | 8%<br>8%                      | 33,437<br>780,208                            |
| 2309-B-b-Dz2<br>2310-B-b-Dz2                 | Dozer Assist-Cover<br>Dozer Assist-Cover  | STS2   | Dam 15<br>Dam 16   | 0.1<br>0.1             | 36<br>36          | 448<br>448                                    | 8%<br>8%                      | 484<br>484                                   |
| 2313-B-b-Dz2<br>2316-B-b-Dz2                 | Dozer Assist-Cover<br>Dozer Assist-Cover  | STS2   | Dam 20<br>Reservoir 17   | 0.3<br>3.4             | 36<br>36          | 1,434<br>15,058                               | 8%<br>8%                      | 1,549<br>16,262                              |
| 2318-B-b-Dz2<br>2320-B-b-Dz2                 | Dozer Assist-Cover<br>Dozer Assist-Cover  | STS2   | Fleming Pond Tailing Thickener 1                                 | 0.8<br>2.6             | 36<br>36          | 3,496<br>11,652                               | 8%<br>8%                      | 3,775<br>12,584                              |
| 2321-B-b-Dz2<br>2323-B-b-Dz2                 | Dozer Assist-Cover<br>Dozer Assist-Cover  | STS2   | PLS Pond & Launder<br>Raffinate Pond                             | 0.3<br>0.1             | 36<br>36          | 1,165<br>493                                  | 8%<br>8%                      | 1,258<br>532                                 |
| 2324-B-b-Dz2<br>2327-B-b-Dz2                 | Dozer Assist-Cover<br>Dozer Assist-Cover<br>Dozer Assist-Cover  | STS2   | Reservoir 2 Reservoir 6 Reservoir 7                              | 0.2<br>1.5             | 36<br>36          | 986<br>6,722<br>10,800                        | 8%<br>8%                      | 1,065<br>7,260<br>11,664                     |
| 2328-B-b-Dz2<br>2341-B-b-Dz2<br>2342-B-b-Dz2 | Dozer Assist-Cover Dozer Assist-Cover Dozer Assist-Cover  | STS2   | Reservoir 7 Elmo's Pond Lower Lined Pond                         | 2.4<br>1.2<br>2.2      | 36<br>36<br>36    | 10,800<br>5,557<br>9,994                      | 8%<br>8%<br>8%                | 11,664<br>6,002<br>10,793                    |
| 2342-B-b-D22<br>2343-B-b-Dz2<br>2344-B-b-Dz2 | Dozer Assist-Cover Dozer Assist-Cover Dozer Assist-Cover  | STS2   | Upper Lined Pond 5900 PLS Sump                                   | 0.4<br>0.6             | 36<br>36          | 1,837<br>2,554                                | 8%<br>8%                      | 1,793<br>1,984<br>2,759                      |
| 2345-B-b-Dz2<br>2346-B-b-Dz2                 | Dozer Assist-Cover Dozer Assist-Cover Dozer Assist-Cover  | STS2   | 6300 PLS Sump<br>6300 PLS Booster Station<br>Lee Hill #2 Booster | 0.6<br>0.0<br>0.1      | 36<br>36          | 2,554<br>134<br>627                           | 8%<br>8%                      | 2,759<br>145<br>678                          |
| 2400-B-b-Dz2<br>2400-B-b-Dz2<br>2512-B-b-Dz2 | Dozer Assist-Cover Dozer Assist-Cover   | STS2   | Ground Hog #5 East Pit Access Disturbed Area                     | 2.0<br>3.7             | 12<br>36          | 2,988<br>16,447                               | 8%<br>8%                      | 3,227<br>17,763                              |
| 2513-B-b-Dz2<br>2514-B-b-Dz2                 | Dozer Assist-Cover Dozer Assist-Cover   | STS2   | Chino part of Cobre Haul Road<br>Highway to Heaven Haul Road     | 3.2<br>32.4            | 36<br>36          | 14,386<br>145,385                             | 8%<br>8%                      | 15,536<br>157,015                            |
| 2515-B-b-Dz2<br>3307-B-b-Dz2                 | Dozer Assist-Cover Dozer Assist-Cover   | STS2   | Disturbed Area Around Reservoi<br>Filter Plant                   |                        | 36<br>36          | 145,567<br>76,364                             | 8%<br>8%                      | 157,213<br>82,474                            |
| 2600-B-b-Dz2<br>3000-B-b-Dz2                 | Dozer Assist-Cover<br>Dozer Assist-Cover  | Upper South  | Unplanned Disturbed Area<br>Axiflo                               | 200.0<br>97.1          | 36<br>36          | 896,296<br>435,140                            | 8%<br>8%                      | 968,000<br>469,952                           |
| 3100-B-b-Dz2<br>3200-B-b-Dz2                 | Dozer Assist-Cover<br>Dozer Assist-Cover  | Borrow Area F<br>West of Borrow E&H  | Tailings Pond 6<br>Tailings Pond 7                               | 261.7<br>1,660.5       | 36<br>36          | 1,172,616<br>7,441,432                        | 8%<br>8%                      | 1,266,425<br>8,036,747                       |
| 3301-B-b-Dz2<br>3308-B-b-Dz2                 | Dozer Assist-Cover<br>Dozer Assist-Cover  | West of Borrow E&H   | Slag Pile Outslopes W side<br>35 Acre Misc. Area                 | 8.2<br>35.0            | 36<br>36          | 36,748<br>156,852                             | 8%<br>8%                      | 39,688<br>169,400                            |
| 1000-C-b-Sh1<br>1100-C-b-Sh1                 | Load-Cover<br>Load-Cover  | Upper South & STS2   | Triangle Stockpile<br>South Stockpile                            | 81.5<br>584.6          | 36<br>36          | 365,390<br>2,619,882                          | 8%<br>8%                      | 394,621<br>2,829,473                         |
| 1200-C-b-Sh1                                 | Load-Cover  | Upper South  | West Stockpile   | 626.4                  | 36                | 2,807,337                                     | 8%                            | 3,031,924                                    |

- Assumptions:

  1 Acres and volumes based on Golder Take-Offs 1401129-004-MTO-RevG\_07\_Chino\_MTOs\_05SEP18.xlsx

  2 Cover Material Swell: The 'Loose Volume' is calculated based on the acreage to be covered, 3 ft of cover, and accounts for appropriate swell factor.

  3 8% swell factor is estimated for cover obtained from a mine stockpile because it is placed loose and is looser than cover borrowed from a natural deposit.

  4 Has been agreed upon with State agencies that swell occurs when cover material is moved from source to haul truck but not from the truck to placement on stockpile

|  |  |   |   |                        |                  | Bank/Stockpile              | Swell Factor     | Loose/Stockpile                 |
|--|--|---|---|------------------------|------------------|-----------------------------|------------------|---------------------------------|
| ID 1300-C-b-Sh1                              | Description Load-Cover                                     | Source Location 1   | Destination Location 2  | Area (ac) <sup>1</sup> | Cover Depth (in) | Volume (bcy) <sup>1,4</sup> | (%) <sup>3</sup> | Volume (lcy) <sup>2</sup>       |
| 1300-C-b-Sh1<br>1400-C-b-Sh1                 | Load-Cover<br>Load-Cover                                   | Upper South & White House Upper South                     | Lambright Stockpile Southwest Lampbright South and Foot In Pit Stockpiles | 785.4<br>94.3<br>46.0  | 36<br>36<br>36   | 3,519,638<br>422,593        | 8%<br>8%         | 3,801,209<br>456,400<br>222,640 |
| 1500-C-b-Sh1<br>1600-C-b-Sh1                 | Load-Cover<br>Load-Cover                                   | Upper South Upper South                                   | South and East In-Pit Stockpiles<br>Northwest Stockpile                   | 8.2                    | 36               | 206,148<br>36,834           | 8%<br>8%         | 39,781                          |
| 1700-C-b-Sh1<br>1800-C-b-Sh1                 | Load-Cover<br>Load-Cover                                   | Upper South Upper South                                   | LeeHill Stockpile Northeast Stockpile                                     | 25.4<br>12.2<br>6.9    | 36<br>36<br>36   | 113,856<br>54,883           | 8%<br>8%<br>8%   | 122,964<br>59,273<br>33,437     |
| 1900-C-b-Sh1<br>2200-C-b-Sh1<br>2309-C-b-Sh1 | Load-Cover<br>Load-Cover<br>Load-Cover                     | Upper South<br>STS2                                       | North Stockpile<br>9 Waste Rock   | 161.2                  | 36               | 30,960<br>722,415<br>448    | 8%               | 780,208<br>484                  |
| 2310-C-b-Sh1                                 | Load-Cover<br>Load-Cover                                   | STS2<br>STS2  | Dam 15<br>Dam 16  | 0.1<br>0.1             | 36<br>36         | 448                         | 8%<br>8%         | 484                             |
| 2313-C-b-Sh1<br>2316-C-b-Sh1                 | Load-Cover<br>Load-Cover                                   | STS2<br>STS2<br>STS2                                      | Dam 20<br>Reservoir 17  | 0.3<br>3.4             | 36<br>36<br>36   | 1,434<br>15,058             | 8%<br>8%         | 1,549<br>16,262                 |
| 2318-C-b-Sh1<br>2320-C-b-Sh1                 | Load-Cover   | STS2  | Fleming Pond Tailing Thickener 1  | 0.8<br>2.6             | 36               | 3,496<br>11,652             | 8%<br>8%         | 3,775<br>12,584                 |
| 2321-C-b-Sh1<br>2323-C-b-Sh1<br>2324-C-b-Sh1 | Load-Cover<br>Load-Cover<br>Load-Cover                     | STS2<br>STS2<br>STS2                                      | PLS Pond & Launder Raffinate Pond   | 0.3<br>0.1<br>0.2      | 36<br>36<br>36   | 1,165<br>493<br>986         | 8%<br>8%<br>8%   | 1,258<br>532                    |
| 2327-C-b-Sh1<br>2328-C-b-Sh1                 | Load-Cover<br>Load-Cover                                   | STS2<br>STS2<br>STS2                                      | Reservoir 2<br>Reservoir 6<br>Reservoir 7                                 | 1.5<br>2.4             | 36<br>36         | 6,722<br>10,800             | 8%<br>8%         | 1,065<br>7,260<br>11,664        |
| 2341-C-b-Sh1<br>2342-C-b-Sh1                 | Load-Cover<br>Load-Cover                                   | STS2<br>STS2<br>STS2                                      | Elmo's Pond Lower Lined Pond  | 1.2<br>2.2             | 36<br>36         | 5,557<br>9,994              | 8%<br>8%         | 6,002<br>10,793                 |
| 2343-C-b-Sh1<br>2344-C-b-Sh1                 | Load-Cover<br>Load-Cover                                   | STS2<br>STS2<br>STS2                                      | Upper Lined Pond<br>5900 PLS Sump   | 0.4<br>0.6             | 36<br>36         | 1,837<br>2,554              | 8%<br>8%         | 1,984<br>2,759                  |
| 2345-C-b-Sh1<br>2346-C-b-Sh1                 | Load-Cover<br>Load-Cover                                   | STS2<br>STS2<br>STS2                                      | 6300 PLS Sump<br>6300 PLS Booster Station<br>Lee Hill #2 Booster          | 0.0<br>0.1             | 36<br>36         | 134<br>627                  | 8%<br>8%         | 2,759<br>145<br>678             |
| 2400-C-b-Sh1<br>2512-C-b-Sh1                 | Load-Cover<br>Load-Cover                                   | STS2<br>STS2<br>STS2                                      | Ground Hog #5 East Pit Access Disturbed Area                              | 2.0<br>3.7             | 12<br>36         | 2,988<br>16,447             | 8%<br>8%         | 3,227<br>17,763                 |
| 2512-C-b-Sh1<br>2513-C-b-Sh1<br>2514-C-b-Sh1 | Load-Cover<br>Load-Cover                                   | STS2<br>STS2<br>STS2                                      | Chino part of Cobre Haul Road<br>Highway to Heaven Haul Road              | 3.2<br>32.4            | 36<br>36         | 14,386<br>145,385           | 8%<br>8%         | 15,536<br>157,015               |
| 2515-C-b-Sh1<br>3307-C-b-Sh1                 | Load-Cover<br>Load-Cover                                   | STS2<br>STS2<br>West of Borrow E&H                        | Disturbed Area Around Reservoi<br>Filter Plant                            |                        | 36<br>36         | 145,567<br>76,364           | 8%<br>8%         | 157,015<br>157,213<br>82,474    |
| 2600-C-b-Sh1<br>3000-C-b-Sh1                 | Load-Cover<br>Load-Cover                                   | Upper South Borrow Area F & North of Borrow Area F        | Unplanned Disturbed Area Axiflo   | 200.0<br>97.1          | 36<br>36         | 896,296<br>435,140          | 8%<br>8%         | 968,000<br>469,952              |
| 3100-C-b-Sh1<br>3200-C-b-Sh1                 | Load-Cover<br>Load-Cover                                   | Borrow Area F West of Borrow E&H                          | Tailings Pond 6 Tailings Pond 7   | 261.7<br>1,660.5       | 36<br>36         | 1,172,616<br>7,441,432      | 8%<br>8%         | 1,266,425<br>8,036,747          |
| 3301-C-b-Sh1                                 | Load-Cover   | West of Borrow E&H West of Borrow E&H West of Borrow E&H  | Slag Pile Outslopes W side  | 8.2                    | 36               | 36,748                      | 8%               | 39,688                          |
| 3308-C-b-Sh1                                 | Load-Cover   |   | 35 Acre Misc. Area  | 35.0                   | 36               | 156,852                     | 8%               | 169,400                         |
| 1000-D-b-Tk4<br>1100-D-b-Tk4                 | Haul-Cover<br>Haul-Cover                                   | Upper South Upper South & STS2                            | Triangle Stockpile South Stockpile  | 81.5<br>584.6          | 36<br>36         | 365,390<br>2,619,882        | 8%<br>8%         | 394,621<br>2,829,473            |
| 1200-D-b-Tk4<br>1200-D-b-Tk4<br>1300-D-b-Tk4 | Haul-Cover<br>Haul-Cover                                   | Upper South & White House                                 | West Stockpile Lambright Stockpile  | 626.4<br>785.4         | 36<br>36         | 2,807,337<br>3,519,638      | 8%<br>8%         | 3,031,924<br>3,801,209          |
| 1400-D-b-Tk4<br>1500-D-b-Tk4                 | Haul-Cover<br>Haul-Cover                                   | Upper South Upper South                                   | Southwest Lampbright South and East In-Pit Stockpiles                     | 94.3<br>46.0           | 36<br>36         | 422,593<br>206,148          | 8%<br>8%         | 456,400<br>222,640              |
| 1600-D-b-Tk4<br>1700-D-b-Tk4                 | Haul-Cover<br>Haul-Cover                                   | Upper South Upper South                                   | Northwest Stockpile LeeHill Stockpile                                     | 8.2<br>25.4            | 36<br>36         | 36,834<br>113,856           | 8%<br>8%         | 39,781<br>122,964               |
| 1800-D-b-Tk4<br>1900-D-b-Tk4                 | Haul-Cover<br>Haul-Cover                                   | Upper South Upper South                                   | Northeast Stockpile North Stockpile                                       | 12.2<br>6.9            | 36<br>36         | 54,883<br>30,960            | 8%<br>8%         | 59,273<br>33,437                |
| 2200-D-b-Tk4                                 | Haul-Cover   | STS2  | 9 Waste Rock  | 161.2                  | 36               | 722,415                     | 8%               | 780,208                         |
| 2309-D-b-Tk4                                 | Haul-Cover   | STS2  | Dam 15  | 0.1                    | 36               | 448                         | 8%               | 484                             |
| 2310-D-b-Tk4                                 | Haul-Cover   | STS2  | Dam 16  | 0.1                    | 36               | 448                         | 8%               | 484                             |
| 2313-D-b-Tk4                                 | Haul-Cover   | STS2  | Dam 20  | 0.3                    | 36               | 1,434                       | 8%               | 1,549                           |
| 2316-D-b-Tk4                                 | Haul-Cover   | STS2  | Reservoir 17  | 3.4                    | 36               | 15,058                      | 8%               | 16,262                          |
| 2318-D-b-Tk4                                 | Haul-Cover   | STS2  | Fleming Pond  | 0.8                    | 36               | 3,496                       | 8%               | 3,775                           |
| 2320-D-b-Tk4                                 | Haul-Cover   | STS2  | Tailing Thickener 1 PLS Pond & Launder                                    | 2.6                    | 36               | 11,652                      | 8%               | 12,584                          |
| 2321-D-b-Tk4                                 | Haul-Cover   | STS2  |   | 0.3                    | 36               | 1,165                       | 8%               | 1,258                           |
| 2323-D-b-Tk4                                 | Haul-Cover   | STS2  | Raffinate Pond Reservoir 2  | 0.1                    | 36               | 493                         | 8%               | 532                             |
| 2324-D-b-Tk4                                 | Haul-Cover   | STS2  |   | 0.2                    | 36               | 986                         | 8%               | 1,065                           |
| 2327-D-b-Tk4                                 | Haul-Cover   | STS2  | Reservoir 6   | 1.5                    | 36               | 6,722                       | 8%               | 7,260                           |
| 2328-D-b-Tk4                                 | Haul-Cover   | STS2  | Reservoir 7   | 2.4                    | 36               | 10,800                      | 8%               | 11,664                          |
| 2341-D-b-Tk4                                 | Haul-Cover   | STS2  | Elmo's Pond   | 1.2                    | 36               | 5,557                       | 8%               | 6,002                           |
| 2342-D-b-Tk4                                 | Haul-Cover   | STS2  | Lower Lined Pond  |                        | 36               | 9,994                       | 8%               | 10,793                          |
| 2343-D-b-Tk4                                 | Haul-Cover   | STS2  | Upper Lined Pond  | 0.4                    | 36               | 1,837                       | 8%               | 1,984                           |
| 2344-D-b-Tk4                                 | Haul-Cover   | STS2  | 5900 PLS Sump   | 0.6                    | 36               | 2,554                       | 8%               | 2,759                           |
| 2345-D-b-Tk4                                 | Haul-Cover   | STS2  | 6300 PLS Booster Station  | 0.0                    | 36               | 134                         | 8%               | 145                             |
| 2346-D-b-Tk4                                 | Haul-Cover   | STS2  | Lee Hill #2 Booster   | 0.1                    | 36               | 627                         | 8%               | 678                             |
| 2400-D-b-Tk4<br>2512-D-b-Tk4                 | Haul-Cover<br>Haul-Cover                                   | STS2<br>STS2  | Ground Hog #5 East Pit Access Disturbed Area                              | 2.0                    | 12<br>36         | 2,988<br>16,447             | 8%<br>8%         | 3,227<br>17,763                 |
| 2513-D-b-Tk4                                 | Haul-Cover   | STS2  | Chino part of Cobre Haul Road   | 3.2                    | 36               | 14,386                      | 8%               | 15,536                          |
| 2514-D-b-Tk4                                 | Haul-Cover   | STS2  | Highway to Heaven Haul Road   | 32.4                   | 36               | 145,385                     | 8%               | 157,015                         |
| 2515-D-b-Tk4                                 | Haul-Cover   | STS2  | Disturbed Area Around Reservoi  |                        | 36               | 145,567                     | 8%               | 157,213                         |
| 3307-D-b-Tk4                                 | Haul-Cover   | West of Borrow E&H  | Filter Plant  |                        | 36               | 76,364                      | 8%               | 82,474                          |
| 2600-D-b-Tk4                                 | Haul-Cover   | Upper South Borrow Area F & North of Borrow Area F        | Unplanned Disturbed Area  | 200.0                  | 36               | 896,296                     | 8%               | 968,000                         |
| 3000-D-b-Tk4                                 | Haul-Cover   |   | Axiflo  | 97.1                   | 36               | 435,140                     | 8%               | 469,952                         |
| 3100-D-b-Tk4                                 | Haul-Cover   | Borrow Area F   | Tailings Pond 6   | 261.7                  | 36               | 1,172,616                   | 8%               | 1,266,425                       |
| 3200-D-b-Tk4                                 | Haul-Cover   | West of Borrow E&H  | Tailings Pond 7   | 1,660.5                | 36               | 7,441,432                   | 8%               | 8,036,747                       |
| 3301-D-b-Tk4                                 | Haul-Cover   | West of Borrow E&H  | Slag Pile Outslopes W side  | 8.2                    | 36               | 36,748                      | 8%               | 39,688                          |
| 3308-D-b-Tk4                                 | Haul-Cover   | West of Borrow E&H  | 35 Acre Misc. Area  | 35.0                   | 36               | 156,852                     | 8%               | 169,400                         |
| 1001-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | Triangle Stockpile T-1                                    | -   | 76.7                   | 36               | 371,373                     | 0%               | 371,373                         |
| 1002-A-d-Mg1                                 | Grade-Top-Placed Cover                                     | Triangle Stockpile T-2                                    |   | 4.8                    | 36               | 23,248                      | 0%               | 23,248                          |
| 1101-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | South Stockpile S-1                                       | -   | 6.4                    | 36               | 31,202                      | 0%               | 31,202                          |
| 1102-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | South Stockpile S-2                                       |   | 86.9                   | 36               | 420,463                     | 0%               | 420,463                         |
| 1103-A-d-Mg1<br>1104-A-d-Mg1                 | Grade-Outslope-Placed Cover<br>Grade-Outslope-Placed Cover | South Stockpile S-3 South Stockpile S-4                   | -   | 76.0<br>37.9           | 36<br>36         | 367,738<br>183,291          | 0%<br>0%         | 367,738<br>183,291              |
| 1105-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | South Stockpile S-5                                       | -   | 82.6                   | 36               | 399,949                     | 0%               | 399,949                         |
| 1106-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | South Stockpile S-6                                       |   | 91.2                   | 36               | 441,328                     | 0%               | 441,328                         |
| 1107-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | South Stockpile S-7                                       | -   | 47.6                   | 36               | 230,590                     | 0%               | 230,590                         |
| 1108-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | South Stockpile S-8                                       |   | 67.8                   | 36               | 328,183                     | 0%               | 328,183                         |
| 1109-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | South Stockpile S-9(1)                                    | -   | 2.6                    | 36               | 12,343                      | 0%               | 12,343                          |
| 1110-A-d-Mg1                                 | Grade-Top-Placed Cover                                     | South Stockpile S-9(2)                                    |   | 45.8                   | 36               | 221,883                     | 0%               | 221,883                         |
| 1111-A-d-Mg1<br>1201-A-d-Mg1                 | Grade-Top-Placed Cover<br>Grade-Outslope-Placed Cover      | South Stockpile S-9(3) West Stockpile W-1                 | -   | 39.8<br>56.2           | 36<br>36         | 192,503<br>272,083          | 0%<br>0%         | 192,503<br>272,083              |
| 1202-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | West Stockpile W-2  | -   | 54.9                   | 36               | 265,729                     | 0%               | 265,729                         |
| 1203-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | West Stockpile W-3  |   | 43.2                   | 36               | 208,859                     | 0%               | 208,859                         |
| 1204-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | West Stockpile W-4  | -   | 41.2                   | 36               | 199,508                     | 0%               | 199,508                         |
| 1205-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | West Stockpile W-5  |   | 54.0                   | 36               | 261,245                     | 0%               | 261,245                         |
| 1206-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | West Stockpile W-6  | -   | 52.5                   | 36               | 254,121                     | 0%               | 254,121                         |
| 1207-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | West Stockpile W-7  |   | 33.2                   | 36               | 160,723                     | 0%               | 160,723                         |
| 1209-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | West Stockpile W-8(1)                                     | -   | 33.9                   | 36               | 164,120                     | 0%               | 164,120                         |
| 1210-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | West Stockpile W-8(2)                                     |   | 33.9                   | 36               | 164,120                     | 0%               | 164,120                         |
| 1211-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | West Stockpile W-9  | -   | 27.1                   | 36               | 131,228                     | 0%               | 131,228                         |
| 1212-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | West Stockpile W-10                                       |   | 21.5                   | 36               | 103,983                     | 0%               | 103,983                         |
| 1213-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | West Stockpile W-11                                       | -   | 23.9                   | 36               | 115,546                     | 0%               | 115,546                         |
| 1214-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | West Stockpile W-12                                       |   | 9.3                    | 36               | 45,128                      | 0%               | 45,128                          |
| 1215-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | West Stockpile W-13(1)                                    | -   | 3.6                    | 36               | 17,316                      | 0%               | 17,316                          |
| 1216-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | West Stockpile W-13(2)                                    |   | 13.8                   | 36               | 66,865                      | 0%               | 66,865                          |
| 1217-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | West Stockpile W-14                                       | -   | 11.6                   | 36               | 56,180                      | 0%               | 56,180                          |
| 1218-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | West Stockpile W-15(1)                                    |   | 7.8                    | 36               | 37,554                      | 0%               | 37,554                          |
| 1219-A-d-Mg1                                 | Grade-Top-Placed Cover                                     | West Stockpile W-15(2)                                    | -   | 6.2                    | 36               | 29,983                      | 0%               | 29,983                          |
| 1220-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | West Stockpile W-16(1)                                    |   | 7.8                    | 36               | 37,520                      | 0%               | 37,520                          |
| 1221-A-d-Mg1                                 | Grade-Top-Placed Cover                                     | West Stockpile W-16(2)                                    | -   | 6.9                    | 36               | 33,292                      | 0%               | 33,292                          |
| 1222-A-d-Mg1                                 | Grade-Top-Placed Cover                                     | West Stockpile W-17(1)                                    |   | 55.7                   | 36               | 269,473                     | 0%               | 269,473                         |
| 1223-A-d-Mg1<br>1301-A-d-Mg1                 | Grade-Top-Placed Cover<br>Grade-Outslope-Placed Cover      | West Stockpile W-17(2) Lambright Stockpile LB-1           | -   | 28.4<br>71.4           | 36<br>36         | 137,348<br>345,512          | 0%<br>0%         | 137,348<br>345,512              |
| 1302-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | Lambright Stockpile LB-2                                  | -   | 38.3                   | 36               | 185,460                     | 0%               | 185,460                         |
| 1303-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | Lambright Stockpile LB-3                                  |   | 33.2                   | 36               | 160,529                     | 0%               | 160,529                         |
| 1304-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | Lambright Stockpile LB-4                                  | -   | 41.6                   | 36               | 201,534                     | 0%               | 201,534                         |
| 1305-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | Lambright Stockpile LB-5                                  |   | 57.7                   | 36               | 279,422                     | 0%               | 279,422                         |
| 1306-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | Lambright Stockpile LB-6                                  | -   | 14.2                   | 36               | 68,551                      | 0%               | 68,551                          |
| 1307-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | Lambright Stockpile LB-7(1)                               | -   | 11.0                   | 36               | 53,433                      | 0%               | 53,433                          |
| 1308-A-d-Mg1<br>1309-A-d-Mg1                 | Grade-Outslope-Placed Cover<br>Grade-Outslope-Placed Cover | Lambright Stockpile LB-7(2) Lambright Stockpile LB-8      | -   | 6.9<br>35.5            | 36<br>36         | 33,479<br>171,667           | 0%<br>0%         | 33,479<br>171,667               |
| 1310-A-d-Mg1<br>1311-A-d-Mg1                 | Grade-Outslope-Placed Cover<br>Grade-Outslope-Placed Cover | Lambright Stockpile LB-9 Lambright Stockpile LB-10        | -   | 47.5<br>60.6           | 36<br>36         | 229,735<br>293,230          | 0%<br>0%         | 229,735<br>293,230              |
| 1312-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | Lambright Stockpile LB-11                                 | -   | 35.3                   | 36               | 170,690                     | 0%               | 170,690                         |
| 1313-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | Lambright Stockpile LB-12                                 |   | 119.3                  | 36               | 577,269                     | 0%               | 577,269                         |
| 1314-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | Lambright Stockpile LB-13                                 | -   | 83.7                   | 36               | 405,114                     | 0%               | 405,114                         |
| 1315-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | Lambright Stockpile LB-14                                 |   | 51.6                   | 36               | 249,982                     | 0%               | 249,982                         |
| 1316-A-d-Mg1<br>1317-A-d-Mg1                 | Grade-Top-Placed Cover<br>Grade-Top-Placed Cover           | Lambright Stockpile LB-19(1) Lambright Stockpile LB-19(2) | -   | 35.1<br>42.5           | 36<br>36         | 170,001<br>205,602          | 0%<br>0%         | 170,001<br>205,602              |
| 1401-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | Southwest Lampbright SWL-15                               | -   | 12.6                   | 36               | 61,219                      | 0%               | 61,219                          |
| 1402-A-d-Mg1                                 | Grade-Outslope-Placed Cover                                | Southwest Lampbright SWL-16                               |   | 22.2                   | 36               | 107,258                     | 0%               | 107,258                         |
|  |  |   |   |                        |                  |                             |                  |                                 |

- Assumptions:

  1 Acres and volumes based on Golder Take-Offs 1401129-004-MTO-RevG\_07\_Chino\_MTOs\_05SEP18.xlsx

  2 Cover Material Swell: The 'Loose Volume' is calculated based on the acreage to be covered, 3 ft of cover, and accounts for appropriate swell factor.

  3 8% swell factor is estimated for cover obtained from a mine stockpile because it is placed loose and is looser than cover borrowed from a natural deposit.

  4 Has been agreed upon with State agencies that swell occurs when cover material is moved from source to haul truck but not from the truck to placement on stockpile

| Second   S | ID           | Description   | Source Location 1                               | Destination Location 2 | Area (ac) <sup>1</sup> | Cover Depth (in) | Bank/Stockpile<br>Volume (bcy) <sup>1,4</sup> | Swell Factor (%) <sup>3</sup> | Loose/Stockpile<br>Volume (lcy) <sup>2</sup> |
|--|--------------|---|---|------------------------|------------------------|------------------|---|-------------------------------|--|
| Color   Colo | •            |   |   | -                      |                        |                  | 25,315  |                               |  |
| Company  | •            |   | Southwest Lampbright SWL-17(2)                  | -<br>-                 |                        |                  |   |                               |  |
| Marchael   Marchael  | 1500-A-d-Mg1 |   | South and East In-Pit Stockpiles                | -<br>-                 |                        |                  |   |                               |  |
| Methods   Meth | 1602-A-d-Mg1 | Grade-Top-Placed Cover  | Northwest Stockpile NW-1(2)                     | -<br>-                 | 1.8                    | 36               | 8,687   | 0%                            | 8,687  |
| Control   Cont | 1604-A-d-Mg1 | Grade-Top-Placed Cover  | Northwest Stockpile NW-2(2)                     | -<br>-                 | 0.3                    | 36               | 1,319   | 0%                            | 1,319  |
| March   Marc | 1701-A-d-Mg1 | Grade-Top-Placed Cover  | LeeHill Stockpile LH-2                          | -                      | 22.4                   | 36               | 108,211                                       | 0%                            | 108,211                                      |
| Ministration   1985   | 1800-A-d-Mg1 | Grade-Entire Stockpile-Placed Cover                             | Northeast Stockpile                             | -                      | 12.2                   | 36               | 59,273  | 0%                            | 59,273                                       |
| March   Marc | 1902-A-d-Mg1 | Grade-Top-Placed Cover  | North Stockpile N-2(1)                          | •                      | 0.2                    | 36               | 731   | 0%                            | 731  |
| March   Marc | 2201-A-d-Mg1 | Grade-Outslope-Placed Cover                                     | 9 Waste Rock 9 WRS-1                            | -<br>-                 | 65.7                   | 36               | 317,988                                       | 0%                            | 317,988                                      |
| 1.50    | 2309-A-d-Mg1 | Grade-Dam 15-Placed Cover                                       | Dams and Reservoirs Dam 15                      | •<br>•                 | 0.1                    | 36               | 484   | 0%                            | 484  |
| Section   Section   Process   Section   Sect | 2313-A-d-Mg1 | Grade-Dam 20-Placed Cover                                       | Dams and Reservoirs Dam 20                      | <del>.</del><br>-      | 0.3                    | 36               | 1,549   | 0%                            | 1,549  |
| Section   Sect | 2318-A-d-Mg1 | Grade-Fleming Pond-Placed Cover                                 | Dams and Reservoirs Fleming Pond                | -                      | 8.0                    | 36               | 3,775   | 0%                            | 3,775  |
| Second Column   Second Colum | 2321-A-d-Mg1 | Grade-PLS Pond & Launder-Placed Cover                           | Dams and Reservoirs PLS Pond & Launder          | <del>-</del><br>-      | 0.3                    | 36               | 1,258   | 0%                            | 1,258  |
| Second Column   Second Colum | 2324-A-d-Mg1 | Grade-Reservoir 2-Placed Cover                                  | Dams and Reservoirs Reservoir 2                 | <del>-</del><br>-      | 0.2                    | 36               | 1,065   | 0%                            | 1,065  |
| Section   Company   Comp | 2328-A-d-Mg1 | Grade-Reservoir 7-Placed Cover                                  | Dams and Reservoirs Reservoir 7                 | -<br>-                 | 2.4                    | 36               | 11,664  | 0%                            | 11,664                                       |
| Second Company   Company | 2342-A-d-Mg1 | Grade-Lower Lined Pond -Placed Cover                            | Dams and Reservoirs Lower Lined Pond            | -<br>-                 | 2.2                    | 36               | 10,793  | 0%                            | 10,793                                       |
| Second Second   Second Secon | 2344-A-d-Mg1 | Grade-5900 PLS Sump -Placed Cover                               | Dams and Reservoirs 5900 PLS Sump               | -<br>-                 | 0.6                    | 36               | 2,759   | 0%                            | 2,759  |
| Stand Age   March September   Stand Age   Stand Age  | 2346-A-d-Mg1 | Grade-Lee Hill #2 Booster -Placed Cover                         |   | -<br>-                 | 0.1                    | 36               | 678   | 0%                            | 678  |
| Standard   Standard  |              |   |   | •<br>•                 |                        |                  |   |                               |  |
| Standard   Content for Province Content Cont |              |   |   | -<br>-                 |                        |                  |   |                               |  |
| Standard Standard International Productions of March 1985   198 |              |   |   | -<br>-                 |                        |                  |   |                               |  |
| Statistics   Sta |              |   |   | -<br>-                 |                        |                  |   |                               |  |
| Second Company   Note Company   No | 3100-A-d-Sc2 | Grade-Entire Impoundment-Placed Cover                           |   | -<br>-                 |                        |                  | 1,266,425                                     |                               | 1,266,425                                    |
| 1907-1-10   Common Control Grame   Prospect   Prospect   Common Control Grame   Prospect   Common Control Grame   Common Control Grame  | 3301-A-d-Sc2 | Grade-Slag Pile Outslopes W side-Placed Cover                   | Miscellaneous SMA Slag Pile Outslopes W side    | •<br>•                 | 8.2                    | 36               | 39,688  | 0%                            | 39,688                                       |
| 1907   1   | 1000-F-e-U3  | Grade Benches-Entire Stockpile-Final Grade                      | Triangle Stockpile                              |                        | 81.5                   | -                | -   | 0%                            | -  |
| Stock-Sept   | 1200-F-e-U3  | Grade Benches-Entire Stockpile-Final Grade                      | West Stockpile                                  | -<br>-<br>-            | 626.4                  | -                | -   | 0%                            | -  |
| 2005-1-10   Control Description   Control  | 2000-F-e-U3  | Grade Benches-Entire Stockpile-Final Grade                      | STS2  | -                      | 83.8                   | -                | -   | 0%                            | -  |
| Stock   Stoc | 2200-F-e-U3  | Grade Benches-Entire Stockpile-Final Grade                      | 9 Waste Rock                                    | -                      | 161.2                  | -                | -   | 0%                            | -  |
| 1566-1641   Control Douronins Efficial Englands—Flar Coxes   State   | 3100-F-e-U4  | Grade Benches-Entire Impoundment-Final Grade                    | Tailings Pond 6                                 | -<br>-                 | 261.7                  | -<br>-           | -   | 0%                            | -  |
| 10005-0-10   Control Elevation Effect Ringing Front Global   Ling (ring)   Florage   Ling (ring)   | 1100-G-e-U5  | Construct Downdrains-Entire Stockpile-Final Grade               | South Stockpile                                 | •                      | 584.6                  | -<br>-           | -<br>-  | 0%                            | -  |
| 1300 0   | 1300-G-e-U5  | Construct Downdrains-Entire Stockpile-Final Grade               | Lambright Stockpile                             | <del>.</del>           | 785.4                  | -<br>-           | -   | 0%                            | -  |
| Minimary   Comment   Com | 3100-G-e-U5  | Construct Downdrains-Entire Impoundment-Final Grade             | Tailings Pond 6                                 | •<br>•                 | 261.7                  | -<br>-           | -   | 0%                            | -  |
|  | 1100-Gb-e-U6 | Construct Downdrain Dissipators-Entire Stockpile-Final Grade    | South Stockpile                                 | •<br>•                 | 584.6                  | -                | -   | 0%                            | -  |
| 10031-6-17   Construct Stanfor Character Stanfor Sta | 1300-Gb-e-U6 | Construct Downdrain Dissipators-Entire Stockpile-Final Grade    | Lambright Stockpile                             | -<br>-                 | 785.4                  | -                | -   | 0%                            | -  |
| 1003-1-17   Constant Bloom Character Strong From Str | 1100-H-e-U7  | Construct Bench Channels-Entire Stockpile-Final Grade           | South Stockpile                                 | <del>-</del><br>-      | 584.6                  | -                | -   | 0%                            | -  |
| 21001-1-17   Contact Bront Charmels Existe Stockyle Fraid Grade   Uppe Soch   14.27   0.6  | 1300-H-e-U7  | Construct Bench Channels-Entire Stockpile-Final Grade           | Lambright Stockpile                             | <del>-</del><br>-      | 785.4                  | -                | -   | 0%                            | -  |
| 25414   Control Enter Charmels Highway to Reserve Insul Ross Front Gross Monicol Process Mark Lightway to Neaven Issue Ross 3  | 2100-H-e-U7  | Construct Bench Channels-Entire Stockpile-Final Grade           | Upper South                                     | <del>-</del><br>-      | 142.7                  | -                | -   | 0%                            | -  |
| Milbright   Milb | 2514-H-e-U7  | Construct Bench Channels-Highway to Heaven Haul Road-Final Grad | € Miscellaneous NMA Highway to Heaven Haul Road | <del>-</del><br>-      | 32.4                   | -                | -   | 0%                            | -  |
| 2001-1-10   Contract Top Channel-Finite Stockjels-Final Grade  | 3100-H-e-U7  | Construct Bench Channels-Entire Impoundment-Final Grade         | Tailings Pond 6                                 | <del>-</del><br>-      | 261.7                  | -                | -   | 0%                            | -  |
| 1001-b-12    Rowogatate-lime Stockele-Final Grade   Som Stockele   GRA   | 2200-I-e-U8  | Construct Top Channels-Entire Stockpile-Final Grade             | 9 Waste Rock                                    | -<br>-                 | 161.2                  | <del>-</del>     | -   | 0%                            | -  |
| 1901-1-12    Reveglate-fired Stockley-Famil Grade   Lambright Stockley   943   0%   1-100-1-12    1901-1-12 | 1100-J-e-U2  | Revegetate-Entire Stockpile-Final Grade                         | South Stockpile                                 | -<br>-                 | 584.6                  | <del>-</del>     | -   | 0%                            | -  |
| 1000-1-12    Revergistate-Firen's Sociation-Frant's Grade   South and Earl In-PR Stockpies   46.0   0%   | 1300-J-e-U2  | Revegetate-Entire Stockpile-Final Grade                         | Lambright Stockpile                             | <del>-</del><br>-      | 785.4                  | -                | -   | 0%                            | -  |
| 1700.1-UZ   Revegetate-Finite Stockpile-Final Grade   Lestis Stockpile   25.4   0%   | 1500-J-e-U2  | Revegetate-Entire Stockpile-Final Grade                         | South and East In-Pit Stockpiles                | -<br>-                 | 46.0                   | -<br>-           | -   | 0%                            | -  |
| 1900_1-UZ   Revegetate-Entire Stockpile-Final Grade   05   0%   - 0   0   0   0   0   0   0   0   0  | 1700-J-e-U2  | Revegetate-Entire Stockpile-Final Grade                         | LeeHill Stockpile                               | -<br>-                 | 25.4                   | <del>-</del>     | -   | 0%                            | -  |
| 21003-a-012   Revegelate-Entire Stockple-Final Grade   9 Water Force   1612   0%   -   |              |   |   | -<br>-                 |                        | -                | -   |                               | -  |
| 23013-4-UZ   Revegletace-Dam 1-5-Final Grade   Dams and Reservoirs Dam 15   0.1   0%   -2313-4-UZ   Revegletace-Dam 15-Final Grade   Dams and Reservoirs Dam 20   0.3   0%   -2313-4-UZ   Revegletace-Final Grade   Dams and Reservoirs Dam 20   0.3   0%   -2313-4-UZ   Revegletace-Final Grade   Dams and Reservoirs Dam 20   0.3   0%   -2313-4-UZ   Revegletace-Final Grade   Dams and Reservoirs Final Grade   0.0   0. |              |   | Upper South                                     | -<br>-                 | 142.7                  |                  |   | 0%                            | -  |
| 2313-b-0-12   Reveglatile-Bame2 OF-final Grade   Dams and Reservoirs Reversion 17-Final Grade   Dams and Reservoirs Reversion 17-Final Grade   Office   Care State   Office   | 2309-J-e-U2  |   |   | -<br>-                 | 0.1                    |                  |   | 0%                            | -  |
| 23151-4-UZ   Revegetate-Final Grade   Dams and Reservoirs Flaming Prond   2.6  |              |   |   | •<br>•                 |                        |                  | -   |                               | -  |
| 2321-3-4-UZ   Revegetate-PLS Pond & Launder -   0.3   0.5   0.5   0.5  |              | •   |   | <del>.</del><br>-      |                        | -                | -   |                               | -  |
| 23274-b-UZ   Revegetate-Reservoir 2-Final Grade   Dams and Reservoir 2   0.2   0.9%  |              |   |   | <u>.</u>               |                        | -                |   |                               |  |
| 23241-b-UZ   Revegetate-Reservoir Friend Grade   Dams and Reservoirs Fond   1.2   0%   - 2342-b-UZ   Revegetate-Lower Lined Fond - Final Grade   Dams and Reservoirs Enrol   1.2   0%   - 2342-b-UZ   Revegetate-Lower Lined Fond - Final Grade   Dams and Reservoirs Lower Lined Fond   0.4   0.6   0%   - 2344-b-UZ   Revegetate-Lower Lined Fond - Final Grade   Dams and Reservoirs Lower Lined Fond   0.4   0.6   0%   - 2344-b-UZ   Revegetate-So00 PLS Sump - Final Grade   Dams and Reservoirs 5000 PLS Sump   0.6   0.6   0%   - 2344-b-UZ   Revegetate-So00 PLS Sump - Final Grade   Dams and Reservoirs 5000 PLS Sump   0.6   0.6   0%   - 2346-b-UZ   Revegetate-So00 PLS Sootser Station - Final Grade   Dams and Reservoirs 5000 PLS Sootser Station   0.0   0.6   0 |              |   |   | <u>.</u>               |                        | -                |   |                               |  |
| 2343-Je-U2   Revegetate-Lower Lined Pond - Final Grade   Dams and Reservoirs Lower Lined Pond  |              | •   |   | <del>.</del><br>-      |                        | -                | -   |                               | -  |
| 2344-Ju-U2   Revegetate-6900 PLS Sump - Final Grade   Dams and Reservoirs 6900 PLS Sump -   0.6   -   0%   -   2346-Ju-U2   Revegetate-Lee Hill #2 Booster -   1.1   -   0.1   -   0.6   -   2346-Ju-U2   Revegetate-Perviously Reclaimed-Final Grade   Dams and Reservoirs 6900 PLS Booster -   0.1   -   0.6   -   2540-Ju-U2   Revegetate-Perviously Reclaimed-Final Grade   Ground Hog #5   -   2.0   -   0.6   -   2540-Ju-U2   Revegetate-Perviously Reclaimed-Final Grade   Ground Hog #5   -   2.0   -   0.6   -   2540-Ju-U2   Revegetate-Bast Pt Access Disturbed Area -   3.7   -   0.6   -   2541-Ju-U2   Revegetate-East Pt Access Disturbed Area -   3.7   -   0.6   -   2541-Ju-U2   Revegetate-Highway to Heaven Haul Road-Final Grade   Miscellaneous MMA Enthropart of Cobre Haul Road -   3.2   -   0.6   0.6   -   2541-Ju-U2   Revegetate-Highway to Heaven Haul Road-Final Grade   Miscellaneous MMA Phylany to Heaven Haul Road -   3.2   -   0.6   0.6   -   2541-Ju-U2   Revegetate-Highway to Heaven Haul Road-Final Grade   Miscellaneous MMA Phylany to Heaven Haul Road -   3.2   -   0.6   0.6   -   2541-Ju-U2   Revegetate-Disturbed Area Around Reservoir 5-Final Grade   Miscellaneous MMA Phylany to Heaven Haul Road -   3.2   -   0.6   0.6   -   2541-Ju-U2   Revegetate-Disturbed Area Around Reservoir 5-Final Grade   Miscellaneous MMA Phylany to Heaven Haul Road -   3.2   -   0.6   0.6   -   2541-Ju-U2   Revegetate-Disturbed Area Around Reservoir 5-Final Grade   Miscellaneous MMA Phylany to Heaven Haul Road -   3.2   -   0.6   0.6   -   2541-Ju-U2   Revegetate-Disturbed Area Around Reservoir 5-Final Grade   Miscellaneous MMA Phylany to Heaven Haul Road -   3.2   -   0.6   0.6   -   2541-Ju-U2   Revegetate-Disturbed Area Around Reservoir 5-Final Grade   Miscellaneous MMA Phylany to Heaven Haul Road -   3.2   -   0.6   0 |              |   |   | -<br>-                 |                        | -<br>-           | -   |                               |  |
| 2346.4-U.Z   Revegetate-Lee Hill #Z Booster - Final Grade   Corund Hog #5  |              |   |   | -<br>-                 |                        | -<br>-           | -   |                               |  |
| 2502_Je_UZ   Revegetate-Northwest Haul Road-Final Grade   Miscellaneous NMA Northwest Haul Road  |              | ŭ   |   | -<br>-                 |                        | -                | -   |                               | -  |
| 2513-J-e-U2   Revegetate-Chino part of Cobre Haul Road -   3.2   -   0%   -   2514-J-e-U2   Revegetate-Highway to Heaven Haul Road -   3.2   -   0%   -   2514-J-e-U2   Revegetate-Disturbed Area Around Reservoir S-Final Grade   Miscellaneous NMA Highway to Heaven Haul Road -   3.2   -   0%   -   2515-J-e-U2   Revegetate-Disturbed Area Around Reservoir S-Final Grade   Miscellaneous NMA Highway to Heaven Haul Road -   3.2   -   0%   -   2515-J-e-U2   Revegetate-Disturbed Area Around Reservoir S-Final Grade   Miscellaneous NMA Filter Plant -   17.0   -   0%   0%   |              |   |   | -<br>-                 |                        |                  | -   |                               | -  |
| 2513-le-U2   Revegetate-Disturbed Area Around Reservoir 5-Final Grade   Miscellaneous NMA Disturbed Area Around Reservoir   32.5   - 0 0%   - 0 0 0  |              |   |   | -<br>-                 |                        | -                |   |                               | -  |
| 3307-Je-U2   Revegetate-Filter Plant-Final Grade   Miscellaneous NMA Filter Plant  |              |   | o ,   | <u>.</u>               |                        | -<br>-           | -   |                               | -  |
| 3000_Je-U2   Revegetate-Entire Impoundment-Final Grade   Axiflo   -   97.1   -   0   0   0   1   1   1   1   1   1   1   | 3307-J-e-U2  |   | Miscellaneous NMA Filter Plant                  | -<br>-                 |                        | -                | -   |                               | -  |
| 3200-Je-U2       Revegetate-Entire Impoundment-Final Grade       Tailings Pond 7       -       1,660.5       -       -       0%       -         3301-Je-U2       Revegetate-Slag Pile Outslopes W side-Final Grade       Miscellaneous SMA Slag Pile Outslopes W side       -       8.2       -       -       0%       -         3308-Je-U2       Revegetate-St Acre Misc. Area-Final Grade       Miscellaneous SMA 35 Acre Misc. Area       -       35.0       -       -       0%       -         5001-E-d-RP1       Rip-Cover Source       White House       -       62.5       -       -       0%       -         5105-E-d-Rp1       Rip-Cover Source       Borrow Area F       -       49.6       -       -       0%       -         5107-E-d-Rp1       Rip-Cover Source       Rip-Cover Source       Borrow Area F       -       67.9       -       -       0%       -         5108-E-d-Rp1       Rip-Cover Source       Borrow Area H       -       165.2       -       -       0%       -         5109-E-d-Rp1       Rip-Cover Source       Borrow Area H       -       165.2       -       -       0%       -         5109-E-d-Rp1       Rip-Cover Source       West of Borrow Area F       -       502.0       -  | 3000-J-e-U2  | Revegetate-Entire Impoundment-Final Grade                       | Axiflo  | -<br>-                 | 97.1                   | -                | -   | 0%                            | -  |
| 3308-Je-U2         Revegetate-35 Acre Misc. Area-Final Grade         Miscellaneous SMA 35 Acre Misc. Area         -         35.0         -         -         0%         -           5001-E-d-Rp1         Rip-Cover Source         White House         -         62.5         -         -         0%         -           5105-E-d-Rp1         Rip-Cover Source         Borrow Area F         -         49.6         -         -         0%         -           5107-E-d-Rp1         Rip-Cover Source         Morth of Borrow Area F         -         67.9         -         0%         -           5108-E-d-Rp1         Rip-Cover Source         Borrow Area F         -         110.0         -         -         0%         -           5108-E-d-Rp1         Rip-Cover Source         Borrow Area H         -         165.2         -         -         0%         -           5108-E-d-Rp1         Rip-Cover Source         West of Borrow Area H         -         502.0         -         -         0%         -           5101-J-d-U2         Revegetate-Cover Source         White House         -         62.5         -         -         0%         -           5105-J-d-U2         Revegetate-Cover Source         North of Borrow Area F         -   | 3200-J-e-U2  | Revegetate-Entire Impoundment-Final Grade                       | Tailings Pond 7                                 | -<br>-                 | 1,660.5                | -                | -   | 0%                            | -  |
| 5105-E-d-Rp1         Rip-Cover Source         Borrow Area F         -         49.6         -         -         0%         -           5106-E-d-Rp1         Rip-Cover Source         North of Borrow Area F         -         67.9         -         -         0%         -           5107-E-d-Rp1         Rip-Cover Source         Borrow Area E         -         110.0         -         -         0%         -           5108-E-d-Rp1         Rip-Cover Source         Borrow Area H         -         165.2         -         -         0%         -           5109-E-d-Rp1         Rip-Cover Source         West of Borrow Area H         -         60.2         -         -         0%         -           5109-E-d-Rp1         Rip-Cover Source         West of Borrow E&H         -         502.0         -         -         0%         -           5105-J-d-U2         Revegetate-Cover Source         White House         -         62.5         -         -         0%         -           5105-J-d-U2         Revegetate-Cover Source         Borrow Area F         -         49.6         -         -         0%         -           5106-J-d-U2         Revegetate-Cover Source         North of Borrow Area F         -         67.  | 3308-J-e-U2  | Revegetate-35 Acre Misc. Area-Final Grade                       | Miscellaneous SMA 35 Acre Misc. Area            | -<br>-                 | 35.0                   | -                | -   | 0%                            | -  |
| 5107-E-d-Rp1         Rip-Cover Source         Borrow Area E         -         110.0         -         -         0%         -           5108-E-d-Rp1         Rip-Cover Source         Borrow Area H         -         165.2         -         -         0%         -           5109-E-d-Rp1         Rip-Cover Source         Rouge Source         502.0         -         -         0%         -           5001-J-d-U2         Revegetate-Cover Source         White House         -         62.5         -         -         0%         -           5105-J-d-U2         Revegetate-Cover Source         Borrow Area F         -         49.6         -         -         0%         -           5106-J-d-U2         Revegetate-Cover Source         North of Borrow Area F         -         67.9         -         -         0%         -   | 5105-E-d-Rp1 | Rip-Cover Source  | Borrow Area F                                   | -<br>-                 | 49.6                   | -                | -   | 0%                            | -  |
| 5109-E-d-Rp1         Rip-Cover Source         West of Borrow E&H         -         502.0         -         -         0%         -           5001-J-d-U2         Revegetate-Cover Source         White House         -         62.5         -         -         0%         -           5105-J-d-U2         Revegetate-Cover Source         Borrow Area F         -         49.6         -         -         0%         -           5106-J-d-U2         Revegetate-Cover Source         North of Borrow Area F         -         67.9         -         -         0%         -   | 5107-E-d-Rp1 | Rip-Cover Source  | Borrow Area E                                   | -<br>-                 | 110.0                  | -<br>-           | -<br>-  | 0%                            | -<br>-                                       |
| 5105-J-d-U2       Revegetate-Cover Source       Borrow Area F       -       49.6       -       -       0%       -         5106-J-d-U2       Revegetate-Cover Source       North of Borrow Area F       -       67.9       -       -       0%       -   | 5109-E-d-Rp1 | Rip-Cover Source  | West of Borrow E&H                              | <u>.</u>               | 502.0                  | -                | -   | 0%                            | -  |
|  | 5105-J-d-U2  | Revegetate-Cover Source   | Borrow Area F                                   | -<br>-                 | 49.6                   | -                | -   | 0%                            | -  |
|  |              | ŭ   |   | -                      |                        | -                | -   |                               | -  |

- Assumptions:

  1 Acres and volumes based on Golder Take-Offs 1401129-004-MTO-RevG\_07\_Chino\_MTOs\_05SEP18.xlsx

  2 Cover Material Swell: The 'Loose Volume' is calculated based on the acreage to be covered, 3 ft of cover, and accounts for appropriate swell factor.

  3 8% swell factor is estimated for cover obtained from a mine stockpile because it is placed loose and is looser than cover borrowed from a natural deposit.

  4 Has been agreed upon with State agencies that swell occurs when cover material is moved from source to haul truck but not from the truck to placement on stockpile

| March   Company   Compan |                | I   |   |                        |                        |                  | D     O t       -                             | O!! 5t                           | l /Ot lil-                                   |
|--|----------------|---|---|------------------------|------------------------|------------------|---|----------------------------------|--|
| Second   S | ID             | Description   | Source Location 1                             | Destination Location 2 | Area (ac) <sup>1</sup> | Cover Depth (in) | Bank/Stockpile<br>Volume (bcv) <sup>1,4</sup> | Swell Factor<br>(%) <sup>3</sup> | Loose/Stockpile<br>Volume (lcv) <sup>2</sup> |
| Second Column  | 5108-J-d-U2    | ,   |   | -                      | 165.2                  | -                | -   | 0%                               | -  |
| 19.00   19.0 |                |   |   | -                      |                        | -                | -   |                                  | -  |
| Montable   Montable  | 1100-M-e-U     |   |   | -                      | 584.6                  | -                | -   | 0%                               | -  |
| Marchane   Marchane Content State State   Marchane    |                | •   |   | -                      |                        | -                | -   |                                  | -  |
| Marchane Control Con |                |   |   | -<br>-                 |                        | -                | -   |                                  | -  |
| Table  |                |   |   | -                      |                        | -                | -   |                                  | -  |
| Machine   Mach |                |   |   | -                      |                        | -                | -   |                                  | -  |
| Machine   Mach |                |   |   | -                      |                        | -                | -   |                                  | -  |
|  |                |   |   | -                      |                        | -                | -   |                                  | -  |
| Proceedings  | 2100-M-e-U     |   | Upper South                                   | -                      |                        | -                | -   |                                  | -  |
| Manufacture    |                |   |   | -                      |                        | -                | -   |                                  | -  |
| Commonwealth   Comm | 2310-M-e-U     | Post-Closure O&M-Dam 16-Final Grade                               | Dams and Reservoirs Dam 16                    | -                      | 0.1                    | -                | -   | 0%                               | -  |
| Stable   Part   Channel (DMA)   Part   Channel (DMA)   Part   P |                |   |   | -                      |                        | -                | -   |                                  | -  |
| Part Clark Count Part From Clarater Print Gross   Dame of Reserved Part From Clarater   1  | 2318-M-e-U     | Post-Closure O&M-Fleming Pond-Final Grade                         | Dams and Reservoirs Fleming Pond              | -                      | 0.8                    | -                | -   | 0%                               | -  |
| STATE  |                |   |   | -                      |                        | -                | -   |                                  | -  |
|  | 2323-M-e-U     |   |   | -                      | 0.1                    | -                | -   | 0%                               | -  |
|  |                |   |   | -                      |                        | -                | -   |                                  | -  |
| Machine   Mach |                |   |   | -                      |                        | -                | -   |                                  | -  |
| 2006-14-04   Pacification (DMC-Ligher Intell Proof Final Grade   Dame and Reservoir Species   O. 0.  |                |   |   | -                      |                        | -                | -   |                                  | -  |
| 28-564-bit   Pacification Of Month Political Production of Production  |                |   |   | -                      |                        | -                | -   |                                  | -  |
| 2006.00   Post-Chance Collabor Collab |                |   |   | -                      |                        | -                | -   |                                  | -  |
|  |                |   |   | -                      |                        | -                | -   |                                  | -  |
|  | 2502-M-e-U     |   |   | -                      |                        | -                | -   |                                  | -  |
| Pact    |                |   |   | -                      |                        | -                | -   |                                  | -  |
| Stort Advanced   Productions to Mills   Productions   Pr | 2514-M-e-U     | Post-Closure O&M-Highway to Heaven Haul Road-Final Grade          | Miscellaneous NMA Highway to Heaven Haul Road | -                      | 32.441                 | -                | -   | 0%                               | -  |
| 2003   4-01   Pest-Clause DBAL-Care (DBAL-Care) (DBA |                |   |   | -                      |                        | -                | -   |                                  | -  |
| 10.00   Peta Course ORAM-Private Fruit Grade   10.00 | 2600-M-e-U     | Post-Closure O&M-200-Acre Unplanned Future Disturbance-Final Grad | Unplanned Disturbed Area                      | -                      | 200.0                  | -                | -   | 0%                               | -  |
| Table   Prof.   Court   Cour |                |   |   | -                      |                        | -                | -   |                                  | -  |
| 2010-19-40   Prof-Closure ORAN-Stage File Cutations with effect Grades   Court Top 18   Court  | 3106-M-e-U     | Post-Closure O&M-Previously Reclaimed-Final Grade                 | Tailings Pond 6 TP-6E and TP-6W               | -                      | 599.0                  | -                | -   | 0%                               | -  |
| 2000M-No.   Post-Closure OMM-Privatery Recrainment Fraid Claude   Clause (Manufacture) MAT Tallings Privat   Clause (Column Privatery Recrainment Fraid Clause )   Clause (Column Privatery Recrainment Fraid Clause )   Clause (Column Privatery) Recrainment Fraid Clause   Column Privatery Recrainment Fraid Clause   Column Private |                |   |   | -                      |                        | -                | -   |                                  | -  |
| 30304-Me.U   Post-Closure (AMA-Perious) Reclaments Final Grade   |                |   |   | -                      |                        | -                | -   | 0%                               | -  |
| 3004H-4L   Post-Closure OARM-Protouty) Reclament-Final Grade   3005H-4L   Post-Closure OARM |                |   |   | -                      |                        | -                | -   |                                  | -  |
|  |                |   |   | -                      |                        | -                | -   |                                  | -  |
|  |                |   |   | -                      |                        | -                | -   |                                  | -  |
| 12000-0-U15   Pulg and Alandron Well-Either Stockpile   -   0%   -   |                |   |   | -                      |                        | -                | -   |                                  | -  |
| 12000-P-10T   Regisser Weit-Entire Stockpile-Final Grade   |                |   |   | -                      | 27.5                   | -                | -   |                                  | -  |
| 1000-P-D-Combit Road Maintenance   Upper South   ST822   South Schoolage    81.6   81.6   81.6   81.7  |                |   | •   | -                      | -                      | -                | -   |                                  | -  |
| 1200.Ps-Comth   Road Maintenance   Upper South   Whitel House   Upper South   Whitel House   Upper South   Whitel House   Upper South   Southwest Lampbright   94.3   98.6   98 |                |   |   | •                      |                        | -                | -   |                                  | -  |
| 1300-Ps-Comb  Road Maintenance   Upper South & White House   Upper South   South and East In-Pit Stockpiles   94.3   94.3   98.6   98.6   99 |                |   |   |                        |                        | -                | -   |                                  | -  |
| 1500-P-A-Combi   Road Maintenance   Upper South   South and East in-Pit Stockpiles   46.0     8%   -   1700-P-A-Combi   Road Maintenance   Upper South   Levelli Blockpile   25.4     8%   -   1700-P-A-Combi   Road Maintenance   Upper South   Levelli Blockpile   25.4     8%   -   1800-P-A-Combi   Road Maintenance   Upper South   North Steckpile   12.2     8%   -   1800-P-A-Combi   Road Maintenance   Upper South   North Steckpile   12.2     8%   -   1800-P-A-Combi   Road Maintenance   STS2   Road Maintenance |                |   | • •   |                        |                        | -                | -   |                                  | -  |
| 1000-P-C-cmit  Road Maintenance   Upper South   Northwest Stockpile   8.2   8%   - 1   |                |   |   |                        |                        |                  | -<br>-  |                                  | -<br>-                                       |
| 1800-P-b-Combt Road Maintenance   Upper South   North Stockpile   1.2  | 1600-P-b-Comb1 | Road Maintenance  | Upper South                                   | Northwest Stockpile    | 8.2                    | -                | -   | 8%                               | -  |
| 1900P-bCombt Road Maintenance   Upper South   North Slockpile   6.9   9 Waste Rock   161.2   - 88%   - 2009P-bCombt Road Maintenance   STS2   Dam 16   0.1   - 88%   - 2309P-bCombt Road Maintenance   STS2   Dam 16   0.1   - 88%   - 2313P-bCombt Road Maintenance   STS2   Dam 16   0.1   - 88%   - 2313P-bCombt Road Maintenance   STS2   Dam 16   0.1   - 88%   - 2313P-bCombt Road Maintenance   STS2   Dam 20   0.3   - 88%   - 2313P-bCombt Road Maintenance   STS2   Reservoir 17   3.4   - 88%   - 2313P-bCombt Road Maintenance   STS2   Reservoir 17   3.4   - 88%   - 2313P-bCombt Road Maintenance   STS2   Reservoir 18   0.4   - 88%   - 88%   - 2313P-bCombt Road Maintenance   STS2   Reservoir 18   0.4   - 88%   - 888   |                |   |   |                        |                        |                  | -<br>-  |                                  | -<br>-                                       |
| 2301P-b-Combi Road Maintenance   STS2  |                |   | Upper South                                   | North Stockpile        | 6.9                    | -                | -   | 8%                               | -  |
| 2310-P-C-Comb Road Maintenance   STS2   Dam 16   |                |   |   |                        |                        | -                | -   |                                  | -  |
| 2316P-b-Combi   Road Maintenance   STS2   Reservoir 17   3.4   -   8%   -   2320P-b-Combi   Road Maintenance   STS2   Flening Prond   0.8   -   8%   -   2320P-b-Combi   Road Maintenance   STS2   Flening Prond   0.8   -   8%   -   2320P-b-Combi   Road Maintenance   STS2   Pl. Spond & Launder   0.3   -   8%   -   2322P-b-Combi   Road Maintenance   STS2   Raffinale Prond   0.1   -   8%   -   2322P-b-Combi   Road Maintenance   STS2   Raffinale Prond   0.1   -   8%   -   2322P-b-Combi   Road Maintenance   STS2   Raffinale Prond   0.1   -   8%   -   2322P-b-Combi   Road Maintenance   STS2   Reservoir 2   0.2   -   8%   -   2322P-b-Combi   Road Maintenance   STS2   Reservoir 6   1.5   -   -   8%   -   2322P-b-Combi   Road Maintenance   STS2   Reservoir 7   2.4   -   -   8%   -   2324P-b-Combi   Road Maintenance   STS2   Elmo's Prond   0.1   -   -   -   8%   -   2324P-b-Combi   Road Maintenance   STS2   Elmo's Prond   0.1   -   -   -   -   8%   -   -   -   -   -   -   -   -   -   | 2310-P-b-Comb1 | Road Maintenance  | STS2  | Dam 16                 | 0.1                    | -                | -   | 8%                               | -  |
| 2319-P-C-Omb  Road Maintenance   STS2   Flening Pond   0.8   - 8%   - 23219-P-C-Omb  Road Maintenance   STS2   Flening Pond   0.8   - 8%   - 23219-P-C-Omb  Road Maintenance   STS2   PLS Pond & Launder   0.3   - 8%   - 23219-P-C-Omb  Road Maintenance   STS2   PLS Pond & Launder   0.1   - 8%   - 23229-P-C-Omb  Road Maintenance   STS2   Raservoir 2   0.2   - 8%   - 23229-P-C-Omb  Road Maintenance   STS2   Reservoir 6   1.5   - 8%   - 23229-P-C-Omb  Road Maintenance   STS2   Reservoir 6   1.5   - 8%   - 23229-P-C-Omb  Road Maintenance   STS2   Reservoir 6   1.5   - 8%   - 23229-P-C-Omb  Road Maintenance   STS2   Reservoir 6   1.5   - 8%   - 23229-P-C-Omb  Road Maintenance   STS2   Reservoir 7   2.4   - 8%   - 23229-P-C-Omb  Road Maintenance   STS2   Reservoir 7   2.4   - 8%   - 23229-P-C-Omb  Road Maintenance   STS2   Lower Lined Pond   1.2   - 8%   - 23229-P-C-Omb  Road Maintenance   STS2   Lower Lined Pond   2.2   - 8%   - 23229-P-C-Omb  Road Maintenance   STS2   Lower Lined Pond   2.2   - 8%   - 23229-P-C-Omb  Road Maintenance   STS2   Lower Lined Pond   2.2   - 8%   - 23229-P-C-Omb  Road Maintenance   STS2   Lower Lined Pond   2.2   - 8%   - 23229-P-C-Omb  Road Maintenance   STS2   STS2   Lower Lined Pond   2.2   - 8%   - 23229-P-C-Omb  Road Maintenance   STS2   STS2  |                |   |   |                        |                        | -                | -   |                                  | -  |
| 2323-P-D-Comb  Road Maintenance  | 2318-P-b-Comb1 | Road Maintenance  | STS2  | Fleming Pond           | 8.0                    | -                | -   | 8%                               | -  |
| 2323-P-Combt   Road Maintenance  |                |   |   |                        |                        | -                | -   |                                  | -  |
| 2328-P-b-Comb1 Road Maintenance   STS2   Reservoir 6   1.5   | 2323-P-b-Comb1 | Road Maintenance  | STS2  | Raffinate Pond         | 0.1                    | -                | -   | 8%                               | -  |
| 2324-P-b-Combt   Road Maintenance   STS2   Reservoir 7   |                |   |   |                        |                        | -                | -   |                                  | -  |
| 2342-P-b-Comb1   Road Maintenance   STS2   Lower Lined Pond   2.2   -   -   8%   -   2343-P-b-Comb1   Road Maintenance   STS2   S900 PLS Sump   0.6   -   -   8%   -   2344-P-b-Comb1   Road Maintenance   STS2   S900 PLS Sump   0.6   -   -   8%   -   2344-P-b-Comb1   Road Maintenance   STS2   S900 PLS Sump   0.6   -   -   8%   -   2344-P-b-Comb1   Road Maintenance   STS2   S900 PLS Sump   0.6   -   -   8%   -   2344-P-b-Comb1   Road Maintenance   STS2   Lee Hill #2 Booster   Station   STS2   Lee Hill #2 Booster   STS2   Lee Hill #2 Booster   STS2   Lee Hill #2 Booster   STS2   | 2328-P-b-Comb1 | Road Maintenance  | STS2  | Reservoir 7            | 2.4                    | -                | -   | 8%                               | -  |
| 2343-P-b-Comb1   Road Maintenance   STS2   S900 PLS Sump   0.6   -   8%   -2   2344-P-b-Comb1   Road Maintenance   STS2   S900 PLS Sump   0.6   -   8%   -2   2345-P-b-Comb1   Road Maintenance   STS2   S900 PLS Sump   0.6   -   8%   -2   2345-P-b-Comb1   Road Maintenance   STS2   S900 PLS Sump   0.6   -   8%   -2   2345-P-b-Comb1   Road Maintenance   STS2   Lee Hill #2 Booster   0.1   -   8%   -2   2400-P-b-Comb1   Road Maintenance   STS2   Ground Hog #5   2.0   -   8%   -2   2400-P-b-Comb1   Road Maintenance   STS2   Ground Hog #5   2.0   -   8%   -2   2512-P-b-Comb1   Road Maintenance   STS2   East Pit Access Disturbed Area   3.7   -   8%   -2   2513-P-b-Comb1   Road Maintenance   STS2   East Pit Access Disturbed Area   3.7   -   8%   -2   2514-P-b-Comb1   Road Maintenance   STS2   Highway to Heaven Haul Road   3.2   -   8%   -2   2514-P-b-Comb1   Road Maintenance   STS2   Highway to Heaven Haul Road   3.2   -   8%   -2   2515-P-b-Comb1   Road Maintenance   STS2   Highway to Heaven Haul Road   3.2   -   8%   -2   2515-P-b-Comb1   Road Maintenance   STS2   Highway to Heaven Haul Road   3.2   -   8%   -2   2515-P-b-Comb1   Road Maintenance   STS2   Highway to Heaven Haul Road   3.2   -   8%   -2   2515-P-b-Comb1   Road Maintenance   West of Borrow E&H   Filter Plant   17.0   -   8%   -2   8%   -2   2515-P-b-Comb1   Road Maintenance   West of Borrow Area F   Axiflo   Sorrow Area F   Sorrow E&H   Sorrow E |                |   |   |                        |                        | -                | -   |                                  | -  |
| 2345-P-b-Comb1         Road Maintenance         5TS2         Lee Hill #2 Booster Station         0.0         -         -         8%         -           2346-P-b-Comb1         Road Maintenance         STS2         Lee Hill #2 Booster         0.1         -         -         8%         -           2400-P-b-Comb1         Road Maintenance         STS2         Ground Hog #5         2.0         -         -         8%         -           2512-P-b-Comb1         Road Maintenance         STS2         East Pit Access Disturbed Area         3.7         -         -         8%         -           2513-P-b-Comb1         Road Maintenance         STS2         Chino part of Cobre Haul Road         3.2         -         -         8%         -           2514-P-b-Comb1         Road Maintenance         STS2         Chino part of Cobre Haul Road         3.2         -         -         8%         -           2514-P-b-Comb1         Road Maintenance         STS2         Disturbed Area Around Reservoi         32.5         -         -         8%         -           2501-P-b-Comb1         Road Maintenance         West of Borrow E&H         Upper South         Upper South         -         -         -         -         -         -         -  |                |   | STS2  |                        |                        | -                | -   | 8%                               | -  |
| 2346-P-b-Comb1         Road Maintenance         STS2         Lee Hill #2 Booster         0.1         -         -         8%         -           2400-P-b-Comb1         Road Maintenance         STS2         Ground Hog #5         2.0         -         -         8%         -           2512-P-b-Comb1         Road Maintenance         STS2         East Pit Access Disturbed Area         3.7         -         -         8%         -           2513-P-b-Comb1         Road Maintenance         STS2         Chino part of Cobre Haul Road         3.2         -         -         8%         -           2514-P-b-Comb1         Road Maintenance         STS2         Highway to Heaven Haul Road         3.2         -         -         8%         -           2515-P-b-Comb1         Road Maintenance         STS2         Highway to Heaven Haul Road         3.2         -         -         8%         -           2515-P-b-Comb1         Road Maintenance         STS2         Highway to Heaven Haul Road         3.2         -         -         8%         -           2515-P-b-Comb1         Road Maintenance         STS2         Highway to Heaven Haul Road         32.5         -         -         8%         -           2600-P-b-Comb1         Road Ma   |                |   |   | ·                      |                        | -                | -   |                                  | -  |
| 2512-P-b-Comb1         Road Maintenance         STS2         East Pit Access Disturbed Area         3.7         -         -         8%         -           2513-P-b-Comb1         Road Maintenance         STS2         Chino part of Cobre Haul Road         3.2         -         -         8%         -           2514-P-b-Comb1         Road Maintenance         STS2         Highway to Heaven Haul Road         32.4         -         -         8%         -           2515-P-b-Comb1         Road Maintenance         STS2         Highway to Heaven Haul Road         32.4         -         -         8%         -           3307-P-b-Comb1         Road Maintenance         STS2         Disturbed Area Around Reservoir         32.5         -         -         8%         -           3307-P-b-Comb1         Road Maintenance         West of Borrow E&H         Unplaned Disturbed Area Around Reservoir         200.0         -         -         8%         -           2600-P-b-Comb1         Road Maintenance         Unplaned Disturbed Area         200.0         -         -         8%         -           3100-P-b-Comb1         Road Maintenance         Borrow Area F & North of Borrow Area F         Axiflo         97.1         -         -         8%         -  |                |   | STS2  |                        |                        | -                | -   |                                  | -  |
| 2513-P-b-Comb1         Road Maintenance         STS2         Chino part of Cobre Haul Road         3.2         -         -         8%         -           2514-P-b-Comb1         Road Maintenance         STS2         Highway to Heaven Haul Road         32.4         -         -         8%         -           2515-P-b-Comb1         Road Maintenance         STS2         Disturbed Area Around Reservoi         32.5         -         -         8%         -           3307-P-b-Comb1         Road Maintenance         West of Borrow E&H         Filter Plant         17.0         -         -         8%         -           2600-P-b-Comb1         Road Maintenance         Upper South         Unplanned Disturbed Area         200.0         -         -         8%         -           3100-P-b-Comb1         Road Maintenance         Borrow Area F & North of Borrow Area F         Axiflo         97.1         -         -         8%         -           3100-P-b-Comb1         Road Maintenance         Borrow Area F & North of Borrow Area F         Tailings Pond 6         26.1,7         -         -         8%         -           3200-P-b-Comb1         Road Maintenance         West of Borrow E&H         Tailings Pond 7         1,660.5         -         -         8%         - </td <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td></td> <td>-</td>  |                |   |   |                        |                        | -                | -   |                                  | -  |
| 2515-P-b-Comb1         Road Maintenance         STS2         Disturbed Area Around Reservoi         32.5         -         -         8%         -           3307-P-b-Comb1         Road Maintenance         West of Borrow E&H         Filter Plant         17.0         -         8%         -           2600-P-b-Comb1         Road Maintenance         Upper South         Unplaned Disturbed Area         200.0         -         -         8%         -           3000-P-b-Comb1         Road Maintenance         Borrow Area F & North of Borrow Area F         Axiflo         97.1         -         -         8%         -           3100-P-b-Comb1         Road Maintenance         Borrow Area F & North of Borrow Area F         Axiflo         97.1         -         -         8%         -           3200-P-b-Comb1         Road Maintenance         Borrow Area F         Tailings Pond 6         261.7         -         -         8%         -           3200-P-b-Comb1         Road Maintenance         West of Borrow E&H         Tailings Pond 7         1,660.5         -         -         8%         -           3301-P-b-Comb1         Road Maintenance         West of Borrow E&H         Slag Pile Outslopes W side         8.2         -         -         8%         -   |                |   | STS2  |                        | 3.2                    | -                | -   | 8%                               | -  |
| 3307-P-b-Comb1         Road Maintenance         West of Borrow E&H         Filter Plant         17.0         -         -         8%         -           2600-P-b-Comb1         Road Maintenance         Upper South         Unplanned Disturbed Area         200.0         -         -         8%         -           3000-P-b-Comb1         Road Maintenance         Borrow Area F & North of Borrow Area F         Axiflo         97.1         -         -         8%         -           3100-P-b-Comb1         Road Maintenance         Borrow Area F         Tailings Pond 6         261.7         -         -         8%         -           3200-P-b-Comb1         Road Maintenance         West of Borrow E&H         Tailings Pond 7         1,660.5         -         -         8%         -           3304-P-b-Comb1         Road Maintenance         West of Borrow E&H         Slag Pile Outslopes W side         8.2         -         -         8%         -           3308-P-b-Comb1         Road Maintenance         West of Borrow E&H         35 Acre Misc. Area         35.0         -         -         8%         -           5005-Q-e-U19         Construct Haul Road-Haul Road         Upper South & White House         -         27.5         -         -         0%         -   |                |   |   |                        |                        | -                | -   |                                  | -  |
| 2600-P-b-Comb1         Road Maintenance         Upper South         Unplanned Disturbed Area         200.0         -         -         8%         -           3000-P-b-Comb1         Road Maintenance         Borrow Area F & North of Borrow Area F         Axiflo         97.1         -         -         8%         -           3100-P-b-Comb1         Road Maintenance         Borrow Area F         Tailings Pond 6         261.7         -         -         8%         -           3200-P-b-Comb1         Road Maintenance         West of Borrow E&H         Tailings Pond 7         1,660.5         -         -         8%         -           3301-P-b-Comb1         Road Maintenance         West of Borrow E&H         Slag Pile Outslopes W side         8.2         -         -         8%         -           3308-P-b-Comb1         Road Maintenance         West of Borrow E&H         35 Acre Misc. Area         35.0         -         -         8%         -           5005-Q-c-U19         Construct Haul Road-Haul Road         Upper South & White House         -         27.5         -         -         0%         -           5005-E-c-Rp1         Rip-Haul Road         Upper South & White House         -         27.5         -         -         0%         - </td <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>-<br/>-</td> <td></td> <td>-</td>  |                |   |   |                        |                        | -                | -<br>-  |                                  | -  |
| 3100-P-b-Combl         Road Maintenance         Borrow Area F         Tailings Pond 6         261.7         -         -         8%         -           3200-P-b-Combl         Road Maintenance         West of Borrow E&H         Tailings Pond 7         1,660.5         -         -         8%         -           3301-P-b-Combl         Road Maintenance         West of Borrow E&H         Slag Pile Outslopes W side         8.2         -         -         8%         -           3308-P-b-Combl         Road Maintenance         West of Borrow E&H         35 Acre Misc. Area         35.0         -         -         8%         -           5005-Q-c-U-19         Construct Haul Road-Haul Road         Upper South & White House         -         27.5         -         -         0%         -           5005-E-c-Rp1         Rip-Haul Road         Upper South & White House         -         27.5         -         -         0%         -   | 2600-P-b-Comb1 | Road Maintenance  | Upper South                                   |                        | 200.0                  | -                | -   | 8%                               | -  |
| 3200-P-b-Comb!         Road Maintenance         West of Borrow E&H         Tailings Pond 7         1,660.5         -         -         8%         -           3301-P-b-Comb!         Road Maintenance         West of Borrow E&H         Slag Pile Outslopes W side         8.2         -         -         8%         -           3308-P-b-Comb!         Road Maintenance         West of Borrow E&H         35 Acre Misc. Area         35.0         -         -         8%         -           5005-Q-c-U19         Construct Haul Road-Haul Road         Upper South & White House         -         27.5         -         -         0%         -           5005-E-c-Rp1         Rip-Haul Road         Upper South & White House         -         27.5         -         -         0%         -   |                |   |   |                        |                        | -                | -   |                                  | -  |
| 3308-P-b-Combt       Road Maintenance       West of Borrow E&H       35 Åcre Misc. Årea       35.0       -       -       8%       -         5005-Q-c-U19       Construct Haul Road-Haul Road       Upper South & White House       -       27.5       -       -       0%       -         5005-E-c-Rp1       Rip-Haul Road       Upper South & White House       -       27.5       -       -       0%       -  | 3200-P-b-Comb1 | Road Maintenance  | West of Borrow E&H                            | Tailings Pond 7        | 1,660.5                | -                | -   | 8%                               | -  |
| 5005-Q-c-U19         Construct Haul Road-Haul Road         Upper South & White House         -         27.5         -         -         0%         -           5005-E-c-Rp1         Rip-Haul Road         Upper South & White House         -         27.5         -         -         0%         -  |                |   |   |                        |                        | -                | -   |                                  | -  |
|  | 5005-Q-c-U19   | Construct Haul Road-Haul Road                                     | Upper South & White House                     | -                      | 27.5                   | -                | -   | 0%                               | -  |
|  |                |   |   | -                      |                        | -                |   |                                  | -  |
|  |                | -   |   |                        |                        |                  |   |                                  |  |

# Productivity and Hours Required for Dozer Use---Earthmoving

Assumptions:
Uses volumes of outslope sections and dam breaches to calculate productivity
Uses push distances of outslope sections for grading productivity
Uses scraper push cycle time for dozer assist with scraper
Uses loader cycle time for dozer assist with loader at cover stockpiles
Grade Factor = -0.02(Grade %) + 1

|                              |  |  |   |  |                                 |                         |                          | PERFORMAN          | ICE FACTORS       | 3                       |                            |  |                              |                    |                       |                      |                     |                        |                               |
|------------------------------|--|--|---|--|---------------------------------|-------------------------|--------------------------|--------------------|-------------------|-------------------------|----------------------------|--|------------------------------|--------------------|-----------------------|----------------------|---------------------|------------------------|-------------------------------|
| ID                           | Task Description   | Source Location 1  | Destination Location 2                                  | Equipment                              | Loose /Stockpile<br>Volume (cy) | Productivity<br>(cy/hr) | Total Task<br>Time (hrs) | Material<br>Factor | Grade M<br>Factor | Material Weight (lb/cy) | Production<br>Method/Blade | Centroid to Centroid Push<br>Distance (ft) | Normal Production<br>(cy/hr) | Operator<br>Factor | Work Hour<br>(min/hr) | Visibility<br>Factor | Elevation<br>Factor | Direct Drive<br>Trans. | Cut to Fill Haul<br>Grade (%) |
| 1001-A-a-Dz2                 | Grade-Outslope-Existing Ground   | Triangle Stockpile T-1   | Destination Location 2                                  | Cat D11T CD                            | 3,074,286                       | 608                     | _                        | 1.0                | 1.6               | 3,300                   | 1.2                        | 703  | 555                          | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -28.6%                        |
| 1101-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground  | South Stockpile S-1  | -   | Cat D9T, SU Blade                      | 348,051                         | 369                     |                          | 1.0                | 1.6               | 3,300                   | 1.2                        | 389  | 337                          | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -28.6%                        |
| 1102-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground  | South Stockpile S-2  | -   | Cat D9T, SU Blade                      | 4,690,126                       | 115                     |                          | 1.0                | 1.6               | 3,300                   | 1.2                        | 1,550                                      | 105                          | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -28.6%                        |
| 1103-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground  | South Stockpile S-3  | -   | Cat D9T, SU Blade                      | 4,101,997                       | 99                      |                          | 1.0<br>1.0         | 1.6               | 3,300                   | 1.2                        | 1,840                                      | 91                           | 1.00               | 50                    | 1.0<br>1.0           | 1.0                 | 1.0                    | -28.6%                        |
| 1104-B-a-Dz3<br>1105-B-a-Dz3 | Dozer Assist Scraper Grading-Outslope-Existing Ground<br>Dozer Assist Scraper Grading-Outslope-Existing Ground | South Stockpile S-4<br>South Stockpile S-5                             | -   | Cat D9T, SU Blade<br>Cat D9T, SU Blade | 2,044,550<br>4,461,300          | 142<br>91               |                          | 1.0                | 1.6<br>1.6        | 3,300<br>3,300          | 1.2<br>1.2                 | 1,204<br>2,025                             | 130<br>83                    | 1.00<br>1.00       | 50<br>50              | 1.0                  | 1.0<br>1.0          | 1.0<br>1.0             | -28.6%<br>-28.6%              |
| 1106-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground  | South Stockpile S-6  | -   | Cat D9T, SU Blade                      | 4,922,868                       | 92                      |                          | 1.0                | 1.6               | 3,300                   | 1.2                        | 2,017                                      | 84                           | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -28.6%                        |
| 1107-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground  | South Stockpile S-7  | -   | Cat D9T, SU Blade                      | 2,572,155                       | 142                     | 0.3                      | 1.0                | 1.6               | 3,300                   | 1.2                        | 1,206                                      | 129                          | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -28.6%                        |
| 1108-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground  | South Stockpile S-8  | -   | Cat D9T, SU Blade                      | 3,660,779                       | 183                     |                          | 1.0                | 1.6               | 3,300                   | 1.2                        | 893  | 167                          | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -28.6%                        |
| 1109-B-a-Dz3<br>1207-B-a-Dz3 | Dozer Assist Scraper Grading-Outslope-Existing Ground<br>Dozer Assist Scraper Grading-Outslope-Existing Ground | South Stockpile S-9(1) West Stockpile W-7                              | -   | Cat D9T, SU Blade<br>Cat D9T, SU Blade | 137,679<br>2,249,293            | 790                     | 0.6                      | 1.0<br>1.0         | 1.6<br>1.6        | 3,300<br>3,300          | 1.2<br>1.2                 | 158  | 722                          | 1.00<br>1.00       | 50<br>50              | 1.0<br>1.0           | 1.0<br>1.0          | 1.0<br>1.0             | -28.6%<br>-28.6%              |
| 1207-B-a-D23<br>1209-B-a-Dz3 | Dozer Assist Scraper Grading-Outslope-Existing Ground Dozer Assist Scraper Grading-Outslope-Existing Ground    | West Stockpile W-7 West Stockpile W-8(1)                               | -<br>-  | Cat D91, SU Blade                      | 347,445                         | 320                     |                          | 1.0                | 1.6               | 3,300                   | 1.2                        | 460  | 292                          | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -28.6%                        |
| 1210-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground  | West Stockpile W-8(2)  | -   | Cat D9T, SU Blade                      | 2,250,301                       | -                       | 0.3                      | 1.0                | 1.6               | 3,300                   | 1.2                        | -  | -                            | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -28.6%                        |
| 1211-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground  | West Stockpile W-9   | -   | Cat D9T, SU Blade                      | 1,195,526                       |                         | 0.4                      | 1.0                | 1.6               | 3,300                   | 1.2                        | <u>-</u>                                   |                              | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -28.6%                        |
| 1212-B-a-Dz3<br>1213-B-a-Dz3 | Dozer Assist Scraper Grading-Outslope-Existing Ground  | West Stockpile W-10 West Stockpile W-11                                | -   | Cat D9T, SU Blade<br>Cat D9T, SU Blade | 640,632<br>4,495,590            | 276                     | 0.4<br>0.4               | 1.0<br>1.0         | 1.6<br>1.6        | 3,300<br>3,300          | 1.2<br>1.2                 | 549  | 252                          | 1.00<br>1.00       | 50<br>50              | 1.0<br>1.0           | 1.0<br>1.0          | 1.0<br>1.0             | -28.6%<br>-28.6%              |
| 1301-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground<br>Dozer Assist Scraper Grading-Outslope-Existing Ground | Lambright Stockpile LB-1   | -   | Cat D9T, SU Blade                      | 2,592,130                       | 128                     |                          | 1.0                | 1.6               | 3,300                   | 1.2                        | 1,357                                      | -<br>117                     | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -28.6%                        |
| 1302-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground  | Lambright Stockpile LB-2   | -   | Cat D9T, SU Blade                      | 1,391,371                       | 129                     |                          | 1.0                | 1.6               | 3,300                   | 1.2                        | 1,343                                      | 118                          | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -28.6%                        |
| 1303-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground  | Lambright Stockpile LB-3   | -   | Cat D9T, SU Blade                      | 1,204,331                       | 157                     |                          | 1.0                | 1.6               | 3,300                   | 1.2                        | 1,066                                      | 144                          | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -28.6%                        |
| 1304-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground  | Lambright Stockpile LB-4   | -   | Cat D9T, SU Blade                      | 1,511,967                       | 123                     |                          | 1.0                | 1.6               | 3,300                   | 1.2                        | 1,428                                      | 112                          | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -28.6%                        |
| 1305-B-a-Dz3<br>1306-B-a-Dz3 | Dozer Assist Scraper Grading-Outslope-Existing Ground<br>Dozer Assist Scraper Grading-Outslope-Existing Ground | Lambright Stockpile LB-5<br>Lambright Stockpile LB-6                   | -   | Cat D9T, SU Blade<br>Cat D9T, SU Blade | 2,096,307<br>514,292            | 129<br>142              |                          | 1.0<br>1.0         | 1.6<br>1.6        | 3,300<br>3,300          | 1.2<br>1.2                 | 1,344<br>1,204                             | 118<br>130                   | 1.00<br>1.00       | 50<br>50              | 1.0<br>1.0           | 1.0<br>1.0          | 1.0<br>1.0             | -28.6%<br>-28.6%              |
| 1307-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground  | Lambright Stockpile LB-7(1)  | -   | Cat D9T, SU Blade                      | 400,870                         | 311                     |                          | 1.0                | 1.6               | 3,300                   | 1.2                        | 476  | 284                          | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -28.6%                        |
| 1308-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground  | Lambright Stockpile LB-7(2)  | -   | Cat D9T, SU Blade                      | 251,168                         | 435                     |                          | 1.0                | 1.6               | 3,300                   | 1.2                        | 320  | 397                          | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -28.6%                        |
| 1309-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground  | Lambright Stockpile LB-8   | -   | Cat D9T, SU Blade                      | 1,287,895                       | 227                     |                          | 1.0                | 1.6               | 3,300                   | 1.2                        | 690  | 207                          | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -28.6%                        |
| 1310-B-a-Dz3<br>1311-B-a-Dz3 | Dozer Assist Scraper Grading-Outslope-Existing Ground<br>Dozer Assist Scraper Grading-Outslope-Existing Ground | Lambright Stockpile LB-9 Lambright Stockpile LB-10                     | -   | Cat D9T, SU Blade<br>Cat D9T, SU Blade | 1,723,541<br>2,199,892          | 181<br>128              |                          | 1.0<br>1.0         | 1.6<br>1.6        | 3,300<br>3,300          | 1.2<br>1.2                 | 904<br>1,363                               | 165<br>117                   | 1.00<br>1.00       | 50<br>50              | 1.0<br>1.0           | 1.0<br>1.0          | 1.0<br>1.0             | -28.6%<br>-28.6%              |
| 1311-B-a-D23                 | Dozer Assist Scraper Grading-Outslope-Existing Ground  | Lambright Stockpile LB-10  | -   | Cat D9T, SU Blade                      | 1,280,563                       | 113                     |                          | 1.0                | 1.6               | 3,300                   | 1.2                        | 1,572                                      | 103                          | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -28.6%                        |
| 1313-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground  | Lambright Stockpile LB-12  | -   | Cat D9T, SU Blade                      | 4,330,838                       | 106                     |                          | 1.0                | 1.6               | 3,300                   | 1.2                        | 1,700                                      | 97                           | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -29%                          |
| 1314-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground  | Lambright Stockpile LB-13  | -   | Cat D9T, SU Blade                      | 3,039,282                       | 132                     |                          | 1.0                | 1.6               | 3,300                   | 1.2                        | 1,311                                      | 121                          | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -29%                          |
| 1315-B-a-Dz3<br>1201-A-a-Dz2 | Dozer Assist Scraper Grading-Outslope-Existing Ground<br>Grade-Outslope-Existing Ground                        | Lambright Stockpile LB-14<br>West Stockpile W-1                        | -   | Cat D9T, SU Blade<br>Cat D11T CD       | 1,875,436<br>1,208,008          | 152<br>522              |                          | 1.0<br>1.0         | 1.6<br>1.6        | 3,300<br>3,300          | 1.2<br>1.2                 | 1,110<br>837                               | 139<br>477                   | 1.00<br>1.00       | 50<br>50              | 1.0<br>1.0           | 1.0<br>1.0          | 1.0<br>1.0             | -29%<br>-28.6%                |
| 1201-A-a-D22<br>1202-A-a-Dz2 | Grade-Outslope-Existing Ground  Grade-Outslope-Existing Ground   | West Stockpile W-1   | -   | Cat D111 CD                            | 1,179,800                       | 560                     |                          | 1.0                | 1.6               | 3,300                   | 1.2                        | 773  | 511                          | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -28.6%                        |
| 1203-A-a-Dz2                 | Grade-Outslope-Existing Ground   | West Stockpile W-3   | -   | Cat D11T CD                            | 927,306                         | 1,463                   |                          | 1.0                | 1.6               | 3,300                   | 1.2                        | 255  | 1,336                        | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -28.6%                        |
| 1204-A-a-Dz2                 | Grade-Outslope-Existing Ground   | West Stockpile W-4   | -   | Cat D11T CD                            | 885,787                         | 602                     |                          | 1.0                | 1.6               | 3,300                   | 1.2                        | 711  | 550                          | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -28.6%                        |
| 1205-A-a-Dz2                 | Grade-Outslope-Existing Ground   | West Stockpile W-5   | -   | Cat D11T CD                            | 1,159,889                       | 613<br>597              |                          | 1.0<br>1.0         | 1.6               | 3,300<br>3,300          | 1.2<br>1.2                 | 696<br>718                                 | 560<br>545                   | 1.00               | 50<br>50              | 1.0<br>1.0           | 1.0<br>1.0          | 1.0                    | -28.6%                        |
| 1206-A-a-Dz2<br>1214-A-a-Dz2 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground  | West Stockpile W-6<br>West Stockpile W-12                              | -   | Cat D11T CD<br>Cat D11T CD             | 1,128,263<br>200,360            | 633                     |                          | 1.0                | 1.6<br>1.6        | 3,300                   | 1.2                        | 670  | 545<br>578                   | 1.00<br>1.00       | 50<br>50              | 1.0                  | 1.0                 | 1.0<br>1.0             | -28.6%<br>-28.6%              |
| 1215-A-a-Dz2                 | Grade-Outslope-Existing Ground   | West Stockpile W-13(1)   | -   | Cat D11T CD                            | 76,881                          | 1,713                   |                          | 1.0                | 1.6               | 3,300                   | 1.2                        | 213  | 1,564                        | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -28.6%                        |
| 1216-A-a-Dz2                 | Grade-Outslope-Existing Ground   | West Stockpile W-13(2)   | -   | Cat D11T CD                            | 296,870                         | 933                     |                          | 1.0                | 1.6               | 3,300                   | 1.2                        | 429  | 852                          | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -28.6%                        |
| 1217-A-a-Dz2                 | Grade-Outslope-Existing Ground   | West Stockpile W-14  | -   | Cat D11T CD                            | 249,433                         | 884<br>1,667            |                          | 1.0<br>1.0         | 1.6<br>1.6        | 3,300<br>3,300          | 1.2                        | 456  | 807<br>1,522                 | 1.00<br>1.00       | 50<br>50              | 1.0<br>1.0           | 1.0<br>1.0          | 1.0                    | -28.6%<br>-29%                |
| 1218-A-a-Dz2<br>1220-A-a-Dz2 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground  | West Stockpile W-15(1) West Stockpile W-16(1)                          | -   | Cat D11T CD<br>Cat D11T CD             | 166,736<br>166,583              | 1,499                   |                          | 1.0                | 1.6               | 3,300                   | 1.2<br>1.2                 | 219<br>248                                 | 1,369                        | 1.00               | 50<br>50              | 1.0                  | 1.0                 | 1.0<br>1.0             | -28.6%                        |
| 1401-A-a-Dz2                 | Grade-Outslope-Existing Ground   | Southwest Lampbright SWL-15  | -   | Cat D11T CD                            | 303,576                         | 1,444                   |                          | 1.0                | 1.6               | 3,300                   | 1.2                        | 259  | 1,318                        | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -28.6%                        |
| 1402-A-a-Dz2                 | Grade-Outslope-Existing Ground   | Southwest Lampbright SWL-16  | -   | Cat D11T CD                            | 531,879                         | 681                     |                          | 1.0                | 1.6               | 3,300                   | 1.2                        | 616  | 622                          | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -28.6%                        |
| 1404-A-a-Dz2                 | Grade-Outslope-Existing Ground   | Southwest Lampbright SWL-17(1)   | -   | Cat D11T CD                            | 405,644                         | 1,017<br>894            |                          | 1.0                | 1.6               | 3,300<br>3,300          | 1.2                        | 388<br>450                                 | 929<br>817                   | 1.00               | 50<br>50              | 1.0<br>1.0           | 1.0<br>1.0          | 1.0                    | -28.6%                        |
| 1405-A-a-Dz2<br>1406-A-a-Dz2 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground  | Southwest Lampbright SWL-17(2) Southwest Lampbright SWL-18             | -   | Cat D11T CD<br>Cat D11T CD             | 446,539<br>450,060              | 978                     |                          | 1.0<br>1.0         | 1.6<br>1.6        | 3,300                   | 1.2<br>1.2                 | 406  | 893                          | 1.00<br>1.00       | 50<br>50              | 1.0                  | 1.0                 | 1.0<br>1.0             | -28.6%<br>-28.6%              |
| 1603-A-a-Dz2                 | Grade-Outslope-Existing Ground   | Northwest Stockpile NW-2(1)  | -   | Cat D11T CD                            | 19,428                          | 3,970                   |                          | 1.0                | 1.6               | 3,300                   | 1.2                        | 81   | 3,625                        | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -28.6%                        |
| 2002-A-a-Dz2                 | Grade-Outslope-Existing Ground   | STS2 S-10(1)   | -   | Cat D11T CD                            | 12,730                          | 2,535                   |                          | 1.0                | 1.6               | 2,900                   | 1.2                        | 157  | 2,034                        | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -29%                          |
| 2003-A-a-Dz2                 | Grade-Outslope-Existing Ground   | STS2 S-10(2)   | -   | Cat D11T CD                            | 225,294                         | 2,159<br>2,494          |                          | 1.0                | 1.6               | 2,900<br>2,900          | 1.2                        | 189<br>160                                 | 1,732                        | 1.00<br>1.00       | 50<br>50              | 1.0<br>1.0           | 1.0<br>1.0          | 1.0                    | -28.6%                        |
| 2101-A-a-Dz2<br>2201-A-a-Dz2 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground  | Upper South US-1(1)<br>9 Waste Rock 9 WRS-1                            | -   | Cat D11T CD<br>Cat D11T CD             | 1,657,692<br>399,767            | 3,609                   |                          | 1.0<br>1.0         | 1.6<br>1.6        | 3,300                   | 1.2<br>1.2                 | 90   | 2,001<br>3,295               | 1.00               | 50<br>50              | 1.0                  | 1.0                 | 1.0<br>1.0             | -28.6%<br>-28.6%              |
| 2309-A-a-Dz2                 | Grade-Dam 15-Existing Ground   | Dams and Reservoirs Dam 15   | -   | Cat D11T CD                            | 780                             | 2,138                   |                          | 1.0                | 1.0               | 3,300                   | 1.2                        | 100  | 3,007                        | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -1.0%                         |
| 2310-A-a-Dz2                 | Grade-Dam 16-Existing Ground   | Dams and Reservoirs Dam 16   | -   | Cat D11T CD                            | 780                             | 2,138                   |                          | 1.0                | 1.0               | 3,300                   | 1.2                        | 100  | 3,007                        | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -1.0%                         |
| 2313-A-a-Dz2                 | Grade-Dam 20-Existing Ground   | Dams and Reservoirs Dam 20   | -   | Cat D11T CD                            | 1,845                           | 2,138                   |                          | 1.0                | 1.0               | 3,300                   | 1.2                        | 100<br>100                                 | 3,007                        | 1.00               | 50<br>50              | 1.0<br>1.0           | 1.0                 | 1.0                    | -1.0%                         |
| 2316-A-a-Dz2<br>2318-A-a-Dz2 | Grade-Reservoir 17-Existing Ground Grade-Fleming Pond-Existing Ground  | Dams and Reservoirs Reservoir 17 Dams and Reservoirs Fleming Pond      | -   | Cat D11T CD<br>Cat D11T CD             | 16,559<br>4,071                 | 2,138<br>2,138          |                          | 1.0<br>1.0         | 1.0<br>1.0        | 3,300<br>3,300          | 1.2<br>1.2                 | 100  | 3,007<br>3,007               | 1.00<br>1.00       | 50<br>50              | 1.0                  | 1.0<br>1.0          | 1.0<br>1.0             | -1.0%<br>-1.0%                |
| 2320-A-a-Dz2                 | Grade-Tailing Thickener 1-Existing Ground  | Dams and Reservoirs Tailing Thickener 1                                | -   | Cat D11T CD                            | 12,880                          | 2,138                   |                          | 1.0                | 1.0               | 3,300                   | 1.2                        | 100  | 3,007                        | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -1.0%                         |
| 2321-A-a-Dz2                 | Grade-PLS Pond & Launder-Existing Ground   | Dams and Reservoirs PLS Pond & Launder                                 | -   | Cat D11T CD                            | 1,555                           | 2,138                   |                          | 1.0                | 1.0               | 3,300                   | 1.2                        | 100  | 3,007                        | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -1.0%                         |
| 2323-A-a-Dz2                 | Grade-Raffinate Pond-Existing Ground   | Dams and Reservoirs Raffinate Pond                                     | -   | Cat D11T CD                            | 829<br>1.361                    | 2,138<br>2.138          |                          | 1.0                | 1.0               | 3,300                   | 1.2                        | 100<br>100                                 | 3,007                        | 1.00               | 50<br>50              | 1.0<br>1.0           | 1.0<br>1.0          | 1.0                    | -1.0%                         |
| 2324-A-a-Dz2<br>2327-A-a-Dz2 | Grade-Reservoir 2-Existing Ground Grade-Reservoir 6-Existing Ground  | Dams and Reservoirs Reservoir 2 Dams and Reservoirs Reservoir 6        | -   | Cat D11T CD<br>Cat D11T CD             | 55,956                          | 2,138                   |                          | 1.0<br>1.0         | 1.0<br>1.0        | 3,300<br>3.300          | 1.2<br>1.2                 | 100  | 3,007<br>3.007               | 1.00<br>1.00       | 50<br>50              | 1.0                  | 1.0                 | 1.0<br>1.0             | -1.0%<br>-1.0%                |
| 2328-A-a-Dz2                 | Grade-Reservoir 7-Existing Ground  | Dams and Reservoirs Reservoir 7  | -   | Cat D11T CD                            | 36,161                          | 2,138                   |                          | 1.0                | 1.0               | 3,300                   | 1.2                        | 100  | 3,007                        | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -1.0%                         |
| 2341-A-a-Dz2                 | Grade-Elmo's Pond -Existing Ground   | Dams and Reservoirs Elmo's Pond  | -   | Cat D11T CD                            | 6,002                           | 2,138                   |                          | 1.0                | 1.0               | 3,300                   | 1.2                        | 100  | 3,007                        | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -1.0%                         |
| 2342-A-a-Dz2                 | Grade-Lower Lined Pond -Existing Ground  | Dams and Reservoirs Lower Lined Pond                                   | -   | Cat D11T CD                            | 10,793                          | 2,138                   |                          | 1.0                | 1.0               | 3,300                   | 1.2                        | 100  | 3,007                        | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -1.0%                         |
| 2343-A-a-Dz2<br>2344-A-a-Dz2 | Grade-Upper Lined Pond -Existing Ground Grade-5900 PLS Sump -Existing Ground                                   | Dams and Reservoirs Upper Lined Pond Dams and Reservoirs 5900 PLS Sump | -   | Cat D11T CD<br>Cat D11T CD             | 1,984<br>2,759                  | 2,138<br>2,138          |                          | 1.0<br>1.0         | 1.0<br>1.0        | 3,300<br>3,300          | 1.2<br>1.2                 | 100<br>100                                 | 3,007<br>3,007               | 1.00<br>1.00       | 50<br>50              | 1.0<br>1.0           | 1.0<br>1.0          | 1.0<br>1.0             | -1.0%<br>-1.0%                |
| 2345-A-a-Dz2                 | Grade-6300 PLS Booster Station -Existing Ground  | Dams and Reservoirs 6300 PLS Booster Station                           | -   | Cat D11T CD                            | 145                             | 2,138                   |                          | 1.0                | 1.0               | 3,300                   | 1.2                        | 100  | 3,007                        | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -1.0%                         |
| 2346-A-a-Dz2                 | Grade-Lee Hill #2 Booster -Existing Ground   | Dams and Reservoirs Lee Hill #2 Booster                                | -   | Cat D11T CD                            | 678                             | 2,138                   |                          | 1.0                | 1.0               | 3,300                   | 1.2                        | 100  | 3,007                        | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | -1.0%                         |
| 3000-A-a-Dz2                 | Grade-Entire Impoundment-Existing Ground   | Axiflo   | -<br>Triangle Otanlarile                                | Cat D11T CD                            | 296                             | 1,117                   |                          | 1.0                | 1.0               | 2,900                   | 1.2                        | 240  | 1,408                        | 1.00               | 50                    | 1.0                  | 1.0                 | 1.0                    | 0%                            |
| 1000-B-b-Dz2<br>1100-B-b-Dz2 | Dozer Assist-Cover<br>Dozer Assist-Cover   | Upper South Upper South & STS2   | Triangle Stockpile<br>South Stockpile                   | Cat D11T CD<br>Cat D11T CD             | 394,621<br>2,829,473            | -                       | 153.6<br>970.4           | _                  | -                 |                         | -                          | -  | -                            | -                  | 50<br>50              | -                    |                     | -                      | 0.0%<br>0.0%                  |
| 1200-B-b-Dz2                 | Dozer Assist-Cover   | Upper South  | West Stockpile  | Cat D111 CD                            | 3,031,924                       | -                       | 1,005.4                  | -                  | -                 | -                       | -                          | -  | -                            | -                  | 50                    | -                    | -                   | -                      | 0.0%                          |
| 1300-B-b-Dz2                 | Dozer Assist-Cover   | Upper South & White House  | Lambright Stockpile                                     | Cat D11T CD                            | 3,801,209                       | -                       | 1,248.6                  | -                  | -                 | -                       | -                          | -  | -                            | -                  | 50                    | -                    | -                   | -                      | 0.0%                          |
| 1400-B-b-Dz2                 | Dozer Assist-Cover   | Upper South  | Southwest Lampbright                                    | Cat D11T CD                            | 456,400                         | -                       | 152.8                    | -                  | -                 | -                       | -                          | -  | -                            | -                  | 50                    | -                    | -                   | -                      | 0.0%                          |
| 1500-B-b-Dz2<br>1600-B-b-Dz2 | Dozer Assist-Cover<br>Dozer Assist-Cover   | Upper South Upper South  | South and East In-Pit Stockpiles<br>Northwest Stockpile | Cat D11T CD<br>Cat D11T CD             | 222,640<br>39,781               | -                       | 74.1<br>13.5             | -                  | -                 | -                       | -                          | <del>-</del>                               | -                            | -                  | 50<br>50              | -                    | -                   | -                      | -1.0%<br>0.0%                 |
| 1700-B-b-Dz2                 | Dozer Assist-Cover   | Upper South  | LeeHill Stockpile                                       | Cat D111 CD                            | 122,964                         | -                       | 40.4                     | -                  | -                 | -                       | -                          | -  | -                            | -                  | 50                    | -                    | -                   | -                      | -1.0%                         |
| 1800-B-b-Dz2                 | Dozer Assist-Cover   | Upper South  | Northeast Stockpile                                     | Cat D11T CD                            | 59,273                          | -                       | 19.6                     | -                  | -                 | -                       | -                          | -  | -                            | -                  | 50                    | -                    | -                   | -                      | -1.0%                         |
| 1900-B-b-Dz2                 | Dozer Assist-Cover   | Upper South  | North Stockpile   | Cat D11T CD                            | 33,437                          | -                       | 11.3                     | -                  | -                 | -                       | -                          | -  | -                            | -                  | 50                    | -                    | -                   | -                      | -1.0%                         |
| 2200-B-b-Dz2<br>2309-B-b-Dz2 | Dozer Assist-Cover<br>Dozer Assist-Cover   | STS2<br>STS2   | 9 Waste Rock<br>Dam 15                                  | Cat D11T CD<br>Cat D11T CD             | 780,208<br>484                  | -                       | 294.0<br>0.2             | -                  | -                 | -                       | -                          | -<br>-                                     | -                            | -                  | 50<br>50              | -                    | -                   | -                      | 0.0%<br>-1.0%                 |
| 2310-B-b-Dz2                 | Dozer Assist-Cover Dozer Assist-Cover  | STS2   | Dam 16  | Cat D111 CD                            | 484                             | -                       | 0.2                      | -                  | -                 | -                       | -                          | -  | -                            | -                  | 50                    | -                    | -                   | -                      | -1.0%                         |
| 2313-B-b-Dz2                 | Dozer Assist-Cover   | STS2   | Dam 20  | Cat D11T CD                            | 1,549                           | -                       | 0.5                      | -                  | -                 | -                       | -                          | -  | -                            | -                  | 50                    | -                    | -                   | -                      | -1.0%                         |
| 2316-B-b-Dz2                 | Dozer Assist-Cover   | STS2   | Reservoir 17  | Cat D11T CD                            | 16,262                          | -                       | 5.6                      | -                  | -                 | -                       | -                          | -  | -                            | -                  | 50                    | -                    | -                   | -                      | -1.0%                         |

# Productivity and Hours Required for Dozer Use---Earthmoving

Assumptions:
Uses volumes of outslope sections and dam breaches to calculate productivity
Uses push distances of outslope sections for grading productivity
Uses scraper push cycle time for dozer assist with scraper
Uses loader cycle time for dozer assist with loader at cover stockpiles
Grade Factor = -0.02(Grade %) + 1

|              |                    |  |                                |                |                  |              |            | PERFORMA | NCE FACTO |                 |              |                           |                   |          |           |            |           |              |                  |
|--------------|--------------------|--|--------------------------------|----------------|------------------|--------------|------------|----------|-----------|-----------------|--------------|---------------------------|-------------------|----------|-----------|------------|-----------|--------------|------------------|
|              |                    |  |                                |                | Loose /Stockpile | Productivity | Total Task | Material | Grade     | Material Weight | Production   | Centroid to Centroid Push | Normal Production | Operator | Work Hour | Visibility | Elevation | Direct Drive | Cut to Fill Haul |
| ID           | Task Description   | Source Location 1                      | Destination Location 2         | Equipment      | Volume (cy)      | (cy/hr)      | Time (hrs) | Factor   | Factor    | (lb/cy)         | Method/Blade | Distance (ft)             | (cy/hr)           | Factor   | (min/hr)  | Factor     | Factor    | Trans.       | Grade (%)        |
| 2318-B-b-Dz2 | Dozer Assist-Cover | STS2                                   | Fleming Pond                   | Cat D11T CD    | 3,775            | -            | 1.2        | -        | -         | -               | -            | -                         | -                 | -        | 50        | -          | -         | -            | -1.0%            |
| 2320-B-b-Dz2 | Dozer Assist-Cover | STS2                                   | Tailing Thickener 1            | Cat D11T CD    | 12,584           | -            | 4.2        | -        | -         | -               | -            | -                         | -                 | -        | 50        | -          | -         | -            | -1.0%            |
| 2321-B-b-Dz2 | Dozer Assist-Cover | STS2                                   | PLS Pond & Launder             | Cat D11T CD    | 1,258            | -            | 0.4        | -        | -         | -               | -            | -                         | -                 | -        | 50        | -          | -         | -            | -1.0%            |
| 2323-B-b-Dz2 | Dozer Assist-Cover | STS2                                   | Raffinate Pond                 | Cat D11T CD    | 532              | -            | 0.2        | -        | -         | -               | -            | -                         | -                 | -        | 50        | -          | -         | -            | -1.0%            |
| 2324-B-b-Dz2 | Dozer Assist-Cover | STS2                                   | Reservoir 2                    | Cat D11T CD    | 1,065            | -            | 0.4        | -        | -         | -               | -            | -                         | -                 | -        | 50        | -          | -         | -            | -1.0%            |
| 2327-B-b-Dz2 | Dozer Assist-Cover | STS2                                   | Reservoir 6                    | Cat D11T CD    | 7,260            | -            | 2.4        | -        | -         | -               | -            | -                         | -                 | -        | 50        | -          | -         | -            | -1.0%            |
| 2328-B-b-Dz2 | Dozer Assist-Cover | STS2                                   | Reservoir 7                    | Cat D11T CD    | 11,664           | -            | 3.8        | -        | -         | -               | -            | -                         | -                 | -        | 50        | -          | -         | -            | -1.0%            |
| 2341-B-b-Dz2 | Dozer Assist-Cover | STS2                                   | Elmo's Pond                    | Cat D11T CD    | 6,002            | -            | 2.0        | -        | -         | -               | -            | -                         | -                 | -        | 50        | -          | -         | -            | -1.0%            |
| 2342-B-b-Dz2 | Dozer Assist-Cover | STS2                                   | Lower Lined Pond               | Cat D11T CD    | 10,793           | -            | 3.5        | -        | -         | -               | -            | -                         | -                 | -        | 50        | -          | -         | -            | -1.0%            |
| 2343-B-b-Dz2 | Dozer Assist-Cover | STS2                                   | Upper Lined Pond               | Cat D11T CD    | 1,984            | -            | 0.7        | -        | -         | -               | -            | -                         | -                 | -        | 50        | -          | -         | -            | -1.0%            |
| 2344-B-b-Dz2 | Dozer Assist-Cover | STS2                                   | 5900 PLS Sump                  | Cat D11T CD    | 2,759            | -            | 0.9        | -        | -         | -               | -            | -                         | -                 | -        | 50        | -          | -         | -            | -1.0%            |
| 2345-B-b-Dz2 | Dozer Assist-Cover | STS2                                   | 6300 PLS Booster Station       | Cat D11T CD    | 145              | -            | 0.0        | -        | -         | -               | -            | -                         | -                 | -        | 50        | -          | -         | -            | -1.0%            |
| 2346-B-b-Dz2 | Dozer Assist-Cover | STS2                                   | Lee Hill #2 Booster            | Cat D11T CD    | 678              | -            | 0.2        | -        | -         | -               | -            | -                         | -                 | -        | 50        | -          | -         | -            | -1.0%            |
| 2400-B-b-Dz2 | Dozer Assist-Cover | STS2                                   | Ground Hog #5                  | Cat D11T CD    | 3,227            | -            | 1.1        | -        | -         | -               | -            | -                         | -                 | -        | 50        | -          | -         | -            | 0%               |
| 2512-B-b-Dz2 | Dozer Assist-Cover | STS2                                   | East Pit Access Disturbed Area | Cat D11T CD    | 17,763           | -            | 6.1        | -        | -         | -               | -            | -                         | -                 | -        | 50        | -          | -         | -            | 0%               |
| 2513-B-b-Dz2 | Dozer Assist-Cover | STS2                                   | Chino part of Cobre Haul Road  | Cat D11T CD    | 15,536           | -            | 5.1        | -        | -         | -               | -            | -                         | -                 | -        | 50        | -          | -         | -            | 0%               |
| 2514-B-b-Dz2 | Dozer Assist-Cover | STS2                                   | Highway to Heaven Haul Road    | Cat D11T CD    | 157,015          | -            | 54.2       | -        | -         | -               | -            | -                         | -                 | -        | 50        | -          | -         | -            | 0%               |
| 2515-B-b-Dz2 | Dozer Assist-Cover | STS2                                   | Disturbed Area Around Reservo  | ir Cat D11T CD | 157,213          | -            | 56.7       | -        | -         | -               | -            | -                         | -                 | -        | 50        | -          | -         | -            | 0%               |
| 3307-B-b-Dz2 | Dozer Assist-Cover | West of Borrow E&H                     | Filter Plant                   | Cat D11T CD    | 82,474           | -            | 28.5       | -        | -         | -               | -            | -                         | -                 | -        | 50        | -          | -         | -            | 0%               |
| 2600-B-b-Dz2 | Dozer Assist-Cover | Upper South                            | Unplanned Disturbed Area       | Cat D11T CD    | 968,000          | -            | 334.1      | -        | -         | -               | -            | -                         | -                 | -        | 50        | -          | -         | -            | 0%               |
| 3000-B-b-Dz2 | Dozer Assist-Cover | Borrow Area F & North of Borrow Area F | Axiflo                         | Cat D11T CD    | 469,952          | -            | 183.5      | -        | -         | -               | -            | -                         | -                 | -        | 50        | -          | -         | -            | 0%               |
| 3100-B-b-Dz2 | Dozer Assist-Cover | Borrow Area F                          | Tailings Pond 6                | Cat D11T CD    | 1,266,425        | -            | 447.5      | -        | -         | -               | -            | -                         | -                 | -        | 50        | -          | -         | -            | 0%               |
| 3200-B-b-Dz2 | Dozer Assist-Cover | West of Borrow E&H                     | Tailings Pond 7                | Cat D11T CD    | 8,036,747        | -            | 2,639.8    | -        | -         | -               | -            | -                         | -                 | -        | 50        | -          | -         | -            | 0%               |
| 3301-B-b-Dz2 | Dozer Assist-Cover | West of Borrow E&H                     | Slag Pile Outslopes W side     | Cat D11T CD    | 39,688           | -            | 13.7       | -        | -         | -               | -            | -                         | -                 | -        | 50        | -          | -         | -            | -29%             |
| 3308-B-b-Dz2 | Dozer Assist-Cover | West of Borrow E&H                     | 35 Acre Misc. Area             | Cat D11T CD    | 169,400          | -            | 58.5       | -        | -         | -               | -            | -                         | -                 | -        | 50        | -          | -         | -            | 0%               |

# Productivity and Hours Required for Dust Suppression and Site Maintenance

### Assumptions:

6,000 gal water truck and 14M motor grader for dust suppression and site maintenance (water truck hours and 14M hours tied to loading time for cover material)

Sheet to which to tie hrs 10 Shovel Equipment for hrs Sh1

|                |                  |  |                                   |   | Operational Maintenance |
|----------------|------------------|--|-----------------------------------|---|-------------------------|
| ID             | Task Description | Source Location 1                      | Destination Location 2            | Equipment                                       | Time (hrs)              |
| 1000-P-b-Comb1 | Road Maintenance | Upper South                            | Triangle Stockpile                | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 153.6                   |
| 1100-P-b-Comb1 | Road Maintenance | Upper South & STS2                     | South Stockpile                   | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal. | 970.4                   |
| 1200-P-b-Comb1 | Road Maintenance | Upper South                            | West Stockpile                    | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal. | 1.005.4                 |
| 1300-P-b-Comb1 | Road Maintenance | Upper South & White House              | Lambright Stockpile               | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal. | 1,248.6                 |
| 1400-P-b-Comb1 | Road Maintenance | Upper South                            | Southwest Lampbright              | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal. | 152.8                   |
| 1500-P-b-Comb1 | Road Maintenance | Upper South                            | South and East In-Pit Stockpiles  | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal. | 74.1                    |
| 1600-P-b-Comb1 | Road Maintenance | Upper South                            | Northwest Stockpile               | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal. | 13.5                    |
| 1700-P-b-Comb1 | Road Maintenance | Upper South                            | LeeHill Stockpile                 | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 40.4                    |
| 1800-P-b-Comb1 | Road Maintenance | Upper South                            | Northeast Stockpile               | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 19.6                    |
| 1900-P-b-Comb1 | Road Maintenance | Upper South                            | North Stockpile                   | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 11.3                    |
| 2200-P-b-Comb1 | Road Maintenance | STS2                                   | 9 Waste Rock                      | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 294.0                   |
| 2309-P-b-Comb1 | Road Maintenance | STS2                                   | Dam 15                            | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 0.2                     |
| 2310-P-b-Comb1 | Road Maintenance | STS2                                   | Dam 16                            | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 0.2                     |
| 2313-P-b-Comb1 | Road Maintenance | STS2                                   | Dam 20                            | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 0.5                     |
| 2316-P-b-Comb1 | Road Maintenance | STS2                                   | Reservoir 17                      | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 5.6                     |
| 2318-P-b-Comb1 | Road Maintenance | STS2                                   | Fleming Pond                      | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 1.2                     |
| 2320-P-b-Comb1 | Road Maintenance | STS2                                   | Tailing Thickener 1               | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 4.2                     |
| 2321-P-b-Comb1 | Road Maintenance | STS2                                   | PLS Pond & Launder                | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 0.4                     |
| 2323-P-b-Comb1 | Road Maintenance | STS2                                   | Raffinate Pond                    | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 0.2                     |
| 2324-P-b-Comb1 | Road Maintenance | STS2                                   | Reservoir 2                       | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 0.4                     |
| 2327-P-b-Comb1 | Road Maintenance | STS2                                   | Reservoir 6                       | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 2.4                     |
| 2328-P-b-Comb1 | Road Maintenance | STS2                                   | Reservoir 7                       | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 3.8                     |
| 2341-P-b-Comb1 | Road Maintenance | STS2                                   | Elmo's Pond                       | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 2.0                     |
| 2342-P-b-Comb1 | Road Maintenance | STS2                                   | Lower Lined Pond                  | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 3.5                     |
| 2343-P-b-Comb1 | Road Maintenance | STS2                                   | Upper Lined Pond                  | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 0.7                     |
| 2344-P-b-Comb1 | Road Maintenance | STS2                                   | 5900 PLS Sump                     | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 0.9                     |
| 2345-P-b-Comb1 | Road Maintenance | STS2                                   | 6300 PLS Booster Station          | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 0.0                     |
| 2346-P-b-Comb1 | Road Maintenance | STS2                                   | Lee Hill #2 Booster               | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 0.2                     |
| 2400-P-b-Comb1 | Road Maintenance | STS2                                   | Ground Hog #5                     | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 1.1                     |
| 2512-P-b-Comb1 | Road Maintenance | STS2                                   | East Pit Access Disturbed Area    | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 6.1                     |
| 2513-P-b-Comb1 | Road Maintenance | STS2                                   | Chino part of Cobre Haul Road     | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 5.1                     |
| 2514-P-b-Comb1 | Road Maintenance | STS2                                   | Highway to Heaven Haul Road       | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 54.2                    |
| 2515-P-b-Comb1 | Road Maintenance | STS2                                   | Disturbed Area Around Reservoir 5 | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 56.7                    |
| 3307-P-b-Comb1 | Road Maintenance | West of Borrow E&H                     | Filter Plant                      | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 28.5                    |
| 2600-P-b-Comb1 | Road Maintenance | Upper South                            | Unplanned Disturbed Area          | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 334.1                   |
| 3000-P-b-Comb1 | Road Maintenance | Borrow Area F & North of Borrow Area F | Axiflo                            | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 183.5                   |
| 3100-P-b-Comb1 | Road Maintenance | Borrow Area F                          | Tailings Pond 6                   | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 447.5                   |
| 3200-P-b-Comb1 | Road Maintenance | West of Borrow E&H                     | Tailings Pond 7                   | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 2,639.8                 |
| 3301-P-b-Comb1 | Road Maintenance | West of Borrow E&H                     | Slag Pile Outslopes W side        | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 13.7                    |
| 3308-P-b-Comb1 | Road Maintenance | West of Borrow E&H                     | 35 Acre Misc. Area                | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.  | 58.5                    |

# Productivity and Hours Required for Ripper---Equipped Dozer Use

Assumptions:
Uses area to calculate task time
88 ft/min = 1 mph

Task time is less than 1 hour for areas smaller than productivity rate (ac/hr)

|                              |   |   |             |   |               |              |              | PERFORMA       | NCE FACTO             | JRS          |                        |                |                  |           |            |                   |                          |
|------------------------------|---|---|-------------|---|---------------|--------------|--------------|----------------|-----------------------|--------------|------------------------|----------------|------------------|-----------|------------|-------------------|--------------------------|
|                              |   |   | Destination |   |               | Productivity | Task Time    | Ripping        | Ripper<br>Penetration | n Pocket     | Distance<br>b/n Passes | Number of Shar | nk Turn Time     | Work Hour | Speed      | 1000 Ft or 100 Ft | Ripped Width Plus        |
| ID                           | Task Description  | Source Location 1   | Location 2  | Equipment   | Area (ac)     | (ac/hr)      | (hrs)        | Length (ft)    | (in)                  | Spacing (in) | (in)                   | Pockets        | (min/pass)       | (min/hr)  | (mph)      | Passes/Acre       | Distance b/n Passes (ft) |
| 1101-E-a-Rp1                 | Rip-Outslope-Existing Ground  | South Stockpile S-1   | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 6.4           | 2.9          | 2.2          | 1,000          | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 1102-E-a-Rp1<br>1103-E-a-Rp1 | Rip-Outslope-Existing Ground Rip-Outslope-Existing Ground   | South Stockpile S-2<br>South Stockpile S-3  | -           | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H) | 86.9<br>76.0  | 2.9<br>2.9   | 29.8<br>26.1 | 1,000<br>1,000 | 18<br>18              |              | 59<br>59               |                | 3 0.25<br>3 0.25 | 50<br>50  | 1.0<br>1.0 | 1.5<br>1.5        | 30<br>30                 |
| 1104-E-a-Rp1                 | Rip-Outslope-Existing Ground  | South Stockpile S-3   | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 37.9          | 2.9          | 13.0         | 1,000          | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 1105-E-a-Rp1                 | Rip-Outslope-Existing Ground  | South Stockpile S-5   | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 82.6          | 2.9          | 28.3         | 1,000          | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 1106-E-a-Rp1                 | Rip-Outslope-Existing Ground  | South Stockpile S-6   | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 91.2          | 2.9          | 31.3         | 1,000          | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 1107-E-a-Rp1<br>1108-E-a-Rp1 | Rip-Outslope-Existing Ground Rip-Outslope-Existing Ground   | South Stockpile S-7<br>South Stockpile S-8  | -           | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H) | 47.6<br>67.8  | 2.9<br>2.9   | 16.3<br>23.3 | 1,000<br>1,000 | 18<br>18              |              | 59<br>59               |                | 3 0.25<br>3 0.25 | 50<br>50  | 1.0<br>1.0 | 1.5<br>1.5        | 30<br>30                 |
| 1109-E-a-Rp1                 | Rip-Outslope-Existing Ground  | South Stockpile S-9(1)  | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 2.6           | 2.9          | 0.9          | 1,000          | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 1207-E-a-Rp1                 | Rip-Outslope-Existing Ground  | West Stockpile W-7  | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 33.2          | 2.9          | 11.4         | 1,000          | 18                    | 59           | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 1209-E-a-Rp1                 | Rip-Outslope-Existing Ground  | West Stockpile W-8(1)   | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 33.9          | 2.9          | 11.6         | 1,000          | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 1210-E-a-Rp1<br>1211-E-a-Rp1 | Rip-Outslope-Existing Ground Rip-Outslope-Existing Ground   | West Stockpile W-8(2) West Stockpile W-9  | -           | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H) | 33.9<br>27.1  | 2.9<br>2.9   | 11.6<br>9.3  | 1,000<br>1,000 | 18<br>18              |              | 59<br>59               |                | 3 0.25<br>3 0.25 | 50<br>50  | 1.0<br>1.0 | 1.5<br>1.5        | 30<br>30                 |
| 1212-E-a-Rp1                 | Rip-Outslope-Existing Ground  | West Stockpile W-10   | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 21.5          | 2.9          | 7.4          | 1,000          | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 1213-E-a-Rp1                 | Rip-Outslope-Existing Ground  | West Stockpile W-11   | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 23.9          | 2.9          | 8.2          | 1,000          | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 1301-E-a-Rp1                 | Rip-Outslope-Existing Ground  | Lambright Stockpile LB-1  | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 71.4          | 2.9          | 24.5         | 1,000          | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30<br>30                 |
| 1302-E-a-Rp1<br>1303-E-a-Rp1 | Rip-Outslope-Existing Ground Rip-Outslope-Existing Ground   | Lambright Stockpile LB-2<br>Lambright Stockpile LB-3                                    | -           | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H) | 38.3<br>33.2  | 2.9<br>2.9   | 13.1<br>11.4 | 1,000<br>1,000 | 18<br>18              |              | 59<br>59               |                | 3 0.25<br>3 0.25 | 50<br>50  | 1.0<br>1.0 | 1.5<br>1.5        | 30                       |
| 1304-E-a-Rp1                 | Rip-Outslope-Existing Ground  | Lambright Stockpile LB-4  | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 41.6          | 2.9          | 14.3         | 1,000          | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 1305-E-a-Rp1                 | Rip-Outslope-Existing Ground  | Lambright Stockpile LB-5  | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 57.7          | 2.9          | 19.8         | 1,000          | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 1306-E-a-Rp1                 | Rip-Outslope-Existing Ground  | Lambright Stockpile LB-6  | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 14.2          | 2.9          | 4.9          | 1,000          | 18                    |              | 59<br>59               |                | 3 0.25           | 50        | 1.0        | 1.5<br>1.5        | 30<br>30                 |
| 1307-E-a-Rp1<br>1308-E-a-Rp1 | Rip-Outslope-Existing Ground Rip-Outslope-Existing Ground   | Lambright Stockpile LB-7(1) Lambright Stockpile LB-7(2)                                 | -           | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H) | 11.0<br>6.9   | 2.9<br>2.9   | 3.8<br>2.4   | 1,000<br>1,000 | 18<br>18              |              | 59<br>59               |                | 3 0.25<br>3 0.25 | 50<br>50  | 1.0<br>1.0 | 1.5               | 30                       |
| 1309-E-a-Rp1                 | Rip-Outslope-Existing Ground  | Lambright Stockpile LB-8  | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 35.5          | 2.9          | 12.2         | 1,000          | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 1310-E-a-Rp1                 | Rip-Outslope-Existing Ground  | Lambright Stockpile LB-9  | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 47.5          | 2.9          | 16.3         | 1,000          | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 1311-E-a-Rp1                 | Rip-Outslope-Existing Ground  | Lambright Stockpile LB-10   | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 60.6          | 2.9          | 20.8         | 1,000          | 18                    |              | 59<br>59               |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 1312-E-a-Rp1<br>1313-E-a-Rp1 | Rip-Outslope-Existing Ground Rip-Outslope-Existing Ground   | Lambright Stockpile LB-11 Lambright Stockpile LB-12                                     | -           | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H) | 35.3<br>119.3 | 2.9<br>2.9   | 12.1<br>40.9 | 1,000<br>1,000 | 18<br>18              |              | 59<br>59               |                | 3 0.25<br>3 0.25 | 50<br>50  | 1.0<br>1.0 | 1.5<br>1.5        | 30<br>30                 |
| 1314-E-a-Rp1                 | Rip-Outslope-Existing Ground  | Lambright Stockpile LB-12   | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 83.7          | 2.9          | 28.7         | 1,000          | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 1315-E-a-Rp1                 | Rip-Outslope-Existing Ground  | Lambright Stockpile LB-14   | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 51.6          | 2.9          | 17.7         | 1,000          | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 1002-E-c-Rp1                 | Rip-Top-Rough Graded Material   | Triangle Stockpile T-2  | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 4.8           | 2.9          | 1.6          | 1,000          | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 1110-E-c-Rp1<br>1111-E-c-Rp1 | Rip-Top-Rough Graded Material Rip-Top-Rough Graded Material   | South Stockpile S-9(2)<br>South Stockpile S-9(3)  | -           | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H) | 45.8<br>39.8  | 2.9<br>2.9   | 15.7<br>13.6 | 1,000<br>1,000 | 18<br>18              |              | 59<br>59               |                | 3 0.25<br>3 0.25 | 50<br>50  | 1.0<br>1.0 | 1.5<br>1.5        | 30<br>30                 |
| 1219-E-c-Rp1                 | Rip-Top-Rough Graded Material   | West Stockpile W-15(2)  | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 6.2           | 2.9          | 2.1          | 1,000          | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 1221-E-c-Rp1                 | Rip-Top-Rough Graded Material   | West Stockpile W-16(2)  | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 6.9           | 2.9          | 2.4          | 1,000          | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 1222-E-c-Rp1                 | Rip-Top-Rough Graded Material   | West Stockpile W-17(1)  | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 55.7          | 2.9<br>2.9   | 19.1<br>9.7  | 1,000          | 18<br>18              |              | 59<br>59               |                | 3 0.25<br>3 0.25 | 50<br>50  | 1.0<br>1.0 | 1.5<br>1.5        | 30<br>30                 |
| 1223-E-c-Rp1<br>1316-E-c-Rp1 | Rip-Top-Rough Graded Material Rip-Top-Rough Graded Material   | West Stockpile W-17(2) Lambright Stockpile LB-19(1)                                     | -           | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H) | 28.4<br>35.1  | 2.9          | 12.0         | 1,000<br>1,000 | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 1317-E-c-Rp1                 | Rip-Top-Rough Graded Material   | Lambright Stockpile LB-19(2)  | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 42.5          | 2.9          | 14.6         | 1,000          | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 1403-E-c-Rp1                 | Rip-Top-Rough Graded Material   | Southwest Lampbright SWL-17   | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 5.2           | 2.9          | 1.8          | 1,000          | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 1500-E-c-Rp1<br>1601-E-c-Rp1 | Rip-Entire Stockpile-Rough Graded Material Rip-Top-Rough Graded Material                              | South and East In-Pit Stockpiles Northwest Stockpile NW-1(1)                            | -           | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H) | 46.0<br>1.7   | 2.9<br>2.9   | 15.8<br>0.6  | 1,000<br>1,000 | 18<br>18              |              | 59<br>59               |                | 3 0.25<br>3 0.25 | 50<br>50  | 1.0<br>1.0 | 1.5<br>1.5        | 30<br>30                 |
| 1602-E-c-Rp1                 | Rip-Top-Rough Graded Material   | Northwest Stockpile NW-1(1)   | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 1.8           | 2.9          | 0.6          | 1,000          | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 1604-E-c-Rp1                 | Rip-Top-Rough Graded Material   | Northwest Stockpile NW-2(2)   | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 0.3           | 2.9          | 0.1          | 1,000          | 18                    | 59           | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 1605-E-c-Rp1                 | Rip-Top-Rough Graded Material   | Northwest Stockpile NW-2(3)   | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 0.3           | 2.9          | 0.1          | 1,000          | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 1701-E-c-Rp1<br>1702-E-c-Rp1 | Rip-Top-Rough Graded Material Rip-Top-Rough Graded Material   | LeeHill Stockpile LH-2<br>LeeHill Stockpile LH-3  | -           | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H) | 22.4<br>3.0   | 2.9<br>2.9   | 7.7<br>1.0   | 1,000<br>1,000 | 18<br>18              |              | 59<br>59               |                | 3 0.25<br>3 0.25 | 50<br>50  | 1.0<br>1.0 | 1.5<br>1.5        | 30<br>30                 |
| 1800-E-c-Rp1                 | Rip-Entire Stockpile-Rough Graded Material  | Northeast Stockpile   | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 12.2          | 2.9          | 4.2          | 1,000          | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 1901-E-c-Rp1                 | Rip-Top-Rough Graded Material   | North Stockpile N-1   | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 6.6           | 2.9          | 2.3          | 1,000          | 18                    | 59           | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 1902-E-c-Rp1                 | Rip-Top-Rough Graded Material   | North Stockpile N-2(1)  | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 0.2           | 2.9          | 0.1          | 1,000          | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 1903-E-c-Rp1<br>2000-E-c-Rp1 | Rip-Top-Rough Graded Material Rip-Entire Stockpile-Rough Graded Material                              | North Stockpile N-2(2)<br>STS2  | -           | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H) | 0.2<br>83.8   | 2.9<br>2.9   | 0.1<br>28.7  | 1,000<br>1,000 | 18<br>18              |              | 59<br>59               |                | 3 0.25<br>3 0.25 | 50<br>50  | 1.0<br>1.0 | 1.5<br>1.5        | 30<br>30                 |
| 2100-E-c-Rp1                 | Rip-Entire Stockpile-Rough Graded Material  | Upper South   | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 142.7         | 2.9          | 48.9         | 1,000          | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 2202-E-c-Rp1                 | Rip-Top-Rough Graded Material   | 9 Waste Rock 9 WRS-2  | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 95.5          | 2.9          | 32.8         | 1,000          | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 2309-E-c-Rp1                 | Rip-Dam 15-Rough Graded Material Rip-Dam 16-Rough Graded Material                                     | Dams and Reservoirs Dam 15  | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 0.1           | 2.4<br>2.4   | 0.0          | 100            | 18                    | 59           | 59<br>59               |                | 3 0.25<br>3 0.25 | 50        | 1.0        | 14.8<br>14.8      | 30                       |
| 2310-E-c-Rp1<br>2313-E-c-Rp1 | Rip-Dam 20-Rough Graded Material  | Dams and Reservoirs Dam 16 Dams and Reservoirs Dam 20                                   | -           | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H) | 0.1<br>0.3    | 2.4          | 0.0          | 100            | 18                    | , 00         | 59                     |                | 3 0.25           | 50        | 1.0<br>1.0 | 14.8              | 30                       |
| 2316-E-c-Rp1                 | Rip-Reservoir 17-Rough Graded Material  | Dams and Reservoirs Reservoir 17  | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 3.4           | 2.4          | 1.4          | 100            | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 14.8              | 30                       |
| 2318-E-c-Rp1                 | Rip-Fleming Pond-Rough Graded Material  | Dams and Reservoirs Fleming Pond  | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 0.8           | 2.4          | 0.3          | 100            | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 14.8              | 30                       |
| 2320-E-c-Rp1<br>2321-E-c-Rp1 | Rip-Tailing Thickener 1-Rough Graded Material Rip-PLS Pond & Launder-Rough Graded Material            | Dams and Reservoirs Tailing Thickener 1 Dams and Reservoirs PLS Pond & Launder          | -           | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H) | 2.6<br>0.3    | 2.4<br>2.4   | 1.1<br>0.1   | 100<br>100     | 18<br>18              |              | 59<br>59               |                | 3 0.25<br>3 0.25 | 50<br>50  | 1.0<br>1.0 | 14.8<br>14.8      | 30                       |
| 2323-E-c-Rp1                 | Rip-Raffinate Pond-Rough Graded Material  | Dams and Reservoirs Raffinate Pond  | -           | Cat D111 CD Multi-shank (w/ MSR-359H)                                       | 0.3           | 2.4          | 0.0          | 100            | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 14.8              | 30                       |
| 2324-E-c-Rp1                 | Rip-Reservoir 2-Rough Graded Material   | Dams and Reservoirs Reservoir 2   | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 0.2           | 2.4          | 0.1          | 100            | 18                    | 59           | 59                     |                | 3 0.25           | 50        | 1.0        | 14.8              | 30<br>30<br>30<br>30     |
| 2327-E-c-Rp1                 | Rip-Reservoir 6-Rough Graded Material   | Dams and Reservoirs Reservoir 6   | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 1.5           | 2.4          | 0.6          | 100            | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 14.8              | 30                       |
| 2328-E-c-Rp1<br>2341-E-c-Rp1 | Rip-Reservoir 7-Rough Graded Material Rip-Elmo's Pond -Rough Graded Material                          | Dams and Reservoirs Reservoir 7 Dams and Reservoirs Elmo's Pond                         | -           | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H) | 2.4<br>1.2    | 2.4<br>2.4   | 1.0<br>0.5   | 100<br>100     | 18<br>18              |              | 59<br>59               |                | 3 0.25           | 50<br>50  | 1.0<br>1.0 | 14.8<br>14.8      | 30<br>30                 |
| 2341-E-c-Rp1<br>2342-E-c-Rp1 | Rip-Eimo s Pond -Rough Graded Material  Rip-Lower Lined Pond -Rough Graded Material                   | Dams and Reservoirs Eimo's Pond  Dams and Reservoirs Lower Lined Pond                   | -           | Cat D111 CD Multi-snank (W/ MSR-359H) Cat D11T CD Multi-shank (W/ MSR-359H) | 2.2           | 2.4<br>2.4   | 0.5          | 100            | 18                    |              | 59<br>59               |                | 3 0.25<br>3 0.25 | 50<br>50  | 1.0        | 14.8              | 30<br>30                 |
| 2343-E-c-Rp1                 | Rip-Upper Lined Pond -Rough Graded Material   | Dams and Reservoirs Upper Lined Pond  | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 0.4           | 2.4          | 0.2          | 100            | 18                    | 59           | 59                     |                | 3 0.25           | 50        | 1.0        | 14.8              | 30<br>30                 |
| 2344-E-c-Rp1                 | Rip-5900 PLS Sump -Rough Graded Material  | Dams and Reservoirs 5900 PLS Sump   | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 0.57          | 2.4          | 0.2          | 100            | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 14.8              | 30                       |
| 2345-E-c-Rp1<br>2346-E-c-Rp1 | Rip-6300 PLS Booster Station -Rough Graded Material<br>Rip-Lee Hill #2 Booster -Rough Graded Material | Dams and Reservoirs 6300 PLS Booster Station<br>Dams and Reservoirs Lee Hill #2 Booster | -           | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H) | 0.0<br>0.1    | 2.4<br>2.4   | 0.0<br>0.1   | 100<br>100     | 18<br>18              |              | 59<br>59               |                | 3 0.25<br>3 0.25 | 50<br>50  | 1.0<br>1.0 | 14.8<br>14.8      | 30<br>30                 |
| 2513-E-c-Rp1                 | Rip-Chino part of Cobre Haul Road-Rough Graded Material   | Miscellaneous NMA Chino part of Cobre Haul Road   | -           | Cat D111 CD Multi-shank (w/ MSR-359H)                                       | 3.2           | 2.9          | 1.1          | 1,000          | 18                    |              | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 2514-E-c-Rp1                 | Rip-Highway to Heaven Haul Road-Rough Graded Material   | Miscellaneous NMA Highway to Heaven Haul Road   | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 32.4          | 2.9          | 11.1         | 1,000          | 18                    | 59           | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |
| 2600-E-c-Rp1                 | Rip-200-Acre Unplanned Future Disturbance-Rough Graded Material                                       | Unplanned Disturbed Area  | -           | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | 200.0         | 2.9          | 68.6         | 1,000          | 18                    | 59           | 59                     |                | 3 0.25           | 50        | 1.0        | 1.5               | 30                       |

### Productivity and Hours Required for Ripper---Equipped Dozer Use

### Assumptions:

Uses area to calculate task time

88 ft/min = 1 mph

Task time is less than 1 hour for areas smaller than productivity rate (ac/hr)

### PERFORMANCE FACTORS Ripper Penetration Distance Destination Productivity Task Time Pocket b/n Passes Number of Shank Turn Time Work Hour 1000 Ft or 100 Ft Ripped Width Plus Ripping Speed Task Description Source Location 1 Location 2 Equipment Area (ac) (ac/hr) (hrs) (min/hr) (mph) Passes/Acre Distance b/n Passes (ft) Length (ft) (in) Spacing (in (min/pass) 3000-E-c-Rp1 Rip-Entire Impoundment-Rough Graded Material Cat D11T CD Multi-shank (w/ MSR-359H) 97.1 Axiflo 2.9 33.3 1.000 18 59 0.25 50 1.0 1.5 30 Rip-Entire Impoundment-Rough Graded Material Rip-Entire Impoundment-Rough Graded Material Tailings Pond 6 Tailings Pond 7 3100-E-c-Rp1 Cat D11T CD Multi-shank (w/ MSR-359H) 30 30 30 261.7 2.9 2.9 89.7 1,000 0.25 0.25 1.0 3200-E-c-Rp1 Cat D11T CD Multi-shank (w/ MSR-359H) 1,660.5 18 569.5 1,000 3301-E-c-Rp1 Rip-Slag Pile Outslopes W side-Rough Graded Material Miscellaneous SMA Slag Pile Outslopes W side Cat D11T CD Multi-shank (w/ MSR-359H) 8.2 2.9 2.8 1,000 18 0.25 50 1.0 3308-E-c-Rp1 Rip-35 Acre Misc. Area-Rough Graded Material Miscellaneous SMA 35 Acre Misc. Area Cat D11T CD Multi-shank (w/ MSR-359H) 35.0 2.916 12.0 1,000 18 59 59 0.25 50 1.0 1.477 30 30 30 30 30 30 30 30 Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H) 5001-E-d-Rp1 Rip-Cover Source White House 62.5 2.916 21.4 1,000 18 59 59 0.25 0.25 50 1.0 1.477 5105-E-d-Rp1 Borrow Area F 49.6 2.916 17.0 1.000 18 18 59 50 1.0 1.477 59 5106-E-d-Rp1 Rip-Cover Source North of Borrow Area F Cat D11T CD Multi-shank (w/ MSR-359H) 67.9 2.916 23.3 1,000 59 59 0.25 50 1.477 1.0 5107-E-d-Rp1 Rip-Cover Source Borrow Area E Cat D11T CD Multi-shank (w/ MSR-359H) 110.0 2.916 37.7 1,000 18 0.25 1.0 1.477 5108-E-d-Rp1 Rip-Cover Source Borrow Area H Cat D11T CD Multi-shank (w/ MSR-359H) 165.2 2.916 56.6 1,000 0.25 1.477 West of Borrow E&H 50 5109-E-d-Rp1 Rip-Cover Source Cat D11T CD Multi-shank (w/ MSR-359H) 502.0 2.916 172.2 1,000 18 59 59 0.25 1.0 1.477 5005-E-c-Rp1 Rip-Haul Road Upper South & White House Cat D11T CD Multi-shank (w/ MSR-359H) 27.5 18 0.25 50 1.0 2.916 9.4 1,000 59 1.5

# Productivity and Hours Required for Hydraulic Excavator

### Assumptions:

Uses area to calculate time for perforating liners 3' sheepsfoot roller 50% of area is perforated

| ID           | Task Description  | Source Location 1                            | Destination<br>Location 2 | Equipment  | Area (ac) | Sheepsfoot Roller<br>Width (ft) | Maximum Reach at<br>Ground Level (ft) | Cycle Time (min) | Task Time (hr) |
|--------------|---|--|---------------------------|------------|-----------|---------------------------------|---------------------------------------|------------------|----------------|
| 2316-K-a-Ex1 | Perforate Liner-Reservoir 17-Existing Ground              | Dams and Reservoirs Reservoir 17             | -                         | Cat 319D L | 3.4       | 3.0                             | 31.7                                  | 0.2              | 2.1            |
| 2318-K-a-Ex1 | Perforate Liner-Fleming Pond-Existing Ground              | Dams and Reservoirs Fleming Pond             | -                         | Cat 319D L | 0.8       | 3.0                             | 31.7                                  | 0.2              | 0.5            |
| 2320-K-a-Ex1 | Perforate Liner-Tailing Thickener 1-Existing Ground       | Dams and Reservoirs Tailing Thickener 1      | -                         | Cat 319D L | 2.6       | 3.0                             | 31.7                                  | 0.2              | 1.6            |
| 2321-K-a-Ex1 | Perforate Liner-PLS Pond & Launder-Existing Ground        | Dams and Reservoirs PLS Pond & Launder       | -                         | Cat 319D L | 0.3       | 3.0                             | 31.7                                  | 0.2              | 0.2            |
| 2323-K-a-Ex1 | Perforate Liner-Raffinate Pond-Existing Ground            | Dams and Reservoirs Raffinate Pond           | -                         | Cat 319D L | 0.1       | 3.0                             | 31.7                                  | 0.2              | 0.1            |
| 2342-K-a-Ex1 | Perforate Liner-Lower Lined Pond -Existing Ground         | Dams and Reservoirs Lower Lined Pond         | -                         | Cat 319D L | 2.2       | 3.0                             | 31.7                                  | 0.2              | 1.4            |
| 2343-K-a-Ex1 | Perforate Liner-Upper Lined Pond -Existing Ground         | Dams and Reservoirs Upper Lined Pond         | -                         | Cat 319D L | 0.4       | 3.0                             | 31.7                                  | 0.2              | 0.3            |
| 2344-K-a-Ex1 | Perforate Liner-5900 PLS Sump -Existing Ground            | Dams and Reservoirs 5900 PLS Sump            | -                         | Cat 319D L | 0.6       | 3.0                             | 31.7                                  | 0.2              | 0.3            |
| 2345-K-a-Ex1 | Perforate Liner-6300 PLS Booster Station -Existing Ground | Dams and Reservoirs 6300 PLS Booster Station | -                         | Cat 319D L | 0.0       | 3.0                             | 31.7                                  | 0.2              | 0.0            |
| 2346-K-a-Ex1 | Perforate Liner-Lee Hill #2 Booster -Existing Ground      | Dams and Reservoirs Lee Hill #2 Booster      | -                         | Cat 319D L | 0.1       | 3.0                             | 31.7                                  | 0.2              | 0.1            |

# Productivity and Hours Required for Truck Use

Assumptions:

Uses haul distance to calculate haul and return time (total task time includes loading, manuevering, dumping, hauling and return time) - moves from cover stockpile to destination stockpile Volume of cover material based on area of destination

Cycles per truck = the greater of Heaped capacity or Struck capacity divided by Loader's per bucket capacity

1 mph = 88 tilmin

1 m/min = 0.03728227153424 mph

See Truck Optimization optimum number of trucks per loader

Haul Grade (%) assumes postive is uphill while the Effective Haul Grade (%) and Effective Return Grade (%) are postive for downhill and uphill

|              |                  |  |                                   |              |                 |             |                |                      |              |                |            | PERFORMANCE | E FACTORS       |                  |               |                |                |                |               |               |              |      |       |                      |               |
|--------------|------------------|--|-----------------------------------|--------------|-----------------|-------------|----------------|----------------------|--------------|----------------|------------|-------------|-----------------|------------------|---------------|----------------|----------------|----------------|---------------|---------------|--------------|------|-------|----------------------|---------------|
|              | Tarli Danadatian | Secretary 1                            | Destination Leasting 0            | E-visor      | Loose/Stockpile | Truck Cycle | Optimum Number |                      | Productivity | Loader/Shovel  |            |             | Heaped Capacity |                  | Total Haul    |                |                | Haul Distance  | Haul Grade    | Haul Grade    | Haul Grade   |      |       |                      | ul Distance   |
| ID           | Task Description | Source Location 1                      | Destination Location 2            | Equipment    | Volume (cy)     | Time (min)  | of Trucks      | Bucket Capacity (cy) | (cy/hr)      | Task Time(hrs) | Time (hrs) | (cy)        | (cy)            | Cycles per Truck | Distance (ft) | Segment 1 (ft) | Segment 2 (ft) | Segment 3 (ft) | Segment 1 (%) | Segment 2 (%) |              |      |       | ent 2 (meters) Segme | nt 3 (meters) |
|              | Haul-Cover       | Upper South                            | Triangle Stockpile                | Komatsu 730E | 394,621         | . 8         | 3              | 27.4                 | 2,569        | 129.6          | 153.6      | 101         |                 | 5                | 4,778         | 4,778          | -              | -              | -4.2%         | 0.09          | 6 0.0%       | 2.5% | 1,456 | -                    | -             |
| 00-D-b-Tk4   |                  | Upper South & STS2                     | South Stockpile                   | Komatsu 730E | 2,829,473       | 12          | 5              | 27.4                 | 2,916        | 929.4          | 970.4      | 101         | 145             | 5                | 8,173         | 8,173          | -              |                | 2.3%          | -             | -            | 2.5% | 2,491 | -                    | -             |
| 200-D-b-Tk4  |                  | Upper South                            | West Stockpile                    | Komatsu 730E | 3,031,924       | 23          | 10             | 27.4                 | 3,016        | 995.9          | 1,005.4    | 101         | 145             | 5                | 22,486        | 22,486         |                |                | 1.0%          | -             |              | 2.5% | 6,854 |                      | -             |
| 1300-D-b-Tk4 |                  | Upper South & White House              | Lambright Stockpile               | Komatsu 730E | 3,801,209       | 29          | 13             | 27.4                 | 3,056        | 1,248.6        | 1,248.6    | 101         | 145             | 5                | 17,438        | 11,551         | 5,887 -        |                | 6.5%          | 8.09          | · -          | 2.5% | 3,521 | 1,794                | -             |
| 1400-D-b-Tk4 |                  | Upper South                            | Southwest Lampbright              | Komatsu 730E | 456,400         | 28          | 12             | 27.4                 | 2,988        | 149.9          | 152.8      | 101         | 145             | 5                | 17,323        | 11,551         | 5,772 -        |                | 6.5%          | 5.89          | /o -         | 2.5% | 3,521 | 1,759                | -             |
| 1500-D-b-Tk4 |                  | Upper South                            | South and East In-Pit Stockpiles  | Komatsu 730E | 222,640         | 32          | 14             | 27.4                 | 3,006        | 73.1           | 74.1       | 101         | 145             | 5                | 21,949        | 21,949         | -              |                | 5.5%          | -             | -            | 2.5% | 6,690 | -                    | -             |
| 1600-D-b-Tk4 |                  | Upper South                            | Northwest Stockpile               | Komatsu 730E | 39,781          | 26          | 11             | 27.4                 | 2,940        | 13.1           | 13.5       | 101         | 145             | 5                | 23,749        | 23,749         | -              |                | 1.9%          | -             | -            | 2.5% | 7,239 | -                    | -             |
| 1700-D-b-Tk4 |                  | Upper South                            | LeeHill Stockpile                 | Komatsu 730E | 122,964         | 25          | 11             | 27.4                 | 3,068        | 40.4           | 40.4       | 101         | 145             | 5                | 25,168        | 25,168         | -              |                | 0.8%          | -             | -            | 2.5% | 7,671 | -                    | -             |
| 1800-D-b-Tk4 |                  | Upper South                            | Northeast Stockpile               | Komatsu 730E | 59,273          | 36          | 16             | 27.4                 | 3,032        | 19.5           | 19.6       | 101         | 145             | 5                | 29,443        | 29,443         | -              |                | 3.8%          | -             | -            | 2.5% | 8,974 | -                    | -             |
| 1900-D-b-Tk4 |                  | Upper South                            | North Stockpile                   | Komatsu 730E | 33,437          | 32          | 14             | 27.4                 | 2,961        | 11.0           | 11.3       | 101         | 145             | 5                | 27,241        | 27,241         |                |                | 3.3%          | -             |              | 2.5% | 8,303 |                      | -             |
| 2200-D-b-Tk4 |                  | STS2                                   | 9 Waste Rock                      | Komatsu 730E | 780,208         | 10          | . 4            | 27.4                 | 2,654        | 256.3          | 294.0      | 101         | 145             | 5                | 5,132         | 2,712          | 2,420          | -              | 0.8%          | 8.59          | 6 0.0%       | 2.5% | 827   | 738                  | -             |
| 2309-D-b-Tk4 |                  | STS2                                   | Dam 15                            | Komatsu 730E | 484             | 23          | 10             | 27.4                 | 3,016        | 0.2            | 0.2        | 101         | 145             | 5                | 22,486        | 22,486         | -              |                | 1.0%          | -             | -            | 2.5% | 6,854 | -                    | -             |
| 2310-D-b-Tk4 |                  | STS2                                   | Dam 16                            | Komatsu 730E | 484             | 23          | 10             | 27.4                 | 3,016        | 0.2            | 0.2        | 101         | 145             | 5                | 22,486        | 22,486         | -              |                | 1.0%          | -             | -            | 2.5% | 6,854 | -                    | -             |
| 2313-D-b-Tk4 |                  | STS2                                   | Dam 20                            | Komatsu 730E | 1,549           | 23          | 10             | 27.4                 | 3,016        | 0.5            | 0.5        | 101         | 145             | 5                | 22,486        | 22,486         | -              |                | 1.0%          | -             | -            | 2.5% | 6,854 | -                    | -             |
| 2316-D-b-Tk4 |                  | STS2                                   | Reservoir 17                      | Komatsu 730E | 16,262          | 12          | 5              | 27.4                 | 2,916        | 5.3            | 5.6        | 101         | 145             | 5                | 8,173         | 8,173          |                |                | 2.3%          | -             |              | 2.5% | 2,491 |                      | -             |
| 2318-D-b-Tk4 |                  | STS2                                   | Fleming Pond                      | Komatsu 730E | 3,775           | 29          | 13             | 27.4                 | 3,056        | 1.2            | 1.2        | 101         | 145             | 5                | 17,438        | 11,551         | 5,887 -        |                | 6.5%          | 8.09          | 6 -          | 2.5% | 3,521 | 1,794                | -             |
| 2320-D-b-Tk4 |                  | STS2                                   | Tailing Thickener 1               | Komatsu 730E | 12,584          | 32          | 14             | 27.4                 | 3,006        | 4.1            | 4.2        | 101         | 145             | 5                | 21,949        | 21,949         |                |                | 5.5%          | -             | , -          | 2.5% | 6,690 | -                    | -             |
| 2321-D-b-Tk4 |                  | STS2                                   | PLS Pond & Launder                | Komatsu 730E | 1,258           | 29          | 13             | 27.4                 | 3,056        | 0.4            | 0.4        | 101         | 145             | 5                | 17,438        | 11,551         | 5,887 -        |                | 6.5%          | 8.09          |              | 2.5% | 3,521 | 1,794                |               |
| 2323-D-b-Tk4 |                  | STS2                                   | Raffinate Pond                    | Komatsu 730E | 532             | 40          | 1/             | 27.4                 | 2,933        | 0.2            | 0.2        | 101         | 145             | 5                | 22,828        | 11,551         | 5,887          | 5,390          | 6.5%          | 8.09          | 6 10.1%      | 2.5% | 3,521 | 1,794                | 1,643         |
| 2324-D-b-Tk4 |                  | STS2                                   | Reservoir 2                       | Komatsu 730E | 1,065           | 12          | 5              | 27.4                 | 2,916        | 0.3            | 0.4        | 101         | 145             | 5                | 8,173         | 8,173          | -              |                | 2.3%          | -             | -            | 2.5% | 2,491 | -                    | -             |
| 2327-D-b-Tk4 |                  | STS2                                   | Reservoir 6                       | Komatsu 730E | 7,260           | 25          | 11             | 27.4                 | 3,068        | 2.4            | 2.4        | 101         | 145             | 5                | 25,168        | 25,168         | -              |                | 0.8%          | -             | -            | 2.5% | 7,671 | -                    | -             |
| 2328-D-b-Tk4 |                  | STS2                                   | Reservoir 7                       | Komatsu 730E | 11,664          | 25          | 11             | 27.4                 | 3,068        | 3.8            | 3.8        | 101         | 145             | 5                | 25,168        | 25,168         |                |                | 0.8%          | -             |              | 2.5% | 7,671 | -                    |               |
| 2341-D-b-Tk4 |                  | STS2                                   | Elmo's Pond                       | Komatsu 730E | 6,002           | 8           | 4              | 27.4                 | 3,231        | 2.0            | 2.0        | 101         | 145             | 5                | 5,509         | 2,660          | 1,390          | 1,459          | 1.3%          | -0.19         |              | 2.5% | 811   | 424                  | 445           |
| 2342-D-b-Tk4 |                  | STS2                                   | Lower Lined Pond                  | Komatsu 730E | 10,793          | 8           | 4              | 27.4                 | 3,231        | 3.5            | 3.5        | 101         | 145             | 5                | 5,509         | 2,660          | 1,390          | 1,459          | 1.3%          | -0.19         |              | 2.5% | 811   | 424                  | 445           |
| 2343-D-b-Tk4 |                  | STS2                                   | Upper Lined Pond                  | Komatsu 730E | 1,984           | . 8         | 4              | 27.4                 | 3,231        | 0.7            | 0.7        | 101         | 145             | 5                | 5,509         | 2,660          | 1,390          | 1,459          | 1.3%          | -0.19         | 6 -3.1%      | 2.5% | 811   | 424                  | 445           |
| 2344-D-b-Tk4 |                  | STS2                                   | 5900 PLS Sump                     | Komatsu 730E | 2,759           | 32          | 14             | 27.4                 | 3,006        | 0.9            | 0.9        | 101         | 145             | 5                | 21,949        | 21,949         | -              |                | 5.5%          | -             | -            | 2.5% | 6,690 | -                    | -             |
| 2345-D-b-Tk4 |                  | STS2                                   | 6300 PLS Booster Station          | Komatsu 730E | 145             | 32          | 14             | 27.4                 | 3,006        | 0.0            | 0.0        | 101         | 145             | 5                | 21,949        | 21,949         | -              |                | 5.5%          | -             | -            | 2.5% | 6,690 | -                    | -             |
| 2346-D-b-Tk4 |                  | STS2                                   | Lee Hill #2 Booster               | Komatsu 730E | 678             | 32          | 14             | 27.4                 | 3,006        | 0.2            | 0.2        | 101         | 145             | 5                | 21,949        | 21,949         | -              |                | 5.5%          | -             | -            | 2.5% | 6,690 | -                    | -             |
| 2400-D-b-Tk4 |                  | STS2                                   | Ground Hog #5                     | Komatsu 730E | 3,227           | 20          | 9              | 27.4                 | 3,060        | 1.1            | 1.1        | 101         | 145             | 5                | 21,500        | 21,500         |                |                | -2.8%         | -             |              | 2.5% | 6,553 |                      |               |
| 2512-D-b-Tk4 |                  | STS2                                   | East Pit Access Disturbed Area    | Komatsu 730E | 17,763          | 14          | 6              | 27.4                 | 2,897        | 5.8            | 6.1        | 101         | 145             | 5                | 12,024        | 8,610          | 1,652          | 1,762          | 1.1%          | 2.39          |              | 2.5% | 2,624 | 504                  | 537           |
| 2513-D-b-Tk4 |                  | STS2                                   | Chino part of Cobre Haul Road     | Komatsu 730E | 15,536          | . 7         | 3              | 27.4                 | 3,032        | 5.1            | 5.1        | 101         | 145             | 5                | 3,179         | 3,179          |                |                | 1.3%          | 0.09          |              | 2.5% | 969   |                      | -             |
| 2514-D-b-Tk4 |                  | STS2                                   | Highway to Heaven Haul Road       | Komatsu 730E | 157,015         | 14          | 6              | 27.4                 | 2,897        | 51.6           | 54.2       | 101         | 145             | 5                | 12,024        | 8,610          | 1,652          | 1,762          | 1.1%          | 2.39          | 6 -0.2%      | 2.5% | 2,624 | 504                  | 537           |
| 2515-D-b-Tk4 |                  | STS2                                   | Disturbed Area Around Reservoir 5 | Komatsu 730E | 157,213         | 17          | 7              | 27.4                 | 2,771        | 51.6           | 56.7       | 101         | 145             | 5                | 11,000        | 11,000         |                |                | 4.9%          | -             | <del>.</del> | 2.5% | 3,353 |                      | -             |
| 3307-D-b-Tk4 |                  | West of Borrow E&H                     | Filter Plant                      | Komatsu 730E | 82,474          | 14          | 6              | 27.4                 | 2,897        | 27.1           | 28.5       | 101         | 145             | 5                | 12,024        | 8,610          | 1,652          | 1,762          | 1.1%          | 2.39          |              | 2.5% | 2,624 | 504                  | 537           |
| 2600-D-b-Tk4 |                  | Upper South                            | Unplanned Disturbed Area          | Komatsu 730E | 968,000         | 14          | 6              | 27.4                 | 2,897        | 318.0          | 334.1      | 101         | 145             | 5                | 12,024        | 8,610          | 1,652          | 1,762          | 1.1%          | 2.39          |              | 2.5% | 2,624 | 504                  | 537           |
| 3000-D-b-Tk4 |                  | Borrow Area F & North of Borrow Area F | Axiflo                            | Komatsu 730E | 469,952         | 8           | 3              | 27.4                 | 2,560        | 154.4          | 183.5      | 101         | 145             | 5                | 5,128         | 2,279          | 1,390          | 1,459          | 0.6%          | -0.19         |              | 2.5% | 695   | 424                  | 445           |
| 3100-D-b-Tk4 |                  | Borrow Area F                          | Tailings Pond 6                   | Komatsu 730E | 1,266,425       | 12          | 5              | 27.4                 | 2,830        | 416.0          | 447.5      | 101         | 145             | 5                | 10,300        | 5,336          | 3,742          | 1,222          | 1.0%          | -0.69         |              | 2.5% | 1,626 | 1,141                | 373           |
| 3200-D-b-Tk4 |                  | West of Borrow E&H                     | Tailings Pond 7                   | Komatsu 730E | 8,036,747       | 11          | 5              | 27.4                 | 3,207        | 2,639.8        | 2,639.8    | 101         | 145             | 5                | 8,800         | 3,157          | 741            | 4,902          | -0.6%         | 2.39          |              | 2.5% | 962   | 226                  | 1,494         |
| 3301-D-b-Tk4 |                  | West of Borrow E&H                     | Slag Pile Outslopes W side        | Komatsu 730E | 39,688          | 14          | 6              | 27.4                 | 2,897        | 13.0           | 13.7       | 101         | 145             | 5                | 12,024        | 8,610          | 1,652          | 1,762          | 1.1%          | 2.39          |              | 2.5% | 2,624 | 504                  | 537           |
| 3308-D-b-Tk4 | Haul-Cover       | West of Borrow E&H                     | 35 Acre Misc. Area                | Komatsu 730E | 169,400         | 14          | 6              | 27.4                 | 2,897        | 55.6           | 58.5       | 101         | 145             | 5                | 12,024        | 8,610          | 1,652          | 1,762          | 1.1%          | 2.39          | 6 -0.2%      | 2.5% | 2,624 | 504                  | 537           |

### Productivity and Hours Required for Truck Use

Assumptions:
Uses haul distance to calculate haul and return time (total task time includes loading, manuevering, dumping, hauling and return Volume of cover material based on area of destination
Cycles per truck = the greater of Heaped capacity or Struck capacity divided by Loader's per bucket capacity

Lycies per truck = the greater or reaped capacity or Siruck capacity divided by Loader's per bucket capacity

1 mph = 88 ff/min

1 m/min = 0.03728227153424 mph

See Truck Optimization optimum number of trucks per loader

Haul Grade (%) assumes postive is uphill while the Effective Haul Grade (%) and Effective Return Grade (%) are postive for dox

Task Description Source Location 1 Equipment Haul-Cover Haul-Cover Haul-Cover Upper South & STS2 Upper South Triangle Stockpile South Stockpile West Stockpile Komatsu 730E Komatsu 730E Komatsu 730E 0.0012 0.0020 0.0017 0.0016 0.0011 0.0011 2.5% 2.5% 2.5% 1.7%
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3. Upper South & White House Upper South Upper South Haul-Cover Haul-Cover Haul-Cover Haul-Cover Haul-Cover Lambright Stockpile Southwest Lampbright South and East In-Pit Stockpiles 19.5 17.9 20.8 14.0 12.5 0.0035 0.0035 0.0031 0.0019 0.0016 Komatsu 730E 0.0040 0.0011 0.0011 0.0011 0.0011 0.0011 0.0011 Komatsu 730E 0.0032 0.0011 Upper South Upper South Northwest Stockpile Komatsu 730E LeeHill Stockpile Komatsu 730E Haul-Cover Haul-Cover Haul-Cover Haul-Cover Upper South
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STS2 Northeast Stockpile North Stockpile 9 Waste Rock Komatsu 730E Komatsu 730E Komatsu 730E Komatsu 730E 0.0025 0.0024 0.0016 0.0017 0.0017 1.1 1.1 1.1 1.1 22.7 0.0011 0.0011 0.0011 0.0011 0.0011 0.0042 0.0013 Dam 15 Dam 16 Haul-Cover Komatsu 730E 0.0011 Haul-Cover Haul-Cover Haul-Cover STS2 STS2 STS2 Dam 20 Reservoir 17 Fleming Pond Komatsu 730E Komatsu 730E Komatsu 730E 0.0017 0.0017 0.0020 0.0035 0.0011 0.0011 0.0011 0.0040 0.0011 Haul-Cover Haul-Cover Haul-Cover Haul-Cover Haul-Cover Tailing Thickener 1
PLS Pond & Launder
Raffinate Pond Komatsu 730E Komatsu 730E Komatsu 730E Komatsu 730E Komatsu 730E 20.8 19.5 27.5 1.1 1.1 1.1 1.1 1.1 0.0031 0.0035 0.0035 0.0020 0.0016 0.0011 0.0011 0.0011 0.0011 0.0011 0.0011 0.0040 0.0040 0.0049 0.0011 0.0015 Reservoir 2 Reservoir 6 5.1 12.5 Haul-Cover Haul-Cover Haul-Cover Haul-Cover 0.0016 0.0018 0.0018 0.0018 Reservoir 7 Komatsu 730E 12.5 0.0011 Reservoir / Elmo's Pond Lower Lined Pond Upper Lined Pond 5900 PLS Sump 6300 PLS Booster Station Komatsu 730E Komatsu 730E Komatsu 730E Komatsu 730E 0.0013 0.0013 0.0013 0.0011 0.0011 0.0011 0.0011 0.0011 0.0011 0.0011 0.0012 0.0012 0.0012 0.0014 0.0014 0.0014 2.0 2.0 7.0 7.0 7.0 9.2 3.9 1.0 3.9 3.5 1.1 1.1 1.1 1.1 1.1 1.1 1.1 Haul-Cover Haul-Cover Haul-Cover Haul-Cover Haul-Cover Komatsu 730E Komatsu 730E Komatsu 730E Komatsu 730E 20.8 20.8 20.8 0.0031 0.0031 0.0011 STS2 STS2 STS2 STS2 STS2 STS2 STS2 0.0031 0.0031 0.0011 0.0017 Lee Hill #2 Booster 0.0014 Ground Hog #5 East Pit Access Disturbed Area 0.0011 0.0020 0.0012 0.0012 Komatsu 730E 0.0011 Haul-Cover Haul-Cover Haul-Cover Haul-Cover Chino part of Cobre Haul Road Highway to Heaven Haul Road Disturbed Area Around Reservoir 5 0.0018 0.0017 0.0029 Komatsu 730E 0.0011 0.0011 0.0011 0.0011 0.0020 0.0012 0.0011 0.0012 1.1 1.1 1.1 1.1 1.1 1.1 0.0012 0.0020 0.0012 0.0011 West of Borrow E&H Filter Plant 0.0017 Komatsu 730E 3.9 1.9 3.6 3.2 3.9 3.9 0.0012 0.0011 0.0011 0.0012 0.0012 0.0012 0.0012 0.0014 0.0013 0.0012 0.0012 0.0012 Haul-Cover Haul-Cover Haul-Cover Upper South
Borrow Area F & North of Borrow Area F
Borrow Area F
West of Borrow E&H Unplanned Disturbed Area Axiflo Tailings Pond 6 Tailings Pond 7 0.0011 0.0012 0.0012 0.0011 Komatsu 730E 0.0017 0.0020 0.0011 Komatsu 730E Komatsu 730E Komatsu 730E 0.0017 0.0016 0.0017 0.0012 0.0013 0.0012 0.0011 0.0011 Haul-Cover 0.0012 0.0020 Slag Pile Outslopes W side 35 Acre Misc. Area Haul-Cover West of Borrow F&H Komatsu 730F 1.1 1.1 0.0017 0.0017 0.0020 0.0011 0.0011 0.0011 Haul-Cover West of Borrow E&H Komatsu 730E 0.0020 0.0011

# Productivity and Hours Required for Front End Loader Use or Hydraulic Shovel Use

# Assumptions:

Uses cover volume to calculate loading time of cover material

# PERFORMANCE FACTORS

| Task Description   |              | 1                | 2                         | 3                                 | 4 5              | 6               | 7                | 8                    | 9               | 10_              | 11            | 12        |
|--|--------------|------------------|---------------------------|-----------------------------------|------------------|-----------------|------------------|----------------------|-----------------|------------------|---------------|-----------|
| Task Resciption   Task Resciption   Source Location 1   Destination Location 2   Equipment   Cycle Time (rimp)   Task Time (rimp)   Per Locatic Shored   Loca   |              |                  |                           |                                   |                  |                 |                  |                      |                 | Max of           |               |           |
| Date   Teach Description   Source Location   Destination Learning   Destination   Destination Learning   Destination   Destination Learning   Destination   Destination Learning   Destination   Destination   Destination   Destination Learning   Destination   Destination   Destination   Destination   Destination   Destination   Destination   Destination Learning   Destination   Destin   |              |                  |                           |                                   |                  |                 |                  |                      |                 | Loader/Shovel or |               |           |
| 1000-C-IS-INI   Load-Cover   Upper Bouth   Triangle Stockpile   Hilbari EX3000-5   2829-473   0.45   3.044   179.6   153.6   27.4   50.0   |              |                  |                           |                                   |                  | Loose/Stockpile | Loader/Shovel    | Per Loader/Shovel    | Loader/Shovel   | Truck Task Time  |               | Work Hour |
| 1000-C-8-Shrf   Load-Cower   Upper South & STS2   Soulf Stockpile   Hatch EX3800-5   2,829.473   0.45   3,044   99.9   1,005.4   27.4   50.1000-C-8-Shrf   Load-Cower   Upper South & What Stockpile   Hatch EX3800-5   3,001.209   0.45   3,044   124.8 6   1,248.6   77.4   50.1000-C-8-Shrf   Load-Cower   Upper South & What Stockpile   Hatch EX3800-5   4,000   0.45   3,044   124.8 6   1,248.6   77.4   50.1000-C-8-Shrf   Load-Cower   Upper South   Mach Ex3800-5   4,000   0.45   3,044   14.9 8   13.1   13.5   27.4   50.1000-C-8-Shrf   Load-Cower   Upper South   Northwest Stockpile   Hatch EX3800-5   59.273   0.45   3,044   40.4   40.4   40.4   42.7   45.0   40.0    | ID           | Task Description | Source Location 1         | Destination Location 2            | Equipment        | Volume (cy)     | Cycle Time (min) | Productivity (cy/hr) | Task Time (hrs) | (hrs)            | Capacity (cy) | (min/hr)  |
| 1,000 - C  | 1000-C-b-Sh1 | Load-Cover       | Upper South               | Triangle Stockpile                | Hitachi EX3600-5 | 394,621         | 0.45             | 3,044                | 129.6           | 153.6            | 27.4          | 50        |
| 1900-C-9-Shr    Load-Cower   Upper South & While house   Lambright Shockpile   Hittoric EX5800-5   3,041,299   0.45   3,044   12,486   12,486   27,4   50   1900-C-9-Shr    Load-Cower   Upper South   South and East In-PR Shockpile   Hittoric EX5800-5   22,264   0.46   3,044   73.1   74.1   77,4   50   1900-C-9-Shr    Load-Cower   Upper South   Leaf-Michael   Hittoric EX5800-5   22,264   0.46   3,044   73.1   74.1   77,4   50   18,000-C-9-Shr    Load-Cower   Upper South   Leaf-Michael   Hittoric EX5800-5   12,2584   0.46   3,044   10,5   10,8   27,4   50   18,000-C-9-Shr    Load-Cower   Upper South   Northwest Shockpile   Hittoric EX5800-5   50,273   0.45   3,044   10,5   10,8   27,4   50   18,000-C-9-Shr    Load-Cower   Upper South   Northwest Shockpile   Hittoric EX5800-5   50,273   0.45   3,044   10,5   10,8   27,4   50   10,900-C-9-Shr    Load-Cower   Upper South   Northwest Shockpile   Hittoric EX5800-5   50,273   0.45   3,044   10,5   10,8   27,4   50   10,900-C-9-Shr    Load-Cower   STS2   9 Wasto Rock   Hittoric EX5800-5   78,0208   0.45   3,044   20,3   20,2   27,4   50    | 1100-C-b-Sh1 | Load-Cover       | Upper South & STS2        | South Stockpile                   | Hitachi EX3600-5 | 2,829,473       | 0.45             | 3,044                | 929.4           | 970.4            | 27.4          | 50        |
| 1400-C-b-Sh1   Load-Cover   Upper South   Southwest Lampbright   Hilachi EX5800-5   456,400   0.45   3,044   73.1   74.1   72.4   50.1   | 1200-C-b-Sh1 | Load-Cover       | Upper South               | West Stockpile                    | Hitachi EX3600-5 | 3,031,924       | 0.45             | 3,044                | 995.9           | 1,005.4          | 27.4          | 50        |
| 1500-C-b-Sht   Load-Cover   Upper South   Morthwest Stockpile   Hiltanii EX5800-5   222,640   0.45   3,044   13.1   13.5   27.4   50.0   | 1300-C-b-Sh1 | Load-Cover       | Upper South & White House | Lambright Stockpile               | Hitachi EX3600-5 | 3,801,209       | 0.45             | 3,044                | 1,248.6         | 1,248.6          | 27.4          | 50        |
| 1690_C-0-Sh1   Load-Cover   Upper South   Northeast Slockpile   Hitachi EX3800-5   52,273   0.45   3,044   11.0   11.3   27.4   50   | 1400-C-b-Sh1 | Load-Cover       | Upper South               | Southwest Lampbright              | Hitachi EX3600-5 | 456,400         | 0.45             | 3,044                | 149.9           | 152.8            | 27.4          | 50        |
| 1700-Cb-Sh1   Load-Cover   Upper South   Load-Cover   Upper South   Northeast Stockpile   Hillanic IX3800-S   59,73   0.45   3.044   19.5   19.6   6.74   50   1900-Cb-Sh1   Load-Cover   Upper South   North Stockpile   Hillanic IX3800-S   33,437   0.45   3.044   11.0   11.3   27.4   50   1900-Cb-Sh1   Load-Cover   STS2   9 Waste Rock   Hillanic IX3800-S   78.028   0.45   3.044   0.2   0.2   27.4   50   2300-Cb-Sh1   Load-Cover   STS2   Dam 15   Hillanic IX3800-S   484   0.45   3.044   0.2   0.2   27.4   50   2310-Cb-Sh1   Load-Cover   STS2   Dam 16   Hillanic IX3800-S   484   0.45   3.044   0.2   0.2   27.4   50   2310-Cb-Sh1   Load-Cover   STS2   Dam 16   Hillanic IX3800-S   484   0.45   3.044   0.2   0.2   27.4   50   2310-Cb-Sh1   Load-Cover   STS2   Dam 20   Hillanic IX3800-S   1.549   0.45   3.044   0.5   0.5   5.5   27.4   50   2310-Cb-Sh1   Load-Cover   STS2   Dam 20   Hillanic IX3800-S   1.549   0.45   3.044   0.5   0.5   5.5   27.4   50   2310-Cb-Sh1   Load-Cover   STS2   Reservoir   Hillanic IX3800-S   1.549   0.45   3.044   0.5   3.044   0.5   0.5   27.4   50   2310-Cb-Sh1   Load-Cover   STS2   Reservoir   Hillanic IX3800-S   1.758   0.45   3.044   0.1   1.2   2.7   3.00   2320-Cb-Sh1   Load-Cover   STS2   Taling Thubaren   Hillanic IX3800-S   1.758   0.45   3.044   0.2   0.2   2.7   4.50   2320-Cb-Sh1   Load-Cover   STS2   Reservoir   Hillanic IX3800-S   1.588   0.45   3.044   0.2   0.2   2.7   4.50   2320-Cb-Sh1   Load-Cover   STS2   Reservoir   Hillanic IX3800-S   1.358   0.45   3.044   0.2   0.2   2.7   4.50   2320-Cb-Sh1   Load-Cover   STS2   Reservoir   Hillanic IX3800-S   1.364   0.45   3.044   0.2   0.2   2.7   4.50   2320-Cb-Sh1   Load-Cover   STS2   Reservoir   Hillanic IX3800-S   1.780   0.45   3.044   0.2   0.2   2.7   4.50   2320-Cb-Sh1   Load-Cover   STS2   Reservoir   Hillanic IX3800-S   1.780   0.45   3.044   0.2   0.2   2.7   4.50   2320-Cb-Sh1   Load-Cover   STS2   Reservoir   Hillanic IX3800-S   1.780   0.45   3.044   0.7   0.7   2.7   5.0   2320-Cb-Sh1   Load-Cover   STS2   Reser   | 1500-C-b-Sh1 | Load-Cover       | Upper South               | South and East In-Pit Stockpiles  | Hitachi EX3600-5 | 222,640         | 0.45             | 3,044                | 73.1            | 74.1             | 27.4          | 50        |
| 1909_C-b-Sh1   | 1600-C-b-Sh1 | Load-Cover       | Upper South               | Northwest Stockpile               | Hitachi EX3600-5 | 39,781          | 0.45             | 3,044                | 13.1            | 13.5             | 27.4          | 50        |
| 1900-Cb-Sh1   Load-Cover   Upper South   Northeast Stockgile   Hilachi EX800-5   59,273   0.45   3.044   19.5   19.6   27.4   50   | 1700-C-b-Sh1 | Load-Cover       | Upper South               | LeeHill Stockpile                 | Hitachi EX3600-5 | 122,964         | 0.45             | 3,044                | 40.4            | 40.4             | 27.4          | 50        |
| 2000-C-S-SH Load-Cover STS2 Dam 15 Hilachi EX3800-5 780,208 0.45 3,044 26.3 294.0 27.4 50 2310-C-S-SH Load-Cover STS2 Dam 16 Hilachi EX3800-5 484 0.45 3,044 0.2 0.2 27.4 50 2310-C-S-SH Load-Cover STS2 Dam 16 Hilachi EX3800-5 14.54 0.45 3,044 0.5 0.5 27.4 50 2310-C-S-SH Load-Cover STS2 Dam 20 Hilachi EX3800-5 16,262 0.45 3,044 0.5 0.5 27.4 50 2310-C-S-SH Load-Cover STS2 Reservoir 17 Hilachi EX3800-5 16,262 0.45 3,044 1.2 1.2 2.74 50 2310-C-S-SH Load-Cover STS2 Reservoir 17 Hilachi EX3800-5 12,564 0.45 3,044 1.2 1.2 2.74 50 2310-C-S-SH Load-Cover STS2 Filming Pond Hilachi EX3800-5 12,564 0.45 3,044 1.1 4.2 27.4 50 2310-C-S-SH Load-Cover STS2 Filming Pond Hilachi EX3800-5 12,564 0.45 3,044 1.1 4.2 27.4 50 2310-C-S-SH Load-Cover STS2 Reservoir 2 Hilachi EX3800-5 12,564 0.45 3,044 0.1 4.2 27.4 50 2310-C-S-SH Load-Cover STS2 Reservoir 2 Hilachi EX3800-5 13.25 0.45 3,044 0.2 0.2 0.2 27.4 50 2310-C-S-SH Load-Cover STS2 Reservoir 2 Hilachi EX3800-5 13.25 0.45 3,044 0.2 0.2 0.2 27.4 50 2310-C-S-SH Load-Cover STS2 Reservoir 2 Hilachi EX3800-5 1.065 0.45 3,044 0.3 0.4 27.4 50 2310-C-S-SH Load-Cover STS2 Reservoir 6 Hilachi EX3800-5 1.065 0.45 3,044 0.2 0.2 0.2 27.4 50 2310-C-S-SH Load-Cover STS2 Reservoir 7 Hilachi EX3800-5 1.065 0.45 3,044 0.3 0.4 27.4 50 2310-C-S-SH Load-Cover STS2 Reservoir 6 Hilachi EX3800-5 1.065 0.45 3,044 0.2 0.2 0.2 27.4 50 2310-C-S-SH Load-Cover STS2 Reservoir 6 Hilachi EX3800-5 1.065 0.45 3,044 0.2 0.2 0.2 27.4 50 2310-C-S-SH Load-Cover STS2 Reservoir 6 Hilachi EX3800-5 1.065 0.45 3,044 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4   | 1800-C-b-Sh1 | Load-Cover       | Upper South               | Northeast Stockpile               | Hitachi EX3600-5 | 59,273          | 0.45             | 3,044                | 19.5            | 19.6             | 27.4          | 50        |
| 2300-Cb-Sh1   Load-Cover   STS2   Dam 15   Hitach EX3600-5   494   0.45   3,044   0.2   0.2   27.4   50   2313-Cb-Sh1   Load-Cover   STS2   Dam 20   Hitach EX3600-5   1,549   0.45   3,044   0.5   0.5   0.5   27.4   50   2313-Cb-Sh1   Load-Cover   STS2   Dam 20   Hitach EX3600-5   1,549   0.45   3,044   0.5   0.5   0.5   27.4   50   2313-Cb-Sh1   Load-Cover   STS2   Fleming Pond   Hitach EX3600-5   3,775   0.45   3,044   1.2   1.2   27.4   50   2320-Cb-Sh1   Load-Cover   STS2   Fleming Pond   Hitach EX3600-5   1,2584   0.45   3,044   1.2   1.2   27.4   50   2321-Cb-Sh1   Load-Cover   STS2   Fleming Pond   Hitach EX3600-5   1,2584   0.45   3,044   0.4   0.4   0.4   27.4   50   2321-Cb-Sh1   Load-Cover   STS2   PLS Pond & Launder   Hitach EX3600-5   1,2584   0.45   3,044   0.4   0.4   0.4   27.4   50   2321-Cb-Sh1   Load-Cover   STS2   Reservoir 2   Hitach EX3600-5   5.52   0.45   3,044   0.4   0.4   0.4   0.4   27.4   50   2321-Cb-Sh1   Load-Cover   STS2   Reservoir 6   Hitach EX3600-5   1,065   0.45   3,044   0.3   0.4   27.4   50   2321-Cb-Sh1   Load-Cover   STS2   Reservoir 7   Hitach EX3600-5   1,065   0.45   3,044   0.3   0.4   27.4   50   2321-Cb-Sh1   Load-Cover   STS2   Reservoir 6   Hitach EX3600-5   1,065   0.45   3,044   0.3   0.4   27.4   50   2321-Cb-Sh1   Load-Cover   STS2   Reservoir 7   Hitach EX3600-5   1,065   0.45   3,044   3.8   3.8   27.4   50   2321-Cb-Sh1   Load-Cover   STS2   Reservoir 6   Hitach EX3600-5   1,065   0.45   3,044   3.8   3.8   27.4   50   2321-Cb-Sh1   Load-Cover   STS2   Reservoir 7   Hitach EX3600-5   1,065   0.45   3,044   3.8   3.8   27.4   50   2321-Cb-Sh1   Load-Cover   STS2   Elmo's Pond   Hitach EX3600-5   1,065   0.45   3,044   0.4   0.9   0.9   0.7      | 1900-C-b-Sh1 | Load-Cover       | Upper South               | North Stockpile                   | Hitachi EX3600-5 | 33,437          | 0.45             | 3,044                | 11.0            | 11.3             | 27.4          | 50        |
| 2310-Cb-Shr    Load-Cover   STS2   Dam 16   Hitachi EX3600-5   1,549   0.45   3,044   0.2   0.2   27.4   50  | 2200-C-b-Sh1 | Load-Cover       | STS2                      | 9 Waste Rock                      | Hitachi EX3600-5 | 780,208         | 0.45             | 3,044                | 256.3           | 294.0            | 27.4          | 50        |
| 2313-C-S-Sh1 Load-Cover STS2 Reservoir 17 Hitach EX3800-5 16,362 0.45 3,044 0.5 5.6 27.4 50 2314-C-Sh1 Load-Cover STS2 Fileming Pord Hitach EX3800-5 16,362 0.45 3,044 1.2 1.2 27.4 50 2314-C-Sh1 Load-Cover STS2 Fileming Pord Hitach EX3800-5 12,584 0.45 3,044 1.1 1.2 27.4 50 2321-C-S-Sh1 Load-Cover STS2 Fileming Pord Hitach EX3800-5 12,584 0.45 3,044 0.4 0.4 0.4 27.4 50 2321-C-S-Sh1 Load-Cover STS2 PLS Pord & Launder Hitach EX3800-5 12,584 0.45 3,044 0.4 0.4 0.4 27.4 50 2321-C-S-Sh1 Load-Cover STS2 Reservoir 6 Hitach EX3800-5 5.52 0.45 3,044 0.4 0.4 0.4 27.4 50 2322-C-S-Sh1 Load-Cover STS2 Reservoir 6 Hitach EX3800-5 5.60 0.45 3,044 0.0 0.0 0.2 27.4 50 2322-C-S-Sh1 Load-Cover STS2 Reservoir 6 Hitach EX3800-5 7,260 0.45 3,044 0.3 0.4 27.4 50 2322-C-S-Sh1 Load-Cover STS2 Reservoir 6 Hitach EX3800-5 7,260 0.45 3,044 0.3 0.4 27.4 50 2322-C-S-Sh1 Load-Cover STS2 Reservoir 6 Hitach EX3800-5 7,260 0.45 3,044 3.8 3.8 3.8 27.4 50 2322-C-S-Sh1 Load-Cover STS2 Reservoir 6 Hitach EX3800-5 1,065 0.45 3,044 3.8 3.8 3.8 27.4 50 2322-C-S-Sh1 Load-Cover STS2 Reservoir 6 Hitach EX3800-5 1,065 0.45 3,044 3.8 3.8 3.8 27.4 50 2322-C-S-Sh1 Load-Cover STS2 Description Hitach EX3800-5 1,065 0.45 3,044 3.8 3.8 3.8 27.4 50 2322-C-S-Sh1 Load-Cover STS2 Description Hitach EX3800-5 1,065 0.45 3,044 3.5 3.5 2.7 4 50 2322-C-S-Sh1 Load-Cover STS2 Description Hitach EX3800-5 1,0793 0.45 3,044 3.5 3.5 2.7 4 50 2322-C-S-Sh1 Load-Cover STS2 Description Hitach EX3800-5 1,0793 0.45 3,044 0.0 0.0 0.0 2.7 4 50 2324-C-S-Sh1 Load-Cover STS2 Booth File Booth Hitach EX3800-5 1,0793 0.45 3,044 0.0 0.0 0.0 2.7 4 50 2324-C-S-Sh1 Load-Cover STS2 Booth File Booth Hitach EX3800-5 1,0753 0.45 3,044 0.0 0.0 0.0 2.7 4 50 2324-C-S-Sh1 Load-Cover STS2 Booth File Booth Hitach EX3800-5 1,0763 0.45 3,044 0.0 0.0 0.0 2.7 4 50 2324-C-S-Sh1 Load-Cover STS2 Booth File Booth Hitach EX3800-5 1,0763 0.45 3,044 0.0 0.0 0.0 2.7 4 50 2324-C-S-Sh1 Load-Cover STS2 Booth File Booth File Booth EX3800-5 1,0763 0.45 3,044 5.8 6.1 2.7 4 50 2324-C-S-Sh1 Load-Cover STS2 Booth File Booth F | 2309-C-b-Sh1 | Load-Cover       | STS2                      | Dam 15                            | Hitachi EX3600-5 | 484             | 0.45             | 3,044                | 0.2             | 0.2              | 27.4          | 50        |
| 2316-C-b-Sh1 Load-Cover STS2 Reservoir 17 Hitschi EX3800-5 16,262 0.45 3,044 5.3 5.6 6 27.4 50 2320-C-b-Sh1 Load-Cover STS2 Fleming Pond Hitschi EX3800-5 12,584 0.45 3,044 1.1 1.2 1.2 27.4 50 2320-C-b-Sh1 Load-Cover STS2 Tailing Thickener 1 Hitschi EX3800-5 12,584 0.45 3,044 4.1 4.2 27.4 50 2320-C-b-Sh1 Load-Cover STS2 PLS Pond & Launder Hitschi EX3800-5 12,584 0.45 3,044 0.4 0.4 27.4 50 2320-C-b-Sh1 Load-Cover STS2 Reservoir 2 Hitschi EX3800-5 5.52 0.45 3,044 0.2 0.2 0.2 27.4 50 2320-C-b-Sh1 Load-Cover STS2 Reservoir 2 Hitschi EX3800-5 5.0.45 3,044 0.2 0.2 0.2 27.4 50 2320-C-b-Sh1 Load-Cover STS2 Reservoir 2 Hitschi EX3800-5 1.085 0.45 3,044 0.2 0.2 0.2 27.4 50 2320-C-b-Sh1 Load-Cover STS2 Reservoir 3 Hitschi EX3800-5 1.085 0.45 3,044 0.3 0.4 27.4 50 2320-C-b-Sh1 Load-Cover STS2 Reservoir 7 Hitschi EX3800-5 1.1,684 0.45 3,044 2.4 2.4 27.4 50 2341-C-b-Sh1 Load-Cover STS2 Lower Lined Pond Hitschi EX3800-5 1.1,684 0.45 3,044 2.0 2.2 0.2 27.4 50 2341-C-b-Sh1 Load-Cover STS2 Lower Lined Pond Hitschi EX3800-5 6,002 0.45 3,044 2.0 2.0 2.0 27.4 50 2342-C-b-Sh1 Load-Cover STS2 Lower Lined Pond Hitschi EX3800-5 10,793 0.45 3,044 2.0 2.0 2.0 27.4 50 2342-C-b-Sh1 Load-Cover STS2 Stopped Pond Hitschi EX3800-5 10,793 0.45 3,044 0.0 0.0 27.4 50 2344-C-b-Sh1 Load-Cover STS2 Stopped Pond Hitschi EX3800-5 1,984 0.45 3,044 0.0 0.0 27.4 50 2344-C-b-Sh1 Load-Cover STS2 Stopped Pond Hitschi EX3800-5 1,984 0.45 3,044 0.0 0.0 27.4 50 2344-C-b-Sh1 Load-Cover STS2 Stopped Pond Hitschi EX3800-5 1,984 0.45 3,044 0.0 0.0 27.4 50 2344-C-b-Sh1 Load-Cover STS2 Stopped Pond Hitschi EX3800-5 1,984 0.45 3,044 0.0 0.0 27.4 50 2346-C-b-Sh1 Load-Cover STS2 Stopped Pond Pond Hitschi EX3800-5 1,984 0.45 3,044 0.0 0.0 27.4 50 2346-C-b-Sh1 Load-Cover STS2 Stopped Pond Pond Hitschi EX3800-5 1,984 0.45 3,044 0.0 0.0 27.4 50 2346-C-b-Sh1 Load-Cover STS2 Stopped Pond Pond Pond Pond Pond Pond Pond Pon   | 2310-C-b-Sh1 | Load-Cover       | STS2                      | Dam 16                            | Hitachi EX3600-5 | 484             | 0.45             | 3,044                | 0.2             | 0.2              | 27.4          | 50        |
| 2318-C-b-Sh1 Load-Cover STS2 Fleming Pond Hitachi EX3600-5 3,775 0,45 3,044 1,1 2 1,2 27,4 50 2321-C-b-Sh1 Load-Cover STS2 Flaing Thickener 1 Hitachi EX3600-5 1,2584 0,45 3,044 4,1 4,2 27,4 50 2321-C-b-Sh1 Load-Cover STS2 PLS Pond & Launder Hitachi EX3600-5 1,258 0,45 3,044 0,4 0,4 0,4 27,4 50 2324-C-b-Sh1 Load-Cover STS2 Reservoir 2 Hitachi EX3600-5 1,085 0,45 3,044 0,2 0,2 2,74 50 2324-C-b-Sh1 Load-Cover STS2 Reservoir 2 Hitachi EX3600-5 7,260 0,45 3,044 0,3 0,4 2,4 2,4 2,4 50 2324-C-b-Sh1 Load-Cover STS2 Reservoir 2 Hitachi EX3600-5 7,260 0,45 3,044 0,3 0,4 2,4 2,4 2,4 50 2324-C-b-Sh1 Load-Cover STS2 Reservoir 2 Hitachi EX3600-5 1,085 0,45 3,044 0,3 0,4 2,4 2,4 2,4 50 2324-C-b-Sh1 Load-Cover STS2 Reservoir 2 Hitachi EX3600-5 1,085 0,45 3,044 0,3 0,4 2,4 2,4 2,4 50 2344-C-b-Sh1 Load-Cover STS2 Reservoir 2 Hitachi EX3600-5 1,085 0,45 3,044 0,3 0,4 3,8 3,8 2,74 50 2342-C-b-Sh1 Load-Cover STS2 Reservoir 2 Hitachi EX3600-5 1,085 0,002 0,45 3,044 0,2 0,2 0,2 7,4 50 2342-C-b-Sh1 Load-Cover STS2 Lower Lined Pond Hitachi EX3600-5 1,093 0,45 3,044 0,3 5 3,5 2,7 4 50 2343-C-b-Sh1 Load-Cover STS2 Lower Lined Pond Hitachi EX3600-5 1,093 0,45 3,044 0,7 0,7 0,7 2,7 4 50 2343-C-b-Sh1 Load-Cover STS2 Stopper Lined Pond Hitachi EX3600-5 1,094 0,45 3,044 0,7 0,7 0,7 2,7 4 50 2344-C-b-Sh1 Load-Cover STS2 Stopper Station Hitachi EX3600-5 1,094 0,45 3,044 0,7 0,9 0,9 2,7 4 50 2346-C-b-Sh1 Load-Cover STS2 Stopper Station Hitachi EX3600-5 1,094 0,45 3,044 0,0 0,0 0,0 2,7 4 50 2346-C-b-Sh1 Load-Cover STS2 Reservoir 2 Reservoir 3 Hitachi EX3600-5 1,094 0,45 3,044 0,0 0,0 0,0 2,7 4 50 2346-C-b-Sh1 Load-Cover STS2 Reservoir 3 Hitachi EX3600-5 1,094 0,45 3,044 1,1 1,1 1,1 2,7 4 50 2400-C-b-Sh1 Load-Cover STS2 Reservoir 5 Hitachi EX3600-5 1,094 0,45 3,044 1,1 1,1 1,1 1,2 7,4 50 251-C-b-Sh1 Load-Cover STS2 Reservoir 5 Hitachi EX3600-5 1,094 0,45 3,044 5,1 6 5,8 6,1 2,7 4 50 251-C-b-Sh1 Load-Cover STS2 Reservoir 5 Hitachi EX3600-5 1,094 0,45 3,044 5,1 6 5,8 5,2 2,4 5 0,251-C-b-Sh1 Load-Cover West of Borrow Area F North Gorrow Area F North  | 2313-C-b-Sh1 | Load-Cover       | STS2                      | Dam 20                            | Hitachi EX3600-5 | 1,549           | 0.45             | 3,044                | 0.5             | 0.5              | 27.4          | 50        |
| 2320-C-b-Sh1   Load-Cover   STS2   Talling Thickener 1   Hitachi EX3600-5   12,584   0.45   3,044   4.1   4.2   27.4   50  | 2316-C-b-Sh1 | Load-Cover       | STS2                      | Reservoir 17                      | Hitachi EX3600-5 | 16,262          | 0.45             | 3,044                | 5.3             | 5.6              | 27.4          | 50        |
| 2231-C-b-Sh1   Load-Cover   STS2   PLS Pond & Launder   Hitachi EX3600-5   1,288   0,45   3,044   0,4   0,4   0,4   27.4   50   2324-C-b-Sh1   Load-Cover   STS2   Reservoir 2   Hitachi EX3600-5   1,065   0,45   3,044   0,3   0,4   27.4   50   2324-C-b-Sh1   Load-Cover   STS2   Reservoir 6   Hitachi EX3600-5   1,065   0,45   3,044   0,3   0,4   2.4   2.4   50   2324-C-b-Sh1   Load-Cover   STS2   Reservoir 6   Hitachi EX3600-5   1,065   0,45   3,044   0,3   0,4   2.4   2.4   2.74   50   2324-C-b-Sh1   Load-Cover   STS2   Reservoir 7   Hitachi EX3600-5   11,066   0,45   3,044   2.0   2.0   2.0   2.74   50   2342-C-b-Sh1   Load-Cover   STS2   Elmo's Pond   Hitachi EX3600-5   10,793   0,45   3,044   2.0   2.0   2.0   2.74   50   2342-C-b-Sh1   Load-Cover   STS2   Lower Lined Pond   Hitachi EX3600-5   10,793   0,45   3,044   0,7   0.7   0.7   2.74   50   2343-C-b-Sh1   Load-Cover   STS2   Upper Lined Pond   Hitachi EX3600-5   1,793   0,45   3,044   0,7   0.7   0.7   2.74   50   2344-C-b-Sh1   Load-Cover   STS2   Upper Lined Pond   Hitachi EX3600-5   1,793   0,45   3,044   0,7   0.7   0.7   2.74   50   2344-C-b-Sh1   Load-Cover   STS2   5900 PLS Sump   Hitachi EX3600-5   2,759   0,45   3,044   0,0   0,0   0.9   2.74   50   2344-C-b-Sh1   Load-Cover   STS2   G300 PLS Booster Station   Hitachi EX3600-5   1,45   0,45   3,044   0,0   0,0   0,0   2.74   50   2346-C-b-Sh1   Load-Cover   STS2   Lee Hill #2 Booster Station   Hitachi EX3600-5   3,227   0,45   3,044   0,0   0,0   0,0   2.74   50   2346-C-b-Sh1   Load-Cover   STS2   East Pit Access Disturbed Area   Hitachi EX3600-5   3,227   0,45   3,044   1,1   1,1   1,1   2.74   50   2,00     | 2318-C-b-Sh1 | Load-Cover       | STS2                      | Fleming Pond                      | Hitachi EX3600-5 | 3,775           | 0.45             | 3,044                | 1.2             | 1.2              | 27.4          | 50        |
| 2324-C-b-Sh1 Load-Cover STS2 Raffinate Pond Hitachi EX3800-5 532 0.45 3,044 0.2 0.2 27.4 50 2324-C-b-Sh1 Load-Cover STS2 Reservoir 6 Hitachi EX3800-5 7,260 0.45 3,044 0.2 0.3 0.4 27.4 50 2328-C-b-Sh1 Load-Cover STS2 Reservoir 6 Hitachi EX3800-5 7,260 0.45 3,044 2.4 2.4 2.4 27.4 50 2328-C-b-Sh1 Load-Cover STS2 Reservoir 7 Hitachi EX3800-5 6,002 0.45 3,044 2.4 2.4 2.4 27.4 50 2328-C-b-Sh1 Load-Cover STS2 Reservoir 7 Hitachi EX3800-5 6,002 0.45 3,044 3.8 3.8 27.4 50 2341-C-b-Sh1 Load-Cover STS2 Lower Lined Pond Hitachi EX3800-5 6,002 0.45 3,044 3.5 3.5 27.4 50 2342-C-b-Sh1 Load-Cover STS2 Lower Lined Pond Hitachi EX3800-5 1,984 0.45 3,044 3.5 3.5 27.4 50 2343-C-b-Sh1 Load-Cover STS2 Lower Lined Pond Hitachi EX3800-5 1,984 0.45 3,044 0.7 0.7 0.7 27.4 50 2344-C-b-Sh1 Load-Cover STS2 Special Pond Pond Hitachi EX3800-5 1,984 0.45 3,044 0.7 0.7 0.7 27.4 50 2345-C-b-Sh1 Load-Cover STS2 Special Pond Pond Pond Pond Pond Pond Pond Pond  | 2320-C-b-Sh1 | Load-Cover       | STS2                      | Tailing Thickener 1               | Hitachi EX3600-5 | 12,584          | 0.45             | 3,044                | 4.1             | 4.2              | 27.4          | 50        |
| 2324-C-b-Sh1   Load-Cover   STS2   Reservoir 2   Hitachi EX3600-5   1,065   0,45   3,044   0.3   0.4   27.4   50     2328-C-b-Sh1   Load-Cover   STS2   Reservoir 6   Hitachi EX3600-5   7,260   0.45   3,044   2.4   2.4   2.4   27.4   50     2324-C-b-Sh1   Load-Cover   STS2   Reservoir 7   Hitachi EX3600-5   11,664   0.45   3,044   2.0   2.0   2.0   27.4   50     2342-C-b-Sh1   Load-Cover   STS2   Elmo's Pond   Hitachi EX3600-5   6,002   0.45   3,044   2.0   2.0   2.0   27.4   50     2342-C-b-Sh1   Load-Cover   STS2   Lower Lined Pond   Hitachi EX3600-5   1,0793   0.45   3,044   0.3   0.4   0.7   0.7   0.7     2343-C-b-Sh1   Load-Cover   STS2   Upper Lined Pond   Hitachi EX3600-5   1,084   0.45   3,044   0.7   0.7   0.7   27.4   50     2343-C-b-Sh1   Load-Cover   STS2   Syon PLS Sump   Hitachi EX3600-5   1,084   0.45   3,044   0.7   0.7   0.7   27.4   50     2345-C-b-Sh1   Load-Cover   STS2   Syon PLS Sump   Hitachi EX3600-5   1,084   0.45   3,044   0.7   0.7   0.7   27.4   50     2345-C-b-Sh1   Load-Cover   STS2   Gover Hull Reserve   Hitachi EX3600-5   145   0.45   3,044   0.7   0.7   0.7   27.4   50     2346-C-b-Sh1   Load-Cover   STS2   Loe Hull #2 Booster   Hitachi EX3600-5   145   0.45   3,044   0.0   0.0   0.0   0.0   27.4   50     2340-C-b-Sh1   Load-Cover   STS2   Loe Hull #2 Booster   Hitachi EX3600-5   678   0.45   3,044   0.1   0.2   0.2   27.4   50     2513-C-b-Sh1   Load-Cover   STS2   Earl Pit Access Disturbed Area   Hitachi EX3600-5   17.63   0.45   3,044   1.1   1.1   1.1   27.4   50     2513-C-b-Sh1   Load-Cover   STS2   Highway to Heaven Haul Road   Hitachi EX3600-5   157.015   0.45   3,044   51.6   54.2   27.4   50     2514-C-b-Sh1   Load-Cover   STS2   Highway to Heaven Haul Road   Hitachi EX3600-5   157.015   0.45   3,044   51.6   54.2   27.4   50     2515-C-b-Sh1   Load-Cover   STS2   Highway to Heaven Haul Road   Hitachi EX3600-5   157.015   0.45   3,044   51.6   54.2   27.4   50     2516-C-b-Sh1   Load-Cover   STS2   Highway to Heaven Haul Road   Hitachi EX3600-5   157.015   0.45   3,04   | 2321-C-b-Sh1 | Load-Cover       | STS2                      | PLS Pond & Launder                | Hitachi EX3600-5 | 1,258           | 0.45             | 3,044                | 0.4             | 0.4              | 27.4          | 50        |
| 2328-C-b-Sh1 Load-Cover STS2 Reservoir 7 Hilachi EX3800-5 7,260 0.45 3,044 2.4 2.4 2.4 2.7 50 2328-C-b-Sh1 Load-Cover STS2 Elmo's Pond Hilachi EX3800-5 6,002 0.45 3,044 2.0 2.0 2.0 27.4 50 2341-C-b-Sh1 Load-Cover STS2 Lower Lined Pond Hilachi EX3800-5 10,783 0.45 3,044 2.0 2.0 2.7 50 2342-C-b-Sh1 Load-Cover STS2 Lower Lined Pond Hilachi EX3800-5 10,783 0.45 3,044 0.7 0.7 0.7 27.4 50 2343-C-b-Sh1 Load-Cover STS2 Upper Lined Pond Hilachi EX3800-5 1,984 0.45 3,044 0.7 0.7 27.4 50 2344-C-b-Sh1 Load-Cover STS2 Upper Lined Pond Hilachi EX3800-5 1,984 0.45 3,044 0.9 0.9 0.9 27.4 50 2344-C-b-Sh1 Load-Cover STS2 500 PLS Sump Hilachi EX3800-5 1,984 0.45 3,044 0.9 0.9 0.9 27.4 50 2345-C-b-Sh1 Load-Cover STS2 500 PLS Sump Hilachi EX3800-5 145 0.45 3,044 0.0 0.0 0.0 27.4 50 2345-C-b-Sh1 Load-Cover STS2 630 PLS Sump Hilachi EX3800-5 145 0.45 3,044 0.0 0.0 0.0 27.4 50 2345-C-b-Sh1 Load-Cover STS2 Lee Hill #2 Booster Hilachi EX3800-5 145 0.45 3,044 0.2 0.2 0.2 27.4 50 2345-C-b-Sh1 Load-Cover STS2 Coroll Hog #5 Hilachi EX3800-5 145 0.45 3,044 0.2 0.2 0.2 27.4 50 2345-C-b-Sh1 Load-Cover STS2 Coroll Hog #5 Hilachi EX3800-5 17.763 0.45 3,044 0.1 1.1 1.1 27.4 50 2512-C-b-Sh1 Load-Cover STS2 Coroll Hog #5 Hilachi EX3800-5 17.763 0.45 3,044 5.8 6.1 27.4 50 2513-C-b-Sh1 Load-Cover STS2 Coroll Hog #5 Hilachi EX3800-5 15,536 0.45 3,044 5.8 6.1 27.4 50 2514-C-b-Sh1 Load-Cover STS2 Hilachi EX3800-5 15,536 0.45 3,044 5.1 5.1 27.4 50 2514-C-b-Sh1 Load-Cover STS2 Hilachi EX3800-5 15,536 0.45 3,044 5.1 5.1 27.4 50 2514-C-b-Sh1 Load-Cover STS2 Distribed Area Around Reservoir 5 Hilachi EX3800-5 15,7015 0.45 3,044 5.1 5.1 5.1 27.4 50 2514-C-b-Sh1 Load-Cover West of Borrow E&H Fight Hilachi EX3800-5 15,7015 0.45 3,044 51.6 56.7 27.4 50 250-C-b-Sh1 Load-Cover Upger South Unplanned Disturbed Area Hilachi EX3800-5 15,7015 0.45 3,044 31.0 33.4 1 27.4 50 250-C-b-Sh1 Load-Cover Upger South Unplanned Disturbed Area Hilachi EX3800-5 15,264.5 0.45 3,044 31.0 33.4 1 27.4 50 250-C-b-Sh1 Load-Cover Borrow Area F & North of Borrow Area F Tillings Pond 6 Hilac | 2323-C-b-Sh1 | Load-Cover       | STS2                      | Raffinate Pond                    | Hitachi EX3600-5 | 532             | 0.45             | 3,044                | 0.2             | 0.2              | 27.4          | 50        |
| 2328-C-b-Sh1   Load-Cover   STS2   Reservoir 7   Hitachi EX3600-5   11,664   0.45   3,044   3.8   3.8   27.4   50     2341-C-b-Sh1   Load-Cover   STS2   Lower Lined Pond   Hitachi EX3600-5   10,793   0.45   3,044   3.5   3.5   27.4   50     2343-C-b-Sh1   Load-Cover   STS2   Lower Lined Pond   Hitachi EX3600-5   10,793   0.45   3,044   3.5   3.5   3.5   27.4   50     2343-C-b-Sh1   Load-Cover   STS2   Upper Lined Pond   Hitachi EX3600-5   1,794   0.45   3,044   0.7   0.7   0.7   27.4   50     2343-C-b-Sh1   Load-Cover   STS2   Upper Lined Pond   Hitachi EX3600-5   2,759   0.45   3,044   0.9   0.9   0.9   27.4   50     2345-C-b-Sh1   Load-Cover   STS2   S500 PLS Sump   Hitachi EX3600-5   1.759   0.45   3,044   0.9   0.9   0.9   0.9     2346-C-b-Sh1   Load-Cover   STS2   Loe Hill #2 Booster   Hitachi EX3600-5   1.45   0.45   3,044   0.0   0.0   0.0   27.4   50     2340-C-b-Sh1   Load-Cover   STS2   Loe Hill #2 Booster   Hitachi EX3600-5   678   0.45   3,044   0.2   0.2   0.2   27.4   50     2340-C-b-Sh1   Load-Cover   STS2   East Pit Access Disturbed Area   Hitachi EX3600-5   3,227   0.45   3,044   1.1   1.1   1.1   27.4   50     2513-C-b-Sh1   Load-Cover   STS2   East Pit Access Disturbed Area   Hitachi EX3600-5   17,763   0.45   3,044   5.8   6.1   27.4   50     2513-C-b-Sh1   Load-Cover   STS2   East Pit Access Disturbed Area   Hitachi EX3600-5   15,536   0.45   3,044   5.8   6.1   27.4   50     2514-C-b-Sh1   Load-Cover   STS2   Highway to Heaven Haul Road   Hitachi EX3600-5   15,015   0.45   3,044   5.1   5.1   27.4   50     2514-C-b-Sh1   Load-Cover   West of Borrow E&H   Filter   Hitachi EX3600-5   157,015   0.45   3,044   27.1   28.5   27.4   50     2600-C-b-Sh1   Load-Cover   West of Borrow Area F   North of Borrow Area F   North of Borrow Area F   Andrew Area F   Hitachi EX3600-5   16,000-5   16,   | 2324-C-b-Sh1 | Load-Cover       |                           | Reservoir 2                       | Hitachi EX3600-5 | 1,065           | 0.45             | 3,044                | 0.3             | 0.4              | 27.4          | 50        |
| 2341-C-b-Sh1 Load-Cover STS2 Elmo's Pond Hitachi EX3600-5 6,002 0.45 3,044 2.0 2.0 27.4 50 2342-C-b-Sh1 Load-Cover STS2 Lower Lined Pond Hitachi EX3600-5 10,793 0.45 3,044 3.5 3.5 27.4 50 2343-C-b-Sh1 Load-Cover STS2 Upper Lined Pond Hitachi EX3600-5 1,984 0.45 3,044 0.7 0.7 0.7 27.4 50 2344-C-b-Sh1 Load-Cover STS2 Upper Lined Pond Hitachi EX3600-5 2,759 0.45 3,044 0.9 0.9 0.9 27.4 50 2345-C-b-Sh1 Load-Cover STS2 6,000 PLS Sump Hitachi EX3600-5 145 0.45 3,044 0.9 0.9 0.9 27.4 50 2345-C-b-Sh1 Load-Cover STS2 6,000 PLS Sump Hitachi EX3600-5 145 0.45 3,044 0.9 0.9 0.9 27.4 50 2345-C-b-Sh1 Load-Cover STS2 Le Hill #2 Booster Hitachi EX3600-5 678 0.45 3,044 0.0 0.0 0.0 27.4 50 2345-C-b-Sh1 Load-Cover STS2 Le Hill #2 Booster Hitachi EX3600-5 678 0.45 3,044 0.2 0.2 27.4 50 2400-C-b-Sh1 Load-Cover STS2 East Pit Access Disturbed Area Hitachi EX3600-5 17,763 0.45 3,044 1.1 1.1 27.4 50 2512-C-b-Sh1 Load-Cover STS2 East Pit Access Disturbed Area Hitachi EX3600-5 17,763 0.45 3,044 5.1 5.1 27.4 50 2513-C-b-Sh1 Load-Cover STS2 Chino part of Cobre Haul Road Hitachi EX3600-5 15,536 0.45 3,044 5.1 5.1 27.4 50 2514-C-b-Sh1 Load-Cover STS2 Disturbed Area Around Reservoir 5 Hitachi EX3600-5 15,7015 0.45 3,044 5.1 5.1 27.4 50 2514-C-b-Sh1 Load-Cover STS2 Disturbed Area Around Reservoir 5 Hitachi EX3600-5 15,7015 0.45 3,044 5.1 5.1 27.4 50 3307-C-b-Sh1 Load-Cover West of Borrow E&H Filter Plant Unplanned Disturbed Area Hitachi EX3600-5 82,474 0.45 3,044 318.0 334.1 27.4 50 3300-C-b-Sh1 Load-Cover Upper South Unplanned Disturbed Area Hitachi EX3600-5 968,000 0.45 3,044 318.0 334.1 27.4 50 3100-C-b-Sh1 Load-Cover Borrow Area F Tailings Pond 7 Hitachi EX3600-5 12,66425 0.45 3,044 416.0 447.5 27.4 50 3100-C-b-Sh1 Load-Cover West of Borrow Area F Tailings Pond 7 Hitachi EX3600-5 8,036,747 0.45 3,044 416.0 447.5 27.4 50 3100-C-b-Sh1 Load-Cover West of Borrow E&H Tailings Pond 7 Hitachi EX3600-5 3,045 3,044 416.0 447.5 27.4 50 3100-C-b-Sh1 Load-Cover West of Borrow E&H Sign Pond 7 Hitachi EX3600-5 3,046 0.45 3,044 416.0 447.5 27.4 50 3100-C- | 2327-C-b-Sh1 | Load-Cover       | STS2                      | Reservoir 6                       | Hitachi EX3600-5 | 7,260           | 0.45             | 3,044                | 2.4             | 2.4              | 27.4          | 50        |
| 2342-C-b-Sh1   Load-Cover   STS2   Lower Lined Pond   Hitachi EX3600-5   10,793   0.45   3,044   3.5   3.5   27.4   50   | 2328-C-b-Sh1 | Load-Cover       | STS2                      | Reservoir 7                       | Hitachi EX3600-5 | 11,664          | 0.45             | 3,044                | 3.8             | 3.8              | 27.4          | 50        |
| 2343-C-b-Sh1 Load-Cover STS2 Upper Lined Pond Hitachi EX3600-5 1,984 0.45 3,044 0.7 0.7 0.7 27.4 50 2344-C-b-Sh1 Load-Cover STS2 5500 PLS Sump Hitachi EX3600-5 2,759 0.45 3,044 0.9 0.9 0.9 27.4 50 2346-C-b-Sh1 Load-Cover STS2 6300 PLS Booster Station Hitachi EX3600-5 145 3,044 0.0 0.0 0.0 0.2 27.4 50 2346-C-b-Sh1 Load-Cover STS2 Lee Hill #2 Booster Hitachi EX3600-5 678 0.45 3,044 0.2 0.2 0.2 27.4 50 2400-C-b-Sh1 Load-Cover STS2 Ground Hog #5 Hitachi EX3600-5 17.763 3.27 0.45 3,044 1.1 1.1 1.1 27.4 50 2512-C-b-Sh1 Load-Cover STS2 Ground Hog #5 Hitachi EX3600-5 17.763 3.27 0.45 3,044 1.1 1.1 1.1 27.4 50 2512-C-b-Sh1 Load-Cover STS2 East Pit Access Disturbed Area Hitachi EX3600-5 15.536 0.45 3,044 5.1 5.1 5.1 27.4 50 2513-C-b-Sh1 Load-Cover STS2 Highway to Heaven Haul Road Hitachi EX3600-5 15.536 0.45 3,044 5.1 5.1 5.1 27.4 50 2513-C-b-Sh1 Load-Cover STS2 Highway to Heaven Haul Road Hitachi EX3600-5 15.7015 0.45 3,044 5.16 5.2 27.4 50 2515-C-b-Sh1 Load-Cover STS2 Highway to Heaven Haul Road Hitachi EX3600-5 157.015 0.45 3,044 5.16 5.2 27.4 50 2515-C-b-Sh1 Load-Cover STS2 Highway to Heaven Haul Road Hitachi EX3600-5 157.213 0.45 3,044 5.16 5.2 27.4 50 2515-C-b-Sh1 Load-Cover West of Borrow E&H Filter Plant Hitachi EX3600-5 968,000 0.45 3,044 27.1 28.5 27.4 50 2600-C-b-Sh1 Load-Cover Borrow Area F North of Borrow Area F Axiflo Hitachi EX3600-5 968,000 0.45 3,044 318.0 334.1 27.4 50 3100-C-b-Sh1 Load-Cover Borrow Area F North of Borrow Area F Tailings Pond 6 Hitachi EX3600-5 9,068,000 0.45 3,044 416.0 447.5 27.4 50 3100-C-b-Sh1 Load-Cover Borrow Area F Tailings Pond 7 Hitachi EX3600-5 39,688 0.45 3,044 16.0 447.5 27.4 50 3100-C-b-Sh1 Load-Cover West of Borrow E&H Silag Pile Outslopes W side Hitachi EX3600-5 39,688 0.45 3,044 113.0 13.7 27.4 50 310-C-b-Sh1 Load-Cover West of Borrow E&H Silag Pile Outslopes W side Hitachi EX3600-5 39,688 0.45 3,044 113.0 13.7 27.4 50 310-C-b-Sh1 Load-Cover West of Borrow E&H Silag Pile Outslopes W side Hitachi EX3600-5 39,688 0.45 3,044 113.0 13.7 27.4 50 310-C-b-Sh1 Load-Cover West of | 2341-C-b-Sh1 | Load-Cover       | STS2                      | Elmo's Pond                       | Hitachi EX3600-5 | 6,002           | 0.45             | 3,044                | 2.0             | 2.0              | 27.4          | 50        |
| 2344-C-b-Sh1 Load-Cover STS2 5900 PLS Sump Hitachi EX3600-5 2,759 0.45 3,044 0.9 0.9 2.74 50 2345-C-b-Sh1 Load-Cover STS2 6300 PLS Booster Station Hitachi EX3600-5 145 0.45 3,044 0.0 0.0 2.2 27.4 50 2346-C-b-Sh1 Load-Cover STS2 Lee Hill #2 Booster Hitachi EX3600-5 678 0.45 3,044 0.0 0.0 2.2 27.4 50 2400-C-b-Sh1 Load-Cover STS2 Lee Hill #2 Booster Hitachi EX3600-5 3,227 0.45 3,044 1.1 1.1 1.1 2.7.4 50 2513-C-b-Sh1 Load-Cover STS2 East Pit Access Disturbed Area Hitachi EX3600-5 17.763 0.45 3,044 5.8 6.1 27.4 50 2513-C-b-Sh1 Load-Cover STS2 East Pit Access Disturbed Area Hitachi EX3600-5 15,536 0.45 3,044 5.8 6.1 27.4 50 2514-C-b-Sh1 Load-Cover STS2 Chino part of Cobre Haul Road Hitachi EX3600-5 15,536 0.45 3,044 5.1 5.1 27.4 50 2515-C-b-Sh1 Load-Cover STS2 Highway to Heaven Haul Road Hitachi EX3600-5 15,7015 0.45 3,044 51.6 54.2 27.4 50 2515-C-b-Sh1 Load-Cover STS2 Disturbed Area Around Reservoir 5 Hitachi EX3600-5 157,213 0.45 3,044 51.6 56.7 27.4 50 2515-C-b-Sh1 Load-Cover West of Borrow E&H Filter Plant Hitachi EX3600-5 157,213 0.45 3,044 51.6 56.7 27.4 50 2500-C-b-Sh1 Load-Cover Upper South Unplanned Disturbed Area Hitachi EX3600-5 968,000 0.45 3,044 27.1 28.5 27.4 50 3000-C-b-Sh1 Load-Cover Borrow Area F & North of Borrow Area F Axiflo Hitachi EX3600-5 968,000 0.45 3,044 118.0 33.1 27.4 50 3100-C-b-Sh1 Load-Cover Borrow Area F & North of Borrow Area F Axiflo Hitachi EX3600-5 1,266,425 0.45 3,044 416.0 447.5 27.4 50 3100-C-b-Sh1 Load-Cover Borrow Area F & North of Borrow Area F Tailings Pond 6 Hitachi EX3600-5 8,036,747 0.45 3,044 416.0 447.5 27.4 50 3301-C-b-Sh1 Load-Cover West of Borrow Area F Shorth of Borrow E&H Slap Ple Outslopes W side Hitachi EX3600-5 3,044 11.0 1.3 1.3 27.4 50 3301-C-b-Sh1 Load-Cover West of Borrow E&H Slap Ple Outslopes W side Hitachi EX3600-5 3,044 11.0 1.3 1.3 27.4 50 3301-C-b-Sh1 Load-Cover West of Borrow E&H Slap Ple Outslopes W side Hitachi EX3600-5 3,045 3,044 13.0 13.0 13.7 27.4 50 3301-C-b-Sh1 Load-Cover West of Borrow E&H Slap Ple Outslopes W side Hitachi EX3600-5 3,046 3,04 | 2342-C-b-Sh1 | Load-Cover       |                           | Lower Lined Pond                  | Hitachi EX3600-5 | 10,793          | 0.45             | 3,044                | 3.5             | 3.5              |               |           |
| 2345-C-b-Sh1 Load-Cover STS2 Lee Hill #2 Booster Station Hitachi EX3600-5 145 0.45 3,044 0.0 0.0 0.0 27.4 50 2346-C-b-Sh1 Load-Cover STS2 Lee Hill #2 Booster Hitachi EX3600-5 678 0.45 3,044 0.2 0.2 0.2 27.4 50 2400-C-b-Sh1 Load-Cover STS2 Ground Hog #5 Hitachi EX3600-5 3,227 0.45 3,044 1.1 1.1 1.1 1.1 1.1 1.1 27.4 50 2512-C-b-Sh1 Load-Cover STS2 East Pit Access Disturbed Area Hitachi EX3600-5 17,763 0.45 3,044 5.8 6.1 27.4 50 2513-C-b-Sh1 Load-Cover STS2 Chino part of Cobre Haul Road Hitachi EX3600-5 15,536 0.45 3,044 5.1 5.1 27.4 50 2514-C-b-Sh1 Load-Cover STS2 Highway to Heaven Haul Road Hitachi EX3600-5 15,7015 0.45 3,044 5.1 5.1 27.4 50 2515-C-b-Sh1 Load-Cover STS2 Highway to Heaven Haul Road Hitachi EX3600-5 157,015 0.45 3,044 51.6 54.2 27.4 50 2515-C-b-Sh1 Load-Cover STS2 Disturbed Area Around Reservoir 5 Hitachi EX3600-5 157,213 0.45 3,044 51.6 54.2 27.4 50 2515-C-b-Sh1 Load-Cover West of Borrow E&H Filter Plant Hitachi EX3600-5 157,213 0.45 3,044 51.6 56.7 27.4 50 2600-C-b-Sh1 Load-Cover Upper South Unplanned Disturbed Area Hitachi EX3600-5 968,000 0.45 3,044 27.1 28.5 27.4 50 3000-C-b-Sh1 Load-Cover Borrow Area F North of Borrow Area F Axiflo Hitachi EX3600-5 149,952 0.45 3,044 154.4 183.5 27.4 50 3100-C-b-Sh1 Load-Cover Borrow Area F Tailings Pond 6 Hitachi EX3600-5 1,266,425 0.45 3,044 16.0 447.5 27.4 50 3200-C-b-Sh1 Load-Cover West of Borrow E&H Tailings Pond 7 Hitachi EX3600-5 3,045 3,044 16.0 447.5 27.4 50 3301-C-b-Sh1 Load-Cover West of Borrow E&H Slag Pile Outslopes W side Hitachi EX3600-5 3,068 0.45 3,044 13.0 13.7 27.4 50  | 2343-C-b-Sh1 | Load-Cover       | STS2                      | Upper Lined Pond                  | Hitachi EX3600-5 | 1,984           | 0.45             | 3,044                | 0.7             | 0.7              | 27.4          | 50        |
| 2346-C-b-Sh1 Load-Cover STS2 Lee Hill #2 Booster Hitachi EX3600-5 678 0.45 3,044 0.2 0.2 27.4 50 2400-C-b-Sh1 Load-Cover STS2 Ground Hog #5 Hitachi EX3600-5 3,227 0.45 3,044 1.1 1.1 1.1 27.4 50 2512-C-b-Sh1 Load-Cover STS2 East Pit Access Disturbed Area Hitachi EX3600-5 17,763 0.45 3,044 5.1 5.1 27.4 50 2513-C-b-Sh1 Load-Cover STS2 Chino part of Cobre Haul Road Hitachi EX3600-5 15,536 0.45 3,044 5.1 5.1 27.4 50 2514-C-b-Sh1 Load-Cover STS2 Chino part of Cobre Haul Road Hitachi EX3600-5 15,536 0.45 3,044 5.1 5.1 27.4 50 2514-C-b-Sh1 Load-Cover STS2 Highway to Heaven Haul Road Hitachi EX3600-5 157,015 0.45 3,044 51.6 54.2 27.4 50 2515-C-b-Sh1 Load-Cover STS2 Disturbed Area Around Reservoir 5 Hitachi EX3600-5 157,213 0.45 3,044 51.6 56.7 27.4 50 2515-C-b-Sh1 Load-Cover West of Borrow E&H Filter Plant Hitachi EX3600-5 82,474 0.45 3,044 27.1 28.5 27.4 50 2600-C-b-Sh1 Load-Cover Upper South Upplanned Disturbed Area Hitachi EX3600-5 88,474 0.45 3,044 27.1 28.5 27.4 50 3000-C-b-Sh1 Load-Cover Borrow Area F & North of Borrow Area F & Axiflo Hitachi EX3600-5 968,000 0.45 3,044 318.0 334.1 27.4 50 3100-C-b-Sh1 Load-Cover Borrow Area F & North of Borrow Area F & Axiflo Hitachi EX3600-5 1,266,425 0.45 3,044 154.4 183.5 27.4 50 3100-C-b-Sh1 Load-Cover Borrow Area F & Tailings Pond 6 Hitachi EX3600-5 1,266,425 0.45 3,044 2,639.8 2,639.8 27.4 50 3200-C-b-Sh1 Load-Cover West of Borrow E&H Tailings Pond 7 Hitachi EX3600-5 89,688 0.45 3,044 2,639.8 2,639.8 27.4 50 3301-C-b-Sh1 Load-Cover West of Borrow E&H Slag Pile Outslopes W side Hitachi EX3600-5 39,688 0.45 3,044 2,639.8 2,639.8 27.4 50   | 2344-C-b-Sh1 | Load-Cover       |                           | 5900 PLS Sump                     | Hitachi EX3600-5 |                 | 0.45             |                      | 0.9             | 0.9              |               | 50        |
| 2400-C-b-Sh1         Load-Cover         STS2         Ground Hog #5         Hitachi EX3600-5         3,227         0.45         3,044         1.1         1.1         27.4         50           2512-C-b-Sh1         Load-Cover         STS2         East Pit Access Disturbed Area         Hitachi EX3600-5         17,763         0.45         3,044         5.8         6.1         27.4         50           2513-C-b-Sh1         Load-Cover         STS2         Chino part of Cobre Haul Road         Hitachi EX3600-5         15,536         0.45         3,044         5.1         5.1         27.4         50           2514-C-b-Sh1         Load-Cover         STS2         Highway to Heaven Haul Road         Hitachi EX3600-5         157,015         0.45         3,044         51.6         54.2         27.4         50           2515-C-b-Sh1         Load-Cover         STS2         Disturbed Area Around Reservoir 5         Hitachi EX3600-5         157,015         0.45         3,044         51.6         56.7         27.4         50           3307-C-b-Sh1         Load-Cover         West of Borrow E&H         Filter Plant         Hitachi EX3600-5         82,474         0.45         3,044         27.1         28.5         27.4         50           3000-C-b-Sh1         Load   |              | Load-Cover       |                           | 6300 PLS Booster Station          | Hitachi EX3600-5 | 145             | 0.45             | 3,044                | 0.0             | 0.0              |               | 50        |
| 2512-C-b-Sh1 Load-Cover STS2 East Pit Access Disturbed Area Hitachi EX3600-5 17,763 0.45 3,044 5.8 6.1 27.4 50 2513-C-b-Sh1 Load-Cover STS2 Chino part of Cobre Haul Road Hitachi EX3600-5 15,536 0.45 3,044 5.1 5.1 27.4 50 2514-C-b-Sh1 Load-Cover STS2 Highway to Heaven Haul Road Hitachi EX3600-5 15,7015 0.45 3,044 5.1 5.1 27.4 50 2515-C-b-Sh1 Load-Cover STS2 Disturbed Area Around Reservoir 5 Hitachi EX3600-5 157,013 0.45 3,044 51.6 56.7 27.4 50 3307-C-b-Sh1 Load-Cover West of Borrow E&H Filter Plant Hitachi EX3600-5 82,474 0.45 3,044 27.1 28.5 27.4 50 2600-C-b-Sh1 Load-Cover Upper South Unplanned Disturbed Area Hitachi EX3600-5 968,000 0.45 3,044 318.0 334.1 27.4 50 3000-C-b-Sh1 Load-Cover Borrow Area F & North of Borrow Area F Axiflo Hitachi EX3600-5 469,952 0.45 3,044 154.4 183.5 27.4 50 3100-C-b-Sh1 Load-Cover West of Borrow Area F Tailings Pond 6 Hitachi EX3600-5 1,266,425 0.45 3,044 2,639 2,639.8 27.4 50 3200-C-b-Sh1 Load-Cover West of Borrow E&H Tailings Pond 7 Hitachi EX3600-5 8,036,747 0.45 3,044 2,639.8 2,639.8 27.4 50 3301-C-b-Sh1 Load-Cover West of Borrow E&H Slag Pile Outslopes W side Hitachi EX3600-5 39,688 0.45 3,044 13.0 13.0 13.7 27.4 50  |              | Load-Cover       |                           |                                   |                  | 678             |                  | 3,044                | 0.2             | 0.2              |               |           |
| 2513-C-b-Sh1         Load-Cover         STS2         Chino part of Cobre Haul Road         Hitachi EX3600-5         15,536         0.45         3,044         5.1         5.1         27.4         50           2514-C-b-Sh1         Load-Cover         STS2         Highway to Heaven Haul Road         Hitachi EX3600-5         157,015         0.45         3,044         51.6         54.2         27.4         50           2515-C-b-Sh1         Load-Cover         STS2         Disturbed Area Around Reservoir 5         Hitachi EX3600-5         157,213         0.45         3,044         51.6         56.7         27.4         50           3307-C-b-Sh1         Load-Cover         West of Borrow E&H         Filter Plant         Hitachi EX3600-5         82,474         0.45         3,044         27.1         28.5         27.4         50           2600-C-b-Sh1         Load-Cover         Upper South         Unplanned Disturbed Area         Hitachi EX3600-5         968,000         0.45         3,044         318.0         33.1         27.4         50           3000-C-b-Sh1         Load-Cover         Borrow Area F & North of Borrow Area F         Axiflo         Hitachi EX3600-5         469,952         0.45         3,044         15.4         183.5         27.4         50           <  | 2400-C-b-Sh1 | Load-Cover       | STS2                      | Ground Hog #5                     | Hitachi EX3600-5 | 3,227           | 0.45             | 3,044                | 1.1             | 1.1              | 27.4          | 50        |
| 2514-C-b-Sh1         Load-Cover         STS2         Highway to Heaven Haul Road         Hitachi EX3600-5         157,015         0.45         3,044         51.6         54.2         27.4         50           2515-C-b-Sh1         Load-Cover         STS2         Disturbed Area Around Reservoir 5         Hitachi EX3600-5         157,213         0.45         3,044         51.6         56.7         27.4         50           3307-C-b-Sh1         Load-Cover         West of Borrow E&H         Filter Plant         Hitachi EX3600-5         82,474         0.45         3,044         27.1         28.5         27.4         50           2600-C-b-Sh1         Load-Cover         Upper South         Unplanned Disturbed Area         Hitachi EX3600-5         968,000         0.45         3,044         318.0         334.1         27.4         50           3000-C-b-Sh1         Load-Cover         Borrow Area F & North of Borrow Area F         Axiflo         Hitachi EX3600-5         469,952         0.45         3,044         15.4         183.5         27.4         50           3100-C-b-Sh1         Load-Cover         Borrow Area F         Tailings Pond 6         Hitachi EX3600-5         1,266,425         0.45         3,044         416.0         447.5         27.4         50   |              | Load-Cover       |                           | East Pit Access Disturbed Area    | Hitachi EX3600-5 | 17,763          | 0.45             | 3,044                | 5.8             | 6.1              |               | 50        |
| 2515-C-b-Sh1       Load-Cover       STS2       Disturbed Area Around Reservoir 5       Hitachi EX3600-5       157,213       0.45       3,044       51.6       56.7       27.4       50         3307-C-b-Sh1       Load-Cover       West of Borrow E&H       Filter Plant       Hitachi EX3600-5       82,474       0.45       3,044       27.1       28.5       27.4       50         2600-C-b-Sh1       Load-Cover       Upper South       Unplanned Disturbed Area       Hitachi EX3600-5       968,000       0.45       3,044       318.0       334.1       27.4       50         3000-C-b-Sh1       Load-Cover       Borrow Area F & North of Borrow Area F       Axiflo       Hitachi EX3600-5       469,952       0.45       3,044       154.4       183.5       27.4       50         3100-C-b-Sh1       Load-Cover       Borrow Area F       Tailings Pond 6       Hitachi EX3600-5       1,266,425       0.45       3,044       416.0       447.5       27.4       50         3200-C-b-Sh1       Load-Cover       West of Borrow E&H       Tailings Pond 7       Hitachi EX3600-5       8,036,747       0.45       3,044       13.0       13.7       27.4       50         3301-C-b-Sh1       Load-Cover       West of Borrow E&H       Slag Pile Outslopes W side  | 2513-C-b-Sh1 | Load-Cover       |                           | Chino part of Cobre Haul Road     | Hitachi EX3600-5 | 15,536          | 0.45             | 3,044                | 5.1             | 5.1              | 27.4          |           |
| 3307-Cb-Sh1         Load-Cover         West of Borrow E&H         Filter Plant         Hitachi EX3600-5         82,474         0.45         3,044         27.1         28.5         27.4         50           2600-Cb-Sh1         Load-Cover         Upper South         Unplanned Disturbed Area         Hitachi EX3600-5         968,000         0.45         3,044         318.0         334.1         27.4         50           3000-Cb-Sh1         Load-Cover         Borrow Area F & North of Borrow Area F         Axiflo         Hitachi EX3600-5         469,952         0.45         3,044         154.4         183.5         27.4         50           3100-Cb-Sh1         Load-Cover         Borrow Area F         Tailings Pond 6         Hitachi EX3600-5         1,266,425         0.45         3,044         416.0         447.5         27.4         50           3200-Cb-Sh1         Load-Cover         West of Borrow E&H         Tailings Pond 7         Hitachi EX3600-5         8,036,747         0.45         3,044         416.0         447.5         27.4         50           3301-Cb-Sh1         Load-Cover         West of Borrow E&H         Slag Pile Outslopes W side         Hitachi EX3600-5         39,688         0.45         3,044         13.0         13.7         27.4         50  |              |                  |                           | Highway to Heaven Haul Road       |                  |                 |                  |                      |                 |                  |               |           |
| 2600-C-b-Sh1       Load-Cover       Upper South       Unplanned Disturbed Area       Hitachi EX3600-5       968,000       0.45       3,044       318.0       334.1       27.4       50         3000-C-b-Sh1       Load-Cover       Borrow Area F & North of Borrow Area F       Axiflo       Hitachi EX3600-5       469,952       0.45       3,044       154.4       183.5       27.4       50         3100-C-b-Sh1       Load-Cover       Borrow Area F       Tailings Pond 6       Hitachi EX3600-5       1,266,425       0.45       3,044       416.0       447.5       27.4       50         3200-C-b-Sh1       Load-Cover       West of Borrow E&H       Tailings Pond 7       Hitachi EX3600-5       8,036,747       0.45       3,044       2,639.8       2,639.8       27.4       50         3301-C-b-Sh1       Load-Cover       West of Borrow E&H       Slag Pile Outslopes W side       Hitachi EX3600-5       39,688       0.45       3,044       13.0       13.7       27.4       50   | 2515-C-b-Sh1 | Load-Cover       | STS2                      | Disturbed Area Around Reservoir 5 | Hitachi EX3600-5 | 157,213         | 0.45             | 3,044                | 51.6            | 56.7             |               |           |
| 3000-C-b-Sh1       Load-Cover       Borrow Area F & North of Borrow Area F       Axiflo       Hitachi EX3600-5       469,952       0.45       3,044       154.4       183.5       27.4       50         3100-C-b-Sh1       Load-Cover       Borrow Area F & North of Borrow Area F       Tailings Pond 6       Hitachi EX3600-5       1,266,425       0.45       3,044       416.0       447.5       27.4       50         3200-C-b-Sh1       Load-Cover       West of Borrow E&H       Tailings Pond 7       Hitachi EX3600-5       8,036,747       0.45       3,044       2,639.8       2,639.8       27.4       50         3301-C-b-Sh1       Load-Cover       West of Borrow E&H       Slag Pile Outslopes W side       Hitachi EX3600-5       39,688       0.45       3,044       13.0       13.7       27.4       50   |              |                  | West of Borrow E&H        |                                   |                  |                 |                  |                      |                 |                  |               |           |
| 3100-C-b-Sh1 Load-Cover Borrow Area F Tailings Pond 6 Hitachi EX3600-5 1,266,425 0.45 3,044 416.0 447.5 27.4 50 3200-C-b-Sh1 Load-Cover West of Borrow E&H Tailings Pond 7 Hitachi EX3600-5 8,036,747 0.45 3,044 2,639.8 2,639.8 27.4 50 3301-C-b-Sh1 Load-Cover West of Borrow E&H Slag Pile Outslopes W side Hitachi EX3600-5 39,688 0.45 3,044 13.0 13.7 27.4 50  |              |                  |                           | Unplanned Disturbed Area          |                  |                 |                  |                      |                 |                  |               |           |
| 3200-C-b-Sh1 Load-Cover West of Borrow E&H Tailings Pond 7 Hitachi EX3600-5 8,036,747 0.45 3,044 2,639.8 2,639.8 27.4 50 3301-C-b-Sh1 Load-Cover West of Borrow E&H Slag Pile Outslopes W side Hitachi EX3600-5 39,688 0.45 3,044 13.0 13.7 27.4 50  |              |                  |                           | Axiflo                            |                  | 469,952         |                  | 3,044                | 154.4           |                  |               |           |
| 3301-C-b-Sh1 Load-Cover West of Borrow E&H Slag Pile Outslopes W side Hitachi EX3600-5 39,688 0.45 3,044 13.0 13.7 27.4 50   |              |                  |                           | Tailings Pond 6                   |                  |                 |                  |                      |                 |                  |               |           |
|  | 3200-C-b-Sh1 | Load-Cover       | West of Borrow E&H        | Tailings Pond 7                   | Hitachi EX3600-5 | 8,036,747       | 0.45             | 3,044                | 2,639.8         | 2,639.8          |               |           |
| 3308-C-b-Sh1 Load-Cover West of Borrow E&H 35 Acre Misc. Area Hitachi EX3600-5 169,400 0.45 3,044 55.6 58.5 27.4 50  |              | _                |                           | Slag Pile Outslopes W side        |                  |                 |                  | 3,044                |                 |                  |               |           |
|  | 3308-C-b-Sh1 | Load-Cover       | West of Borrow E&H        | 35 Acre Misc. Area                | Hitachi EX3600-5 | 169,400         | 0.45             | 3,044                | 55.6            | 58.5             | 27.4          | 50        |

# Productivity for Scrapers

Assumptions:
Uses volumes of stockpile or cover for hauling and grading times
Haul & Scrape Grade (%) assumes positive is downhill

Number of scrapers used for grading cover = 6 1609.344 meters/mile

|              |   |   |             |           |                 | Total Haul   | Haul &    | Rolling    | Effective    |                   |            | /laneuver & | Full    | Empty Scraper |               | usher      |           | Soil     | Heaped   |           | Cycles per  | Productivity    | Total      |           |                 |
|--------------|---|---|-------------|-----------|-----------------|--------------|-----------|------------|--------------|-------------------|------------|-------------|---------|---------------|---------------|------------|-----------|----------|----------|-----------|-------------|-----------------|------------|-----------|-----------------|
|              |   |   | Destination |           | Loose/Stockpile | Distance One | Scrape    | Resistance | Grade Uphill | Effective Grade L | oad Time S | pread Time  | Scraper | Return Speed  | Cycle Task Cy | cle Time   | Rated     | Weight   | Capacity | Work Hour | Scraper per | per Heaped      | Task       | Number of | Task Time w All |
| ID           | Task Description                            | Source Location 1                               | Location 2  | Equipment | Volume (cy)     | Way (feet)   | Grade (%) | (%)        | (%)          | Downhill (%)      | (min)      | (min)       | Haul    | (mph)         | Time (min) (m | iin/cycle) | Load (lb) | (lbs/cy) | (cy)     | (min/hr)  | Hr          | Scraper (cy/hr) | Time (hrs) | Scrapers  | Scrapers (hrs)  |
| 1101-A-a-Sc2 | Grade-Outslope-Existing Ground              | South Stockpile S-1                             | -           | Cat 657G  | 348,051         | 4,809        | 7.15%     | 2.5%       | 9.7%         | 4.7%              | 0.9        | 0.7         | 26.1    | 21.9          | 6.1           | 1.4        | 104,000   | 3,300    | 44       | 50        | 8           | 252             | 1,380      | 5         | 276             |
| 1102-A-a-Sc2 | Grade-Outslope-Existing Ground              | South Stockpile S-2                             | -           | Cat 657G  | 4,690,126       | 5,418        | 8.42%     | 2.5%       | 10.9%        | 5.9%              | 0.9        | 0.7         | 25.7    | 20.2          | 6.9           | 1.4        | 104,000   | 3,300    | 44       | 50        | 7           | 221             | 21,260     | 5         | 4,252           |
| 1103-A-a-Sc2 | Grade-Outslope-Existing Ground              | South Stockpile S-3                             | -           | Cat 657G  | 4,101,997       | 2,633        | 7.57%     | 2.5%       | 10.1%        | 5.1%              | 0.9        | 0.7         | 26.0    | 21.3          | 4.1           | 1.4        | 104,000   | 3,300    | 44       | 50        | 12          | 378             | 10,847     | 3         | 3,616           |
| 1104-A-a-Sc2 | Grade-Outslope-Existing Ground              | South Stockpile S-4                             | -           | Cat 657G  | 2,044,550       | 2,316        | 12.69%    | 2.5%       | 15.2%        | 10.2%             | 0.9        | 0.7         | 22.3    | 15.3          | 4.4           | 1.4        | 104,000   | 3,300    | 44       | 50        | 11          | 347             | 5,898      | 4         | 1,474           |
| 1105-A-a-Sc2 | Grade-Outslope-Existing Ground              | South Stockpile S-5                             | -           | Cat 657G  | 4,461,300       | 1,969        | 11.81%    | 2.5%       | 14.3%        | 9.3%              | 0.9        | 0.7         | 23.2    | 16.2          | 3.8           | 1.4        | 104,000   | 3,300    | 44       | 50        | 13          | 378             | 11,797     | 3         | 3,932           |
| 1106-A-a-Sc2 | Grade-Outslope-Existing Ground              | South Stockpile S-6                             | -           | Cat 657G  | 4,922,868       | 1,927        | 14.25%    | 2.5%       | 16.8%        | 11.8%             | 0.9        | 0.7         | 20.6    | 13.9          | 4.1           | 1.4        | 104,000   | 3,300    | 44       | 50        | 12          | 378             | 13,017     | 3         | 4,339           |
| 1107-A-a-Sc2 | Grade-Outslope-Existing Ground              | South Stockpile S-7                             | -           | Cat 657G  | 2,572,155       | 1,927        | 14.25%    | 2.5%       | 16.8%        | 11.8%             | 0.9        | 0.7         | 20.6    | 13.9          | 4.1           | 1.4        | 104,000   | 3,300    | 44       | 50        | 12          | 378             | 6,801      | 3         | 2,267           |
| 1108-A-a-Sc2 | Grade-Outslope-Existing Ground              | South Stockpile S-8                             | -           | Cat 657G  | 3,660,779       | 1,761        | 10.55%    | 2.5%       | 13.1%        | 8.1%              | 0.9        | 0.7         | 24.3    | 17.6          | 3.5           | 1.4        | 104,000   | 3,300    | 44       | 50        | 14          | 441             | 8,297      | 3         | 2,766           |
| 1109-A-a-Sc2 | Grade-Outslope-Existing Ground              | South Stockpile S-9(1)                          | -           | Cat 657G  | 137,679         | 479          | 7.54%     | 2.5%       | 10.0%        | 5.0%              | 0.9        | 0.7         | 26.0    | 21.3          | 2.0           | 1.4        | 104,000   | 3,300    | 44       | 50        | 25          | 788             | 175        | 2         | 87              |
| 1207-A-a-Sc2 | Grade-Outslope-Existing Ground              | West Stockpile W-7                              | -           | Cat 657G  | 2,249,293       | 3,238        | 4.00%     | 2.5%       | 6.5%         | 1.5%              | 0.9        | 0.7         | 24.8    | 26.4          | 4.4           | 1.4        | 104,000   | 3,300    | 44       | 50        | 11          | 347             | 6,488      | 4         | 1,622           |
| 1209-A-a-Sc2 | Grade-Outslope-Existing Ground              | West Stockpile W-8(1)                           | -           | Cat 657G  | 347,445         | 3,238        | 4.00%     | 2.5%       | 6.5%         | 1.5%              | 0.9        | 0.7         | 24.8    | 26.4          | 4.4           | 1.4        | 104,000   | 3,300    | 44       | 50        | 11          | 347             | 1,002      | 4         | 251             |
| 1210-A-a-Sc2 | Grade-Outslope-Existing Ground              | West Stockpile W-8(2)                           | -           | Cat 657G  | 2,250,301       | 2,333        | 4.00%     | 2.5%       | 6.5%         | 1.5%              | 0.9        | 0.7         | 24.8    | 26.4          | 3.6           | 1.4        | 104,000   | 3,300    | 44       | 50        | 14          | 410             | 5,493      | 3         | 1,831           |
| 1211-A-a-Sc2 | Grade-Outslope-Existing Ground              | West Stockpile W-9                              | -           | Cat 657G  | 1,195,526       | 1,711        | 4.00%     | 2.5%       | 6.5%         | 1.5%              | 0.9        | 0.7         | 24.8    | 26.4          | 3.0           | 1.4        | 104,000   | 3,300    | 44       | 50        | 17          | 504             | 2,371      | 3         | 790             |
| 1212-A-a-Sc2 | Grade-Outslope-Existing Ground              | West Stockpile W-10                             | -           | Cat 657G  | 640,632         | 1,711        | 4.00%     | 2.5%       | 6.5%         | 1.5%              | 0.9        | 0.7         | 24.8    | 26.4          | 3.0           | 1.4        | 104,000   | 3,300    | 44       | 50        | 17          | 504             | 1,270      | 3         | 423             |
| 1213-A-a-Sc2 | Grade-Outslope-Existing Ground              | West Stockpile W-11                             | -           | Cat 657G  | 4,495,590       | 1,711        | 4.00%     | 2.5%       | 6.5%         | 1.5%              | 0.9        | 0.7         | 24.8    | 26.4          | 3.0           | 1.4        | 104,000   | 3,300    | 44       | 50        | 17          | 504             | 8,916      | 3         | 2,972           |
| 1301-A-a-Sc2 | Grade-Outslope-Existing Ground              | Lambright Stockpile LB-1                        | -           | Cat 657G  | 2,592,130       | 2,723        | 9.21%     | 2.5%       | 11.7%        | 6.7%              | 0.9        | 0.7         | 25.3    | 19.2          | 4.3           | 1.4        | 104,000   | 3,300    | 44       | 50        | 12          | 347             | 7,477      | 4         | 1,869           |
| 1302-A-a-Sc2 | Grade-Outslope-Existing Ground              | Lambright Stockpile LB-2                        | -           | Cat 657G  | 1,391,371       | 2,354        | 9.45%     | 2.5%       | 12.0%        | 7.0%              | 0.9        | 0.7         | 25.2    | 18.9          | 4.0           | 1.4        | 104,000   | 3,300    | 44       | 50        | 13          | 378             | 3,679      | 3         | 1,226           |
| 1303-A-a-Sc2 | Grade-Outslope-Existing Ground              | Lambright Stockpile LB-3                        | -           | Cat 657G  | 1,204,331       | 2,708        | 11.23%    | 2.5%       | 13.7%        | 8.7%              | 0.9        | 0.7         | 23.7    | 16.8          | 4.6           | 1.4        | 104,000   | 3,300    | 44       | 50        | 11          | 315             | 3,821      | 4         | 955             |
| 1304-A-a-Sc2 | Grade-Outslope-Existing Ground              | Lambright Stockpile LB-4                        | -           | Cat 657G  | 1,511,967       | 2,559        | 14.89%    | 2.5%       | 17.4%        | 12.4%             | 0.9        | 0.7         | 19.9    | 13.4          | 5.1           | 1.4        | 104,000   | 3,300    | 44       | 50        | 10          | 284             | 5,331      | 4         | 1,333           |
| 1305-A-a-Sc2 | Grade-Outslope-Existing Ground              | Lambright Stockpile LB-5                        | -           | Cat 657G  | 2,096,307       | 2,565        | 13.21%    | 2.5%       | 15.7%        | 10.7%             | 0.9        | 0.7         | 21.7    | 14.8          | 4.8           | 1.4        | 104,000   | 3,300    | 44       | 50        | 10          | 315             | 6,652      | 4         | 1,663           |
| 1306-A-a-Sc2 | Grade-Outslope-Existing Ground              | Lambright Stockpile LB-6                        | -           | Cat 657G  | 514,292         | 2,565        | 13.20%    | 2.5%       | 15.7%        | 10.7%             | 0.9        | 0.7         | 21.7    | 14.9          | 4.8           | 1.4        | 104,000   | 3,300    | 44       | 50        | 10          | 315             | 1,632      | 4         | 408             |
| 1307-A-a-Sc2 | Grade-Outslope-Existing Ground              | Lambright Stockpile LB-7(1)                     | -           | Cat 657G  | 400,870         | 1,631        | 10.16%    | 2.5%       | 12.7%        | 7.7%              | 0.9        | 0.7         | 24.7    | 18.0          | 3.3           | 1.4        | 104,000   | 3,300    | 44       | 50        | 15          | 473             | 848        | 3         | 283             |
| 1308-A-a-Sc2 | Grade-Outslope-Existing Ground              | Lambright Stockpile LB-7(2)                     | -           | Cat 657G  | 251,168         | 1,631        | 10.16%    | 2.5%       | 12.7%        | 7.7%              | 0.9        | 0.7         | 24.7    | 18.0          | 3.3           | 1.4        | 104,000   | 3,300    | 44       | 50        | 15          | 473             | 531        | 3         | 177             |
| 1309-A-a-Sc2 | Grade-Outslope-Existing Ground              | Lambright Stockpile LB-8                        | -           | Cat 657G  | 1,287,895       | 2,512        | 13.28%    | 2.5%       | 15.8%        | 10.8%             | 0.9        | 0.7         | 21.6    | 14.8          | 4.8           | 1.4        | 104,000   | 3,300    | 44       | 50        | 11          | 315             | 4,087      | 4         | 1,022           |
| 1310-A-a-Sc2 | Grade-Outslope-Existing Ground              | Lambright Stockpile LB-9                        | -           | Cat 657G  | 1,723,541       | 2,900        | 12.18%    | 2.5%       | 14.7%        | 9.7%              | 0.9        | 0.7         | 22.8    | 15.8          | 5.0           | 1.4        | 104,000   | 3,300    | 44       | 50        | 10          | 284             | 6,077      | 4         | 1,519           |
| 1311-A-a-Sc2 | Grade-Outslope-Existing Ground              | Lambright Stockpile LB-10                       | -           | Cat 657G  | 2,199,892       | 3,425        | 10.47%    | 2.5%       | 13.0%        | 8.0%              | 0.9        | 0.7         | 24.4    | 17.7          | 5.3           | 1.4        | 104,000   | 3,300    | 44       | 50        | 9           | 284             | 7,756      | 4         | 1,939           |
| 1312-A-a-Sc2 | Grade-Outslope-Existing Ground              | Lambright Stockpile LB-11                       | -           | Cat 657G  | 1,280,563       | 2,210        | 15.24%    | 2.5%       | 17.7%        | 12.7%             | 0.9        | 0.7         | 19.5    | 13.1          | 4.7           | 1.4        | 104,000   | 3,300    | 44       | 50        | 11          | 315             | 4,063      | 4         | 1,016           |
| 1313-A-a-Sc2 | Grade-Outslope-Existing Ground              | Lambright Stockpile LB-12                       | -           | Cat 657G  | 4,330,838       | 2,035        | 15.38%    | 2.5%       | 17.9%        | 12.9%             | 0.9        | 0.7         | 19.4    | 13.0          | 4.5           | 1.4        | 104,000   | 3,300    | 44       | 50        | 11          | 347             | 12,493     | 4         | 3,123           |
| 1314-A-a-Sc2 | Grade-Outslope-Existing Ground              | Lambright Stockpile LB-13                       | -           | Cat 657G  | 3,039,282       | 2,150        | 15.20%    | 2.5%       | 17.7%        | 12.7%             | 0.9        | 0.7         | 19.6    | 13.2          | 4.6           | 1.4        | 104,000   | 3,300    | 44       | 50        | 11          | 315             | 9,644      | 4         | 2,411           |
| 1315-A-a-Sc2 | Grade-Outslope-Existing Ground              | Lambright Stockpile LB-14                       | -           | Cat 657G  | 1,875,436       | 1,748        | 15.37%    | 2.5%       | 17.9%        | 12.9%             | 0.9        | 0.7         | 19.4    | 13.0          | 4.0           | 1.4        | 104,000   | 3,300    | 44       | 50        | 12          | 378             | 4,959      | 3         | 1,653           |
| 3000-A-d-Sc2 | Grade-Entire Impoundment-Placed Cover       | Axiflo  | -           | Cat 657G  | 469,952         | 5,128        | 0.63%     | 2.5%       | 3.1%         | 0.0%              | 0.9        | 0.7         | 23.3    | 30.3          | 5.93          | -          | 104,000   | 2,900    | 44       | 50        | 8           | 287             | 1,638      | 6.0       | 273             |
| 3100-A-d-Sc2 | Grade-Entire Impoundment-Placed Cover       | Tailings Pond 6                                 | -           | Cat 657G  | 1,266,425       | 10,300       | -0.10%    | 2.5%       | 2.6%         | 0.0%              | 0.9        | 0.7         | 27.6    | 33.0          | 9.29          | -          | 104,000   | 2,900    | 44       | 50        | 5           | 179             | 7,063      | 6.0       | 1,177           |
| 3200-A-d-Sc2 | Grade-Entire Impoundment-Placed Cover       | Tailings Pond 7                                 | -           | Cat 657G  | 8,036,747       | 8,800        | 0.16%     | 2.5%       | 2.7%         | 0.0%              | 0.9        | 0.7         | 23.3    | 30.6          | 9.06          | -          | 104,000   | 2,900    | 44       | 50        | 6           | 179             | 44,820     | 6.0       | 7,470           |
| 3301-A-d-Sc2 | Grade-Slag Pile Outslopes W side-Placed Cov | re Miscellaneous SMA Slag Pile Outslopes W side | -           | Cat 657G  | 39,688          | 12,024       | -1.10%    | 2.5%       | 3.6%         | 0.0%              | 0.9        | 0.7         | 25.9    | 33.0          | 10.91         | -          | 104,000   | 2,900    | 44       | 50        | 5           | 143             | 277        | 6.0       | 46              |

# Productivity and Hours Required for Motorgrader Use---Grading

# Assumptions:

Productivity (based on area of overall stockpile) = Sq.ft per hour = Speed x (Eff. Blade L -Blade Overlap) x Efficiency (Cat. Handbook Edition 47 pg 11-27)

Max. safe slope for motor graders is 2:1 (50%), proposed final grade for Chino cover grading on stockpiles is 33%, therefore use of graders an option (Cat. Handbook Edition 46 pg 11-30)

Grade Factor = -0.02(Grade %) + 1

| ID                           | Task Description  | Source Location 1                             | Destination<br>Location 2 | Grading<br>Equipment | Area (ac)   | Grading Shaping<br>Productivity (ac/hr) | Task Time<br>(hrs) | Grade<br>Factor | Material<br>Factor | Material<br>Weight (lb/cy) | Production<br>Method/Blade | Effective Blade<br>Width (ft) | Pass Overlap<br>(ft) | Speed<br>(mph) | Work Hour<br>(min/hr) | Operator<br>Factor |
|------------------------------|---|---|---------------------------|----------------------|-------------|---|--------------------|-----------------|--------------------|----------------------------|----------------------------|-------------------------------|----------------------|----------------|-----------------------|--------------------|
| 1002-A-a-Mg1                 | Grade-Top-Existing Ground                               | Triangle Stockpile T-2                        | -                         | Cat 16M              | 4.8         | 3                                       | 1.6                | 1.0             | 1.0                |                            | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 1.00               |
| 1110-A-a-Mg1                 | Grade-Top-Existing Ground                               | South Stockpile S-9(2)                        | _                         | Cat 16M              | 45.8        | 3                                       | 15.2               | 1.0             | 1.0                |                            | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 1.00               |
| 1111-A-a-Mg1                 | Grade-Top-Existing Ground                               | South Stockpile S-9(3)                        | _                         | Cat 16M              | 39.8        | 3                                       | 13.2               | 1.0             | 1.0                | 3,300                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 1.00               |
| 1219-A-a-Mg1                 | Grade-Top-Existing Ground                               | West Stockpile W-15(2)                        | _                         | Cat 16M              | 6.2         | 3                                       | 2.1                | 1.0             | 1.0                | 3,300                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 1.00               |
| 1221-A-a-Mg1                 | Grade-Top-Existing Ground                               | West Stockpile W-16(2)                        | _                         | Cat 16M              | 6.9         | 3                                       | 2.3                | 1.0             | 1.0                | 3,300                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 1.00               |
| 1222-A-a-Mg1                 | Grade-Top-Existing Ground                               | West Stockpile W-17(1)                        | =                         | Cat 16M              | 55.7        | 3                                       | 18.5               | 1.0             | 1.0                | 3,300                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 1.00               |
| 1223-A-a-Mg1                 | Grade-Top-Existing Ground                               | West Stockpile W-17(2)                        | =                         | Cat 16M              | 28.4        | 3                                       | 9.4                | 1.0             | 1.0                | 3,300                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 1.00               |
| 1316-A-a-Mg1                 | Grade-Top-Existing Ground                               | Lambright Stockpile LB-19(1)                  | -                         | Cat 16M              | 35.1        | 3                                       | 11.6               | 1.0             | 1.0                | 3,300                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 1.00               |
| 1317-A-a-Mg1                 | Grade-Top-Existing Ground                               | Lambright Stockpile LB-19(2)                  | -                         | Cat 16M              | 42.5        | 3                                       | 14.1               | 1.0             | 1.0                | 3,300                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 1.00               |
| 1403-A-a-Mg1                 | Grade-Top-Existing Ground                               | Southwest Lampbright SWL-17                   | -                         | Cat 16M              | 5.2         | 3                                       | 1.7                | 1.0             | 1.0                | 3,300                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 1.00               |
| 1601-A-a-Mg1                 | Grade-Top-Existing Ground                               | Northwest Stockpile NW-1(1)                   | -                         | Cat 16M              | 1.7         | 3                                       | 0.6                | 1.0             | 1.0                | 3,300                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 1.00               |
| 1602-A-a-Mg1                 | Grade-Top-Existing Ground                               | Northwest Stockpile NW-1(2)                   | =                         | Cat 16M              | 1.8         | 3                                       | 0.6                | 1.0             | 1.0                | 3,300                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 1.00               |
| 1604-A-a-Mg1                 | Grade-Top-Existing Ground                               | Northwest Stockpile NW-2(2)                   | =                         | Cat 16M              | 0.3         | 3                                       | 0.1                | 1.0             | 1.0                | 3,300                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 1.00               |
| 1605-A-a-Mg1                 | Grade-Top-Existing Ground                               | Northwest Stockpile NW-2(3)                   | -                         | Cat 16M              | 0.3         | 3                                       | 0.1                | 1.0             | 1.0                | 3,300                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 1.00               |
| 1701-A-a-Mg1                 | Grade-Top-Existing Ground                               | LeeHill Stockpile LH-2                        | -                         | Cat 16M              | 22.4        | 3                                       | 7.4                | 1.0             | 1.0                | 3,300                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 1.00               |
| 1702-A-a-Mg1                 | Grade-Top-Existing Ground                               | LeeHill Stockpile LH-3                        | -                         | Cat 16M              | 3.0         | 3                                       | 1.0                | 1.0             | 1.0                | 3,300                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 1.00               |
| 1800-A-a-Mg1                 | Grade-Entire Stockpile-Existing Ground                  | Northeast Stockpile                           | -                         | Cat 16M              | 12.2        | 3                                       | 4.1                | 1.0             | 1.0                | 3,300                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 1.00               |
| 1901-A-a-Mg1                 | Grade-Top-Existing Ground                               | North Stockpile N-1                           | -                         | Cat 16M              | 6.6         | 3                                       | 2.2                | 1.0             | 1.0                | 3,300                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 1.00               |
| 1902-A-a-Mg1                 | Grade-Top-Existing Ground                               | North Stockpile N-2(1)                        | -                         | Cat 16M              | 0.2         | 3                                       | 0.1                | 1.0             | 1.0                | 3,300                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 1.00               |
| 1903-A-a-Mg1                 | Grade-Top-Existing Ground                               | North Stockpile N-2(2)                        | -                         | Cat 16M              | 0.2         | 3                                       | 0.1                | 1.0             | 1.0                | 3,300                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 1.00               |
| 2001-A-a-Mg1                 | Grade-Top-Existing Ground                               | STS2 S-10                                     | -                         | Cat 16M              | 52.7        | 3                                       | 15.4               | 1.0             | 1.0                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 1.00               |
| 2102-A-a-Mg1                 | Grade-Top-Existing Ground                               | Upper South US-1(2)                           | -                         | Cat 16M              | 36.0        | 3                                       | 10.5               | 1.0             | 1.0                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 1.00               |
| 2202-A-a-Mg1                 | Grade-Top-Existing Ground                               | 9 Waste Rock 9 WRS-2                          | -                         | Cat 16M              | 95.5        | 3                                       | 31.7               | 1.0             | 1.0                | 3,300                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 1.00               |
| 2514-A-a-Mg1                 | · ,   | Miscellaneous NMA Highway to Heaven Haul Road | -                         | Cat 16M              | 32.4        | 3                                       | 11.0               | 1.0             | 1.0                | 3,300                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 1.00               |
| 2600-A-a-Mg1                 | Grade-200-Acre Unplanned Future Disturbance-Existing    | •   | -                         | Cat 16M              | 200.0       | 3                                       | 67.6               | 1.0             | 1.0                | 3,300                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 1.00               |
| 3000-A-a-Mg1                 | Grade-Entire Impoundment-Existing Ground                | Axiflo  | -                         | Cat 16M              | 97.1        | 3                                       | 28.9               | 1.0             | 1.0                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 1.00               |
| 3100-A-a-Mg1                 | Grade-Entire Impoundment-Existing Ground                | Tailings Pond 6                               | -                         | Cat 16M              | 261.7       | 3                                       | 77.8               | 1.0             | 1.0                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 1.00               |
| 3200-A-a-Mg1                 | Grade-Entire Impoundment-Existing Ground                | Tailings Pond 7                               | =                         | Cat 16M              | 1,660.5     | 3                                       | 493.5              | 1.0             | 1.0                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 1.00               |
| 3308-A-a-Mg1                 | Grade-35 Acre Misc. Area-Existing Ground                | Miscellaneous SMA 35 Acre Misc. Area          | -                         | Cat 16M              | 35.0        | 3                                       | 11.8               | 1.0             | 1.0                | 3,300                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 1.00               |
| 1001-A-d-Mg1                 | Grade-Outslope-Placed Cover                             | Triangle Stockpile T-1                        | -                         | Cat 16M<br>Cat 16M   | 76.7        | 5                                       | 16.1               | 1.6<br>1.0      | 1.2                | 2,900<br>2,900             | 1.2                        | 16.0                          | 2.0                  | 2.5<br>2.5     | 50                    | 0.75               |
| 1002-A-d-Mg1                 | Grade-Top-Placed Cover                                  | Triangle Stockpile T-2                        | -                         |                      | 4.8         | ა<br>-                                  | 1.6                | 1.0             | 1.2                | ,                          | 1.2                        | 16.0                          | 2.0                  |                | 50                    | 0.75<br>0.75       |
| 1101-A-d-Mg1<br>1102-A-d-Mg1 | Grade-Outslope-Placed Cover Grade-Outslope-Placed Cover | South Stockpile S-1<br>South Stockpile S-2    | -                         | Cat 16M<br>Cat 16M   | 6.4<br>86.9 | 5<br>F                                  | 1.4<br>18.3        | 1.6             | 1.2<br>1.2         | 2,900<br>2,900             | 1.2<br>1.2                 | 16.0<br>16.0                  | 2.0<br>2.0           | 2.5<br>2.5     | 50<br>50              | 0.75<br>0.75       |
| 1103-A-d-Mg1                 | Grade-Outslope-Placed Cover                             | South Stockpile S-2 South Stockpile S-3       | -                         | Cat 16M              | 76.0        | 5                                       | 16.0               | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1104-A-d-Mg1                 | Grade-Outslope-Placed Cover                             | South Stockpile S-4                           | -                         | Cat 16M              | 37.9        | 5                                       | 8.0                | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1105-A-d-Mg1                 | Grade-Outslope-Placed Cover                             | South Stockpile S-5                           | _                         | Cat 16M              | 82.6        | 5                                       | 17.4               | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1106-A-d-Mg1                 | Grade-Outslope-Placed Cover                             | South Stockpile S-6                           | _                         | Cat 16M              | 91.2        | 5                                       | 19.2               | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1107-A-d-Mg1                 | Grade-Outslope-Placed Cover                             | South Stockpile S-7                           | _                         | Cat 16M              | 47.6        | 5                                       | 10.0               | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1108-A-d-Mg1                 | Grade-Outslope-Placed Cover                             | South Stockpile S-8                           | _                         | Cat 16M              | 67.8        | 5                                       | 14.2               | 1.6             | 1.2                |                            | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1109-A-d-Mg1                 | Grade-Outslope-Placed Cover                             | South Stockpile S-9(1)                        | _                         | Cat 16M              | 2.6         | 5                                       | 0.5                | 1.6             | 1.2                |                            | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1110-A-d-Mg1                 | Grade-Top-Placed Cover                                  | South Stockpile S-9(2)                        | _                         | Cat 16M              | 45.8        | 3                                       | 14.8               | 1.0             | 1.2                |                            | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1111-A-d-Mg1                 | Grade-Top-Placed Cover                                  | South Stockpile S-9(3)                        | -                         | Cat 16M              | 39.8        | 3                                       | 12.9               | 1.0             | 1.2                |                            | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1201-A-d-Mg1                 | Grade-Outslope-Placed Cover                             | West Stockpile W-1                            | =                         | Cat 16M              | 56.2        | 5                                       | 11.8               | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1202-A-d-Mg1                 | Grade-Outslope-Placed Cover                             | West Stockpile W-2                            | =                         | Cat 16M              | 54.9        | 5                                       | 11.5               | 1.6             | 1.2                |                            | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1203-A-d-Mg1                 | Grade-Outslope-Placed Cover                             | West Stockpile W-3                            | =                         | Cat 16M              | 43.2        | 5                                       | 9.1                | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1204-A-d-Mg1                 | Grade-Outslope-Placed Cover                             | West Stockpile W-4                            | -                         | Cat 16M              | 41.2        | 5                                       | 8.7                | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1205-A-d-Mg1                 | Grade-Outslope-Placed Cover                             | West Stockpile W-5                            | -                         | Cat 16M              | 54.0        | 5                                       | 11.3               | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1206-A-d-Mg1                 | Grade-Outslope-Placed Cover                             | West Stockpile W-6                            | -                         | Cat 16M              | 52.5        | 5                                       | 11.0               | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1207-A-d-Mg1                 | Grade-Outslope-Placed Cover                             | West Stockpile W-7                            | -                         | Cat 16M              | 33.2        | 5                                       | 7.0                | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1209-A-d-Mg1                 | Grade-Outslope-Placed Cover                             | West Stockpile W-8(1)                         | -                         | Cat 16M              | 33.9        | 5                                       | 7.1                | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1210-A-d-Mg1                 | Grade-Outslope-Placed Cover                             | West Stockpile W-8(2)                         | -                         | Cat 16M              | 33.9        | 5                                       | 7.1                | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1211-A-d-Mg1                 | Grade-Outslope-Placed Cover                             | West Stockpile W-9                            | -                         | Cat 16M              | 27.1        | 5                                       | 5.7                | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1212-A-d-Mg1                 | Grade-Outslope-Placed Cover                             | West Stockpile W-10                           | -                         | Cat 16M              | 21.5        | 5                                       | 4.5                | 1.6             | 1.2                |                            | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1213-A-d-Mg1                 | Grade-Outslope-Placed Cover                             | West Stockpile W-11                           | -                         | Cat 16M              | 23.9        | 5                                       | 5.0                | 1.6             | 1.2                |                            | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1214-A-d-Mg1                 | Grade-Outslope-Placed Cover                             | West Stockpile W-12                           | -                         | Cat 16M              | 9.3         | 5                                       | 2.0                | 1.6             | 1.2                |                            | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1215-A-d-Mg1                 | Grade-Outslope-Placed Cover                             | West Stockpile W-13(1)                        | -                         | Cat 16M              | 3.6         | 5                                       | 0.8                | 1.6             | 1.2                |                            | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1216-A-d-Mg1                 | Grade-Outslope-Placed Cover                             | West Stockpile W-13(2)                        | -                         | Cat 16M              | 13.8        | 5                                       | 2.9                | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1217-A-d-Mg1                 | Grade-Outslope-Placed Cover                             | West Stockpile W-14                           | -                         | Cat 16M              | 11.6        | 5                                       | 2.4                | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
|                              |   |   |                           |                      |             |   |                    |                 |                    |                            |                            |                               |                      |                |                       |                    |

# Productivity and Hours Required for Motorgrader Use---Grading

# Assumptions:

Productivity (based on area of overall stockpile) = Sq.ft per hour = Speed x (Eff. Blade L -Blade Overlap) x Efficiency (Cat. Handbook Edition 47 pg 11-27)

Max. safe slope for motor graders is 2:1 (50%), proposed final grade for Chino cover grading on stockpiles is 33%, therefore use of graders an option (Cat. Handbook Edition 46 pg 11-30)

Grade Factor = -0.02(Grade %) + 1

| ID                           | Task Description  | Source Location 1   | Destination<br>Location 2 | Grading<br>Equipment | Area (ac)    | Grading Shaping<br>Productivity (ac/hr) | Task Time<br>(hrs) | Grade<br>Factor | Material<br>Factor | Material<br>Weight (lb/cy) | Production<br>Method/Blade | Effective Blade<br>Width (ft) | Pass Overlap<br>(ft) | Speed<br>(mph) | Work Hour<br>(min/hr) | Operator<br>Factor |
|------------------------------|---|---|---------------------------|----------------------|--------------|---|--------------------|-----------------|--------------------|----------------------------|----------------------------|-------------------------------|----------------------|----------------|-----------------------|--------------------|
| 1218-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | West Stockpile W-15(1)  | -                         | Cat 16M              | 7.8          | 5                                       | 1.6                | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1219-A-d-Mg1                 | Grade-Top-Placed Cover  | West Stockpile W-15(2)  | -                         | Cat 16M              | 6.2          | 3                                       | 2.0                | 1.0             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1220-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | West Stockpile W-16(1)  | -                         | Cat 16M              | 7.8          | 5                                       | 1.6                | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1221-A-d-Mg1                 | Grade-Top-Placed Cover  | West Stockpile W-16(2)  | =                         | Cat 16M              | 6.9          | 3                                       | 2.2                | 1.0             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1222-A-d-Mg1                 | Grade-Top-Placed Cover  | West Stockpile W-17(1)  | -                         | Cat 16M              | 55.7         | 3                                       | 18.0               | 1.0             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1223-A-d-Mg1                 | Grade-Top-Placed Cover  | West Stockpile W-17(2)  | -                         | Cat 16M              | 28.4         | 3                                       | 9.2                | 1.0             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1301-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | Lambright Stockpile LB-1  | =                         | Cat 16M              | 71.4         | 5                                       | 15.0               | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1302-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | Lambright Stockpile LB-2  | -                         | Cat 16M              | 38.3         | 5                                       | 8.1                | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1303-A-d-Mg1<br>1304-A-d-Mg1 | Grade-Outslope-Placed Cover Grade-Outslope-Placed Cover       | Lambright Stockpile LB-3<br>Lambright Stockpile LB-4            | -                         | Cat 16M<br>Cat 16M   | 33.2<br>41.6 | 5                                       | 7.0<br>8.8         | 1.6<br>1.6      | 1.2<br>1.2         | 2,900<br>2,900             | 1.2<br>1.2                 | 16.0<br>16.0                  | 2.0<br>2.0           | 2.5<br>2.5     | 50<br>50              | 0.75<br>0.75       |
| 1305-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | Lambright Stockpile LB-5  | -                         | Cat 16M              | 57.7         | ວ<br>5                                  | 0.0<br>12.1        | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1306-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | Lambright Stockpile LB-6  | _                         | Cat 16M              | 14.2         | 5                                       | 3.0                | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1307-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | Lambright Stockpile LB-7(1)                                     | _                         | Cat 16M              | 11.0         | 5                                       | 2.3                | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1308-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | Lambright Stockpile LB-7(2)                                     | _                         | Cat 16M              | 6.9          | 5                                       | 1.5                | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1309-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | Lambright Stockpile LB-8  | -                         | Cat 16M              | 35.5         | 5                                       | 7.5                | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1310-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | Lambright Stockpile LB-9  | -                         | Cat 16M              | 47.5         | 5                                       | 10.0               | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1311-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | Lambright Stockpile LB-10                                       | -                         | Cat 16M              | 60.6         | 5                                       | 12.7               | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1312-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | Lambright Stockpile LB-11                                       | -                         | Cat 16M              | 35.3         | 5                                       | 7.4                | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1313-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | Lambright Stockpile LB-12                                       | -                         | Cat 16M              | 119.3        | 5                                       | 25.1               | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1314-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | Lambright Stockpile LB-13                                       | -                         | Cat 16M              | 83.7         | 5                                       | 17.6               | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1315-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | Lambright Stockpile LB-14                                       | =                         | Cat 16M              | 51.6         | 5                                       | 10.9               | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1316-A-d-Mg1                 | Grade-Top-Placed Cover  | Lambright Stockpile LB-19(1)                                    | -                         | Cat 16M              | 35.1         | 3                                       | 11.4               | 1.0             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1317-A-d-Mg1                 | Grade-Top-Placed Cover  | Lambright Stockpile LB-19(2)                                    | -                         | Cat 16M              | 42.5         | 3                                       | 13.8               | 1.0             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1401-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | Southwest Lampbright SWL-15                                     | =                         | Cat 16M              | 12.6         | 5                                       | 2.7                | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1402-A-d-Mg1                 | Grade-Outslope-Placed Cover Grade-Top-Placed Cover            | Southwest Lampbright SWL-16                                     | -                         | Cat 16M              | 22.2         | 5                                       | 4.7                | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5<br>2.5     | 50                    | 0.75<br>0.75       |
| 1403-A-d-Mg1<br>1404-A-d-Mg1 | Grade-Top-Placed Cover Grade-Outslope-Placed Cover            | Southwest Lampbright SWL-17 Southwest Lampbright SWL-17(1)      | -                         | Cat 16M<br>Cat 16M   | 5.2<br>16.9  | ა<br>5                                  | 1.7<br>3.6         | 1.0<br>1.6      | 1.2<br>1.2         | 2,900<br>2,900             | 1.2<br>1.2                 | 16.0<br>16.0                  | 2.0<br>2.0           | 2.5            | 50<br>50              | 0.75<br>0.75       |
| 1405-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | Southwest Lampbright SWL-17(1)                                  | _                         | Cat 16M              | 18.6         | 5                                       | 3.9                | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1406-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | Southwest Lampbright SWL-17(2)                                  | -                         | Cat 16M              | 18.8         | 5                                       | 3.9                | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1500-A-d-Mg1                 | Grade-Entire Stockpile-Placed Cover                           | South and East In-Pit Stockpiles                                | _                         | Cat 16M              | 46.0         | 3                                       | 14.9               | 1.0             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1601-A-d-Mg1                 | Grade-Top-Placed Cover  | Northwest Stockpile NW-1(1)                                     | _                         | Cat 16M              | 1.7          | 3                                       | 0.5                | 1.0             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1602-A-d-Mg1                 | Grade-Top-Placed Cover  | Northwest Stockpile NW-1(2)                                     | -                         | Cat 16M              | 1.8          | 3                                       | 0.6                | 1.0             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1603-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | Northwest Stockpile NW-2(1)                                     | -                         | Cat 16M              | 4.2          | 5                                       | 0.9                | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1604-A-d-Mg1                 | Grade-Top-Placed Cover  | Northwest Stockpile NW-2(2)                                     | -                         | Cat 16M              | 0.3          | 3                                       | 0.1                | 1.0             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1605-A-d-Mg1                 | Grade-Top-Placed Cover  | Northwest Stockpile NW-2(3)                                     | -                         | Cat 16M              | 0.3          | 3                                       | 0.1                | 1.0             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1701-A-d-Mg1                 | Grade-Top-Placed Cover  | LeeHill Stockpile LH-2  | =                         | Cat 16M              | 22.4         | 3                                       | 7.2                | 1.0             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1702-A-d-Mg1                 | Grade-Top-Placed Cover  | LeeHill Stockpile LH-3  | -                         | Cat 16M              | 3.0          | 3                                       | 1.0                | 1.0             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1800-A-d-Mg1                 | Grade-Entire Stockpile-Placed Cover                           | Northeast Stockpile   | =                         | Cat 16M              | 12.2         | 3                                       | 4.0                | 1.0             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 1901-A-d-Mg1                 | Grade-Top-Placed Cover  | North Stockpile N-1<br>North Stockpile N-2(1)                   | -                         | Cat 16M<br>Cat 16M   | 6.6<br>0.2   | 3                                       | 2.1<br>0.0         | 1.0<br>1.0      | 1.2<br>1.2         | 2,900<br>2,900             | 1.2                        | 16.0<br>16.0                  | 2.0<br>2.0           | 2.5<br>2.5     | 50<br>50              | 0.75<br>0.75       |
| 1902-A-d-Mg1<br>1903-A-d-Mg1 | Grade-Top-Placed Cover Grade-Top-Placed Cover                 | North Stockpile N-2(1)  | -                         | Cat 16M              | 0.2          | ა                                       | 0.0                | 1.0             | 1.2                | 2,900                      | 1.2<br>1.2                 | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 2201-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | 9 Waste Rock 9 WRS-1  | _                         | Cat 16M              | 65.7         | 5                                       | 13.8               | 1.6             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 2202-A-d-Mg1                 | Grade-Top-Placed Cover  | 9 Waste Rock 9 WRS-2  | _                         | Cat 16M              | 95.5         | 3                                       | 30.9               | 1.0             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 2309-A-d-Ma1                 | Grade-Dam 15-Placed Cover                                     | Dams and Reservoirs Dam 15                                      | _                         | Cat 16M              | 0.1          | 3                                       | 0.0                | 1.0             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 2310-A-d-Mg1                 | Grade-Dam 16-Placed Cover                                     | Dams and Reservoirs Dam 16                                      | =                         | Cat 16M              | 0.1          | 3                                       | 0.0                | 1.0             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 2313-A-d-Mg1                 | Grade-Dam 20-Placed Cover                                     | Dams and Reservoirs Dam 20                                      | -                         | Cat 16M              | 0.3          | 3                                       | 0.1                | 1.0             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 2316-A-d-Mg1                 | Grade-Reservoir 17-Placed Cover                               | Dams and Reservoirs Reservoir 17                                | =                         | Cat 16M              | 3.4          | 3                                       | 1.1                | 1.0             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 2318-A-d-Mg1                 | Grade-Fleming Pond-Placed Cover                               | Dams and Reservoirs Fleming Pond                                | -                         | Cat 16M              | 8.0          | 3                                       | 0.3                | 1.0             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 2320-A-d-Mg1                 | Grade-Tailing Thickener 1-Placed Cover                        | Dams and Reservoirs Tailing Thickener 1                         | -                         | Cat 16M              | 2.6          | 3                                       | 0.8                | 1.0             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 2321-A-d-Mg1                 | Grade-PLS Pond & Launder-Placed Cover                         | Dams and Reservoirs PLS Pond & Launder                          | -                         | Cat 16M              | 0.3          | 3                                       | 0.1                | 1.0             | 1.2                | 2,900                      | 1.2                        |                               | 2.0                  | 2.5            | 50                    | 0.75               |
| 2323-A-d-Mg1                 | Grade-Raffinate Pond-Placed Cover                             | Dams and Reservoirs Raffinate Pond                              | -                         | Cat 16M              | 0.1          | 3                                       | 0.0                | 1.0             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50                    | 0.75               |
| 2324-A-d-Mg1                 | Grade-Reservoir 2-Placed Cover                                | Dams and Reservoirs Reservoir 2                                 | -                         | Cat 16M              | 0.2          | 3                                       | 0.1                | 1.0             | 1.2                | 2,900                      | 1.2                        | 16.0                          | 2.0                  | 2.5            | 50<br>50              | 0.75               |
| 2327-A-d-Mg1<br>2328-A-d-Mg1 | Grade-Reservoir 6-Placed Cover Grade-Reservoir 7-Placed Cover | Dams and Reservoirs Reservoir 6 Dams and Reservoirs Reservoir 7 | -                         | Cat 16M<br>Cat 16M   | 1.5<br>2.4   | 3                                       | 0.5<br>0.8         | 1.0<br>1.0      | 1.2<br>1.2         | 2,900<br>2,900             | 1.2<br>1.2                 | 16.0<br>16.0                  | 2.0<br>2.0           | 2.5<br>2.5     | 50<br>50              | 0.75<br>0.75       |
| 2341-A-d-Mg1                 | Grade-Elmo's Pond -Placed Cover                               |   | -                         | Cat 16M              | 1.2          | ა<br>2                                  | 0.4                | 1.0             | 1.2                | 2,900                      | 1.2                        |                               | 2.0                  | 2.5            | 50                    | 0.75               |
| 2342-A-d-Mg1                 | Grade-Lower Lined Pond -Placed Cover                          | D   | -                         | Cat 16M              | 2.2          | 3                                       | 0.4                | 1.0             | 1.2                | 2,900                      | 1.2                        |                               | 2.0                  | 2.5            | 50                    | 0.75               |
| 2343-A-d-Mg1                 | Grade-Upper Lined Pond -Placed Cover                          |   | -                         | Cat 16M              | 0.4          | 3                                       | 0.1                | 1.0             | 1.2                | 2,900                      | 1.2                        |                               | 2.0                  | 2.5            | 50                    | 0.75               |
| 2344-A-d-Mg1                 | Grade-5900 PLS Sump -Placed Cover                             | 5 5000 510 0  | -                         | Cat 16M              | 0.6          | 3                                       | 0.2                | 1.0             | 1.2                | 2,900                      | 1.2                        |                               | 2.0                  | 2.5            | 50                    | 0.75               |
|                              | 1   |   |                           |                      |              | · ·                                     |                    |                 |                    | _,•                        |                            | . 3.0                         |                      | 0              | 30                    |                    |

# Productivity and Hours Required for Motorgrader Use---Grading

# Assumptions:

Productivity (based on area of overall stockpile) = Sq.ft per hour = Speed x (Eff. Blade L -Blade Overlap) x Efficiency (Cat. Handbook Edition 47 pg 11-27)

Max. safe slope for motor graders is 2:1 (50%), proposed final grade for Chino cover grading on stockpiles is 33%, therefore use of graders an option (Cat. Handbook Edition 46 pg 11-30)

Grade Factor = -0.02(Grade %) + 1

|              |   |   | Destination | Grading   |           | Grading Shaping      | Task Time | Grade  | Material | Material       | Production   | Effective Blade | Pass Overlap | Speed | Work Hour | Operator |
|--------------|---|---|-------------|-----------|-----------|----------------------|-----------|--------|----------|----------------|--------------|-----------------|--------------|-------|-----------|----------|
| ID           | Task Description                                    | Source Location 1                                 | Location 2  | Equipment | Area (ac) | Productivity (ac/hr) | (hrs)     | Factor | Factor   | Weight (lb/cy) | Method/Blade | Width (ft)      | (ft)         | (mph) | (min/hr)  | Factor   |
| 2345-A-d-Mg1 | Grade-6300 PLS Booster Station -Placed Cover        | Dams and Reservoirs 6300 PLS Booster Station      | -           | Cat 16M   | 0.0       | 3                    | 0.0       | 1.0    | 1.2      | 2,900          | 1.2          | 16.0            | 2.0          | 2.5   | 50        | 0.75     |
| 2346-A-d-Mg1 | Grade-Lee Hill #2 Booster -Placed Cover             | Dams and Reservoirs Lee Hill #2 Booster           | -           | Cat 16M   | 0.1       | 3                    | 0.0       | 1.0    | 1.2      | 2,900          | 1.2          | 16.0            | 2.0          | 2.5   | 50        | 0.75     |
| 2400-A-d-Mg1 | Grade-Previously Reclaimed-Placed Cover             | Ground Hog #5                                     | -           | Cat 16M   | 2.0       | 3                    | 0.7       | 1.0    | 1.2      | 2,900          | 1.2          | 16.0            | 2.0          | 2.5   | 50        | 0.75     |
| 2512-A-d-Mg1 | Grade-East Pit Access Disturbed Area-Placed Cover   | Miscellaneous NMA East Pit Access Disturbed Area  | =           | Cat 16M   | 3.7       | 3                    | 1.2       | 1.0    | 1.2      | 2,900          | 1.2          | 16.0            | 2.0          | 2.5   | 50        | 0.75     |
| 2513-A-d-Mg1 | Grade-Chino part of Cobre Haul Road-Placed Cover    | Miscellaneous NMA Chino part of Cobre Haul Road   | =           | Cat 16M   | 3         | 3                    | 1.1       | 1.0    | 1.2      | 2,900          | 1.20         | 16.00           | 2.00         | 2.50  | 50        | 0.75     |
| 2514-A-d-Mg1 | Grade-Highway to Heaven Haul Road-Placed Cover      | Miscellaneous NMA Highway to Heaven Haul Road     | =           | Cat 16M   | 32        | 3                    | 10.7      | 1.0    | 1.2      | 2,900          | 1.20         | 16.00           | 2.00         | 2.50  | 50        | 0.75     |
| 2515-A-d-Mg1 | Grade-Disturbed Area Around Reservoir 5-Placed Cove | r Miscellaneous NMA Disturbed Area Around Reservo | =           | Cat 16M   | 32        | 3                    | 10.7      | 1.0    | 1.2      | 2,900          | 1.20         | 16.00           | 2.00         | 2.50  | 50        | 0.75     |
| 3307-A-d-Mg1 | Grade-Filter Plant-Placed Cover                     | Miscellaneous NMA Filter Plant                    | -           | Cat 16M   | 17        | 3                    | 5.6       | 1.0    | 1.2      | 2,900          | 1.20         | 16.00           | 2.00         | 2.50  | 50        | 0.75     |
| 2600-A-d-Mg1 | Grade-200-Acre Unplanned Future Disturbance-Placed  | C Unplanned Disturbed Area                        | -           | Cat 16M   | 200.0     | 3                    | 66.0      | 1.0    | 1.2      | 2,900          | 1.2          | 16.0            | 2.0          | 2.5   | 50        | 0.75     |
| 3308-A-d-Mg1 | Grade-35 Acre Misc. Area-Placed Cover               | Miscellaneous SMA 35 Acre Misc. Area              | -           | Cat 16M   | 35        | 3                    | 11.6      | 1.0    | 1.2      | 2,900          | 1.20         | 16.00           | 2.00         | 2.50  | 50        | 0.75     |

|                              |   |  |                        | 1   | Lube,                | Tires, GEC, &                  |                    |                 |                    |                            | Direct Lube, Tires,                       |                        |                            |  |                            |
|------------------------------|---|--|------------------------|---|----------------------|--------------------------------|--------------------|-----------------|--------------------|----------------------------|---|------------------------|----------------------------|--|----------------------------|
|                              |   |  |                        |   |                      | Parts Adjusted<br>al Cost (w/o |                    | Number of Units |                    |                            | GEC, & Field Parts<br>djusted Rental Cost |                        |                            |  |                            |
| ID                           | Description   | Source Location 1  | Destination Location 2 | Equipment   |                      | uel) (\$/hr)                   | Labor Cost (\$/hr) | (Equipment)     | Time Req'd (hrs)   | Direct Fuel Cost (\$)      | (w/o fuel) (\$)                           | Direct Labor Cost (\$) | Total Equipment Cost (\$)  | Total Production Volume (CY)                   | Total Production Area (AC) |
| 1101-E-a-Rp1                 | Rip-Outslope-Existing Ground  | South Stockpile S-1  |                        | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H) | \$69.62<br>\$69.62   | \$259.35<br>\$259.35           | \$27.41<br>\$27.41 | 1               | 2.2                | \$154<br>\$2.074           | \$573<br>\$7,727                          | \$61<br>\$817          | \$788                      |  | 6.4<br>86.9                |
| 1102-E-a-Rp1<br>1103-E-a-Rp1 | Rip-Outslope-Existing Ground<br>Rip-Outslope-Existing Ground  | South Stockpile S-2<br>South Stockpile S-3   | -                      | Cat D111 CD Multi-shank (w/ MSR-359H)                                       | \$69.62              | \$259.35                       | \$27.41            | 1               | 29.8<br>26.1       | \$2,074<br>\$1,814         | \$7,727<br>\$6,758                        | \$714                  | \$10,618<br>\$9,287        |  | 76.0                       |
| 1104-E-a-Rp1                 | Rip-Outslope-Existing Ground  | South Stockpile S-4  | -                      | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | \$69.62              | \$259.35                       | \$27.41            | 1               | 13.0               | \$904                      | \$3,369                                   | \$356                  | \$4,629                    | -  | 37.9                       |
| 1105-E-a-Rp1<br>1106-E-a-Rp1 | Rip-Outslope-Existing Ground<br>Rip-Outslope-Existing Ground  | South Stockpile S-5<br>South Stockpile S-6   | -                      | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H) | \$69.62<br>\$69.62   | \$259.35<br>\$259.35           | \$27.41<br>\$27.41 | 1               | 28.3<br>31.3       | \$1,973<br>\$2,177         | \$7,350<br>\$8,111                        | \$777<br>\$857         | \$10,100<br>\$11,145       |  | 82.6<br>91.2               |
| 1107-E-a-Rp1                 | Rip-Outslope-Existing Ground  | South Stockpile S-7  | -                      | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | \$69.62              | \$259.35                       | \$27.41            | 1               | 16.3               | \$1,138                    | \$4,238                                   | \$448                  | \$5,823                    | -  | 47.6                       |
| 1108-E-a-Rp1<br>1109-E-a-Rp1 | Rip-Outslope-Existing Ground<br>Rip-Outslope-Existing Ground  | South Stockpile S-8<br>South Stockpile S-9(1)  | -                      | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H) | \$69.62<br>\$69.62   | \$259.35<br>\$259.35           | \$27.41<br>\$27.41 | 1               | 23.3<br>0.9        | \$1,619<br>\$61            | \$6,031<br>\$227                          | \$637<br>\$24          | \$8,288<br>\$312           |  | 67.8<br>2.6                |
| 1207-E-a-Rp1                 | Rip-Outslope-Existing Ground  | West Stockpile W-7   | -                      | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | \$69.62              | \$259.35                       | \$27.41            | 1               | 11.4               | \$793                      | \$2,954                                   | \$312                  | \$4,059                    | -  | 33.2                       |
| 1209-E-a-Rp1                 | Rip-Outslope-Existing Ground  | West Stockpile W-8(1)  | -                      | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | \$69.62              | \$259.35                       | \$27.41<br>\$27.41 | 1               | 11.6               | \$810                      | \$3,016                                   | \$319                  | \$4,145<br>\$4.145         | -  | 33.9<br>33.9               |
| 1210-E-a-Rp1<br>1211-E-a-Rp1 | Rip-Outslope-Existing Ground<br>Rip-Outslope-Existing Ground  | West Stockpile W-8(2) West Stockpile W-9   | -                      | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H) | \$69.62<br>\$69.62   | \$259.35<br>\$259.35           | \$27.41            | 1               | 11.6<br>9.3        | \$810<br>\$647             | \$3,016<br>\$2,412                        | \$319<br>\$255         | \$4,145<br>\$3,314         | -  | 33.9<br>27.1               |
| 1212-E-a-Rp1                 | Rip-Outslope-Existing Ground  | West Stockpile W-10  | -                      | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | \$69.62              | \$259.35                       | \$27.41            | 1               | 7.4                | \$513                      | \$1,911                                   | \$202                  | \$2,626                    | -  | 21.5                       |
| 1213-E-a-Rp1<br>1301-E-a-Rp1 | Rip-Outslope-Existing Ground<br>Rip-Outslope-Existing Ground  | West Stockpile W-11<br>Lambright Stockpile LB-1                                      | -                      | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H) | \$69.62<br>\$69.62   | \$259.35<br>\$259.35           | \$27.41<br>\$27.41 | 1               | 8.2<br>24.5        | \$570<br>\$1,704           | \$2,124<br>\$6,350                        | \$224<br>\$671         | \$2,918<br>\$8,725         |  | 23.9<br>71.4               |
| 1302-E-a-Rp1                 | Rip-Outslope-Existing Ground  | Lambright Stockpile LB-2   | -                      | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | \$69.62              | \$259.35                       | \$27.41            | i               | 13.1               | \$915                      | \$3,408                                   | \$360                  | \$4,684                    | -  | 38.3                       |
| 1303-E-a-Rp1<br>1304-E-a-Rp1 | Rip-Outslope-Existing Ground<br>Rip-Outslope-Existing Ground  | Lambright Stockpile LB-3<br>Lambright Stockpile LB-4                                 | -                      | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H) | \$69.62<br>\$69.62   | \$259.35<br>\$259.35           | \$27.41<br>\$27.41 | 1               | 11.4<br>14.3       | \$792<br>\$994             | \$2,950<br>\$3,704                        | \$312<br>\$391         | \$4,054<br>\$5,089         | -  | 33.2<br>41.6               |
| 1305-E-a-Rp1                 | Rip-Outslope-Existing Ground  | Lambright Stockpile LB-5   | -                      | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | \$69.62              | \$259.35                       | \$27.41            | i               | 19.8               | \$1,378                    | \$5,704<br>\$5,135                        | \$543                  | \$7,056                    |  | 57.7                       |
| 1306-E-a-Rp1                 | Rip-Outslope-Existing Ground  | Lambright Stockpile LB-6   | -                      | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | \$69.62              | \$259.35                       | \$27.41            | 1               | 4.9                | \$338                      | \$1,260                                   | \$133                  | \$1,731                    | -  | 14.2                       |
| 1307-E-a-Rp1<br>1308-E-a-Rp1 | Rip-Outslope-Existing Ground Rip-Outslope-Existing Ground   | Lambright Stockpile LB-7(1) Lambright Stockpile LB-7(2)                              | -                      | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H) | \$69.62<br>\$69.62   | \$259.35<br>\$259.35           | \$27.41<br>\$27.41 | 1               | 3.8<br>2.4         | \$264<br>\$165             | \$982<br>\$615                            | \$104<br>\$65          | \$1,349<br>\$845           | -  | 11.0<br>6.9                |
| 1309-E-a-Rp1                 | Rip-Outslope-Existing Ground  | Lambright Stockpile LB-8   | -                      | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | \$69.62              | \$259.35                       | \$27.41            | 1               | 12.2               | \$847                      | \$3,155                                   | \$333                  | \$4,335                    | -  | 35.5                       |
| 1310-E-a-Rp1                 | Rip-Outslope-Existing Ground  | Lambright Stockpile LB-9   | -                      | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | \$69.62              | \$259.35                       | \$27.41            | 1               | 16.3               | \$1,133                    | \$4,222                                   | \$446                  | \$5,802                    | -  | 47.5                       |
| 1311-E-a-Rp1<br>1312-E-a-Rp1 | Rip-Outslope-Existing Ground<br>Rip-Outslope-Existing Ground  | Lambright Stockpile LB-10<br>Lambright Stockpile LB-11                               | -                      | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H) | \$69.62<br>\$69.62   | \$259.35<br>\$259.35           | \$27.41<br>\$27.41 | 1               | 20.8<br>12.1       | \$1,447<br>\$842           | \$5,389<br>\$3,137                        | \$570<br>\$332         | \$7,405<br>\$4,311         | -  | 60.6<br>35.3               |
| 1313-E-a-Rp1                 | Rip-Outslope-Existing Ground  | Lambright Stockpile LB-12  | -                      | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | \$69.62              | \$259.35                       | \$27.41            | 1               | 40.9               | \$2,848                    | \$10,609                                  | \$1,121                | \$14,578                   | -  | 119.3                      |
| 1314-E-a-Rp1<br>1315-E-a-Rp1 | Rip-Outslope-Existing Ground<br>Rip-Outslope-Existing Ground  | Lambright Stockpile LB-13<br>Lambright Stockpile LB-14                               |                        | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H) | \$69.62<br>\$69.62   | \$259.35<br>\$259.35           | \$27.41<br>\$27.41 | 1<br>1          | 28.7<br>17.7       | \$1,998<br>\$1,233         | \$7,445<br>\$4,594                        | \$787<br>\$486         | \$10,231<br>\$6,313        | •  | 83.7<br>51.6               |
| 2316-K-a-Ex1                 | Perforate Liner-Reservoir 17-Existing Ground  | Dams and Reservoirs Reservoir 17   |                        | Cat 319D L  | \$12.29              | \$52.38                        | \$27.70            | 1               | 2.1                | \$25                       | \$108                                     | \$57                   | \$190                      |  | 3.4                        |
| 2318-K-a-Ex1<br>2320-K-a-Ex1 | Perforate Liner-Fleming Pond-Existing Ground Perforate Liner-Tailing Thickener 1-Existing Ground                  | Dams and Reservoirs Fleming Pond Dams and Reservoirs Tailing Thickener 1             | -                      | Cat 319D L<br>Cat 319D L  | \$12.29<br>\$12.29   | \$52.38<br>\$52.38             | \$27.70<br>\$27.70 | 1               | 0.5<br>1.6         | \$6<br>\$20                | \$25<br>\$83                              | \$13<br>\$44           | \$44<br>\$147              | •  | 0.8<br>2.6                 |
| 2320-K-a-Ex1<br>2321-K-a-Ex1 | Perforate Liner-Tailing Trickener 1-Existing Ground Perforate Liner-PLS Pond & Launder-Existing Ground            | Dams and Reservoirs Tailing Trickener 1  Dams and Reservoirs PLS Pond & Launder      |                        | Cat 319D L  | \$12.29<br>\$12.29   | \$52.38<br>\$52.38             | \$27.70            | 1               | 0.2                | \$20<br>\$2                | ъоз<br>\$8                                | \$44<br>\$4            | \$147<br>\$15              |  | 0.3                        |
| 2323-K-a-Ex1                 | Perforate Liner-Raffinate Pond-Existing Ground  | Dams and Reservoirs Raffinate Pond   | -                      | Cat 319D L  | \$12.29              | \$52.38                        | \$27.70            | 1               | 0.1                | \$1                        | \$4                                       | \$2                    | \$6                        | -  | 0.1                        |
| 2342-K-a-Ex1<br>2343-K-a-Ex1 | Perforate Liner-Lower Lined Pond -Existing Ground Perforate Liner-Upper Lined Pond -Existing Ground               | Dams and Reservoirs Lower Lined Pond Dams and Reservoirs Upper Lined Pond            | -                      | Cat 319D L<br>Cat 319D L  | \$12.29<br>\$12.29   | \$52.38<br>\$52.38             | \$27.70<br>\$27.70 | 1               | 1.4<br>0.3         | \$17<br>\$3                | \$71<br>\$13                              | \$38<br>\$7            | \$126<br>\$23              | Ī.   | 2.2<br>0.4                 |
| 2344-K-a-Ex1                 | Perforate Liner-5900 PLS Sump -Existing Ground  | Dams and Reservoirs 5900 PLS Sump  | -                      | Cat 319D L  | \$12.29              | \$52.38                        | \$27.70            | 1               | 0.3                | \$4                        | \$18                                      | \$10                   | \$32                       | -  | 0.6                        |
| 2345-K-a-Ex1<br>2346-K-a-Ex1 | Perforate Liner-6300 PLS Booster Station -Existing Ground<br>Perforate Liner-Lee Hill #2 Booster -Existing Ground | Dams and Reservoirs 6300 PLS Booster Station Dams and Reservoirs Lee Hill #2 Booster | -                      | Cat 319D L<br>Cat 319D L  | \$12.29<br>\$12.29   | \$52.38<br>\$52.38             | \$27.70<br>\$27.70 | 1               | 0.0                | \$0<br>\$1                 | \$1<br>\$4                                | \$1<br>\$2             | \$2                        | -  | 0.0<br>0.1                 |
| 1001-A-a-Dz2                 | Grade-Outslope-Existing Ground  | Triangle Stockpile T-1   | -                      | Cat D11T CD   | \$69.62              | \$254.44                       | \$27.41            | i               | 5,059.7            | \$352,229                  | \$1,287,393                               | \$138,685              | \$1,778,308                | 3,074,286                                      |                            |
| 1002-A-a-Mg1                 | Grade-Top-Existing Ground   | Triangle Stockpile T-2   | -                      | Cat 16M   | \$22.23              | \$93.51                        | \$27.41            | 1               | 1.6                | \$35                       | \$149                                     | \$44                   | \$228                      |  | 4.8                        |
| 1101-B-a-Dz3<br>1102-B-a-Dz3 | Dozer Assist Scraper Grading-Outslope-Existing Ground Dozer Assist Scraper Grading-Outslope-Existing Ground       | South Stockpile S-1<br>South Stockpile S-2   | -                      | Cat D9T, SU Blade<br>Cat D9T, SU Blade                                      | \$33.58<br>\$33.58   | \$198.37<br>\$198.37           | \$27.41<br>\$27.41 | 1               | 0.2<br>0.2         | \$6<br>\$6                 | \$38<br>\$33                              | \$5<br>\$5             | \$50<br>\$44               | 348,05°<br>4.690.126                           |                            |
| 1103-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground   | South Stockpile S-3  | -                      | Cat D9T, SU Blade   | \$33.58              | \$198.37                       | \$27.41            | 1               | 0.3                | \$10                       | \$57                                      | \$8                    | \$75                       | 4,101,997                                      | 7 -                        |
| 1104-B-a-Dz3<br>1105-B-a-Dz3 | Dozer Assist Scraper Grading-Outslope-Existing Ground<br>Dozer Assist Scraper Grading-Outslope-Existing Ground    | South Stockpile S-4<br>South Stockpile S-5   | -                      | Cat D9T, SU Blade<br>Cat D9T, SU Blade                                      | \$33.58<br>\$33.58   | \$198.37<br>\$198.37           | \$27.41<br>\$27.41 | 1               | 0.3<br>0.3         | \$9<br>\$10                | \$52<br>\$57                              | \$7<br>\$8             | \$68<br>\$75               | 2,044,550<br>4,461,300                         |                            |
| 1106-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground   | South Stockpile S-6  | -                      | Cat D9T, SU Blade   | \$33.58              | \$198.37                       | \$27.41            | 1               | 0.3                | \$10                       | \$57                                      | \$8                    | \$75<br>\$75               | 4,922,868                                      |                            |
| 1107-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground   | South Stockpile S-7  | -                      | Cat D9T, SU Blade   | \$33.58              | \$198.37                       | \$27.41            | 1               | 0.3                | \$10                       | \$57                                      | \$8                    | \$75                       | 2,572,15                                       |                            |
| 1108-B-a-Dz3<br>1109-B-a-Dz3 | Dozer Assist Scraper Grading-Outslope-Existing Ground<br>Dozer Assist Scraper Grading-Outslope-Existing Ground    | South Stockpile S-8<br>South Stockpile S-9(1)  | -                      | Cat D9T, SU Blade<br>Cat D9T, SU Blade                                      | \$33.58<br>\$33.58   | \$198.37<br>\$198.37           | \$27.41<br>\$27.41 | 1               | 0.3<br>0.6         | \$11<br>\$20               | \$67<br>\$119                             | \$9<br>\$16            | \$87<br>\$156              | 3,660,779<br>137,679                           |                            |
| 1207-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground   | West Stockpile W-7   | -                      | Cat D9T, SU Blade   | \$33.58              | \$198.37                       | \$27.41            | i               | 0.3                | \$9                        | \$52                                      | \$7                    | \$68                       | 2,249,293                                      | -                          |
| 1209-B-a-Dz3<br>1210-B-a-Dz3 | Dozer Assist Scraper Grading-Outslope-Existing Ground<br>Dozer Assist Scraper Grading-Outslope-Existing Ground    | West Stockpile W-8(1)<br>West Stockpile W-8(2)                                       | -                      | Cat D9T, SU Blade<br>Cat D9T, SU Blade                                      | \$33.58<br>\$33.58   | \$198.37<br>\$198.37           | \$27.41<br>\$27.41 | 1               | 0.3<br>0.3         | \$9<br>\$10                | \$52<br>\$62                              | \$7<br>\$9             | \$68<br>\$81               | 347,445<br>2,250,30                            |                            |
| 1210-B-a-D23<br>1211-B-a-Dz3 | Dozer Assist Scraper Grading-Outslope-Existing Ground  Dozer Assist Scraper Grading-Outslope-Existing Ground      | West Stockpile W-9(2)  | -                      | Cat D9T, SU Blade   | \$33.58              | \$198.37                       | \$27.41            | 1               | 0.4                | \$13                       | \$76                                      | \$9<br>\$11            | \$100                      | 1,195,526                                      |                            |
| 1212-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground   | West Stockpile W-10  | -                      | Cat D9T, SU Blade   | \$33.58              | \$198.37                       | \$27.41            | 1               | 0.4                | \$13                       | \$76                                      | \$11                   | \$100                      | 640,632  |                            |
| 1213-B-a-Dz3<br>1301-B-a-Dz3 | Dozer Assist Scraper Grading-Outslope-Existing Ground Dozer Assist Scraper Grading-Outslope-Existing Ground       | West Stockpile W-11<br>Lambright Stockpile LB-1                                      | -                      | Cat D9T, SU Blade<br>Cat D9T, SU Blade                                      | \$33.58<br>\$33.58   | \$198.37<br>\$198.37           | \$27.41<br>\$27.41 | 1               | 0.4<br>0.3         | \$13<br>\$9                | \$76<br>\$52                              | \$11<br>\$7            | \$100<br>\$68              | 4,495,590<br>2,592,130                         |                            |
| 1302-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground   | Lambright Stockpile LB-2   | -                      | Cat D9T, SU Blade   | \$33.58              | \$198.37                       | \$27.41            | 1               | 0.3                | \$10                       | \$57                                      | \$8                    | \$75                       | 1,391,37                                       |                            |
| 1303-B-a-Dz3<br>1304-B-a-Dz3 | Dozer Assist Scraper Grading-Outslope-Existing Ground Dozer Assist Scraper Grading-Outslope-Existing Ground       | Lambright Stockpile LB-3<br>Lambright Stockpile LB-4                                 | -                      | Cat D9T, SU Blade<br>Cat D9T, SU Blade                                      | \$33.58<br>\$33.58   | \$198.37<br>\$198.37           | \$27.41<br>\$27.41 | 1               | 0.2<br>0.2         | \$8<br>\$7                 | \$48<br>\$43                              | \$7<br>\$6             | \$62<br>\$56               | 1,204,33 <sup>-</sup><br>1,511,96 <sup>-</sup> | 1 -<br>7 -                 |
| 1305-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground   | Lambright Stockpile LB-5   | -                      | Cat D9T, SU Blade   | \$33.58              | \$198.37                       | \$27.41            | 1               | 0.2                | \$8                        | \$48                                      | \$7                    | \$62                       | 2,096,307                                      |                            |
| 1306-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground   | Lambright Stockpile LB-6   | -                      | Cat D9T, SU Blade   | \$33.58              | \$198.37                       | \$27.41            | 1               | 0.2                | \$8                        | \$48                                      | \$7                    | \$62                       | 514,29   |                            |
| 1307-B-a-Dz3<br>1308-B-a-Dz3 | Dozer Assist Scraper Grading-Outslope-Existing Ground Dozer Assist Scraper Grading-Outslope-Existing Ground       | Lambright Stockpile LB-7(1) Lambright Stockpile LB-7(2)                              | -                      | Cat D9T, SU Blade<br>Cat D9T, SU Blade                                      | \$33.58<br>\$33.58   | \$198.37<br>\$198.37           | \$27.41<br>\$27.41 | 1               | 0.4<br>0.4         | \$12<br>\$12               | \$71<br>\$71                              | \$10<br>\$10           | \$93<br>\$93               | 400,870<br>251,168                             |                            |
| 1309-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground   | Lambright Stockpile LB-8   | -                      | Cat D9T, SU Blade   | \$33.58              | \$198.37                       | \$27.41            | 1               | 0.2                | \$8                        | \$48                                      | \$7                    | \$62                       | 1,287,895                                      |                            |
| 1310-B-a-Dz3<br>1311-B-a-Dz3 | Dozer Assist Scraper Grading-Outslope-Existing Ground<br>Dozer Assist Scraper Grading-Outslope-Existing Ground    | Lambright Stockpile LB-9<br>Lambright Stockpile LB-10                                |                        | Cat D9T, SU Blade<br>Cat D9T, SU Blade                                      | \$33.58<br>\$33.58   | \$198.37<br>\$198.37           | \$27.41<br>\$27.41 | 1               | 0.2<br>0.2         | \$7<br>\$7                 | \$43<br>\$43                              | \$6<br>\$e             | \$56<br>\$56               | 1,723,54<br>2,199,892                          |                            |
| 1312-B-a-Dz3                 | Dozer Assist Scraper Grading-Outslope-Existing Ground   | Lambright Stockpile LB-11  | -                      | Cat D9T, SU Blade   | \$33.58              | \$198.37                       | \$27.41            | 1               | 0.2                | \$8                        | \$48                                      | \$7                    | \$62                       | 1,280,563                                      |                            |
| 1313-B-a-Dz3<br>1314-B-a-Dz3 | Dozer Assist Scraper Grading-Outslope-Existing Ground   | Lambright Stockpile LB-12  | -                      | Cat D9T, SU Blade<br>Cat D9T, SU Blade                                      | \$33.58<br>\$33.58   | \$198.37<br>\$198.37           | \$27.41<br>\$27.41 | 1               | 0.3<br>0.2         | \$9<br>\$8                 | \$52<br>\$48                              | \$7                    | \$68<br>\$62               | 4,330,838<br>3,039,282                         |                            |
| 1314-B-a-Dz3<br>1315-B-a-Dz3 | Dozer Assist Scraper Grading-Outslope-Existing Ground<br>Dozer Assist Scraper Grading-Outslope-Existing Ground    | Lambright Stockpile LB-13<br>Lambright Stockpile LB-14                               |                        | Cat D91, SU Blade<br>Cat D9T, SU Blade                                      | \$33.58<br>\$33.58   | \$198.37<br>\$198.37           | \$27.41<br>\$27.41 | 1               | 0.2                | \$8<br>\$10                | \$48<br>\$57                              | \$ <i>1</i><br>\$8     | \$62<br>\$75               | 3,039,282<br>1,875,436                         |                            |
| 1101-A-a-Sc2                 | Grade-Outslope-Existing Ground  | South Stockpile S-1  | -                      | Cat 657G  | \$100.29             | \$195.03                       | \$27.41            | 5               | 276.1              | \$138,453                  | \$269,242                                 | \$37,839               | \$445,534                  | 348,05   | 1 -                        |
|                              | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground   | South Stockpile S-2<br>South Stockpile S-3   |                        | Cat 657G<br>Cat 657G  | \$100.29<br>\$100.29 | \$195.03<br>\$195.03           | \$27.41<br>\$27.41 | 5<br>3          | 4,252.0<br>3,615.5 | \$2,132,235<br>\$1,087,834 | \$4,146,441<br>\$2,115,452                | \$582,742<br>\$297,306 | \$6,861,418<br>\$3,500,592 | 4,690,126<br>4,101,997                         |                            |
| 1104-A-a-Sc2                 | Grade-Outslope-Existing Ground  | South Stockpile S-4  |                        | Cat 657G  | \$100.29             | \$195.03                       | \$27.41            | 4               | 1,474.4            | \$591,498                  | \$1,150,255                               | \$161,657              | \$1,903,410                | 2,044,550                                      | -                          |
| 1105-A-a-Sc2<br>1106-A-a-Sc2 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground   | South Stockpile S-5<br>South Stockpile S-6   |                        | Cat 657G<br>Cat 657G  | \$100.29<br>\$100.29 | \$195.03<br>\$195.03           | \$27.41<br>\$27.41 | 3               | 3,932.2<br>4,339.1 | \$1,183,120<br>\$1,305,526 | \$2,300,749<br>\$2,538,786                | \$323,348<br>\$356.801 | \$3,807,217<br>\$4,201,113 | 4,461,300<br>4,922,868                         |                            |
| 1106-A-a-Sc2<br>1107-A-a-Sc2 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground   | South Stockpile S-6<br>South Stockpile S-7   |                        | Cat 657G  | \$100.29             | \$195.03                       | \$27.41<br>\$27.41 | 3               | 2,267.1            | \$1,305,526<br>\$682,126   | \$2,538,786<br>\$1,326,493                | \$356,801<br>\$186,426 | \$4,201,113<br>\$2,195,044 | 2,572,155                                      |                            |
| 1108-A-a-Sc2                 | Grade-Outslope-Existing Ground  | South Stockpile S-8  | -                      | Cat 657G  | \$100.29             | \$195.03                       | \$27.41            | 3               | 2,765.7            | \$832,135                  | \$1,618,209                               | \$227,423              | \$2,677,768                | 3,660,779                                      | -                          |
| 1109-A-a-Sc2<br>1207-A-a-Sc2 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground   | South Stockpile S-9(1) West Stockpile W-7  |                        | Cat 657G<br>Cat 657G  | \$100.29<br>\$100.29 | \$195.03<br>\$195.03           | \$27.41<br>\$27.41 | 2<br>4          | 87.4<br>1,622.1    | \$17,526<br>\$650,732      | \$34,081<br>\$1,265,443                   | \$4,790<br>\$177,846   | \$56,397<br>\$2,094,020    | 137,679<br>2,249,293                           |                            |
| 1209-A-a-Sc2                 | Grade-Outslope-Existing Ground  | West Stockpile W-8(1)  |                        | Cat 657G  | \$100.29             | \$195.03                       | \$27.41            | 4               | 250.6              | \$100,517                  | \$195,471                                 | \$27,472               | \$323,460                  | 347,445  | -                          |
| 1210-A-a-Sc2<br>1211-A-a-Sc2 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground   | West Stockpile W-8(2) West Stockpile W-9   |                        | Cat 657G<br>Cat 657G  | \$100.29<br>\$100.29 | \$195.03<br>\$195.03           | \$27.41<br>\$27.41 | 3               | 1,830.9<br>790.3   | \$550,866<br>\$237,787     | \$1,071,239<br>\$462,411                  | \$150,552<br>\$64,987  | \$1,772,657<br>\$765,185   | 2,250,30°<br>1,195,526                         |                            |
| 1212-A-a-Sc2                 | Grade-Outslope-Existing Ground  | West Stockpile W-10  |                        | Cat 657G  | \$100.29             | \$195.03                       | \$27.41            | 3               | 423.5              | \$127,420                  | \$247,787                                 | \$34,824               | \$410,031                  | 640,632  | 2 -                        |
| 1213-A-a-Sc2                 | Grade-Outslope-Existing Ground  | West Stockpile W-11  | -                      | Cat 657G  | \$100.29             | \$195.03                       | \$27.41            | 3               | 2,971.8            | \$894,160                  | \$1,738,825                               | \$244,375              | \$2,877,360                | 4,495,590                                      | -                          |
| 1301-A-a-Sc2<br>1302-A-a-Sc2 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground   | Lambright Stockpile LB-1<br>Lambright Stockpile LB-2                                 |                        | Cat 657G<br>Cat 657G  | \$100.29<br>\$100.29 | \$195.03<br>\$195.03           | \$27.41<br>\$27.41 | 4               | 1,869.3<br>1,226.4 | \$749,916<br>\$368,986     | \$1,458,321<br>\$717,548                  | \$204,953<br>\$100,844 | \$2,413,190<br>\$1,187,378 | 2,592,130<br>1,391,37                          |                            |
| 1303-A-a-Sc2                 | Grade-Outslope-Existing Ground  | Lambright Stockpile LB-3   |                        | Cat 657G  | \$100.29             | \$195.03                       | \$27.41            | 4               | 955.4              | \$383,261                  | \$745,307                                 | \$104,746              | \$1,233,313                | 1,204,33                                       | 1 -                        |
| 1304-A-a-Sc2<br>1305-A-a-Sc2 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground   | Lambright Stockpile LB-4<br>Lambright Stockpile LB-5                                 |                        | Cat 657G<br>Cat 657G  | \$100.29<br>\$100.29 | \$195.03<br>\$195.03           | \$27.41<br>\$27.41 | 4               | 1,332.7<br>1,662.9 | \$534,624<br>\$667,119     | \$1,039,654<br>\$1,297,311                | \$146,113<br>\$182,324 | \$1,720,391<br>\$2,146,754 | 1,511,967<br>2,096,307                         |                            |
| 1306-A-a-Sc2                 | Grade-Outslope-Existing Ground  | Lambright Stockpile LB-5 Lambright Stockpile LB-6                                    |                        | Cat 657G  | \$100.29             | \$195.03                       | \$27.41            | 4               | 408.0              | \$163,666                  | \$318,272                                 | \$44,730               | \$526,668                  | 514,292  | 2 -                        |
| 1307-A-a-Sc2                 | Grade-Outslope-Existing Ground  | Lambright Stockpile LB-7(1)  | -                      | Cat 657G  | \$100.29             | \$195.03                       | \$27.41            | 3               | 282.7              | \$85,047                   | \$165,387                                 | \$23,244               | \$273,678                  | 400,870  | -                          |
| 1308-A-a-Sc2<br>1309-A-a-Sc2 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground   | Lambright Stockpile LB-7(2) Lambright Stockpile LB-8                                 |                        | Cat 657G<br>Cat 657G  | \$100.29<br>\$100.29 | \$195.03<br>\$195.03           | \$27.41<br>\$27.41 | 3<br>4          | 177.1<br>1,021.6   | \$53,287<br>\$409,854      | \$103,624<br>\$797,021                    | \$14,563<br>\$112,013  | \$171,475<br>\$1,318,888   | 251,168<br>1,287,89                            |                            |
| 1310-A-a-Sc2                 | Grade-Outslope-Existing Ground  | Lambright Stockpile LB-9   |                        | Cat 657G  | \$100.29             | \$195.03                       | \$27.41            | 4               | 1,519.1            | \$609,435                  | \$1,185,136                               | \$166,559              | \$1,961,131                | 1,723,54                                       | 1 -                        |
| 1311-A-a-Sc2                 | Grade-Outslope-Existing Ground  | Lambright Stockpile LB-10  |                        | Cat 657G<br>Cat 657G  | \$100.29<br>\$100.20 | \$195.03                       | \$27.41<br>\$27.41 | 4               | 1,939.0            | \$777,871<br>\$407,521     | \$1,512,683                               | \$212,593<br>\$111,276 | \$2,503,147                | 2,199,892                                      |                            |
| 1312-A-a-Sc2<br>1313-A-a-Sc2 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground   | Lambright Stockpile LB-11<br>Lambright Stockpile LB-12                               |                        | Cat 657G<br>Cat 657G  | \$100.29<br>\$100.29 | \$195.03<br>\$195.03           | \$27.41<br>\$27.41 | 4               | 1,015.8<br>3,123.2 | \$407,521<br>\$1,252,933   | \$792,483<br>\$2,436,511                  | \$111,376<br>\$342,428 | \$1,311,380<br>\$4,031,872 | 1,280,563<br>4,330,838                         |                            |
| 1314-A-a-Sc2                 | Grade-Outslope-Existing Ground  | Lambright Stockpile LB-13  |                        | Cat 657G  | \$100.29             | \$195.03                       | \$27.41            | 4               | 2,411.0            | \$967,207                  | \$1,880,876                               | \$264,339              | \$3,112,422                | 3,039,282                                      | 2 -                        |
| 1315-A-a-Sc2<br>1110-A-a-Mg1 | Grade-Outslope-Existing Ground Grade-Top-Existing Ground  | Lambright Stockpile LB-14<br>South Stockpile S-9(2)                                  |                        | Cat 657G<br>Cat 16M   | \$100.29<br>\$22.23  | \$195.03<br>\$93.51            | \$27.41<br>\$27.41 | 3<br>1          | 1,653.0<br>15.2    | \$497,359<br>\$338         | \$967,186<br>\$1,421                      | \$135,929<br>\$417     | \$1,600,473<br>\$2,176     | 1,875,436                                      | -<br>45.8                  |
|                              | Choosing Ground   |  |                        |   | Ψ22.20               | Q30.01                         | Ψ£7.41             |                 | 13.2               | φοσο                       | Ψ1,721                                    | ₩ <del>-</del> 17      | Ψ2,170                     | •  | ₹3.0                       |

|                              |   |   |                        |  |                    | e, Tires, GEC, &                    |                    |                 |                  |                        | Direct Lube, Tires,                       |                        |                           |                              |                            |
|------------------------------|---|---|------------------------|--|--------------------|-------------------------------------|--------------------|-----------------|------------------|------------------------|---|------------------------|---------------------------|------------------------------|----------------------------|
|                              |   |   |                        |  |                    | d Parts Adjusted<br>ental Cost (w/o |                    | Number of Units |                  |                        | GEC, & Field Parts<br>djusted Rental Cost |                        |                           |                              |                            |
| ID                           | Description   | Source Location 1   | Destination Location 2 | Equipment  | Fuel Cost (\$/hr)  | fuel) (\$/hr)                       | Labor Cost (\$/hr) | (Equipment)     | Time Req'd (hrs) | Direct Fuel Cost (\$)  | (w/o fuel) (\$)                           | Direct Labor Cost (\$) | Total Equipment Cost (\$) | Total Production Volume (CY) | Total Production Area (AC) |
| 1111-A-a-Mg1<br>1201-A-a-Dz2 | Grade-Top-Existing Ground<br>Grade-Outslope-Existing Ground   | South Stockpile S-9(3)<br>West Stockpile W-1                                      | -                      | Cat 16M<br>Cat D11T CD   | \$22.23<br>\$69.62 | \$93.51<br>\$254.44                 | \$27.41<br>\$27.41 | 1               | 13.2<br>2,312.7  | \$293<br>\$160,998     | \$1,233<br>\$588,445                      | \$361<br>\$63,391      | \$1,888<br>\$812,833      | 1,208,008                    | 39.8                       |
| 1202-A-a-Dz2                 | Grade-Outslope-Existing Ground  | West Stockpile W-2  | -                      | Cat D11T CD  | \$69.62            | \$254.44                            | \$27.41            | i               | 2,108.2          | \$146,763              | \$536,419                                 | \$57,786               | \$740,968                 | 1,179,800                    | <u>-</u>                   |
| 1203-A-a-Dz2<br>1204-A-a-Dz2 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground   | West Stockpile W-3<br>West Stockpile W-4  | -                      | Cat D11T CD<br>Cat D11T CD   | \$69.62<br>\$69.62 | \$254.44<br>\$254.44                | \$27.41<br>\$27.41 | 1               | 633.7<br>1,471.5 | \$44,116<br>\$102,435  | \$161,245<br>\$374,401                    | \$17,370<br>\$40,333   | \$222,731<br>\$517,169    | 927,306<br>885,787           | -                          |
| 1204-A-a-DZ2<br>1205-A-a-DZ2 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground   | West Stockpile W-4 West Stockpile W-5   | -                      | Cat D11T CD  | \$69.62<br>\$69.62 | \$254.44<br>\$254.44                | \$27.41<br>\$27.41 | 1               | 1,471.5          | \$102,435<br>\$131,763 | \$374,401<br>\$481,594                    | \$40,333<br>\$51,880   | \$665,238                 | 1,159,889                    |                            |
| 1206-A-a-Dz2                 | Grade-Outslope-Existing Ground  | West Stockpile W-6  | -                      | Cat D11T CD  | \$69.62            | \$254.44                            | \$27.41            | 1               | 1,891.2          | \$131,655              | \$481,198                                 | \$51,837               | \$664,691                 | 1,128,263                    | -                          |
| 1214-A-a-Dz2<br>1215-A-a-Dz2 | Grade-Outslope-Existing Ground<br>Grade-Outslope-Existing Ground  | West Stockpile W-12<br>West Stockpile W-13(1)                                     | -                      | Cat D11T CD<br>Cat D11T CD   | \$69.62<br>\$69.62 | \$254.44<br>\$254.44                | \$27.41<br>\$27.41 | 1               | 316.3<br>44.9    | \$22,019<br>\$3,124    | \$80,479<br>\$11,418                      | \$8,670<br>\$1,230     | \$111,167<br>\$15,771     | 200,360<br>76,881            |                            |
| 1216-A-a-Dz2                 | Grade-Outslope-Existing Ground  | West Stockpile W-13(2)  | -                      | Cat D11T CD  | \$69.62            | \$254.44                            | \$27.41            | 1               | 318.2            | \$22,150               | \$80,959                                  | \$8,721                | \$111,831                 | 296,870                      | -                          |
| 1217-A-a-Dz2                 | Grade-Outslope-Existing Ground  | West Stockpile W-14   | -                      | Cat D11T CD  | \$69.62            | \$254.44                            | \$27.41            | 1               | 282.1            | \$19,638               | \$71,778                                  | \$7,732                | \$99,148                  | 249,433                      | -                          |
| 1218-A-a-Dz2<br>1219-A-a-Mg1 | Grade-Outslope-Existing Ground Grade-Top-Existing Ground  | West Stockpile W-15(1) West Stockpile W-15(2)                                     | -                      | Cat D11T CD<br>Cat 16M   | \$69.62<br>\$22.23 | \$254.44<br>\$93.51                 | \$27.41<br>\$27.41 | 1               | 100.0<br>2.1     | \$6,961<br>\$46        | \$25,443<br>\$192                         | \$2,741<br>\$56        | \$35,145<br>\$294         | 166,736                      | 6.2                        |
| 1220-A-a-Dz2                 | Grade-Outslope-Existing Ground  | West Stockpile W-16(1)  | -                      | Cat D11T CD  | \$69.62            | \$254.44                            | \$27.41            | 1               | 111.1            | \$7,736                | \$28,276                                  | \$3,046                | \$39,058                  | 166,583                      | -                          |
| 1221-A-a-Mg1<br>1222-A-a-Mg1 | Grade-Top-Existing Ground<br>Grade-Top-Existing Ground  | West Stockpile W-16(2)<br>West Stockpile W-17(1)                                  |                        | Cat 16M<br>Cat 16M   | \$22.23<br>\$22.23 | \$93.51<br>\$93.51                  | \$27.41<br>\$27.41 | 1               | 2.3<br>18.5      | \$51<br>\$410          | \$213<br>\$1,726                          | \$63<br>\$506          | \$326<br>\$2,643          |                              | 6.9<br>55.7                |
| 1223-A-a-Mg1                 | Grade-Top-Existing Ground   | West Stockpile W-17(2)  | -                      | Cat 16M  | \$22.23            | \$93.51                             | \$27.41            | 1               | 9.4              | \$209                  | \$880                                     | \$258                  | \$1,347                   | -                            | 28.4                       |
| 1316-A-a-Mg1<br>1317-A-a-Mg1 | Grade-Top-Existing Ground<br>Grade-Top-Existing Ground  | Lambright Stockpile LB-19(1)<br>Lambright Stockpile LB-19(2)                      | -                      | Cat 16M<br>Cat 16M   | \$22.23<br>\$22.23 | \$93.51<br>\$93.51                  | \$27.41<br>\$27.41 | 1               | 11.6<br>14.1     | \$259<br>\$313         | \$1,089<br>\$1,317                        | \$319<br>\$386         | \$1,667<br>\$2,016        | -                            | 35.1<br>42.5               |
| 1401-A-a-Dz2                 | Grade-Outslope-Existing Ground  | Southwest Lampbright SWL-15   | -                      | Cat D11T CD  | \$69.62            | \$254.44                            | \$27.41            | i               | 210.3            | \$14,639               | \$53,504                                  | \$5,764                | \$73,907                  | 303,576                      | -                          |
| 1402-A-a-Dz2                 | Grade-Outslope-Existing Ground  | Southwest Lampbright SWL-16   | -                      | Cat D11T CD  | \$69.62            | \$254.44                            | \$27.41            | 1               | 780.7<br>1.7     | \$54,346               | \$198,634                                 | \$21,398<br>\$48       | \$274,378                 | 531,879                      | -                          |
| 1403-A-a-Mg1<br>1404-A-a-Dz2 | Grade-Top-Existing Ground<br>Grade-Outslope-Existing Ground   | Southwest Lampbright SWL-17<br>Southwest Lampbright SWL-17(1)                     | -                      | Cat 16M<br>Cat D11T CD   | \$22.23<br>\$69.62 | \$93.51<br>\$254.44                 | \$27.41<br>\$27.41 | 1               | 398.8            | \$39<br>\$27,766       | \$162<br>\$101,484                        | \$48<br>\$10,932       | \$248<br>\$140,183        | 405,644                      | 5.2                        |
| 1405-A-a-Dz2                 | Grade-Outslope-Existing Ground  | Southwest Lampbright SWL-17(2)  | -                      | Cat D11T CD  | \$69.62            | \$254.44                            | \$27.41            | 1               | 499.3            | \$34,756               | \$127,031                                 | \$13,685               | \$175,472                 | 446,539                      | -                          |
| 1406-A-a-Dz2<br>1601-A-a-Mg1 | Grade-Outslope-Existing Ground Grade-Top-Existing Ground  | Southwest Lampbright SWL-18<br>Northwest Stockpile NW-1(1)                        |                        | Cat D11T CD<br>Cat 16M   | \$69.62<br>\$22.23 | \$254.44<br>\$93.51                 | \$27.41<br>\$27.41 | 1               | 460.3<br>0.6     | \$32,041<br>\$12       | \$117,110<br>\$52                         | \$12,616<br>\$15       | \$161,767<br>\$79         | 450,060                      | -<br>1.7                   |
| 1602-A-a-Mg1                 | Grade-Top-Existing Ground   | Northwest Stockpile NW-1(2)   | -                      | Cat 16M  | \$22.23            | \$93.51                             | \$27.41            | 1               | 0.6              | \$13                   | \$56                                      | \$16                   | \$85                      | -                            | 1.8                        |
| 1603-A-a-Dz2<br>1604-A-a-Mg1 | Grade-Outslope-Existing Ground<br>Grade-Top-Existing Ground   | Northwest Stockpile NW-2(1) Northwest Stockpile NW-2(2)                           | -                      | Cat D11T CD<br>Cat 16M   | \$69.62<br>\$22.23 | \$254.44<br>\$93.51                 | \$27.41<br>\$27.41 | 1               | 4.9<br>0.1       | \$341<br>\$2           | \$1,245<br>\$8                            | \$134<br>\$2           | \$1,720<br>\$13           | 19,428                       | 0.3                        |
| 1605-A-a-Mg1                 | Grade-Top-Existing Ground Grade-Top-Existing Ground   | Northwest Stockpile NW-2(2) Northwest Stockpile NW-2(3)                           | •                      | Cat 16M  | \$22.23<br>\$22.23 | \$93.51<br>\$93.51                  | \$27.41<br>\$27.41 | 1               | 0.1              | \$2<br>\$2             | \$8                                       | \$2<br>\$2             | \$13<br>\$13              |                              | 0.3                        |
| 1701-A-a-Mg1                 | Grade-Top-Existing Ground   | LeeHill Stockpile LH-2  | -                      | Cat 16M  | \$22.23            | \$93.51                             | \$27.41            | 1               | 7.4              | \$165                  | \$693                                     | \$203                  | \$1,061                   | -                            | 22.4                       |
| 1702-A-a-Mg1<br>1800-A-a-Mg1 | Grade-Top-Existing Ground<br>Grade-Entire Stockpile-Existing Ground                                     | LeeHill Stockpile LH-3<br>Northeast Stockpile                                     | -                      | Cat 16M<br>Cat 16M   | \$22.23<br>\$22.23 | \$93.51<br>\$93.51                  | \$27.41<br>\$27.41 | 1               | 1.0<br>4.1       | \$22<br>\$90           | \$95<br>\$380                             | \$28<br>\$111          | \$145<br>\$581            | -                            | 3.0<br>12.2                |
| 1901-A-a-Mg1                 | Grade-Top-Existing Ground   | North Stockpile N-1   | •                      | Cat 16M  | \$22.23            | \$93.51                             | \$27.41            | 1               | 2.2              | \$49                   | \$205                                     | \$60                   | \$313                     | -                            | 6.6                        |
| 1902-A-a-Mg1<br>1903-A-a-Mg1 | Grade-Top-Existing Ground<br>Grade-Top-Existing Ground  | North Stockpile N-2(1)<br>North Stockpile N-2(2)                                  |                        | Cat 16M<br>Cat 16M   | \$22.23<br>\$22.23 | \$93.51<br>\$93.51                  | \$27.41<br>\$27.41 | 1               | 0.1<br>0.1       | \$1<br>¢1              | \$5<br>\$5                                | \$1<br>\$1             | \$7<br>\$7                | -                            | 0.2<br>0.2                 |
| 2001-A-a-Mg1                 | Grade-Top-Existing Ground   | STS2 S-10   | -                      | Cat 16M  | \$22.23            | \$93.51                             | \$27.41            | 1               | 15.4             | \$341                  | \$1,435                                   | \$421                  | \$2,197                   |                              | 52.7                       |
| 2002-A-a-Dz2<br>2003-A-a-Dz2 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground   | STS2 S-10(1)<br>STS2 S-10(2)  | •                      | Cat D11T CD<br>Cat D11T CD   | \$69.62<br>\$69.62 | \$254.44<br>\$254.44                | \$27.41<br>\$27.41 | 1               | 5.0<br>104.4     | \$350<br>\$7,266       | \$1,278<br>\$26,556                       | \$138<br>\$2,861       | \$1,765<br>\$36,682       | 12,730<br>225,294            | -                          |
| 2101-A-a-Dz2                 | Grade-Outslope-Existing Ground Grade-Outslope-Existing Ground   | Upper South US-1(1)   | -                      | Cat D111 CD  | \$69.62<br>\$69.62 | \$254.44<br>\$254.44                | \$27.41            | 1               | 664.7            | \$46.273               | \$26,556<br>\$169,128                     | \$18,219               | \$233,620                 | 1,657,692                    | -                          |
| 2102-A-a-Mg1                 | Grade-Top-Existing Ground   | Upper South US-1(2)   | -                      | Cat 16M  | \$22.23            | \$93.51                             | \$27.41            | 1               | 10.5             | \$234                  | \$982                                     | \$288                  | \$1,504                   |                              | 36.0                       |
| 2201-A-a-Dz2<br>2202-A-a-Mg1 | Grade-Outslope-Existing Ground Grade-Top-Existing Ground  | 9 Waste Rock 9 WRS-1<br>9 Waste Rock 9 WRS-2                                      | -                      | Cat D11T CD<br>Cat 16M   | \$69.62<br>\$22.23 | \$254.44<br>\$93.51                 | \$27.41<br>\$27.41 | 1               | 110.8<br>31.7    | \$7,712<br>\$704       | \$28,188<br>\$2,961                       | \$3,037<br>\$868       | \$38,937<br>\$4,533       | 399,767                      | 95.5                       |
| 2309-A-a-Dz2                 | Grade-Dam 15-Existing Ground  | Dams and Reservoirs Dam 15  | -                      | Cat D11T CD  | \$69.62            | \$254.44                            | \$27.41            | 1               | 0.4              | \$25                   | \$93                                      | \$10                   | \$128                     | 780                          | -                          |
| 2310-A-a-Dz2<br>2313-A-a-Dz2 | Grade-Dam 16-Existing Ground<br>Grade-Dam 20-Existing Ground  | Dams and Reservoirs Dam 16<br>Dams and Reservoirs Dam 20                          | -                      | Cat D11T CD<br>Cat D11T CD   | \$69.62<br>\$69.62 | \$254.44<br>\$254.44                | \$27.41<br>\$27.41 | 1               | 0.4<br>0.9       | \$25<br>\$60           | \$93<br>\$220                             | \$10<br>\$24           | \$128<br>\$303            | 780<br>1.845                 | -                          |
| 2316-A-a-Dz2                 | Grade-Reservoir 17-Existing Ground  | Dams and Reservoirs Reservoir 17  | -                      | Cat D11T CD  | \$69.62            | \$254.44                            | \$27.41            | i               | 7.7              | \$539                  | \$1,971                                   | \$212                  | \$2,722                   | 16,559                       | -                          |
| 2318-A-a-Dz2                 | Grade-Fleming Pond-Existing Ground  | Dams and Reservoirs Fleming Pond  | -                      | Cat D11T CD  | \$69.62            | \$254.44<br>\$254.44                | \$27.41<br>\$27.41 | 1               | 1.9              | \$133                  | \$485                                     | \$52                   | \$669                     | 4,071                        | -                          |
| 2320-A-a-Dz2<br>2321-A-a-Dz2 | Grade-Tailing Thickener 1-Existing Ground Grade-PLS Pond & Launder-Existing Ground                      | Dams and Reservoirs Tailing Thickener 1 Dams and Reservoirs PLS Pond & Launder    | -                      | Cat D11T CD<br>Cat D11T CD   | \$69.62<br>\$69.62 | \$254.44<br>\$254.44                | \$27.41<br>\$27.41 | 1               | 6.0<br>0.7       | \$419<br>\$51          | \$1,533<br>\$185                          | \$165<br>\$20          | \$2,118<br>\$256          | 12,880<br>1,555              | -                          |
| 2323-A-a-Dz2                 | Grade-Raffinate Pond-Existing Ground  | Dams and Reservoirs Raffinate Pond  | -                      | Cat D11T CD  | \$69.62            | \$254.44                            | \$27.41            | 1               | 0.4              | \$27                   | \$99                                      | \$11                   | \$136                     | 829                          | -                          |
| 2324-A-a-Dz2<br>2327-A-a-Dz2 | Grade-Reservoir 2-Existing Ground Grade-Reservoir 6-Existing Ground                                     | Dams and Reservoirs Reservoir 2<br>Dams and Reservoirs Reservoir 6                | -                      | Cat D11T CD<br>Cat D11T CD   | \$69.62<br>\$69.62 | \$254.44<br>\$254.44                | \$27.41<br>\$27.41 | 1               | 0.6<br>26.2      | \$44<br>\$1,822        | \$162<br>\$6,660                          | \$17<br>\$717          | \$224<br>\$9,199          | 1,361<br>55,956              | -                          |
| 2328-A-a-Dz2                 | Grade-Reservoir 7-Existing Ground   | Dams and Reservoirs Reservoir 7   | -                      | Cat D11T CD  | \$69.62            | \$254.44                            | \$27.41            | 1               | 16.9             | \$1,178                | \$4,304                                   | \$464                  | \$5,945                   | 36,161                       | -                          |
| 2341-A-a-Dz2<br>2342-A-a-Dz2 | Grade-Elmo's Pond -Existing Ground<br>Grade-Lower Lined Pond -Existing Ground                           | Dams and Reservoirs Elmo's Pond Dams and Reservoirs Lower Lined Pond              |                        | Cat D11T CD<br>Cat D11T CD   | \$69.62<br>\$69.62 | \$254.44<br>\$254.44                | \$27.41<br>\$27.41 | 1               | 2.8<br>5.0       | \$195<br>\$351         | \$714<br>\$1,285                          | \$77<br>\$138          | \$987<br>\$1,774          | 6,002<br>10,793              | Ī.                         |
| 2343-A-a-Dz2                 | Grade-Upper Lined Pond -Existing Ground   | Dams and Reservoirs Upper Lined Pond  | -                      | Cat D11T CD  | \$69.62            | \$254.44                            | \$27.41            | i               | 0.9              | \$65                   | \$236                                     | \$25                   | \$326                     | 1,984                        | -                          |
| 2344-A-a-Dz2<br>2345-A-a-Dz2 | Grade-5900 PLS Sump -Existing Ground Grade-6300 PLS Booster Station -Existing Ground                    | Dams and Reservoirs 5900 PLS Sump<br>Dams and Reservoirs 6300 PLS Booster Station | -                      | Cat D11T CD<br>Cat D11T CD   | \$69.62<br>\$69.62 | \$254.44<br>\$254.44                | \$27.41<br>\$27.41 | 1               | 1.3<br>0.1       | \$90<br>\$5            | \$328<br>\$17                             | \$35<br>\$2            | \$454<br>\$24             | 2,759<br>145                 | -                          |
| 2346-A-a-Dz2                 | Grade-Lee Hill #2 Booster -Existing Ground  | Dams and Reservoirs Lee Hill #2 Booster   | -                      | Cat D11T CD  | \$69.62            | \$254.44                            | \$27.41            | 1               | 0.3              | \$22                   | \$81                                      | \$9                    | \$111                     | 678                          |                            |
| 2514-A-a-Mg1                 | Grade-Highway to Heaven Haul Road-Existing Ground   | Miscellaneous NMA Highway to Heaven Haul Road                                     | -                      | Cat 16M  | \$22.23            | \$93.51                             | \$27.41            | 1               | 11.0             | \$244                  | \$1,026                                   | \$301                  | \$1,571                   | -                            | 32.4                       |
| 2600-A-a-Mg1<br>3000-A-a-Mg1 | Grade-200-Acre Unplanned Future Disturbance-Existing Ground<br>Grade-Entire Impoundment-Existing Ground | Unplanned Disturbed Area Axiflo   | -                      | Cat 16M<br>Cat 16M   | \$22.23<br>\$22.23 | \$93.51<br>\$93.51                  | \$27.41<br>\$27.41 | 1               | 67.6<br>28.9     | \$1,504<br>\$642       | \$6,325<br>\$2,699                        | \$1,854<br>\$791       | \$9,683<br>\$4,131        | -                            | 200.0<br>97.1              |
| 3000-A-a-Dz2                 | Grade-Entire Impoundment-Existing Ground  | Axiflo  | -                      | Cat D11T CD  | \$69.62            | \$254.44                            | \$27.41            | 1               | 0.3              | \$18                   | \$68                                      | \$7                    | \$93                      | 296                          | -                          |
| 3100-A-a-Mg1<br>3200-A-a-Mg1 | Grade-Entire Impoundment-Existing Ground<br>Grade-Entire Impoundment-Existing Ground                    | Tailings Pond 6 Tailings Pond 7   | -                      | Cat 16M<br>Cat 16M   | \$22.23<br>\$22.23 | \$93.51<br>\$93.51                  | \$27.41<br>\$27.41 | 1               | 77.8<br>493.5    | \$1,729<br>\$10,971    | \$7,272<br>\$46,148                       | \$2,132<br>\$13,527    | \$11,132<br>\$70,646      | -                            | 261.7<br>1,660.5           |
| 3308-A-a-Mg1                 | Grade-35 Acre Misc. Area-Existing Ground  | Miscellaneous SMA 35 Acre Misc. Area  |                        | Cat 16M  | \$22.23            | \$93.51                             | \$27.41            | i               | 11.8             | \$263                  | \$1,107                                   | \$324                  | \$1,694                   |                              | 35.0                       |
| 1002-E-c-Rp1<br>1110-E-c-Rp1 | Rip-Top-Rough Graded Material<br>Rip-Top-Rough Graded Material  | Triangle Stockpile T-2<br>South Stockpile S-9(2)                                  |                        | Cat D11T CD Multi-shank (w/ MSR-359H)<br>Cat D11T CD Multi-shank (w/ MSR-359H) | \$69.62<br>\$69.62 | \$259.35<br>\$259.35                | \$27.41<br>\$27.41 | 1               | 1.6<br>15.7      | \$115<br>\$1,095       | \$427<br>\$4,078                          | \$45<br>\$431          | \$587<br>\$5,603          | -                            | 4.8<br>45.8                |
| 1111-E-c-Rp1                 | Rip-Top-Rough Graded Material   | South Stockpile S-9(3)  | -                      | Cat D11T CD Multi-shank (w/ MSR-359H)  | \$69.62            | \$259.35                            | \$27.41            | 1               | 13.6             | \$950                  | \$3,538                                   | \$374                  | \$4,861                   |                              | 39.8                       |
| 1219-E-c-Rp1<br>1221-E-c-Rp1 | Rip-Top-Rough Graded Material Rip-Top-Rough Graded Material   | West Stockpile W-15(2)<br>West Stockpile W-16(2)                                  | -                      | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H)    | \$69.62<br>\$69.62 | \$259.35<br>\$259.35                | \$27.41<br>\$27.41 | 1               | 2.1<br>2.4       | \$148<br>\$164         | \$551<br>\$612                            | \$58<br>\$65           | \$757<br>\$841            | •                            | 6.2<br>6.9                 |
| 1222-E-c-Rp1                 | Rip-Top-Rough Graded Material   | West Stockpile W-16(2) West Stockpile W-17(1)                                     | -                      | Cat D111 CD Multi-shank (w/ MSR-359H)  | \$69.62<br>\$69.62 | \$259.35                            | \$27.41            | 1               | 19.1             | \$1,329                | \$4,952                                   | \$523                  | \$6,805                   |                              | 55.7                       |
|                              | Rip-Top-Rough Graded Material   | West Stockpile W-17(2)  | •                      | Cat D11T CD Multi-shank (w/ MSR-359H)  | \$69.62<br>\$69.62 | \$259.35<br>\$259.35                | \$27.41<br>\$27.41 | 1               | 9.7<br>12.0      | \$678<br>\$839         | \$2,524<br>\$3,124                        | \$267<br>\$330         | \$3,469<br>\$4,293        |                              | 28.4<br>35.1               |
| 1316-E-c-Rp1<br>1317-E-c-Rp1 | Rip-Top-Rough Graded Material<br>Rip-Top-Rough Graded Material  | Lambright Stockpile LB-19(1) Lambright Stockpile LB-19(2)                         |                        | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H)    | \$69.62<br>\$69.62 | \$259.35<br>\$259.35                | \$27.41<br>\$27.41 | 1               | 12.0<br>14.6     | \$839<br>\$1,014       | \$3,124<br>\$3,779                        | \$330<br>\$399         | \$4,293<br>\$5,192        | -                            | 35.1<br>42.5               |
| 1403-E-c-Rp1                 | Rip-Top-Rough Graded Material   | Southwest Lampbright SWL-17   | -                      | Cat D11T CD Multi-shank (w/ MSR-359H)  | \$69.62            | \$259.35                            | \$27.41            | 1               | 1.8              | \$125                  | \$465                                     | \$49                   | \$639                     |                              | 5.2                        |
| 1500-E-c-Rp1<br>1601-E-c-Rp1 | Rip-Entire Stockpile-Rough Graded Material<br>Rip-Top-Rough Graded Material                             | South and East In-Pit Stockpiles<br>Northwest Stockpile NW-1(1)                   | •                      | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H)    | \$69.62<br>\$69.62 | \$259.35<br>\$259.35                | \$27.41<br>\$27.41 | 1<br>1          | 15.8<br>0.6      | \$1,098<br>\$40        | \$4,092<br>\$148                          | \$432<br>\$16          | \$5,622<br>\$204          |                              | 46.0<br>1.7                |
| 1602-E-c-Rp1                 | Rip-Top-Rough Graded Material   | Northwest Stockpile NW-1(2)   | •                      | Cat D11T CD Multi-shank (w/ MSR-359H)  | \$69.62            | \$259.35                            | \$27.41            | 1               | 0.6              | \$43                   | \$160                                     | \$17                   | \$219                     | -                            | 1.8                        |
| 1604-E-c-Rp1<br>1605-E-c-Rp1 | Rip-Top-Rough Graded Material<br>Rip-Top-Rough Graded Material  | Northwest Stockpile NW-2(2)<br>Northwest Stockpile NW-2(3)                        |                        | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H)    | \$69.62<br>\$69.62 | \$259.35<br>\$259.35                | \$27.41<br>\$27.41 | 1               | 0.1<br>0.1       | \$7<br>\$6             | \$24<br>\$24                              | \$3<br>\$3             | \$33<br>\$33              |                              | 0.3<br>0.3                 |
| 1701-E-c-Rp1                 | Rip-Top-Rough Graded Material   | LeeHill Stockpile LH-2  | -                      | Cat D11T CD Multi-shank (w/ MSR-359H)  | \$69.62            | \$259.35                            | \$27.41            | 1               | 7.7              | \$534                  | \$1,989                                   | \$210                  | \$2,733                   |                              | 22.4                       |
| 1702-E-c-Rp1                 | Rip-Top-Rough Graded Material   |   | -                      | Cat D11T CD Multi-shank (w/ MSR-359H)  | \$69.62<br>\$69.62 | \$259.35                            | \$27.41<br>\$27.41 | 1               | 1.0              | \$73<br>\$202          | \$271<br>\$1,089                          | \$29<br>\$115          | \$373<br>\$1,497          | -                            | 3.0                        |
| 1800-E-c-Rp1<br>1901-E-c-Rp1 | Rip-Entire Stockpile-Rough Graded Material<br>Rip-Top-Rough Graded Material                             | Northeast Stockpile<br>North Stockpile N-1  | -                      | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H)    | \$69.62<br>\$69.62 | \$259.35<br>\$259.35                | \$27.41<br>\$27.41 | 1               | 4.2<br>2.3       | \$292<br>\$158         | \$1,089<br>\$587                          | \$115<br>\$62          | \$1,497<br>\$807          |                              | 12.2<br>6.6                |
| 1902-E-c-Rp1                 | Rip-Top-Rough Graded Material   | North Stockpile N-2(1)  | -                      | Cat D11T CD Multi-shank (w/ MSR-359H)  | \$69.62            | \$259.35                            | \$27.41            | 1               | 0.1              | \$4                    | \$13                                      | \$1                    | \$18                      |                              | 0.2                        |
| 1903-E-c-Rp1<br>2000-E-c-Rp1 | Rip-Top-Rough Graded Material Rip-Entire Stockpile-Rough Graded Material                                | North Stockpile N-2(2)<br>STS2  | •                      | Cat D11T CD Multi-shank (w/ MSR-359H)<br>Cat D11T CD Multi-shank (w/ MSR-359H) | \$69.62<br>\$69.62 | \$259.35<br>\$259.35                | \$27.41<br>\$27.41 | 1               | 0.1<br>28.7      | \$4<br>\$2,000         | \$14<br>\$7,452                           | \$1<br>\$788           | \$19<br>\$10,240          | -                            | 0.2<br>83.8                |
| 2100-E-c-Rp1                 | Rip-Entire Stockpile-Rough Graded Material  | Upper South   |                        | Cat D11T CD Multi-shank (w/ MSR-359H)  | \$69.62            | \$259.35                            | \$27.41            | i               | 48.9             | \$3,406                | \$12,690                                  | \$1,341                | \$17,437                  |                              | 142.7                      |
| 2202-E-c-Rp1<br>2309-E-c-Rp1 | Rip-Top-Rough Graded Material Rip-Dam 15-Rough Graded Material  | 9 Waste Rock 9 WRS-2<br>Dams and Reservoirs Dam 15                                |                        | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H)    | \$69.62<br>\$69.62 | \$259.35<br>\$259.35                | \$27.41<br>\$27.41 | 1               | 32.8<br>0.0      | \$2,280<br>\$3         | \$8,495<br>\$11                           | \$898<br>\$1           | \$11,673<br>\$15          | -                            | 95.5<br>0.1                |
| 2310-E-c-Rp1                 | Rip-Dam 16-Rough Graded Material  | Dams and Reservoirs Dam 16  | -                      | Cat D11T CD Multi-shank (w/ MSR-359H)  | \$69.62            | \$259.35                            | \$27.41            | 1               | 0.0              | \$3                    | \$11                                      | \$1                    | \$15                      |                              | 0.1                        |
| 2313-E-c-Rp1                 | Rip-Dam 20-Rough Graded Material  | Dams and Reservoirs Dam 20  | •                      | Cat D11T CD Multi-shank (w/ MSR-359H)<br>Cat D11T CD Multi-shank (w/ MSR-359H) | \$69.62<br>\$69.62 | \$259.35<br>\$259.35                | \$27.41<br>\$27.41 | 1               | 0.1<br>1.4       | \$9<br>\$96            | \$34<br>\$357                             | \$4<br>\$38            | \$47<br>\$490             | -                            | 0.3<br>3.4                 |
| 2316-E-c-Rp1<br>2318-E-c-Rp1 | Rip-Reservoir 17-Rough Graded Material Rip-Fleming Pond-Rough Graded Material                           | Dams and Reservoirs Reservoir 17 Dams and Reservoirs Fleming Pond                 | •                      | Cat D11T CD Multi-shank (w/ MSR-359H)  | \$69.62<br>\$69.62 | \$259.35<br>\$259.35                | \$27.41<br>\$27.41 | 1               | 0.3              | \$96<br>\$22           | \$357<br>\$83                             | \$38<br>\$9            | \$490<br>\$114            |                              | 0.8                        |
| 2320-E-c-Rp1                 | Rip-Tailing Thickener 1-Rough Graded Material   | Dams and Reservoirs Tailing Thickener 1   | -                      | Cat D11T CD Multi-shank (w/ MSR-359H)  | \$69.62            | \$259.35                            | \$27.41            | 1               | 1.1              | \$74                   | \$276                                     | \$29                   | \$379                     | -                            | 2.6                        |
| 2321-E-c-Rp1<br>2323-E-c-Rp1 | Rip-PLS Pond & Launder-Rough Graded Material Rip-Raffinate Pond-Rough Graded Material                   | Dams and Reservoirs PLS Pond & Launder<br>Dams and Reservoirs Raffinate Pond      | •                      | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H)    | \$69.62<br>\$69.62 | \$259.35<br>\$259.35                | \$27.41<br>\$27.41 | 1<br>1          | 0.1<br>0.0       | \$7<br>\$3             | \$28<br>\$12                              | \$3<br>\$1             | \$38<br>\$16              |                              | 0.3<br>0.1                 |
| 2324-E-c-Rp1                 | Rip-Reservoir 2-Rough Graded Material   | Dams and Reservoirs Reservoir 2   | •                      | Cat D11T CD Multi-shank (w/ MSR-359H)  | \$69.62            | \$259.35                            | \$27.41            | 1               | 0.1              | \$6                    | \$23                                      | \$2                    | \$32                      | -                            | 0.2                        |
| 2327-E-c-Rp1<br>2328-E-c-Rp1 | Rip-Reservoir 6-Rough Graded Material<br>Rip-Reservoir 7-Rough Graded Material                          |   | -                      | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H)    | \$69.62<br>\$69.62 | \$259.35<br>\$259.35                | \$27.41<br>\$27.41 | 1               | 0.6<br>1.0       | \$43<br>\$69           | \$159<br>\$256                            | \$17<br>\$27           | \$219<br>\$352            |                              | 1.5<br>2.4                 |
| 2341-E-c-Rp1                 | Rip-Elmo's Pond -Rough Graded Material  | Dams and Reservoirs Elmo's Pond   |                        | Cat D11T CD Multi-shank (w/ MSR-359H)  | \$69.62            | \$259.35                            | \$27.41            | i               | 0.5              | \$35                   | \$132                                     | \$14                   | \$181                     | -                            | 1.2                        |
|                              |   |   |                        |  |                    |                                     |                    |                 |                  |                        |   |                        |                           |                              |                            |

|                              |  |   |  |   |                      | Tires, GEC, &                 |                    |                                |                    |                        | Direct Lube, Tires,<br>GEC, & Field Parts |                        |                            |                              |                            |
|------------------------------|--|---|--|---|----------------------|-------------------------------|--------------------|--------------------------------|--------------------|------------------------|---|------------------------|----------------------------|------------------------------|----------------------------|
| ID                           | Description  | Source Location 1   | Destination Location 2   | Equipment   | Ren                  | tal Cost (w/o<br>uel) (\$/hr) | Labor Cost (\$/hr) | Number of Units<br>(Equipment) | Time Req'd (hrs)   |                        | djusted Rental Cost<br>(w/o fuel) (\$)    | Direct Labor Cost (\$) | Total Equipment Cost (\$)  | Total Production Volume (CY) | Total Production Area (AC) |
| 2342-E-c-Rp1<br>2343-E-c-Rp1 | Rip-Lower Lined Pond -Rough Graded Material<br>Rip-Upper Lined Pond -Rough Graded Material                               | Dams and Reservoirs Lower Lined Pond Dams and Reservoirs Upper Lined Pond               | -  | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H) | \$69.62<br>\$69.62   | \$259.35<br>\$259.35          | \$27.41<br>\$27.41 | 1 1                            | 0.9<br>0.2         | \$64<br>\$12           | \$237<br>\$44                             | \$25<br>\$5            | \$325<br>\$60              | -                            | 2.2<br>0.4                 |
| 2344-E-c-Rp1                 | Rip-5900 PLS Sump -Rough Graded Material   | Dams and Reservoirs 5900 PLS Sump   |  | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | \$69.62              | \$259.35                      | \$27.41            | 1                              | 0.2                | \$16                   | \$61                                      | \$6                    | \$83                       | :                            | 0.6                        |
| 2345-E-c-Rp1<br>2346-E-c-Rp1 | Rip-6300 PLS Booster Station -Rough Graded Material<br>Rip-Lee Hill #2 Booster -Rough Graded Material                    | Dams and Reservoirs 6300 PLS Booster Station<br>Dams and Reservoirs Lee Hill #2 Booster |  | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H) | \$69.62<br>\$69.62   | \$259.35<br>\$259.35          | \$27.41<br>\$27.41 | 1                              | 0.0<br>0.1         | \$1<br>\$4             | \$3<br>\$15                               | \$0<br>\$2             | \$4<br>\$20                |                              | 0.0<br>0.1                 |
| 2513-E-c-Rp1                 | Rip-Chino part of Cobre Haul Road-Rough Graded Material  | Miscellaneous NMA Chino part of Cobre Haul Road   | -  | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | \$69.62              | \$259.35                      | \$27.41            | 1                              | 1.1                | \$77                   | \$286                                     | \$30                   | \$392                      |                              | 3.2                        |
| 2514-E-c-Rp1<br>2600-E-c-Rp1 | Rip-Highway to Heaven Haul Road-Rough Graded Material<br>Rip-200-Acre Unplanned Future Disturbance-Rough Graded Material | Miscellaneous NMA Highway to Heaven Haul Road<br>Unplanned Disturbed Area               |  | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H) | \$69.62<br>\$69.62   | \$259.35<br>\$259.35          | \$27.41<br>\$27.41 | 1                              | 11.1<br>68.6       | \$775<br>\$4,775       | \$2,886<br>\$17,790                       | \$305<br>\$1,880       | \$3,965<br>\$24,445        |                              | 32.4<br>200.0              |
| 3000-E-c-Rp1<br>3100-E-c-Rp1 | Rip-Entire Impoundment-Rough Graded Material<br>Rip-Entire Impoundment-Rough Graded Material                             | Axiflo<br>Tailings Pond 6   | •  | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H) | \$69.62<br>\$69.62   | \$259.35<br>\$259.35          | \$27.41<br>\$27.41 | 1                              | 33.3<br>89.7       | \$2,318<br>\$6,247     | \$8,637<br>\$23,274                       | \$913<br>\$2.460       | \$11,868<br>\$31,982       |                              | 97.1<br>261.7              |
| 3200-E-c-Rp1                 | Rip-Entire Impoundment-Rough Graded Material   | Tailings Pond 7   |  | Cat D11T CD Multi-shank (w/ MSR-359H)                                       | \$69.62              | \$259.35                      | \$27.41            | 1                              | 569.5              | \$39,646               | \$147,700                                 | \$15,610               | \$202,956                  | :                            | 1,660.5                    |
| 3301-E-c-Rp1<br>3308-E-c-Rp1 | Rip-Slag Pile Outslopes W side-Rough Graded Material<br>Rip-35 Acre Misc. Area-Rough Graded Material                     | Miscellaneous SMA Slag Pile Outslopes W side<br>Miscellaneous SMA 35 Acre Misc. Area    |  | Cat D11T CD Multi-shank (w/ MSR-359H) Cat D11T CD Multi-shank (w/ MSR-359H) | \$69.62<br>\$69.62   | \$259.35<br>\$259.35          | \$27.41<br>\$27.41 | 1                              | 2.8<br>12.0        | \$196<br>\$836         | \$729<br>\$3.113                          | \$77<br>\$329          | \$1,002<br>\$4,278         | :                            | 8.2<br>35.0                |
| 1000-B-b-Dz2                 | Dozer Assist-Cover   | Upper South   | Triangle Stockpile   | Cat D11T CD   | \$69.62              | \$254.44                      | \$27.41            | 1                              | 153.6              | \$10,694               | \$39,087                                  | \$4,211                | \$53,992                   | 394,621                      | -                          |
| 1100-B-b-Dz2<br>1200-B-b-Dz2 | Dozer Assist-Cover<br>Dozer Assist-Cover   | Upper South & STS2<br>Upper South   | South Stockpile<br>West Stockpile                                | Cat D11T CD<br>Cat D11T CD  | \$69.62<br>\$69.62   | \$254.44<br>\$254.44          | \$27.41<br>\$27.41 | 1                              | 970.4<br>1,005.4   | \$67,552<br>\$69,994   | \$246,901<br>\$255,828                    | \$26,598<br>\$27,559   | \$341,051<br>\$353,382     | 2,829,473<br>3,031,924       |                            |
| 1300-B-b-Dz2<br>1400-B-b-Dz2 | Dozer Assist-Cover   | Upper South & White House Upper South   | Lambright Stockpile<br>Southwest Lampbright                      | Cat D11T CD<br>Cat D11T CD  | \$69.62<br>\$69.62   | \$254.44<br>\$254.44          | \$27.41<br>\$27.41 | 1                              | 1,248.6<br>152.8   | \$86,919<br>\$10,635   | \$317,690<br>\$38.871                     | \$34,223<br>\$4.187    | \$438,832<br>\$53,693      | 3,801,209<br>456,400         | -                          |
| 1500-B-b-Dz2                 | Dozer Assist-Cover   | Upper South   | South and East In-Pit Stockpiles                                 | Cat D11T CD   | \$69.62              | \$254.44                      | \$27.41            | 1                              | 74.1               | \$5,156                | \$18,847                                  | \$2,030                | \$26,033                   | 222,640                      | -                          |
| 1600-B-b-Dz2<br>1700-B-b-Dz2 | Dozer Assist-Cover<br>Dozer Assist-Cover   | Upper South<br>Upper South  | Northwest Stockpile<br>LeeHill Stockpile                         | Cat D11T CD<br>Cat D11T CD  | \$69.62<br>\$69.62   | \$254.44<br>\$254.44          | \$27.41<br>\$27.41 | 1                              | 13.5<br>40.4       | \$942<br>\$2,812       | \$3,443<br>\$10,277                       | \$371<br>\$1,107       | \$4,755<br>\$14,196        | 39,781<br>122,964            |                            |
| 1800-B-b-Dz2                 | Dozer Assist-Cover   | Upper South   | Northeast Stockpile  | Cat D11T CD   | \$69.62              | \$254.44                      | \$27.41            | 1                              | 19.6               | \$1,361                | \$4,975                                   | \$536                  | \$6,871                    | 59,273                       | -                          |
| 1900-B-b-Dz2<br>2200-B-b-Dz2 | Dozer Assist-Cover<br>Dozer Assist-Cover   | Upper South<br>STS2   | North Stockpile<br>9 Waste Rock                                  | Cat D11T CD<br>Cat D11T CD  | \$69.62<br>\$69.62   | \$254.44<br>\$254.44          | \$27.41<br>\$27.41 | 1                              | 11.3<br>294.0      | \$786<br>\$20,464      | \$2,873<br>\$74,797                       | \$310<br>\$8,058       | \$3,969<br>\$103,319       | 33,437<br>780,208            | -<br>-                     |
| 2309-B-b-Dz2<br>2310-B-b-Dz2 | Dozer Assist-Cover Dozer Assist-Cover  | STS2<br>STS2  | Dam 15<br>Dam 16   | Cat D11T CD<br>Cat D11T CD  | \$69.62<br>\$69.62   | \$254.44<br>\$254.44          | \$27.41<br>\$27.41 | 1                              | 0.2<br>0.2         | \$11<br>\$11           | \$41<br>\$41                              | \$4<br>\$4             | \$56<br>\$56               | 484<br>484                   | 1                          |
| 2313-B-b-Dz2                 | Dozer Assist-Cover   | STS2  | Dam 20   | Cat D11T CD   | \$69.62              | \$254.44                      | \$27.41            | 1                              | 0.5                | \$36                   | \$131                                     | \$14                   | \$181                      | 1,549                        |                            |
| 2316-B-b-Dz2<br>2318-B-b-Dz2 | Dozer Assist-Cover<br>Dozer Assist-Cover   | STS2<br>STS2  | Reservoir 17<br>Fleming Pond                                     | Cat D11T CD<br>Cat D11T CD  | \$69.62<br>\$69.62   | \$254.44<br>\$254.44          | \$27.41<br>\$27.41 | 1                              | 5.6<br>1.2         | \$388<br>\$86          | \$1,419<br>\$316                          | \$153<br>\$34          | \$1,960<br>\$436           | 16,262<br>3,775              |                            |
| 2320-B-b-Dz2                 | Dozer Assist-Cover   | STS2  | Tailing Thickener 1  | Cat D11T CD   | \$69.62              | \$254.44                      | \$27.41            | 1                              | 4.2                | \$291                  | \$1,065                                   | \$115                  | \$1,471                    | 12,584                       | -                          |
| 2321-B-b-Dz2<br>2323-B-b-Dz2 | Dozer Assist-Cover<br>Dozer Assist-Cover   | STS2<br>STS2  | PLS Pond & Launder<br>Raffinate Pond                             | Cat D11T CD<br>Cat D11T CD  | \$69.62<br>\$69.62   | \$254.44<br>\$254.44          | \$27.41<br>\$27.41 | 1                              | 0.4<br>0.2         | \$29<br>\$13           | \$105<br>\$46                             | \$11<br>\$5            | \$145<br>\$64              | 1,258<br>532                 |                            |
| 2324-B-b-Dz2<br>2327-B-b-Dz2 | Dozer Assist-Cover Dozer Assist-Cover  | STS2<br>STS2  | Reservoir 2<br>Reservoir 6                                       | Cat D11T CD<br>Cat D11T CD  | \$69.62<br>\$69.62   | \$254.44<br>\$254.44          | \$27.41<br>\$27.41 | 1                              | 0.4<br>2.4         | \$25<br>\$166          | \$93<br>\$607                             | \$10<br>\$65           | \$128<br>\$838             | 1,065<br>7,260               |                            |
| 2328-B-b-Dz2                 | Dozer Assist-Cover   | STS2  | Reservoir 7  | Cat D11T CD   | \$69.62              | \$254.44                      | \$27.41            | 1                              | 3.8                | \$267                  | \$975                                     | \$105                  | \$1,347                    | 11,664                       | -                          |
| 2341-B-b-Dz2<br>2342-B-b-Dz2 | Dozer Assist-Cover<br>Dozer Assist-Cover   | STS2<br>STS2  | Elmo's Pond<br>Lower Lined Pond                                  | Cat D11T CD<br>Cat D11T CD  | \$69.62<br>\$69.62   | \$254.44<br>\$254.44          | \$27.41<br>\$27.41 | 1                              | 2.0<br>3.5         | \$137<br>\$247         | \$502<br>\$902                            | \$54<br>\$97           | \$693<br>\$1,246           | 6,002<br>10,793              |                            |
| 2343-B-b-Dz2                 | Dozer Assist-Cover   | STS2  | Upper Lined Pond   | Cat D11T CD   | \$69.62              | \$254.44                      | \$27.41            | 1                              | 0.7                | \$45                   | \$166                                     | \$18                   | \$229                      | 1,984                        | -                          |
| 2344-B-b-Dz2<br>2345-B-b-Dz2 | Dozer Assist-Cover<br>Dozer Assist-Cover   | STS2<br>STS2  | 5900 PLS Sump<br>6300 PLS Booster Station                        | Cat D11T CD<br>Cat D11T CD  | \$69.62<br>\$69.62   | \$254.44<br>\$254.44          | \$27.41<br>\$27.41 | 1                              | 0.9<br>0.0         | \$64<br>\$3            | \$234<br>\$12                             | \$25<br>\$1            | \$323<br>\$17              | 2,759<br>145                 |                            |
| 2346-B-b-Dz2                 | Dozer Assist-Cover   | STS2  | Lee Hill #2 Booster  | Cat D11T CD   | \$69.62              | \$254.44                      | \$27.41            | 1                              | 0.2                | \$16                   | \$57                                      | \$6                    | \$79                       | 678                          | -                          |
| 2400-B-b-Dz2<br>2512-B-b-Dz2 | Dozer Assist-Cover<br>Dozer Assist-Cover   | STS2<br>STS2  | Ground Hog #5 East Pit Access Disturbed Area                     | Cat D11T CD<br>Cat D11T CD  | \$69.62<br>\$69.62   | \$254.44<br>\$254.44          | \$27.41<br>\$27.41 | 1                              | 1.1<br>6.1         | \$74<br>\$427          | \$270<br>\$1,560                          | \$29<br>\$168          | \$373<br>\$2,155           | 3,227<br>17,763              |                            |
| 2513-B-b-Dz2<br>2514-B-b-Dz2 | Dozer Assist-Cover<br>Dozer Assist-Cover   | STS2<br>STS2  | Chino part of Cobre Haul Road<br>Highway to Heaven Haul Road     | Cat D11T CD<br>Cat D11T CD  | \$69.62<br>\$69.62   | \$254.44<br>\$254.44          | \$27.41<br>\$27.41 | 1                              | 5.1<br>54.2        | \$357<br>\$3,773       | \$1,304<br>\$13,790                       | \$140<br>\$1,486       | \$1,801<br>\$19,049        | 15,536<br>157,015            | -                          |
| 2515-B-b-Dz2                 | Dozer Assist-Cover   | STS2  | Disturbed Area Around Reservoir 5                                | Cat D11T CD   | \$69.62              | \$254.44                      | \$27.41            | 1                              | 56.7               | \$3,950                | \$14,436                                  | \$1,555                | \$19,941                   | 157,213                      |                            |
| 3307-B-b-Dz2<br>2600-B-b-Dz2 | Dozer Assist-Cover<br>Dozer Assist-Cover   | West of Borrow E&H<br>Upper South   | Filter Plant<br>Unplanned Disturbed Area                         | Cat D11T CD<br>Cat D11T CD  | \$69.62<br>\$69.62   | \$254.44<br>\$254.44          | \$27.41<br>\$27.41 | 1                              | 28.5<br>334.1      | \$1,982<br>\$23,260    | \$7,243<br>\$85,017                       | \$780<br>\$9,159       | \$10,006<br>\$117,436      | 82,474<br>968,000            | -<br>-                     |
| 3000-B-b-Dz2                 | Dozer Assist-Cover   | Borrow Area F & North of Borrow Area F  | Axiflo   | Cat D11T CD   | \$69.62              | \$254.44                      | \$27.41            | 1                              | 183.5              | \$12,777               | \$46,701                                  | \$5,031                | \$64,509                   | 469,952                      |                            |
| 3100-B-b-Dz2<br>3200-B-b-Dz2 | Dozer Assist-Cover<br>Dozer Assist-Cover   | Borrow Area F<br>West of Borrow E&H   | Tailings Pond 6 Tailings Pond 7                                  | Cat D11T CD<br>Cat D11T CD  | \$69.62<br>\$69.62   | \$254.44<br>\$254.44          | \$27.41<br>\$27.41 | 1                              | 447.5<br>2,639.8   | \$31,152<br>\$183,770  | \$113,860<br>\$671,679                    | \$12,266<br>\$72,357   | \$157,277<br>\$927,806     | 1,266,425<br>8,036,747       | -                          |
| 3301-B-b-Dz2<br>3308-B-b-Dz2 | Dozer Assist-Cover<br>Dozer Assist-Cover   | West of Borrow E&H<br>West of Borrow E&H  | Slag Pile Outslopes W side<br>35 Acre Misc. Area                 | Cat D11T CD<br>Cat D11T CD  | \$69.62<br>\$69.62   | \$254.44<br>\$254.44          | \$27.41<br>\$27.41 | 1                              | 13.7<br>58.5       | \$954<br>\$4,071       | \$3,486<br>\$14,878                       | \$375<br>\$1,603       | \$4,815<br>\$20,551        | 39,688<br>169,400            | -                          |
| 1000-C-b-Sh1                 | Load-Cover   | Upper South   | Triangle Stockpile   | Hitachi EX3600-5  | \$193.56             | \$507.98                      | \$27.70            | 1                              | 153.6              | \$29,735               | \$78,035                                  | \$4,255                | \$112,025                  | 394,621                      |                            |
| 1100-C-b-Sh1<br>1200-C-b-Sh1 | Load-Cover<br>Load-Cover   | Upper South & STS2 Upper South  | South Stockpile<br>West Stockpile                                | Hitachi EX3600-5<br>Hitachi EX3600-5  | \$193.56<br>\$193.56 | \$507.98<br>\$507.98          | \$27.70<br>\$27.70 | 1<br>1                         | 970.4<br>1,005.4   | \$187,828<br>\$194,619 | \$492,928<br>\$510,751                    | \$26,879<br>\$27,851   | \$707,635<br>\$733,220     | 2,829,473<br>3,031,924       | -<br>-                     |
| 1300-C-b-Sh1                 | Load-Cover   | Upper South & White House   | Lambright Stockpile  | Hitachi EX3600-5  | \$193.56             | \$507.98                      | \$27.70            | 1                              | 1,248.6            | \$241,680              | \$634,255                                 | \$34,585               | \$910,520                  | 3,801,209                    | -                          |
| 1400-C-b-Sh1<br>1500-C-b-Sh1 | Load-Cover<br>Load-Cover   | Upper South Upper South   | Southwest Lampbright<br>South and East In-Pit Stockpiles         | Hitachi EX3600-5<br>Hitachi EX3600-5  | \$193.56<br>\$193.56 | \$507.98<br>\$507.98          | \$27.70<br>\$27.70 | 1                              | 152.8<br>74.1      | \$29,571<br>\$14,337   | \$77,604<br>\$37,627                      | \$4,232<br>\$2,052     | \$111,406<br>\$54,016      | 456,400<br>222,640           | -<br>-                     |
| 1600-C-b-Sh1<br>1700-C-b-Sh1 | Load-Cover<br>Load-Cover   | Upper South Upper South   | Northwest Stockpile<br>LeeHill Stockpile                         | Hitachi EX3600-5<br>Hitachi EX3600-5  | \$193.56<br>\$193.56 | \$507.98<br>\$507.98          | \$27.70<br>\$27.70 | 1                              | 13.5<br>40.4       | \$2,619<br>\$7,818     | \$6,873<br>\$20,517                       | \$375<br>\$1,119       | \$9,867<br>\$29,454        | 39,781<br>122,964            | -                          |
| 1800-C-b-Sh1                 | Load-Cover   | Upper South   | Northeast Stockpile  | Hitachi EX3600-5  | \$193.56             | \$507.98                      | \$27.70            | 1                              | 19.6               | \$3,784                | \$9,931                                   | \$1,119<br>\$542       | \$14,257                   | 59,273                       |                            |
| 1900-C-b-Sh1<br>2200-C-b-Sh1 | Load-Cover<br>Load-Cover   | Upper South<br>STS2   | North Stockpile<br>9 Waste Rock                                  | Hitachi EX3600-5<br>Hitachi EX3600-5  | \$193.56<br>\$193.56 | \$507.98<br>\$507.98          | \$27.70<br>\$27.70 | 1                              | 11.3<br>294.0      | \$2,186<br>\$56,901    | \$5,736<br>\$149,329                      | \$313<br>\$8,143       | \$8,235<br>\$214,373       | 33,437<br>780,208            |                            |
| 2309-C-b-Sh1                 | Load-Cover   | STS2  | Dam 15   | Hitachi EX3600-5  | \$193.56             | \$507.98                      | \$27.70            | 1                              | 0.2                | \$31                   | \$82                                      | \$4                    | \$117                      | 484                          | -                          |
| 2310-C-b-Sh1<br>2313-C-b-Sh1 | Load-Cover<br>Load-Cover   | STS2<br>STS2  | Dam 16<br>Dam 20   | Hitachi EX3600-5<br>Hitachi EX3600-5  | \$193.56<br>\$193.56 | \$507.98<br>\$507.98          | \$27.70<br>\$27.70 | 1                              | 0.2<br>0.5         | \$31<br>\$99           | \$82<br>\$261                             | \$4<br>\$14            | \$117<br>\$375             | 484<br>1,549                 |                            |
| 2316-C-b-Sh1<br>2318-C-b-Sh1 | Load-Cover<br>Load-Cover   | STS2<br>STS2  | Reservoir 17<br>Fleming Pond                                     | Hitachi EX3600-5<br>Hitachi EX3600-5  | \$193.56<br>\$193.56 | \$507.98<br>\$507.98          | \$27.70<br>\$27.70 | 1                              | 5.6<br>1.2         | \$1,080<br>\$240       | \$2,833<br>\$630                          | \$154<br>\$34          | \$4,067<br>\$904           | 16,262<br>3,775              |                            |
| 2320-C-b-Sh1                 | Load-Cover   | STS2  | Tailing Thickener 1  | Hitachi EX3600-5  | \$193.56             | \$507.98                      | \$27.70            | 1                              | 4.2                | \$810                  | \$2,127                                   | \$34<br>\$116          | \$3,053                    | 12,584                       | -                          |
| 2321-C-b-Sh1<br>2323-C-b-Sh1 | Load-Cover<br>Load-Cover   | STS2<br>STS2  | PLS Pond & Launder<br>Raffinate Pond                             | Hitachi EX3600-5<br>Hitachi EX3600-5  | \$193.56<br>\$193.56 | \$507.98<br>\$507.98          | \$27.70<br>\$27.70 | 1                              | 0.4                | \$80<br>\$35           | \$210<br>\$92                             | \$11<br>\$5            | \$301<br>\$132             | 1,258<br>532                 |                            |
| 2324-C-b-Sh1                 | Load-Cover   | STS2  | Reservoir 2  | Hitachi EX3600-5  | \$193.56             | \$507.98                      | \$27.70            | 1                              | 0.4                | \$71                   | \$186                                     | \$10                   | \$266                      | 1,065                        | -                          |
| 2327-C-b-Sh1<br>2328-C-b-Sh1 | Load-Cover<br>Load-Cover   | STS2<br>STS2  | Reservoir 6<br>Reservoir 7                                       | Hitachi EX3600-5<br>Hitachi EX3600-5  | \$193.56<br>\$193.56 | \$507.98<br>\$507.98          | \$27.70<br>\$27.70 | 1<br>1                         | 2.4<br>3.8         | \$462<br>\$742         | \$1,211<br>\$1,946                        | \$66<br>\$106          | \$1,739<br>\$2,794         | 7,260<br>11,664              | -<br>-                     |
| 2341-C-b-Sh1                 | Load-Cover   | STS2<br>STS2  | Elmo's Pond  | Hitachi EX3600-5  | \$193.56             | \$507.98                      | \$27.70            | 1                              | 2.0                | \$382                  | \$1,001                                   | \$55<br>\$98           | \$1,438                    | 6,002                        |                            |
| 2343-C-b-Sh1                 | Load-Cover<br>Load-Cover   | STS2  | Lower Lined Pond<br>Upper Lined Pond                             | Hitachi EX3600-5<br>Hitachi EX3600-5  | \$193.56<br>\$193.56 | \$507.98<br>\$507.98          | \$27.70<br>\$27.70 | 1                              | 3.5<br>0.7         | \$686<br>\$126         | \$1,801<br>\$331                          | \$18                   | \$2,585<br>\$475           | 10,793<br>1,984              | -                          |
| 2344-C-b-Sh1<br>2345-C-b-Sh1 | Load-Cover<br>Load-Cover   | STS2<br>STS2  | 5900 PLS Sump<br>6300 PLS Booster Station                        | Hitachi EX3600-5<br>Hitachi EX3600-5  | \$193.56<br>\$193.56 | \$507.98<br>\$507.98          | \$27.70<br>\$27.70 | 1                              | 0.9                | \$178<br>\$9           | \$466<br>\$25                             | \$25<br>\$1            | \$669<br>\$35              | 2,759<br>145                 | -                          |
| 2346-C-b-Sh1                 | Load-Cover   | STS2  | Lee Hill #2 Booster  | Hitachi EX3600-5  | \$193.56             | \$507.98                      | \$27.70            | į                              | 0.2                | \$44                   | \$115                                     | \$6                    | \$164                      | 678                          | -                          |
| 2400-C-b-Sh1<br>2512-C-b-Sh1 | Load-Cover<br>Load-Cover   | STS2<br>STS2  | Ground Hog #5 East Pit Access Disturbed Area                     | Hitachi EX3600-5<br>Hitachi EX3600-5  | \$193.56<br>\$193.56 | \$507.98<br>\$507.98          | \$27.70<br>\$27.70 | 1<br>1                         | 1.1<br>6.1         | \$205<br>\$1,187       | \$538<br>\$3,115                          | \$29<br>\$170          | \$773<br>\$4,471           | 3,227<br>17,763              |                            |
| 2513-C-b-Sh1                 | Load-Cover   | STS2  | Chino part of Cobre Haul Road                                    | Hitachi EX3600-5  | \$193.56             | \$507.98                      | \$27.70            | 1                              | 5.1                | \$992                  | \$2,603                                   | \$142                  | \$3,737                    | 15,536                       | -                          |
|                              | Load-Cover<br>Load-Cover   | STS2<br>STS2  | Highway to Heaven Haul Road<br>Disturbed Area Around Reservoir 5 | Hitachi EX3600-5<br>Hitachi EX3600-5  | \$193.56<br>\$193.56 | \$507.98<br>\$507.98          | \$27.70<br>\$27.70 | 1                              | 54.2<br>56.7       | \$10,491<br>\$10,982   | \$27,532<br>\$28,820                      | \$1,501<br>\$1,572     | \$39,524<br>\$41,374       | 157,015<br>157,213           |                            |
|                              | Load-Cover<br>Load-Cover   | West of Borrow E&H<br>Upper South   | Filter Plant<br>Unplanned Disturbed Area                         | Hitachi EX3600-5<br>Hitachi EX3600-5  | \$193.56<br>\$193.56 | \$507.98<br>\$507.98          | \$27.70<br>\$27.70 | 1                              | 28.5<br>334.1      | \$5,510<br>\$64,676    | \$14,461<br>\$169,733                     | \$789<br>\$9,255       | \$20,760<br>\$243,664      | 82,474<br>968,000            |                            |
| 3000-C-b-Sh1                 | Load-Cover   | Borrow Area F & North of Borrow Area F  | Axiflo   | Hitachi EX3600-5  | \$193.56             | \$507.98                      | \$27.70            | 1                              | 183.5              | \$35,527               | \$93,236                                  | \$5,084                | \$133,847                  | 469,952                      | · -                        |
| 3100-C-b-Sh1<br>3200-C-b-Sh1 | Load-Cover<br>Load-Cover   | Borrow Area F<br>West of Borrow E&H   | Tailings Pond 6<br>Tailings Pond 7                               | Hitachi EX3600-5<br>Hitachi EX3600-5  | \$193.56<br>\$193.56 | \$507.98<br>\$507.98          | \$27.70<br>\$27.70 | 1                              | 447.5<br>2,639.8   | \$86,618<br>\$510,974  | \$227,316<br>\$1,340,980                  | \$12,395<br>\$73,123   | \$326,329<br>\$1,925,076   | 1,266,425<br>8,036,747       |                            |
| 3301-C-b-Sh1                 | Load-Cover   | West of Borrow E&H  | Slag Pile Outslopes W side                                       | Hitachi EX3600-5  | \$193.56             | \$507.98                      | \$27.70            | į                              | 13.7               | \$2,652                | \$6,959                                   | \$379                  | \$9,990                    | 39,688                       | -                          |
| 3308-C-b-Sh1<br>1000-D-b-Tk4 | Load-Cover<br>Haul-Cover   | West of Borrow E&H<br>Upper South   | 35 Acre Misc. Area<br>Triangle Stockpile                         | Hitachi EX3600-5<br>Komatsu 730E  | \$193.56<br>\$78.34  | \$507.98<br>\$221.79          | \$27.70<br>\$24.27 | 1<br>3                         | 58.5<br>153.6      | \$11,318<br>\$36,105   | \$29,703<br>\$102,213                     | \$1,620<br>\$11,185    | \$42,641<br>\$149,502      | 169,400<br>394,621           |                            |
| 1100-D-b-Tk4<br>1200-D-b-Tk4 | Haul-Cover   | Upper South & STS2  | South Stockpile  | Komatsu 730E  | \$78.34              | \$221.79<br>\$221.79          | \$24.27<br>\$24.27 | 5<br>10                        | 970.4              | \$380,106<br>\$787,699 | \$1,076,088                               | \$117,753<br>\$244,022 | \$1,573,948<br>\$3,261,711 | 2,829,473                    | -                          |
| 1300-D-b-Tk4                 | Haul-Cover<br>Haul-Cover   | Upper South Upper South & White House   | West Stockpile<br>Lambright Stockpile                            | Komatsu 730E<br>Komatsu 730E  | \$78.34<br>\$78.34   | \$221.79                      | \$24.27            | 13                             | 1,005.4<br>1,248.6 | \$1,271,623            | \$2,229,990<br>\$3,599,988                | \$393,937              | \$5,265,548                | 3,031,924<br>3,801,209       | -                          |
| 1400-D-b-Tk4<br>1500-D-b-Tk4 | Haul-Cover<br>Haul-Cover   | Upper South<br>Upper South  | Southwest Lampbright South and East In-Pit Stockpiles            | Komatsu 730E<br>Komatsu 730E  | \$78.34<br>\$78.34   | \$221.79<br>\$221.79          | \$24.27<br>\$24.27 | 12<br>14                       | 152.8<br>74.1      | \$143,621<br>\$81,241  | \$406,593<br>\$229,994                    | \$44,492<br>\$25,168   | \$594,706<br>\$336,402     | 456,400<br>222,640           |                            |
| 1600-D-b-Tk4                 | Haul-Cover   | Upper South   | Northwest Stockpile  | Komatsu 730E  | \$78.34              | \$221.79                      | \$24.27            | 11                             | 13.5               | \$11,660               | \$33,010                                  | \$3,612                | \$48,283                   | 39,781                       | -                          |
| 1700-D-b-Tk4<br>1800-D-b-Tk4 |  | Upper South Upper South   | LeeHill Stockpile<br>Northeast Stockpile                         | Komatsu 730E<br>Komatsu 730E  | \$78.34<br>\$78.34   | \$221.79<br>\$221.79          | \$24.27<br>\$24.27 | 11<br>16                       | 40.4<br>19.6       | \$34,807<br>\$24,507   | \$98,539<br>\$69,379                      | \$10,783<br>\$7,592    | \$144,128<br>\$101,478     | 122,964<br>59,273            |                            |
| 1900-D-b-Tk4                 |  | Upper South   | North Stockpile  | Komatsu 730E  | \$78.34              | \$221.79                      | \$24.27            | 14                             | 11.3               | \$12,385               | \$35,062                                  | \$3,837                | \$51,284                   | 33,437                       |                            |

|                              |   |   |  |                              |           | Fiel               | e, Tires, GEC, & d<br>d Parts Adjusted<br>ental Cost (w/o |                    | Number of Units |                  |                        | Direct Lube, Tires,<br>GEC, & Field Parts<br>djusted Rental Cost |                        |                           |                              |                            |
|------------------------------|---|---|--|------------------------------|-----------|--------------------|---|--------------------|-----------------|------------------|------------------------|--|------------------------|---------------------------|------------------------------|----------------------------|
| ID                           | Description   | Source Location 1   | Destination Location 2   |                              | Equipment | Fuel Cost (\$/hr)  | fuel) (\$/hr)   | Labor Cost (\$/hr) | (Equipment)     | Time Req'd (hrs) | Direct Fuel Cost (\$)  | (w/o fuel) (\$)  | Direct Labor Cost (\$) | Total Equipment Cost (\$) | Total Production Volume (CY) | Total Production Area (AC) |
| 2200-D-b-Tk4<br>2309-D-b-Tk4 | Haul-Cover<br>Haul-Cover                                      | STS2<br>STS2  | 9 Waste Rock<br>Dam 15   | Komatsu 730E<br>Komatsu 730E |           | \$78.34<br>\$78.34 | \$221.79<br>\$221.79                                      | \$24.27<br>\$24.27 | 4<br>10         | 294.0<br>0.2     | \$92,120<br>\$126      | \$260,794<br>\$356   | \$28,538<br>\$39       | \$381,453<br>\$521        | 780,208<br>484               | -                          |
| 2310-D-b-Tk4                 | Haul-Cover  | STS2  | Dam 16   | Komatsu 730E                 |           | \$78.34            | \$221.79  | \$24.27            | 10              | 0.2              | \$126                  | \$356  | \$39                   | \$521                     | 484                          | -                          |
| 2313-D-b-Tk4<br>2316-D-b-Tk4 | Haul-Cover<br>Haul-Cover                                      | STS2<br>STS2  | Dam 20<br>Reservoir 17   | Komatsu 730E<br>Komatsu 730E |           | \$78.34<br>\$78.34 | \$221.79<br>\$221.79                                      | \$24.27<br>\$24.27 | 10<br>5         | 0.5<br>5.6       |                        | \$1,139<br>\$6.185   | \$125<br>\$677         | \$1,666<br>\$9.046        | 1,549<br>16,262              |                            |
| 2318-D-b-Tk4                 | Haul-Cover  | STS2  | Fleming Pond   | Komatsu 730E                 |           | \$78.34            | \$221.79  | \$24.27            | 13              | 1.2              | \$1,263                | \$3,575  | \$391                  | \$5,230                   | 3,775                        | -                          |
| 2320-D-b-Tk4<br>2321-D-b-Tk4 | Haul-Cover<br>Haul-Cover                                      | STS2<br>STS2  | Tailing Thickener 1<br>PLS Pond & Launder                        | Komatsu 730E<br>Komatsu 730E |           | \$78.34<br>\$78.34 | \$221.79<br>\$221.79                                      | \$24.27<br>\$24.27 | 14<br>13        | 4.2<br>0.4       |                        | \$13,000<br>\$1,192  | \$1,423<br>\$130       | \$19,014<br>\$1,743       | 12,584<br>1,258              | <u> </u>                   |
| 2323-D-b-Tk4                 | Haul-Cover  | STS2  | Raffinate Pond   | Komatsu 730E                 |           | \$78.34            | \$221.79  | \$24.27            | 17              | 0.2              | \$242                  | \$684  | \$75                   | \$1,001                   | 532                          | -                          |
| 2324-D-b-Tk4<br>2327-D-b-Tk4 | Haul-Cover<br>Haul-Cover                                      | STS2<br>STS2  | Reservoir 2<br>Reservoir 6                                       | Komatsu 730E<br>Komatsu 730E |           | \$78.34<br>\$78.34 | \$221.79<br>\$221.79                                      | \$24.27<br>\$24.27 | 5<br>11         | 0.4<br>2.4       |                        | \$405<br>\$5,818   | \$44<br>\$637          | \$592<br>\$8,510          | 1,065<br>7,260               | <u> </u>                   |
| 2328-D-b-Tk4                 | Haul-Cover  | STS2  | Reservoir 7  | Komatsu 730E                 |           | \$78.34            | \$221.79  | \$24.27            | 11              | 3.8              | \$3,302                | \$9,347  | \$1,023                | \$13,672                  | 11,664                       | <u>-</u>                   |
| 2341-D-b-Tk4<br>2342-D-b-Tk4 | Haul-Cover<br>Haul-Cover                                      | STS2<br>STS2  | Elmo's Pond<br>Lower Lined Pond                                  | Komatsu 730E<br>Komatsu 730E |           | \$78.34<br>\$78.34 | \$221.79<br>\$221.79                                      | \$24.27<br>\$24.27 | 4               | 2.0<br>3.5       |                        | \$1,749<br>\$3,145   | \$191<br>\$344         | \$2,558<br>\$4,600        | 6,002<br>10,793              | -                          |
| 2343-D-b-Tk4                 | Haul-Cover  | STS2  | Upper Lined Pond   | Komatsu 730E                 |           | \$78.34            | \$221.79  | \$24.27            | 4               | 0.7              | \$204                  | \$578  | \$63                   | \$846                     | 1,984                        | <u> </u>                   |
| 2344-D-b-Tk4<br>2345-D-b-Tk4 | Haul-Cover<br>Haul-Cover                                      | STS2<br>STS2  | 5900 PLS Sump<br>6300 PLS Booster Station                        | Komatsu 730E<br>Komatsu 730E |           | \$78.34<br>\$78.34 | \$221.79<br>\$221.79                                      | \$24.27<br>\$24.27 | 14              | 0.9<br>0.0       |                        | \$2,850<br>\$150   | \$312<br>\$16          | \$4,168<br>\$219          | 2,759<br>145                 | -                          |
| 2346-D-b-Tk4                 | Haul-Cover  | STS2  | Lee Hill #2 Booster  | Komatsu 730E                 |           | \$78.34            | \$221.79  | \$24.27            | 14              | 0.2              | \$247                  | \$700  | \$77                   | \$1,024                   | 678                          | <u>-</u>                   |
| 2400-D-b-Tk4<br>2512-D-b-Tk4 | Haul-Cover<br>Haul-Cover                                      | STS2<br>STS2  | Ground Hog #5 East Pit Access Disturbed Area                     | Komatsu 730E<br>Komatsu 730E |           | \$78.34<br>\$78.34 | \$221.79<br>\$221.79                                      | \$24.27<br>\$24.27 | 9               | 1.1<br>6.1       | \$747<br>\$2,882       | \$2,116<br>\$8,159   | \$232<br>\$893         | \$3,094<br>\$11,934       | 3,227<br>17,763              |                            |
| 2513-D-b-Tk4                 | Haul-Cover  | STS2  | Chino part of Cobre Haul Road                                    | Komatsu 730E                 |           | \$78.34            | \$221.79  | \$24.27            | 3               | 5.1              | \$1,204                | \$3,409  | \$373                  | \$4,987                   | 15,536                       | -                          |
| 2514-D-b-Tk4<br>2515-D-b-Tk4 | Haul-Cover<br>Haul-Cover                                      | STS2<br>STS2  | Highway to Heaven Haul Road<br>Disturbed Area Around Reservoir 5 | Komatsu 730E<br>Komatsu 730E |           | \$78.34<br>\$78.34 | \$221.79<br>\$221.79                                      | \$24.27<br>\$24.27 | 6               | 54.2<br>56.7     | \$25,476<br>\$31,114   | \$72,124<br>\$88,083   | \$7,892<br>\$9,639     | \$105,492<br>\$128,836    | 157,015<br>157,213           |                            |
| 3307-D-b-Tk4                 | Haul-Cover  | West of Borrow E&H  | Filter Plant   | Komatsu 730E                 |           | \$78.34            | \$221.79  | \$24.27            | 6               | 28.5             | \$13,382               | \$37,884   | \$4,145                | \$55,411                  | 82,474                       | -                          |
| 2600-D-b-Tk4<br>3000-D-b-Tk4 | Haul-Cover<br>Haul-Cover                                      | Upper South<br>Borrow Area F & North of Borrow Area F         | Unplanned Disturbed Area<br>Axiflo                               | Komatsu 730E<br>Komatsu 730E |           | \$78.34<br>\$78.34 | \$221.79<br>\$221.79                                      | \$24.27<br>\$24.27 | 6               | 334.1<br>183.5   | \$157,061<br>\$43,138  | \$444,643<br>\$122,123   | \$48,656<br>\$13,364   | \$650,360<br>\$178.624    | 968,000<br>469,952           | Ī.                         |
| 3100-D-b-Tk4                 | Haul-Cover  | Borrow Area F   | Tailings Pond 6  | Komatsu 730E                 |           | \$78.34            | \$221.79  | \$24.27            | 5               | 447.5            | \$175,288              | \$496,242  | \$54,302               | \$725,833                 | 1,266,425                    | -                          |
| 3200-D-b-Tk4<br>3301-D-b-Tk4 | Haul-Cover<br>Haul-Cover                                      | West of Borrow E&H<br>West of Borrow E&H                      | Tailings Pond 7<br>Slag Pile Outslopes W side                    | Komatsu 730E<br>Komatsu 730E |           | \$78.34<br>\$78.34 | \$221.79<br>\$221.79                                      | \$24.27<br>\$24.27 | 5<br>6          | 2,639.8<br>13.7  | \$1,034,055<br>\$6,440 | \$2,927,428<br>\$18,230  | \$320,341<br>\$1,995   | \$4,281,823<br>\$26,665   | 8,036,747<br>39,688          | -                          |
| 3308-D-b-Tk4                 | Haul-Cover  | West of Borrow E&H  | 35 Acre Misc. Area   | Komatsu 730E                 |           | \$78.34            | \$221.79  | \$24.27            | 6               | 58.5             | \$27,486               | \$77,813   | \$8,515                | \$113,813                 | 169,400                      | -                          |
| 1001-A-d-Mg1<br>1002-A-d-Mg1 | Grade-Outslope-Placed Cover<br>Grade-Top-Placed Cover         | Triangle Stockpile T-1 Triangle Stockpile T-2                 |  | Cat 16M<br>Cat 16M           |           | \$22.23<br>\$22.23 | \$93.51<br>\$93.51  | \$27.41<br>\$27.41 | 1               | 16.1<br>1.6      | \$358<br>\$35          | \$1,508<br>\$145   | \$442<br>\$43          | \$2,308<br>\$223          |                              | 76.7<br>4.8                |
| 1101-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | South Stockpile S-1   |  | Cat 16M                      |           | \$22.23            | \$93.51   | \$27.41            | 1               | 1.4              | \$30                   | \$127  | \$37                   | \$194                     |                              | 6.4                        |
| 1102-A-d-Mg1<br>1103-A-d-Mg1 | Grade-Outslope-Placed Cover<br>Grade-Outslope-Placed Cover    | South Stockpile S-2<br>South Stockpile S-3                    |  | Cat 16M<br>Cat 16M           |           | \$22.23<br>\$22.23 | \$93.51<br>\$93.51  | \$27.41<br>\$27.41 | 1               | 18.3<br>16.0     |                        | \$1,707<br>\$1,493   | \$500<br>\$438         | \$2,613<br>\$2,286        | -<br>-                       | 86.9<br>76.0               |
| 1104-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | South Stockpile S-4   |  | Cat 16M                      |           | \$22.23            | \$93.51   | \$27.41            | 1               | 8.0              | \$177                  | \$744  | \$218                  | \$1,139                   |                              | 37.9                       |
| 1105-A-d-Mg1<br>1106-A-d-Mg1 | Grade-Outslope-Placed Cover<br>Grade-Outslope-Placed Cover    | South Stockpile S-5<br>South Stockpile S-6                    |  | Cat 16M<br>Cat 16M           |           | \$22.23<br>\$22.23 | \$93.51<br>\$93.51  | \$27.41<br>\$27.41 | 1<br>1          | 17.4<br>19.2     |                        | \$1,624<br>\$1,792   | \$476<br>\$525         | \$2,486<br>\$2,743        |                              | 82.6<br>91.2               |
| 1107-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | South Stockpile S-7   | -  | Cat 16M                      |           | \$22.23            | \$93.51   | \$27.41            | 1               | 10.0             | \$223                  | \$936  | \$274                  | \$1,433                   | -                            | 47.6                       |
| 1108-A-d-Mg1<br>1109-A-d-Mg1 | Grade-Outslope-Placed Cover<br>Grade-Outslope-Placed Cover    | South Stockpile S-8<br>South Stockpile S-9(1)                 |  | Cat 16M<br>Cat 16M           |           | \$22.23<br>\$22.23 | \$93.51<br>\$93.51  | \$27.41<br>\$27.41 | 1               | 14.2<br>0.5      |                        | \$1,332<br>\$50  | \$391<br>\$15          | \$2,040<br>\$77           | Ī.                           | 67.8<br>2.6                |
| 1110-A-d-Mg1                 | Grade-Top-Placed Cover  | South Stockpile S-9(2)  | -  | Cat 16M                      |           | \$22.23            | \$93.51   | \$27.41            | 1               | 14.8             | \$330                  | \$1,388  | \$407                  | \$2,125                   | -                            | 45.8                       |
| 1111-A-d-Mg1<br>1201-A-d-Mg1 | Grade-Top-Placed Cover<br>Grade-Outslope-Placed Cover         | South Stockpile S-9(3) West Stockpile W-1                     |  | Cat 16M<br>Cat 16M           |           | \$22.23<br>\$22.23 | \$93.51<br>\$93.51  | \$27.41<br>\$27.41 | 1               | 12.9<br>11.8     |                        | \$1,204<br>\$1,105   | \$353<br>\$324         | \$1,843<br>\$1,691        | -                            | 39.8<br>56.2               |
| 1202-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | West Stockpile W-2  | -  | Cat 16M                      |           | \$22.23            | \$93.51   | \$27.41            | 1               | 11.5             | \$256                  | \$1,079  | \$316                  | \$1,652                   | -                            | 54.9                       |
| 1203-A-d-Mg1<br>1204-A-d-Mg1 | Grade-Outslope-Placed Cover Grade-Outslope-Placed Cover       | West Stockpile W-3<br>West Stockpile W-4                      | -  | Cat 16M<br>Cat 16M           |           | \$22.23<br>\$22.23 | \$93.51<br>\$93.51  | \$27.41<br>\$27.41 | 1               | 9.1<br>8.7       | \$202<br>\$193         | \$848<br>\$810   | \$249<br>\$237         | \$1,298<br>\$1,240        | -                            | 43.2<br>41.2               |
| 1205-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | West Stockpile W-5  | -  | Cat 16M                      |           | \$22.23            | \$93.51   | \$27.41            | 1               | 11.3             | \$252                  | \$1,061  | \$311                  | \$1,624                   | -                            | 54.0                       |
| 1206-A-d-Mg1<br>1207-A-d-Mg1 | Grade-Outslope-Placed Cover<br>Grade-Outslope-Placed Cover    | West Stockpile W-6<br>West Stockpile W-7                      | -  | Cat 16M<br>Cat 16M           |           | \$22.23<br>\$22.23 | \$93.51<br>\$93.51  | \$27.41<br>\$27.41 | 1               | 11.0<br>7.0      |                        | \$1,032<br>\$653   | \$302<br>\$191         | \$1,579<br>\$999          | -                            | 52.5<br>33.2               |
| 1209-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | West Stockpile W-8(1)   | -  | Cat 16M                      |           | \$22.23            | \$93.51   | \$27.41            | 1               | 7.1              | \$158                  | \$666  | \$195                  | \$1,020                   | -                            | 33.9                       |
| 1210-A-d-Mg1<br>1211-A-d-Mg1 | Grade-Outslope-Placed Cover<br>Grade-Outslope-Placed Cover    | West Stockpile W-8(2)<br>West Stockpile W-9                   | -  | Cat 16M<br>Cat 16M           |           | \$22.23<br>\$22.23 | \$93.51<br>\$93.51  | \$27.41<br>\$27.41 | 1               | 7.1<br>5.7       |                        | \$666<br>\$533   | \$195<br>\$156         | \$1,020<br>\$816          | -                            | 33.9<br>27.1               |
| 1212-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | West Stockpile W-10   | -  | Cat 16M                      |           | \$22.23            | \$93.51   | \$27.41            | 1               | 4.5              | \$100                  | \$422  | \$124                  | \$646                     | -                            | 21.5                       |
| 1213-A-d-Mg1<br>1214-A-d-Mg1 | Grade-Outslope-Placed Cover<br>Grade-Outslope-Placed Cover    | West Stockpile W-11<br>West Stockpile W-12                    |  | Cat 16M<br>Cat 16M           |           | \$22.23<br>\$22.23 | \$93.51<br>\$93.51  | \$27.41<br>\$27.41 | 1               | 5.0<br>2.0       |                        | \$469<br>\$183   | \$138<br>\$54          | \$718<br>\$280            | -                            | 23.9<br>9.3                |
| 1215-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | West Stockpile W-13(1)  | -  | Cat 16M                      |           | \$22.23            | \$93.51   | \$27.41            | 1               | 0.8              | \$17                   | \$70   | \$21                   | \$108<br>\$416            | -                            | 3.6                        |
| 1216-A-d-Mg1<br>1217-A-d-Mg1 | Grade-Outslope-Placed Cover<br>Grade-Outslope-Placed Cover    | West Stockpile W-13(2)<br>West Stockpile W-14                 | -  | Cat 16M<br>Cat 16M           |           | \$22.23<br>\$22.23 | \$93.51<br>\$93.51  | \$27.41<br>\$27.41 | 1               | 2.9<br>2.4       |                        | \$271<br>\$228   | \$80<br>\$67           | \$349                     | -                            | 13.8<br>11.6               |
| 1218-A-d-Mg1<br>1219-A-d-Mg1 | Grade-Outslope-Placed Cover<br>Grade-Top-Placed Cover         | West Stockpile W-15(1)<br>West Stockpile W-15(2)              | -  | Cat 16M<br>Cat 16M           |           | \$22.23<br>\$22.23 | \$93.51<br>\$93.51  | \$27.41<br>\$27.41 | 1               | 1.6<br>2.0       |                        | \$152<br>\$188   | \$45<br>\$55           | \$233<br>\$287            | -                            | 7.8<br>6.2                 |
| 1220-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | West Stockpile W-16(2) West Stockpile W-16(1)                 | 1  | Cat 16M                      |           | \$22.23            | \$93.51   | \$27.41            | 1               | 1.6              | \$36                   | \$152  | \$45                   | \$233                     |                              | 7.8                        |
| 1221-A-d-Mg1<br>1222-A-d-Mg1 | Grade-Top-Placed Cover<br>Grade-Top-Placed Cover              | West Stockpile W-16(2) West Stockpile W-17(1)                 | -  | Cat 16M<br>Cat 16M           |           | \$22.23<br>\$22.23 | \$93.51<br>\$93.51  | \$27.41<br>\$27.41 | 1               | 2.2<br>18.0      |                        | \$208<br>\$1,686   | \$61<br>\$494          | \$319<br>\$2,580          |                              | 6.9<br>55.7                |
| 1223-A-d-Mg1                 | Grade-Top-Placed Cover  | West Stockpile W-17(2)  | 1  | Cat 16M                      |           | \$22.23            | \$93.51   | \$27.41            | 1               | 9.2              | \$204                  | \$859  | \$252                  | \$1,315                   |                              | 28.4                       |
| 1301-A-d-Mg1<br>1302-A-d-Mg1 | Grade-Outslope-Placed Cover<br>Grade-Outslope-Placed Cover    | Lambright Stockpile LB-1<br>Lambright Stockpile LB-2          | -  | Cat 16M<br>Cat 16M           |           | \$22.23<br>\$22.23 | \$93.51<br>\$93.51  | \$27.41<br>\$27.41 | 1               | 15.0<br>8.1      | \$333<br>\$179         | \$1,403<br>\$753   | \$411<br>\$221         | \$2,148<br>\$1,153        | -                            | 71.4<br>38.3               |
| 1303-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | Lambright Stockpile LB-3                                      | -  | Cat 16M                      |           | \$22.23            | \$93.51   | \$27.41            | 1               | 7.0              |                        | \$652  | \$191                  | \$998                     | -                            | 33.2                       |
| 1304-A-d-Mg1<br>1305-A-d-Mg1 | Grade-Outslope-Placed Cover                                   | Lambright Stockpile LB-4                                      | -  | Cat 16M<br>Cat 16M           |           | \$22.23            | \$93.51<br>\$93.51  | \$27.41<br>\$27.41 | 1               | 8.8<br>12.1      |                        | \$818  | \$240                  | \$1,253<br>\$1,737        | -                            | 41.6<br>57.7               |
| 1306-A-d-Mg1                 | Grade-Outslope-Placed Cover<br>Grade-Outslope-Placed Cover    | Lambright Stockpile LB-5<br>Lambright Stockpile LB-6          | -  | Cat 16M                      |           | \$22.23<br>\$22.23 | \$93.51   | \$27.41            | 1               | 3.0              | \$66                   | \$1,134<br>\$278   | \$333<br>\$82          | \$426                     |                              | 14.2                       |
| 1307-A-d-Mg1<br>1308-A-d-Mg1 | Grade-Outslope-Placed Cover<br>Grade-Outslope-Placed Cover    | Lambright Stockpile LB-7(1) Lambright Stockpile LB-7(2)       | •  | Cat 16M<br>Cat 16M           |           | \$22.23<br>\$22.23 | \$93.51<br>\$93.51  | \$27.41<br>\$27.41 | 1               | 2.3<br>1.5       |                        | \$217<br>\$136   | \$64<br>\$40           | \$332<br>\$208            | -                            | 11.0<br>6.9                |
| 1309-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | Lambright Stockpile LB-8                                      | -  | Cat 16M                      |           | \$22.23            | \$93.51   | \$27.41            | 1               | 7.5              | \$166                  | \$697  | \$204                  | \$1,067                   |                              | 35.5                       |
| 1310-A-d-Mg1<br>1311-A-d-Mg1 | Grade-Outslope-Placed Cover<br>Grade-Outslope-Placed Cover    | Lambright Stockpile LB-9                                      |  | Cat 16M<br>Cat 16M           |           | \$22.23<br>\$22.23 | \$93.51<br>\$93.51  | \$27.41<br>\$27.41 | 1               | 10.0<br>12.7     | \$222<br>\$283         | \$933<br>\$1,191   | \$273<br>\$349         | \$1,428<br>\$1,823        | -                            | 47.5<br>60.6               |
| 1312-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | Lambright Stockpile LB-10<br>Lambright Stockpile LB-11        |  | Cat 16M                      |           | \$22.23            | \$93.51   | \$27.41            | 1               | 7.4              | \$165                  | \$693  | \$203                  | \$1,061                   |                              | 35.3                       |
| 1313-A-d-Mg1<br>1314-A-d-Mg1 | Grade-Outslope-Placed Cover<br>Grade-Outslope-Placed Cover    | Lambright Stockpile LB-12<br>Lambright Stockpile LB-13        |  | Cat 16M<br>Cat 16M           |           | \$22.23<br>\$22.23 | \$93.51<br>\$93.51  | \$27.41<br>\$27.41 | 1               | 25.1<br>17.6     | \$557<br>\$391         | \$2,344<br>\$1,645   | \$687<br>\$482         | \$3,588<br>\$2,518        |                              | 119.3<br>83.7              |
| 1315-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | Lambright Stockpile LB-14                                     |  | Cat 16M                      |           | \$22.23            | \$93.51   | \$27.41            | i               | 10.9             | \$241                  | \$1,015  | \$298                  | \$1,554                   |                              | 51.6                       |
| 1316-A-d-Mg1<br>1317-A-d-Mg1 | Grade-Top-Placed Cover<br>Grade-Top-Placed Cover              | Lambright Stockpile LB-19(1)<br>Lambright Stockpile LB-19(2)  |  | Cat 16M<br>Cat 16M           |           | \$22.23<br>\$22.23 | \$93.51<br>\$93.51  | \$27.41<br>\$27.41 | 1               | 11.4<br>13.8     |                        | \$1,063<br>\$1,286   | \$312<br>\$377         | \$1,628<br>\$1,969        | -                            | 35.1<br>42.5               |
| 1401-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | Southwest Lampbright SWL-15                                   |  | Cat 16M                      |           | \$22.23            | \$93.51   | \$27.41            | 1               | 2.7              | \$59                   | \$249  | \$73                   | \$381                     |                              | 12.6                       |
| 1402-A-d-Mg1<br>1403-A-d-Mg1 | Grade-Outslope-Placed Cover<br>Grade-Top-Placed Cover         | Southwest Lampbright SWL-16<br>Southwest Lampbright SWL-17    |  | Cat 16M<br>Cat 16M           |           | \$22.23<br>\$22.23 | \$93.51<br>\$93.51  | \$27.41<br>\$27.41 | 1               | 4.7<br>1.7       |                        | \$435<br>\$158   | \$128<br>\$46          | \$667<br>\$242            | -                            | 22.2<br>5.2                |
| 1404-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | Southwest Lampbright SWL-17(1)                                | -  | Cat 16M                      |           | \$22.23            | \$93.51   | \$27.41            | i               | 3.6              | \$79                   | \$332  | \$97                   | \$508                     | -                            | 16.9                       |
| 1405-A-d-Mg1<br>1406-A-d-Mg1 | Grade-Outslope-Placed Cover<br>Grade-Outslope-Placed Cover    | Southwest Lampbright SWL-17(2)<br>Southwest Lampbright SWL-18 |  | Cat 16M<br>Cat 16M           |           | \$22.23<br>\$22.23 | \$93.51<br>\$93.51  | \$27.41<br>\$27.41 | 1               | 3.9<br>3.9       |                        | \$366<br>\$368   | \$107<br>\$108         | \$560<br>\$564            | -                            | 18.6<br>18.8               |
| 1500-A-d-Mg1                 | Grade-Entire Stockpile-Placed Cover                           | South and East In-Pit Stockpiles                              | -  | Cat 16M                      |           | \$22.23            | \$93.51   | \$27.41            | i               | 14.9             | \$331                  | \$1,393  | \$408                  | \$2,132                   | -                            | 46.0                       |
| 1601-A-d-Mg1<br>1602-A-d-Mg1 | Grade-Top-Placed Cover<br>Grade-Top-Placed Cover              | Northwest Stockpile NW-1(1)<br>Northwest Stockpile NW-1(2)    |  | Cat 16M<br>Cat 16M           |           | \$22.23<br>\$22.23 | \$93.51<br>\$93.51  | \$27.41<br>\$27.41 | 1               | 0.5<br>0.6       |                        | \$50<br>\$54   | \$15<br>\$16           | \$77<br>\$83              | -                            | 1.7<br>1.8                 |
| 1603-A-d-Mg1                 | Grade-Outslope-Placed Cover                                   | Northwest Stockpile NW-2(1)                                   | -  | Cat 16M                      |           | \$22.23            | \$93.51   | \$27.41            | i               | 0.9              |                        | \$83   | \$24                   | \$127                     | -                            | 4.2                        |
| 1604-A-d-Mg1<br>1605-A-d-Mg1 | Grade-Top-Placed Cover  | Northwest Stockpile NW-2(2)                                   | -  | Cat 16M<br>Cat 16M           |           | \$22.23            | \$93.51<br>\$93.51  | \$27.41<br>\$27.41 | 1               | 0.1<br>0.1       | \$2<br>\$2             | \$8<br>\$8   | \$2<br>\$2             | \$13<br>\$13              |                              | 0.3                        |
| 1701-A-d-Mg1                 | Grade-Top-Placed Cover<br>Grade-Top-Placed Cover              | Northwest Stockpile NW-2(3)<br>LeeHill Stockpile LH-2         |  | Cat 16M                      |           | \$22.23<br>\$22.23 | \$93.51   | \$27.41            | 1               | 7.2              | \$161                  | \$677  | \$198                  | \$1,036                   |                              | 0.3<br>22.4                |
| 1702-A-d-Mg1<br>1800-A-d-Mg1 | Grade-Top-Placed Cover  | LeeHill Stockpile LH-3  | •  | Cat 16M<br>Cat 16M           |           | \$22.23<br>\$22.23 | \$93.51<br>\$93.51  | \$27.41<br>\$27.41 | 1               | 1.0              | \$22                   | \$92<br>\$371  | \$27<br>\$109          | \$141<br>\$568            |                              | 3.0                        |
| 1800-A-d-Mg1<br>1901-A-d-Mg1 | Grade-Entire Stockpile-Placed Cover<br>Grade-Top-Placed Cover | Northeast Stockpile<br>North Stockpile N-1                    |  | Cat 16M<br>Cat 16M           |           | \$22.23<br>\$22.23 | \$93.51<br>\$93.51  | \$27.41<br>\$27.41 | 1               | 4.0<br>2.1       |                        | \$371<br>\$200   | \$109<br>\$59          | \$568<br>\$306            |                              | 12.2<br>6.6                |
| 1902-A-d-Mg1<br>1903-A-d-Mg1 | Grade-Top-Placed Cover  | North Stockpile N-2(1)  |  | Cat 16M<br>Cat 16M           |           | \$22.23<br>\$22.23 | \$93.51<br>\$93.51  | \$27.41<br>\$27.41 | 1               | 0.0<br>0.0       |                        | \$5<br>\$5   | \$1<br>\$1             | \$7<br>\$7                |                              | 0.2<br>0.2                 |
| 2201-A-d-Mg1                 | Grade-Top-Placed Cover<br>Grade-Outslope-Placed Cover         | North Stockpile N-2(2)<br>9 Waste Rock 9 WRS-1                |  | Cat 16M                      |           | \$22.23<br>\$22.23 | \$93.51<br>\$93.51  | \$27.41            | 1               | 13.8             | \$307                  | \$1,291  | \$378                  | \$7<br>\$1,976            |                              | 65.7                       |
| 2202-A-d-Mg1                 | Grade-Top-Placed Cover  | 9 Waste Rock 9 WRS-2  | -  | Cat 16M                      |           | \$22.23            | \$93.51   | \$27.41            | 1               | 30.9             | \$687                  | \$2,891  | \$847                  | \$4,426                   | -                            | 95.5                       |
| 2309-A-d-Mg1                 | Grade-Dam 15-Placed Cover                                     | Dams and Reservoirs Dam 15                                    | -  | Cat 16M                      |           | \$22.23            | \$93.51   | \$27.41            | '               | 0.0              | \$1                    | \$3  | \$1                    | \$5                       | •                            | 0.1                        |

|                              |  |  |  |  |                      | Lube, Tires, GEC, &                      |                    |                 |                   |                         | Direct Lube, Tires,                        |                         |                           |                              |                            |
|------------------------------|--|--|--|--|----------------------|--|--------------------|-----------------|-------------------|-------------------------|--|-------------------------|---------------------------|------------------------------|----------------------------|
|                              |  |  |  |  |                      | Field Parts Adjusted<br>Rental Cost (w/o |                    | Number of Units |                   |                         | GEC, & Field Parts<br>Adjusted Rental Cost |                         |                           |                              |                            |
| ID                           | Description  | Source Location 1  | Destination Location 2                                       | Equipment  | Fuel Cost (\$/hr)    | fuel) (\$/hr)                            | Labor Cost (\$/hr) | (Equipment)     | Time Reg'd (hrs)  | Direct Fuel Cost (\$)   | (w/o fuel) (\$)                            | Direct Labor Cost (\$)  | Total Equipment Cost (\$) | Total Production Volume (CY) | Total Production Area (AC) |
| 2310-A-d-Ma1                 | Grade-Dam 16-Placed Cover  | Dams and Reservoirs Dam 16   | <u>'</u> -   | Cat 16M  | \$22.23              | \$93.51                                  | \$27.41            | 1               | 0.0               | \$1                     | \$3  | \$1                     | \$5                       | -                            | 0.1                        |
| 2313-A-d-Mg1                 | Grade-Dam 20-Placed Cover  | Dams and Reservoirs Dam 20   | -  | Cat 16M  | \$22.23              | \$93.51                                  | \$27.41            | i               | 0.1               | \$2                     | \$10                                       | \$3                     | \$15                      | -                            | 0                          |
| 2316-A-d-Mg1                 | Grade-Reservoir 17-Placed Cover  | Dams and Reservoirs Reservoir 17                                     | -  | Cat 16M  | \$22.23              | \$93.51                                  | \$27.41            | 1               | 1.1               | \$24                    | \$102                                      | \$30                    | \$156                     | -                            | 3                          |
| 2318-A-d-Mg1                 | Grade-Fleming Pond-Placed Cover  | Dams and Reservoirs Fleming Pond                                     | -  | Cat 16M  | \$22.23              | \$93.51                                  | \$27.41            | 1               | 0.3               |                         | \$24                                       | \$7                     | \$36                      | -                            | 1                          |
| 2320-A-d-Mg1                 | Grade-Tailing Thickener 1-Placed Cover   | Dams and Reservoirs Tailing Thickener 1                              | -  | Cat 16M  | \$22.23              | \$93.51                                  | \$27.41            | 1               | 0.8               | \$19                    | \$79                                       | \$23                    | \$120                     | -                            | 3                          |
| 2321-A-d-Mg1                 | Grade-PLS Pond & Launder-Placed Cover  | Dams and Reservoirs PLS Pond & Launder                               | -  | Cat 16M  | \$22.23              | \$93.51                                  | \$27.41            | 1               | 0.1               | \$2                     | \$8  | \$2                     | \$12                      | -                            | 0                          |
| 2323-A-d-Mg1                 | Grade-Raffinate Pond-Placed Cover  | Dams and Reservoirs Raffinate Pond                                   | -  | Cat 16M  | \$22.23              | \$93.51                                  | \$27.41            | 1               | 0.0               |                         | \$3  | \$1                     | \$5                       | -                            | 0                          |
| 2324-A-d-Mg1                 | Grade-Reservoir 2-Placed Cover   | Dams and Reservoirs Reservoir 2                                      | -  | Cat 16M  | \$22.23              | \$93.51                                  | \$27.41            | 1               | 0.1               | \$2                     | \$7<br>\$45                                | \$2                     | \$10                      | -                            | 0                          |
| 2327-A-d-Mg1                 | Grade-Reservoir 6-Placed Cover   | Dams and Reservoirs Reservoir 6                                      | -  | Cat 16M  | \$22.23              | \$93.51                                  | \$27.41            | 1               | 0.5               |                         | T  | \$13                    | \$70                      | -                            | 2                          |
| 2328-A-d-Mg1<br>2341-A-d-Mg1 | Grade-Reservoir 7-Placed Cover<br>Grade-Elmo's Pond -Placed Cover                      | Dams and Reservoirs Reservoir 7                                      | -  | Cat 16M<br>Cat 16M   | \$22.23              | \$93.51<br>\$93.51                       | \$27.41<br>\$27.41 | 1               | 0.8<br>0.4        |                         | \$73<br>\$38                               | \$21<br>\$11            | \$112<br>\$57             | -                            | 2                          |
| 2341-A-d-Mg1<br>2342-A-d-Mg1 | Grade-Limo's Pond -Placed Cover Grade-Lower Lined Pond -Placed Cover                   | Dams and Reservoirs Elmo's Pond Dams and Reservoirs Lower Lined Pond | -  | Cat 16M  | \$22.23<br>\$22.23   | \$93.51<br>\$93.51                       | \$27.41<br>\$27.41 | 1               | 0.4               | \$9<br>\$16             | \$38<br>\$68                               | \$11                    | \$57<br>\$103             | -                            | 1                          |
| 2343-A-d-Mg1                 | Grade-Upper Lined Pond -Placed Cover   | Dams and Reservoirs Upper Lined Pond                                 | -  | Cat 16M  | \$22.23              | \$93.51                                  | \$27.41            | 1               | 0.7               |                         | \$12                                       | \$20<br>\$4             | \$19                      | •                            | 2                          |
| 2344-A-d-Mg1                 | Grade-5900 PLS Sump -Placed Cover  | Dams and Reservoirs 5900 PLS Sump                                    |  | Cat 16M  | \$22.23              | \$93.51                                  | \$27.41            | 1               | 0.1               | \$4                     | \$17                                       | \$ <del>-1</del><br>\$5 | \$26                      |                              | 1                          |
| 2345-A-d-Mg1                 | Grade-6300 PLS Booster Station -Placed Cover   | Dams and Reservoirs 6300 PLS Booster Station                         | -  | Cat 16M  | \$22.23              | \$93.51                                  | \$27.41            | i               | 0.0               | \$0                     | \$1  | \$0                     | \$1                       |                              |                            |
| 2346-A-d-Ma1                 | Grade-Lee Hill #2 Booster -Placed Cover  | Dams and Reservoirs Lee Hill #2 Booster                              | -  | Cat 16M  | \$22.23              | \$93.51                                  | \$27.41            | 1               | 0.0               | \$1                     | \$4  | \$1                     | \$6                       | -                            | 0                          |
| 2400-A-d-Mg1                 | Grade-Previously Reclaimed-Placed Cover  | Ground Hog #5  | -  | Cat 16M  | \$22.23              | \$93.51                                  | \$27.41            | 1               | 0.7               | \$15                    | \$62                                       | \$18                    | \$95                      | -                            | 2                          |
| 2512-A-d-Mg1                 | Grade-East Pit Access Disturbed Area-Placed Cover                                      | Miscellaneous NMA East Pit Access Disturbed Area                     | -  | Cat 16M  | \$22.23              | \$93.51                                  | \$27.41            | 1               | 1.2               | \$27                    | \$113                                      | \$33                    | \$173                     | -                            | 4                          |
| 2513-A-d-Mg1                 | Grade-Chino part of Cobre Haul Road-Placed Cover                                       | Miscellaneous NMA Chino part of Cobre Haul Road                      | -  | Cat 16M  | \$22.23              | \$93.51                                  | \$27.41            | 1               | 1.1               | \$24                    | \$99                                       | \$29                    | \$152                     | -                            | 3                          |
| 2514-A-d-Mg1                 | Grade-Highway to Heaven Haul Road-Placed Cover   | Miscellaneous NMA Highway to Heaven Haul Road                        | -  | Cat 16M  | \$22.23              | \$93.51                                  | \$27.41            | 1               | 10.7              | \$238                   | \$1,002                                    | \$294                   | \$1,534                   | -                            | 32                         |
| 2515-A-d-Mg1                 | Grade-Disturbed Area Around Reservoir 5-Placed Cover                                   | Miscellaneous NMA Disturbed Area Around Reservoir 5                  | -  | Cat 16M  | \$22.23              | \$93.51                                  | \$27.41            | 1               | 10.7              |                         | \$1,003                                    | \$294                   | \$1,536                   | -                            | 32                         |
| 3307-A-d-Mg1                 | Grade-Filter Plant-Placed Cover  | Miscellaneous NMA Filter Plant                                       | -  | Cat 16M  | \$22.23              | \$93.51                                  | \$27.41            | 1               | 5.6               |                         | \$526                                      | \$154                   | \$806                     | -                            | 17                         |
| 2600-A-d-Mg1                 | Grade-200-Acre Unplanned Future Disturbance-Placed Cover                               | Unplanned Disturbed Area   | -  | Cat 16M  | \$22.23              | \$93.51                                  | \$27.41            | 1               | 66.0              | \$1,468                 | \$6,176                                    | \$1,810                 | \$9,455                   |                              | 200                        |
| 3000-A-d-Sc2                 | Grade-Entire Impoundment-Placed Cover  | Axiflo   | -  | Cat 657G   | \$100.29             | \$195.03                                 | \$27.41            | 6               | 273.01            | \$164,284               | \$319,475                                  | \$44,899                | \$528,658                 | 469,952                      |                            |
| 3100-A-d-Sc2                 | Grade-Entire Impoundment-Placed Cover  | Tailings Pond 6  | •  | Cat 657G   | \$100.29             | \$195.03                                 | \$27.41            | 6               | 1,177.13          |                         | \$1,377,471<br>\$8 741 449                 | \$193,590               | \$2,279,402               | 1,266,425                    |                            |
| 3200-A-d-Sc2<br>3301-A-d-Sc2 | Grade-Entire Impoundment-Placed Cover<br>Grade-Slag Pile Outslopes W side-Placed Cover | Tailings Pond 7 Miscellaneous SMA Slag Pile Outslopes W side         | -  | Cat 657G<br>Cat 657G   | \$100.29<br>\$100.29 | \$195.03<br>\$195.03                     | \$27.41<br>\$27.41 | б               | 7,470.05<br>46.11 | \$4,495,137<br>\$27,748 | \$8,741,449<br>\$53,960                    | \$1,228,525<br>\$7,584  | \$14,465,112<br>\$89,292  | 8,036,747<br>39,688          | · ·                        |
| 3301-A-d-Sc2<br>3308-A-d-Mg1 |  | Miscellaneous SMA 35 Acre Misc. Area                                 | -  | Cat 16M  |                      | \$195.03<br>\$93.51                      | \$27.41<br>\$27.41 | 1               |                   |                         | \$53,960<br>\$1.081                        | \$7,584<br>\$317        | \$89,292<br>\$1.655       | 39,688                       | 35                         |
| 5001-E-d-Rp1                 | Grade-35 Acre Misc. Area-Placed Cover<br>Rip-Cover Source                              | White House  | -  | Cat D11T CD Multi-shank (w/ MSR-359H)  | \$22.23<br>\$69.62   | \$259.35                                 | \$27.41            | 1               | 11.56<br>21.44    |                         | \$5,560                                    | \$517<br>\$588          | \$7,640                   | •                            | 62.5                       |
| 5105-E-d-Rp1                 | Rip-Cover Source   | Borrow Area F  |  | Cat D11T CD Multi-shank (w/ MSR-359H)  | \$69.62              | \$259.35                                 | \$27.41            | 1               | 17.02             |                         | \$4,413                                    | \$466                   | \$6,064                   |                              | 49.6                       |
| 5106-E-d-Rp1                 | Rip-Cover Source   | North of Borrow Area F   |  | Cat D11T CD Multi-shank (w/ MSR-359H)  | \$69.62              | \$259.35                                 | \$27.41            | i               | 23.28             |                         | \$6,039                                    | \$638                   | \$8,298                   |                              | 67.9                       |
| 5107-F-d-Rp1                 | Rip-Cover Source   | Borrow Area E  | -  | Cat D11T CD Multi-shank (w/ MSR-359H)  | \$69.62              | \$259.35                                 | \$27.41            | i               | 37.72             |                         | \$9.782                                    | \$1.034                 | \$13.441                  |                              | 110.0                      |
| 5108-E-d-Rp1                 | Rip-Cover Source   | Borrow Area H  | -  | Cat D11T CD Multi-shank (w/ MSR-359H)  | \$69.62              | \$259.35                                 | \$27.41            | i               | 56.64             | \$3.943                 | \$14.691                                   | \$1.553                 | \$20.187                  | -                            | 165.2                      |
| 5109-E-d-Rp1                 |  | West of Borrow E&H   | -  | Cat D11T CD Multi-shank (w/ MSR-359H)  | \$69.62              | \$259.35                                 | \$27.41            | 1               | 172.19            |                         | \$44,656                                   | \$4,720                 | \$61,363                  | -                            | 502.0                      |
|                              | 1 Road Maintenance   | Upper South  | Triangle Stockpile   | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal.  | \$45.72              | \$154.40                                 | \$51.68            | 1               | 153.6             | \$7.024                 | \$23,719                                   | \$7.939                 | \$38.682                  | -                            | -                          |
|                              | 1 Road Maintenance   | Upper South & STS2   | South Stockpile  | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal.  | \$45.72              | \$154.40                                 | \$51.68            | 1               | 970.4             | \$44,368                | \$149,826                                  | \$50,148                | \$244,342                 | -                            | _                          |
| 1200-P-b-Comb                | 1 Road Maintenance   | Upper South  | West Stockpile   | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal.  | \$45.72              | \$154.40                                 | \$51.68            | 1               | 1,005.4           | \$45,973                | \$155,243                                  | \$51,961                | \$253,177                 | -                            | -                          |
|                              | 1 Road Maintenance   | Upper South & White House  | Lambright Stockpile  | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.   | \$45.72              | \$154.40                                 | \$51.68            | 1               | 1,248.6           |                         | \$192,782                                  | \$64,526                | \$314,397                 | -                            | -                          |
|                              | 1 Road Maintenance   | Upper South  | Southwest Lampbright   | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.   | \$45.72              | \$154.40                                 | \$51.68            | 1               | 152.8             |                         | \$23,588                                   | \$7,895                 | \$38,468                  | -                            | -                          |
| 1500-P-b-Comb                | 1 Road Maintenance   | Upper South  | South and East In-Pit Stockpiles                             | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.   | \$45.72              | \$154.40                                 | \$51.68            | 1               | 74.1              |                         | \$11,437                                   | \$3,828                 | \$18,651                  | -                            | -                          |
|                              | 1 Road Maintenance   | Upper South  | Northwest Stockpile  | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal.  | \$45.72              | \$154.40                                 | \$51.68            | 1               | 13.5              |                         | \$2,089                                    | \$699                   | \$3,407                   | -                            | -                          |
|                              | 1 Road Maintenance   | Upper South  | LeeHill Stockpile  | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.   | \$45.72              | \$154.40                                 | \$51.68            | 1               | 40.4              |                         | \$6,236                                    | \$2,087                 | \$10,170                  | -                            | -                          |
|                              | 1 Road Maintenance   | Upper South  | Northeast Stockpile  | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.   | \$45.72              | \$154.40                                 | \$51.68            | 1               | 19.6              |                         | \$3,019                                    | \$1,010                 | \$4,923                   | -                            | -                          |
|                              | 1 Road Maintenance   | Upper South  | North Stockpile  | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.   | \$45.72              | \$154.40                                 | \$51.68            | 1               | 11.3              |                         | \$1,743                                    | \$584                   | \$2,843                   | -                            | -                          |
|                              | of Road Maintenance<br>of Road Maintenance   | STS2<br>STS2   | 9 Waste Rock<br>Dam 15                                       | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal.  | \$45.72<br>\$45.72   | \$154.40<br>\$154.40                     | \$51.68<br>\$51.68 | 1               | 294.0<br>0.2      | \$13,441<br>\$7         | \$45,389<br>\$25                           | \$15,192<br>\$8         | \$74,022<br>\$40          | -                            | -                          |
|                              | 1 Road Maintenance   | STS2   | Dam 16   | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal.<br>Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal. | \$45.72<br>\$45.72   | \$154.40<br>\$154.40                     | \$51.68<br>\$51.68 | 1               | 0.2               | Ψ,                      | \$25<br>\$25                               | \$6<br>\$8              | \$40<br>\$40              | -                            | -                          |
|                              | 1 Road Maintenance   | STS2   | Dam 20   | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.   | \$45.72<br>\$45.72   | \$154.40<br>\$154.40                     | \$51.68<br>\$51.68 | 1               | 0.2               | \$7<br>\$23             | \$25<br>\$79                               | \$0<br>\$27             | \$129                     | •                            | •                          |
|                              | 1 Road Maintenance   | STS2   | Reservoir 17   | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.   | \$45.72<br>\$45.72   | \$154.40                                 | \$51.68            | 1               | 5.6               |                         | \$861                                      | \$288                   | \$1.404                   |                              |                            |
|                              | 1 Road Maintenance   | STS2   | Fleming Pond   | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.   | \$45.72              | \$154.40                                 | \$51.68            | i               | 1.2               |                         | \$191                                      | \$64                    | \$312                     |                              |                            |
|                              | 1 Road Maintenance   | STS2   | Tailing Thickener 1  | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.   | \$45.72              | \$154.40                                 | \$51.68            | i               | 4.2               | \$191                   | \$646                                      | \$216                   | \$1,054                   |                              | _                          |
|                              | 1 Road Maintenance   | STS2   | PLS Pond & Launder   | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal.  | \$45.72              | \$154.40                                 | \$51.68            | 1               | 0.4               |                         | \$64                                       | \$21                    | \$104                     | -                            | _                          |
|                              | 1 Road Maintenance   | STS2   | Raffinate Pond   | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.   | \$45.72              | \$154.40                                 | \$51.68            | 1               | 0.2               |                         | \$28                                       | \$9                     | \$46                      | -                            | -                          |
|                              | 1 Road Maintenance   | STS2   | Reservoir 2  | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.   | \$45.72              | \$154.40                                 | \$51.68            | 1               | 0.4               |                         | \$56                                       | \$19                    | \$92                      | -                            | -                          |
|                              | 1 Road Maintenance   | STS2   | Reservoir 6  | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal.  | \$45.72              | \$154.40                                 | \$51.68            | 1               | 2.4               | \$109                   | \$368                                      | \$123                   | \$600                     | -                            | -                          |
|                              | 1 Road Maintenance   | STS2   | Reservoir 7  | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal.  | \$45.72              | \$154.40                                 | \$51.68            | 1               | 3.8               | \$175                   | \$592                                      | \$198                   | \$965                     | -                            | -                          |
|                              | 1 Road Maintenance   | STS2   | Elmo's Pond  | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal.  | \$45.72              | \$154.40                                 | \$51.68            | 1               | 2.0               |                         | \$304                                      | \$102                   | \$496                     | -                            | -                          |
|                              | 1 Road Maintenance   | STS2   | Lower Lined Pond   | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal.  | \$45.72              | \$154.40                                 | \$51.68            | 1               | 3.5               |                         | \$547                                      | \$183                   | \$893                     | -                            | -                          |
|                              | 1 Road Maintenance   | STS2   | Upper Lined Pond   | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.   | \$45.72              | \$154.40                                 | \$51.68            | 1               | 0.7               |                         | \$101                                      | \$34                    | \$164                     | -                            | -                          |
|                              | 1 Road Maintenance   | STS2   | 5900 PLS Sump  | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.   | \$45.72              | \$154.40                                 | \$51.68            | 1               | 0.9               |                         | \$142                                      | \$47                    | \$231                     | -                            | -                          |
|                              | 1 Road Maintenance   | STS2   | 6300 PLS Booster Station                                     | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal.  | \$45.72              | \$154.40                                 | \$51.68            | 1               | 0.0               | \$2                     | \$7  | \$2                     | \$12                      | -                            | -                          |
|                              | 1 Road Maintenance   | STS2   | Lee Hill #2 Booster  | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal.  | \$45.72              | \$154.40                                 | \$51.68            | 1               | 0.2               |                         | \$35                                       | \$12                    | \$57                      | -                            | -                          |
|                              | of Road Maintenance  | STS2<br>STS2   | Ground Hog #5  Fast Pit Access Disturbed Area                | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal. Cat 14M, Off-Hwy Water Tanker Truck 6,000-gal.     | \$45.72<br>\$45.72   | \$154.40<br>\$154.40                     | \$51.68<br>\$51.68 | 1               | 1.1<br>6.1        | \$48<br>\$280           | \$164<br>\$947                             | \$55<br>\$317           | \$267<br>\$1.544          | -                            | -                          |
|                              |  | STS2<br>STS2   |  |  | \$45.72<br>\$45.72   | \$154.40<br>\$154.40                     | \$51.68<br>\$51.68 | 1               | 6.1<br>5.1        | \$280<br>\$234          | \$947<br>\$791                             | \$317<br>\$265          | \$1,544<br>\$1,290        | -                            | -                          |
|                              | of Road Maintenance  | S1S2<br>STS2   | Chino part of Cobre Haul Road<br>Highway to Heaven Haul Road | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.<br>Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.   | \$45.72<br>\$45.72   | \$154.40<br>\$154.40                     | \$51.68<br>\$51.68 | 1               | 5.1<br>54.2       | \$234<br>\$2.478        | \$791<br>\$8.368                           | \$265<br>\$2.801        | \$1,290<br>\$13.647       | -                            | -                          |
|                              | 1 Road Maintenance   | STS2   | Disturbed Area Around Reservoir 5                            |  | \$45.72<br>\$45.72   | \$154.40<br>\$154.40                     | \$51.00<br>\$51.68 | 1               | 56.7              | \$2,476                 | \$8,760                                    | \$2,001                 | \$13,647<br>\$14,286      | -                            | -                          |
|                              | 1 Road Maintenance   | West of Borrow E&H   | Filter Plant   | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.   | \$45.72              | \$154.40                                 | \$51.68            | i               | 28.5              |                         | \$4.395                                    | \$1,471                 | \$7.168                   |                              | -                          |
|                              | 1 Road Maintenance   | Upper South  | Unplanned Disturbed Area                                     | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.   | \$45.72              | \$154.40                                 | \$51.68            | i               | 334.1             | \$1,302<br>\$15.278     | \$51.590                                   | \$17.268                | \$84.136                  |                              |                            |
|                              | 1 Road Maintenance   | Borrow Area F & North of Borrow Area F                               | Axiflo   | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.   | \$45.72              | \$154.40                                 | \$51.68            | i               | 183.5             |                         | \$28,339                                   | \$9,485                 | \$46,217                  | -                            | -                          |
|                              | 1 Road Maintenance   | Borrow Area F  | Tailings Pond 6  | Cat 14M, Off-Hwy Water Tanker Truck, 6,000-gal.  | \$45.72              | \$154.40                                 | \$51.68            | i               | 447.5             |                         | \$69.093                                   | \$23.126                | \$112,679                 | -                            | -                          |
|                              | 1 Road Maintenance   | West of Borrow E&H   | Tailings Pond 7  | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.   | \$45.72              | \$154.40                                 | \$51.68            | i               | 2,639.8           |                         | \$407,591                                  | \$136,425               | \$664,717                 | -                            | -                          |
|                              | 1 Road Maintenance   | West of Borrow E&H   | Slag Pile Outslopes W side                                   | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.   | \$45.72              | \$154.40                                 | \$51.68            | i               | 13.7              | \$626                   | \$2,115                                    | \$708                   | \$3,450                   | -                            | -                          |
|                              | 1 Road Maintenance   | West of Borrow E&H   | 35 Acre Misc. Area   | Cat 14M, Off-Hwy Water Tanker Truck,6,000-gal.   | \$45.72              | \$154.40                                 | \$51.68            | i               | 58.5              |                         | \$9,028                                    | \$3,022                 | \$14,724                  | -                            | -                          |
|                              | Rip-Haul Road  | Upper South & White House  | -  | Cat D11T CD Multi-shank (w/ MSR-359H)  | \$69.62              | \$259.35                                 | \$27.41            | 1               | 9.4               |                         | \$2,449                                    | \$259                   | \$3,366                   | -                            | 27.5                       |
|                              |  |  |  |  |                      |  |                    |                 |                   |                         |  |                         |                           |                              |                            |
|                              |  |  |  |  |                      |  |                    |                 |                   |                         |  |                         |                           |                              |                            |
|                              |  |  |  |  |                      |  |                    |                 | TOTAL             | \$32,233,938            | \$71,743,005                               | \$9,360,751             | \$113,337,695             | 222,481,351                  | 10,941                     |

### Revegetation Costs

**Description:**Includes scarifying (ripping), discing, rangeland drill seeding, mulching, crimping, and daily per diem

|                            | T  | ı  | Destination | 1 1            | Fuel Unit | Reven w/o Fuel    | Fuel Direct Cost | Reveg w/o Fuel                          |
|----------------------------|--|--|-------------|----------------|-----------|-------------------|------------------|---|
| ID                         | Description  | Source Location 1                                | Location 2  | Area (ac)      |           | Unit Cost (\$/ac) | (\$)             | Direct Cost (\$)                        |
| 1000-J-e-U2                | Revegetate-Entire Stockpile-Final Grade                      | Triangle Stockpile                               | Location 2  | 81.5           |           |                   | ( . ,            | (.,                                     |
| 1100-J-e-U2                | Revegetate-Entire Stockpile-Final Grade                      | South Stockpile                                  |             | 584.6          |           |                   |                  |   |
|                            |  |  |             |                |           |                   | , , , , ,        | ,                                       |
| 1200-J-e-U2<br>1300-J-e-U2 | Revegetate-Entire Stockpile-Final Grade                      | West Stockpile                                   |             | 626.4<br>785.4 |           |                   |                  |   |
|                            | Revegetate-Entire Stockpile-Final Grade                      | Lambright Stockpile                              |             |                |           |                   |                  |   |
| 1400-J-e-U2                | Revegetate-Entire Stockpile-Final Grade                      | Southwest Lampbright                             |             | 94.3           |           |                   |                  | , |
| 1500-J-e-U2                | Revegetate-Entire Stockpile-Final Grade                      | South and East In-Pit Stockpiles                 |             | 46.0           |           |                   |                  |   |
| 1600-J-e-U2                | Revegetate-Entire Stockpile-Final Grade                      | Northwest Stockpile                              |             | 8.2            |           |                   |                  | •                                       |
| 1700-J-e-U2                | Revegetate-Entire Stockpile-Final Grade                      | LeeHill Stockpile                                |             | 25.4           |           |                   |                  |   |
| 1800-J-e-U2                | Revegetate-Entire Stockpile-Final Grade                      | Northeast Stockpile                              |             | 12.2           |           |                   |                  |   |
| 1900-J-e-U2                | Revegetate-Entire Stockpile-Final Grade                      | North Stockpile                                  |             | 6.9            |           |                   | ,                |   |
| 2000-J-e-U2                | Revegetate-Entire Stockpile-Final Grade                      | STS2   |             | 83.8           |           |                   |                  |   |
| 2100-J-e-U2                | Revegetate-Entire Stockpile-Final Grade                      | Upper South                                      |             | 142.7          |           |                   |                  |   |
| 2200-J-e-U2                | Revegetate-Entire Stockpile-Final Grade                      | 9 Waste Rock                                     |             | 161.2          |           |                   |                  | \$ 132,203                              |
| 2309-J-e-U2                | Revegetate-Dam 15-Final Grade                                | Dams and Reservoirs Dam 15                       |             | 0.1            |           |                   |                  | \$ 82                                   |
| 2310-J-e-U2                | Revegetate-Dam 16-Final Grade                                | Dams and Reservoirs Dam 16                       |             | 0.1            |           |                   |                  | \$ 82                                   |
| 2313-J-e-U2                | Revegetate-Dam 20-Final Grade                                | Dams and Reservoirs Dam 20                       |             | 0.3            |           |                   | ,                | \$ 262                                  |
| 2316-J-e-U2                | Revegetate-Reservoir 17-Final Grade                          | Dams and Reservoirs Reservoir 17                 |             | 3.4            |           |                   |                  | -,                                      |
| 2318-J-e-U2                | Revegetate-Fleming Pond-Final Grade                          | Dams and Reservoirs Fleming Pond                 |             | 8.0            |           |                   |                  | \$ 640                                  |
| 2320-J-e-U2                | Revegetate-Tailing Thickener 1-Final Grade                   | Dams and Reservoirs Tailing Thickener 1          |             | 2.6            |           |                   |                  |   |
| 2321-J-e-U2                | Revegetate-PLS Pond & Launder-Final Grade                    | Dams and Reservoirs PLS Pond & Launder           |             | 0.3            | \$ 3.85   | \$ 820.12         | \$ 1             | \$ 213                                  |
| 2323-J-e-U2                | Revegetate-Raffinate Pond-Final Grade                        | Dams and Reservoirs Raffinate Pond               |             | 0.1            |           |                   |                  | \$ 90                                   |
| 2324-J-e-U2                | Revegetate-Reservoir 2-Final Grade                           | Dams and Reservoirs Reservoir 2                  |             | 0.2            | \$ 3.85   | \$ 820.12         | \$ 1             | \$ 180                                  |
| 2327-J-e-U2                | Revegetate-Reservoir 6-Final Grade                           | Dams and Reservoirs Reservoir 6                  |             | 1.5            | \$ 3.85   | \$ 820.12         | \$ 6             | \$ 1,230                                |
| 2328-J-e-U2                | Revegetate-Reservoir 7-Final Grade                           | Dams and Reservoirs Reservoir 7                  |             | 2.4            | \$ 3.85   | \$ 820.12         | \$ 9             | \$ 1,976                                |
| 2341-J-e-U2                | Revegetate-Elmo's Pond -Final Grade                          | Dams and Reservoirs Elmo's Pond                  |             | 1.2            | \$ 3.85   | \$ 820.12         | \$ 5             | \$ 1,017                                |
| 2342-J-e-U2                | Revegetate-Lower Lined Pond -Final Grade                     | Dams and Reservoirs Lower Lined Pond             |             | 2.2            | \$ 3.85   | \$ 820.12         | \$ 9             | \$ 1,829                                |
| 2343-J-e-U2                | Revegetate-Upper Lined Pond -Final Grade                     | Dams and Reservoirs Upper Lined Pond             |             | 0.4            | \$ 3.85   | \$ 820.12         | \$ 2             | \$ 336                                  |
| 2344-J-e-U2                | Revegetate-5900 PLS Sump -Final Grade                        | Dams and Reservoirs 5900 PLS Sump                |             | 0.6            | \$ 3.85   | \$ 820.12         | \$ 2             | \$ 467                                  |
| 2345-J-e-U2                | Revegetate-6300 PLS Booster Station -Final Grade             | Dams and Reservoirs 6300 PLS Booster Station     |             | 0.0            | \$ 3.85   | \$ 820.12         | \$ 0             | \$ 25                                   |
| 2346-J-e-U2                | Revegetate-Lee Hill #2 Booster -Final Grade                  | Dams and Reservoirs Lee Hill #2 Booster          |             | 0.1            | \$ 3.85   | \$ 820.12         | \$ 1             | \$ 115                                  |
| 2400-J-e-U2                | Revegetate-Previously Reclaimed-Final Grade                  | Ground Hog #5                                    |             | 2.0            | \$ 3.85   | \$ 820.12         | \$ 8             | \$ 1,640                                |
| 2502-J-e-U2                | Revegetate-Northwest Haul Road-Final Grade                   | Miscellaneous NMA Northwest Haul Road            |             | 4.8            | \$ 3.85   | \$ 820.12         | \$ 19            | \$ 3,961                                |
| 2512-J-e-U2                | Revegetate-East Pit Access Disturbed Area-Final Grade        | Miscellaneous NMA East Pit Access Disturbed Area |             | 3.7            |           |                   |                  |   |
| 2513-J-e-U2                | Revegetate-Chino part of Cobre Haul Road-Final Grade         | Miscellaneous NMA Chino part of Cobre Haul Road  |             | 3.2            |           |                   |                  |   |
| 2514-J-e-U2                | Revegetate-Highway to Heaven Haul Road-Final Grade           | Miscellaneous NMA Highway to Heaven Haul Road    |             | 32.4           |           |                   | ,                | , , , , , ,                             |
| 2515-J-e-U2                | Revegetate-Disturbed Area Around Reservoir 5-Final Grade     | Miscellaneous NMA Disturbed Area Around Reservo  |             | 32.5           |           |                   |                  |   |
| 3307-J-e-U2                | Revegetate-Filter Plant-Final Grade                          | Miscellaneous NMA Filter Plant                   |             | 17.0           |           |                   |                  |   |
| 2600-J-e-U2                | Revegetate-200-Acre Unplanned Future Disturbance-Final Grade |  |             | 200.0          |           |                   |                  |   |
| 3000-J-e-U2                | Revegetate-Entire Impoundment-Final Grade                    | Axiflo   |             | 97             |           |                   | ,                |   |
| 3100-J-e-U2                | Revegetate-Entire Impoundment-Final Grade                    | Tailings Pond 6                                  |             | 262            |           |                   | ,                |   |
| 3200-J-e-U2                | Revegetate-Entire Impoundment-Final Grade                    | Tailings Pond 7                                  |             | 1660           |           |                   |                  | , |
| 3301-J-e-U2                | Revegetate-Slag Pile Outslopes W side-Final Grade            | Miscellaneous SMA Slag Pile Outslopes W side     |             | 8              |           |                   |                  |   |
| 3308-J-e-U2                | Revegetate-35 Acre Misc. Area-Final Grade                    | Miscellaneous SMA 35 Acre Misc. Area             |             | 35.0           |           |                   | ,                |   |
| 5001-J-d-U2                | Revegetate-Cover Source                                      | White House                                      |             | 63             |           |                   |                  |   |
| 5105-J-d-U2                | Revegetate-Cover Source                                      | Borrow Area F                                    |             | 50             |           |                   |                  |   |
|                            |  | North of Borrow Area F                           |             | 68             |           |                   |                  |   |
| 5106-J-d-U2                | Revegetate-Cover Source                                      |  |             |                |           |                   | ,                |   |
| 5107-J-d-U2                | Revegetate-Cover Source                                      | Borrow Area E                                    |             | 110            |           |                   |                  |   |
| 5108-J-d-U2                | Revegetate-Cover Source                                      | Borrow Area H                                    |             | 165            |           |                   |                  |   |
| 5109-J-d-U2                | Revegetate-Cover Source                                      | West of Borrow E&H                               |             | 502            |           |                   |                  |   |
| 5005-J-e-U2                | Revegetate-Haul Road   | Upper South & White House                        |             | 27.5           | \$ 3.85   | \$ 820.12         | \$ 106           | \$ 22,584                               |
|                            |  |  | TOTAL       | 6,018          |           |                   | \$ 23,158        | \$ 4,935,373                            |
|                            |  |  | IOIAL       | 0,010          |           |                   | ψ 23,136         | φ 4,830,373                             |

### Other Reclamation Activity Costs

### Assumptions:

- 1 Downdrain lengths and bench channel lengths based on Golder Take-Offs 1401129-004-MTO-RevG\_07\_Chino\_MTOs\_05SEP18.xlsx 2 Bench grading lengths equal to bench channel lengths

- Top channels constructed at 9 WRS
   Cost to construct drain or channel on re-graded stockpile
- 5 The downdrain, ACB, well plug & abandon, and well replacement costs include fuel

|              |  | 1   | Destination | I                        |      | Fuel | Unit Cost | Unit Cost w/o Fuel     | Fuel Direct Cost       | Direct w/o Fuel |
|--------------|--|---|-------------|--------------------------|------|------|-----------|------------------------|------------------------|-----------------|
| ID           | Description  | Source Location 1                             | Location 2  | Quantity <sup>1, 2</sup> | Unit |      | \$/unit)  | (\$/unit) <sup>4</sup> | (\$/unit) <sup>5</sup> | Cost (\$)       |
| 1000-F-e-U3  | Grade Benches-Entire Stockpile-Final Grade                       | Triangle Stockpile                            | -           | 13,831                   | ft   | \$   | 0.37      | \$ 1.52                | \$ 5,123.1             | \$ 20,989       |
| 1100-F-e-U3  | Grade Benches-Entire Stockpile-Final Grade                       | South Stockpile                               | -           | 95,487                   | ft   | \$   | 0.37      | \$ 1.52                | \$ 35,369.1            | \$ 144,902      |
| 1200-F-e-U3  | Grade Benches-Entire Stockpile-Final Grade                       | West Stockpile                                | -           | 108,831                  | ft   | \$   | 0.37      | \$ 1.52                | \$ 40,311.7            | \$ 165,151      |
| 1300-F-e-U3  | Grade Benches-Entire Stockpile-Final Grade                       | Lambright Stockpile                           | -           | 157,574                  | ft   | \$   | 0.37      | \$ 1.52                | \$ 58,366.4            | \$ 239,118      |
| 2000-F-e-U3  | Grade Benches-Entire Stockpile-Final Grade                       | STS2  | -           | 6,218                    | ft   | \$   | 0.37      | \$ 1.52                | \$ 2,303.2             | \$ 9,436        |
| 2100-F-e-U3  | Grade Benches-Entire Stockpile-Final Grade                       | Upper South                                   | -           | 5,348                    | ft   | \$   | 0.37      | \$ 1.52                | \$ 1,980.9             | \$ 8,116        |
| 2200-F-e-U3  | Grade Benches-Entire Stockpile-Final Grade                       | 9 Waste Rock                                  | -           | 14,085                   | ft   | \$   | 0.37      | \$ 1.52                | \$ 5,217.2             | \$ 21,374       |
| 3000-F-e-U4  | Grade Benches-Entire Impoundment-Final Grade                     | Axiflo  | -           | 3,380                    | ft   | \$   | 0.37      | \$ 1.52                | \$ 1,252.0             | \$ 5,129        |
| 3100-F-e-U4  | Grade Benches-Entire Impoundment-Final Grade                     | Tailings Pond 6                               | -           | 6,497                    | ft   | \$   | 0.37      | \$ 1.52                | \$ 2,406.6             | \$ 9,859        |
| 3200-F-e-U4  | Grade Benches-Entire Impoundment-Final Grade                     | Tailings Pond 7                               | -           | 42,224                   | ft   | \$   | 0.37      | \$ 1.52                | \$ 15,639.9            | \$ 64,074       |
| 1100-G-e-U5  | Construct Downdrains-Entire Stockpile-Final Grade                | South Stockpile                               | -           | 6,474                    | ft   | -    |           | \$ 374.38              | \$ -                   | \$ 2,423,818    |
| 1200-G-e-U5  | Construct Downdrains-Entire Stockpile-Final Grade                | West Stockpile                                | -           | 4,493                    | ft   | -    |           | \$ 374.38              | \$ -                   | \$ 1,682,090    |
| 1300-G-e-U5  | Construct Downdrains-Entire Stockpile-Final Grade                | Lambright Stockpile                           | -           | 9,299                    | ft   | -    |           | \$ 374.38              | \$ -                   | \$ 3,481,362    |
| 2200-G-e-U5  | Construct Downdrains-Entire Stockpile-Final Grade                | 9 Waste Rock                                  | -           | 1,067                    | ft   | -    |           | \$ 374.38              | \$ -                   | \$ 399,464      |
| 3100-G-e-U5  | Construct Downdrains-Entire Impoundment-Final Grade              | Tailings Pond 6                               | -           | 319                      | ft   | -    |           | \$ 374.38              | \$ -                   | \$ 119,515      |
| 3200-G-e-U5  | Construct Downdrains-Entire Impoundment-Final Grade              | Tailings Pond 7                               | -           | 2,280                    | ft   | -    |           | \$ 374.38              | \$ -                   | \$ 853,712      |
| 1100-Gb-e-U6 | Construct Downdrain Dissipators-Entire Stockpile-Final Grade     | South Stockpile                               | -           | 2                        | ea   | -    |           | \$ 14,556.48           | \$ -                   | \$ 29,113       |
| 1200-Gb-e-U6 | Construct Downdrain Dissipators-Entire Stockpile-Final Grade     | West Stockpile                                | -           | 4                        | ea   | -    |           | \$ 14,556.48           | \$ -                   | \$ 58,226       |
| 1300-Gb-e-U6 | Construct Downdrain Dissipators-Entire Stockpile-Final Grade     | Lambright Stockpile                           | -           | 4                        | ea   | -    |           | \$ 14,556.48           | \$ -                   | \$ 58,226       |
| 1000-H-e-U7  | Construct Bench Channels-Entire Stockpile-Final Grade            | Triangle Stockpile                            | -           | 13,831                   | ft   | \$   | 0.94      | \$ 4.39                | \$ 13,067.8            | \$ 60,732       |
| 1100-H-e-U7  | Construct Bench Channels-Entire Stockpile-Final Grade            | South Stockpile                               | -           | 95,487                   | ft   | \$   | 0.94      | \$ 4.39                | \$ 90,218.4            | \$ 419,283      |
| 1200-H-e-U7  | Construct Bench Channels-Entire Stockpile-Final Grade            | West Stockpile                                | -           | 108,831                  | ft   | \$   | 0.94      | \$ 4.39                | \$ 102,825.8           | \$ 477,875      |
| 1300-H-e-U7  | Construct Bench Channels-Entire Stockpile-Final Grade            | Lambright Stockpile                           | -           | 157,574                  | ft   | \$   | 0.94      | \$ 4.39                | \$ 148,879.2           | \$ 691,904      |
| 2000-H-e-U7  | Construct Bench Channels-Entire Stockpile-Final Grade            | STS2  | -           | 6,218                    | ft   | \$   | 0.94      | \$ 4.39                | \$ 5,874.9             | \$ 27,303       |
| 2100-H-e-U7  | Construct Bench Channels-Entire Stockpile-Final Grade            | Upper South                                   | -           | 5,348                    | ft   | \$   | 0.94      | \$ 4.39                | \$ 5,052.9             | \$ 23,483       |
| 2200-H-e-U7  | Construct Bench Channels-Entire Stockpile-Final Grade            | 9 Waste Rock                                  | -           | 14,085                   | ft   | \$   | 0.94      | \$ 4.39                | \$ 13,307.8            | \$ 61,847       |
| 2514-H-e-U7  | Construct Bench Channels-Highway to Heaven Haul Road-Final Grade | Miscellaneous NMA Highway to Heaven Haul Road | -           | 1,995                    | ft   | \$   | 0.94      | \$ 4.39                | \$ 1,884.9             | \$ 8,760        |
| 3000-H-e-U7  | Construct Bench Channels-Entire Impoundment-Final Grade          | Axiflo  | -           | 3,380                    | ft   | \$   | 0.94      | \$ 4.39                | \$ 3,193.5             | \$ 14,842       |
| 3100-H-e-U7  | Construct Bench Channels-Entire Impoundment-Final Grade          | Tailings Pond 6                               | -           | 6,497                    | ft   | \$   | 0.94      | \$ 4.39                | \$ 6,138.7             | \$ 28,529       |
| 3200-H-e-U7  | Construct Bench Channels-Entire Impoundment-Final Grade          | Tailings Pond 7                               | -           | 42,224                   | ft   | \$   | 0.94      | \$ 4.39                | \$ 39,893.7            | \$ 185,403      |
| 2200-I-e-U8  | Construct Top Channels-Entire Stockpile-Final Grade              | 9 Waste Rock                                  | -           | 6,767                    | ft   | \$   | 0.44      | \$ 2.04                | \$ 3,000.6             | \$ 13,789       |
| 1200-N-e-U16 | Plug and Abandon Well-Entire Stockpile-Final Grade               | West Stockpile                                | -           | 1,700                    | ft   | -    |           | \$ 10.47               | \$ -                   | \$ 17,799       |
| 1200-O-e-U17 | Replace Well-Entire Stockpile-Final Grade                        | West Stockpile                                | -           | 1,700                    | ft   | -    |           | \$ 66.43               | \$ -                   | \$ 112,935      |
| 5005-Q-c-U19 | Construct Haul Road-Haul Road                                    | Upper South & White House                     | -           | 17,438                   | ft   | \$   | 7.38      | \$ 29.88               | \$ 128,709.53          | \$ 521,110      |
|              |  |   |             |                          |      |      |           |                        |                        |                 |

# Chino Mine

Reclamation Summary Stockpiles, Haul Roads, Reservoirs, and Disturbed Areas Based on Golder 2018 Closure/Closeout Plan

|                |                                   | Current Value |
|----------------|-----------------------------------|---------------|
| DIRECT COSTS   | Facility and Structure Removal    | \$4,591,210   |
|                | Earthmoving                       | \$113,337,695 |
|                | Revegetation                      | \$4,958,530   |
|                | Other                             | \$13,189,284  |
|                | Subtotal, Direct Costs            | \$136,076,720 |
| INDIRECT COSTS | Subtotal, Indirect Costs 30.0%    | \$40,823,016  |
| TOTAL COST     |                                   | \$176,899,735 |
|                | Seventeen Year Annual Expenditure | \$10,405,867  |

### Notes:

Indirect costs are based on 2019 agreement between FMI and agencies

Indirect costs include mobilization and demobilization, engineering redesign fee, contingencies, contractor profit and overhead, project management fee, and state procurement cost

# **Facility Characteristics**

Direct Costs

Indirect Costs

Facilities are categorized in this listing to meet the MMD reporting requirement

|   | 1000               | 1100            | 1200           | 1300                | 1400                 | 1500                             | 1600                | 1700              | 1800                | 1900            | 2000         | 2100               | 2200         | 230                 |
|---|--------------------|-----------------|----------------|---------------------|----------------------|----------------------------------|---------------------|-------------------|---------------------|-----------------|--------------|--------------------|--------------|---------------------|
| Facility  | Triangle Stockpile | South Stockpile | West Stockpile | Lambright Stockpile | Southwest Lampbright | South and East In-Pit Stockpiles | Northwest Stockpile | LeeHill Stockpile | Northeast Stockpile | North Stockpile | STS2         | Upper South        | 9 Waste Rock | Dams and Reservoirs |
| Reclaimed Acres <sup>6</sup>                            | 81.53              | 584.60          | 626.43         | 785.37              | 94.30                | 46.00                            | 8.22                | 25.41             | 12.25               | 6.91            | 83.78        | 142.66             | 161.20       | 15.64               |
| <u>ltem</u>   | Capital Cost       | Capital Cost    | Capital Cost   | Capital Cost        | Capital Cost         | Capital Cost                     | Capital Cost        | Capital Cost      | Capital Cost        | Capital Cost    | Capital Cost | Capital Cost       | Capital Cost | Capital Cost        |
| Cover Material Excav, Haul, Grade <sup>1</sup>          | \$356,732          | \$2,885,955     | \$4,621,914    | \$6,954,185         | \$801,195            | \$437,234                        | \$66,625            | \$199,126         | \$128,097           | \$66,651        | \$0          | \$0                | \$779,568    | \$110,835           |
| Top/Outslope Adjustment Grading <sup>2</sup>            | \$1,779,123        | \$25,724,715    | \$12,316,669   | \$25,612,852        | \$826,593            | \$5,622                          | \$2,400             | \$4,311           | \$2,078             | \$1,172         | \$50,884     | \$252,561          | \$55,143     | \$28,487            |
| Scarify, Seed & Mulch, Reveg <sup>3</sup>               | \$67,181           | \$481,693       | \$516,159      | \$647,123           | \$77,698             | \$37,903                         | \$6,772             | \$20,934          | \$10,091            | \$5,692         | \$69,030     | \$117,547          | \$132,824    | \$13,497            |
| Channels & Benches⁴                                     | \$99,911           | \$3,142,704     | \$2,526,479    | \$4,677,856         | \$0                  | \$0                              | \$0                 | \$0               | \$0                 | \$0             | \$44,917     | \$38,632           | \$517,999    | \$0                 |
| Demolition  | \$0                | \$0             | \$0            | \$0                 | \$0                  | \$0                              | \$0                 | \$0               | \$0                 | \$0             | \$0          | \$0                | \$0          | \$0                 |
| Other <sup>5</sup>                                      | \$0                | \$0             | \$130,734      | \$0                 | \$0                  | \$0                              | \$0                 | \$0               | \$0                 | \$0             | \$0          | \$0                | \$0          | \$0                 |
| Capital Cost Totals                                     | \$2,302,946        | \$32,235,067    | \$20,111,955   | \$37,892,017        | \$1,705,486          | \$480,759                        | \$75,797            | \$224,370         | \$140,266           | \$73,516        | \$164,831    | \$408,741          | \$1,485,534  | \$152,819           |
| Capital Cost/Acre                                       | \$28,245           | \$55,140        | \$32,106       | \$48,247            | \$18,086             | \$10,451                         | \$9,222             | \$8,831           | \$11,453            | \$10,641        | \$1,967      | \$2,865            | \$9,215      | \$9,771             |
| Cover Material Excav, Haul, Grade1                      | \$107,020          | \$865,787       | \$1,386,574    | \$2,086,256         | \$240,358            | \$131,170                        | \$19,987            | \$59,738          | \$38,429            | \$19,995        | \$0          | \$0                | \$233,871    | \$33,251            |
| Top/Outslope Adjustment Grading <sup>2</sup>            | \$533,737          | \$7,717,415     | \$3,695,001    | \$7,683,856         | \$247,978            | \$1,687                          | \$720               | \$1,293           | \$623               | \$352           | \$15,265     | \$75,768           | \$16,543     | \$8,546             |
| Scarify, Seed & Mulch, Reveg <sup>3</sup>               | \$20,154           | \$144,508       | \$154,848      | \$194,137           | \$23,309             | \$11,371                         | \$2,032             | \$6,280           | \$3,027             | \$1,708         | \$20,709     | \$35,264           | \$39,847     | \$4,049             |
| Channels & Benches <sup>4</sup>                         | \$29,973           | \$942,811       | \$757,944      | \$1,403,357         | \$0                  | \$0                              | \$0                 | \$0               | \$0                 | \$0             | \$13,475     | \$11,590           | \$155,400    | \$0                 |
| Demolition  | \$0                | \$0             | \$0            | \$0                 | \$0                  | \$0                              | \$0                 | \$0               | \$0                 | \$0             | \$0          | \$0                | \$0          | \$0                 |
| Other <sup>5</sup>                                      | \$0                | \$0             | \$39,220       | \$0                 | \$0                  | \$0                              | \$0                 | \$0               | \$0                 | \$0             | \$0          | \$0                | \$0          | \$0                 |
| Indirect Cost Totals                                    | \$690,884          | \$9,670,520     | \$6,033,586    | \$11,367,605        | \$511,646            | \$144,228                        | \$22,739            | \$67,311          | \$42,080            | \$22,055        | \$49,449     | \$122,622          | \$445,660    | \$45,846            |
| Indirect Cost/Acre                                      | \$8,474            | \$16,542        | \$9,632        | \$14,474            | \$5,426              | \$3,135                          | \$2,767             | \$2,649           | \$3,436             | \$3,192         | \$590        | \$860              | \$2,765      | \$2,931             |
| Total Cost  | \$2,993,830        | \$41,905,588    | \$26,145,541   | \$49,259,621        | \$2,217,132          | \$624,987                        | \$98,535            | \$291,682         | \$182,346           | \$95,570        | \$214,281    | \$531,3 <b>6</b> 3 | \$1,931,194  | \$198,665           |
| Total Cost Cover  | \$463,751          | \$3,751,742     | \$6,008,488    | \$9,040,441         | \$1,041,553          | \$568,404                        | \$86,612            | \$258,863         | \$166,526           | \$86,646        | \$0          | \$0                | \$1,013,439  | \$144,086           |
| Total Cost Cover  Total Cost Top/Outslope Adjustment    | \$2,312,859        | \$33,442,130    | \$16,011,670   | \$33,296,708        | \$1,074,571          | \$7,309                          | \$3,119             | \$5,604           | \$2,702             | \$1,524         | \$66,150     | \$328,329          | \$71,685     | \$37,034            |
| Total Cost For/Outslope Adjustment Total Cost Earthwork | \$2,776,611        | \$37,193,871    | \$22,020,157   | \$42,337,149        | \$2,116,125          | \$575,714                        | \$89,731            | \$264,468         | \$169,228           | \$88,170        | \$66,150     | \$328,329          | \$1,085,124  | \$181,119           |
| Capital Cost Re-Veg                                     | \$87,335           | \$626,201       | \$671,007      | \$841,260           | \$101,008            | \$49,273                         | \$8,804             | \$27,214          | \$13,118            | \$7,400         | \$89,739     | \$152,811          | \$172,671    | \$17,546            |
| Capital Cost Other <sup>5</sup>                         | \$0                | \$0             | \$169,954      | \$0                 | \$0                  | \$0                              | \$0                 | \$0               | \$0                 | \$0             | \$0          | \$0                | \$0          | \$0                 |
| Total Cost/Acre   | \$36,719           | \$71,682        | \$41,737       | \$62,721            | \$23,512             | \$13,587                         | \$11,988            | \$11,481          | \$14.890            | \$13,834        | \$2,558      | \$3,725            | \$11,980     | \$12,702            |
| Total Cost/Acre Cover                                   | 5,688              | 6,418           | 9,592          | 11,511              | 11,045               | 12,357                           | 10,538              | 10,189            | 13.598              | 12,542          | 0            | 0                  | 6,287        | 9,213               |
| Total Cost/Acre Top/Outslope Adjustment                 | 28,367             | 57,205          | 25,560         | 42,396              | 11,396               | 159                              | 380                 | 221               | 221                 | 221             | 790          | 2,301              | 445          | 2,368               |
| Total Cost/Acre Earthwork                               | \$34,055           | \$63,623        | \$35,152       | \$53,907            | \$22,441             | \$12,516                         | \$10,917            | \$10,410          | \$13,818            | \$12,763        | \$790        | \$2,301            | \$6.732      | \$11,581            |
| Capital Cost/Acre Re-Veg                                | 1,071              | 1,071           | 1.071          | 1,071               | 1,071                | 1,071                            | 1,071               | 1,071             | 1,071               | 1,071           | 1,071        | 1,071              | 1,071        | 1,122               |
|   |                    |                 |                |                     |                      |                                  |                     |                   |                     |                 |              |                    |              |                     |

<sup>1</sup> Cover Material includes dozer assist, load, haul, grade cover, and water truck and motor grader for road maintenance and dust control during reclamation

<sup>2</sup> Top/Outslope Adjustment Grading includes rough grading and ripping before placing cover

<sup>3</sup> Revegetation includes scarifying, discing, drill speeding, mulching, crimping, per diem, mobilization, seeding, and mulching

<sup>4</sup> Channels & Benches includes bench channels, downdrains, benches

<sup>5</sup> Other includes well installation/closure, and seepage collection/interceptor trench installation

<sup>6</sup> Total area does not include 599 previously reclaimed acres

## **Facility Characteristics**

Facilities are categorized in this listing to meet the MMD reporting requirement

|              |  | 2400               | 2500                 | 2600                     | 3000         | 3100             | 3200            | 3300              | 5001         | 510             | 5 5106                 | 5107             | 5108             | 5109               | 5005                      |                      |
|--------------|--|--------------------|----------------------|--------------------------|--------------|------------------|-----------------|-------------------|--------------|-----------------|------------------------|------------------|------------------|--------------------|---------------------------|----------------------|
|              | Facility   | Ground Hog #5      | Miscellaneous NMA    | Unplanned Disturbed Area | Axiflo       | Tailings Pond 6  | Tailings Pond 7 | Miscellaneous SMA | White House  | Borrow Area F   | North of Borrow Area F | Borrow Area E    | Borrow Area H    | West of Borrow E&H | Upper South & White House | Total                |
|              | <b>,</b>   |                    |                      |                          |              | 9                |                 |                   |              |                 |                        |                  |                  |                    | - Spp. Seeming            |                      |
|              | Reclaimed Acres <sup>6</sup>                           | 2.00               | 61.19                | 200.00                   | 97.10        | 261.66           | 1660.48         | 60.26             | 62.51        | 49.62           | 67.89                  | 109.97           | 165.16           | 502.04             | 27.54                     | 6001.71              |
|              | <u>ltem</u>  | Capital Cost       | Capital Cost         | Capital Cost             | Capital Cost | Capital Cost     | Capital Cost    | Capital Cost      | Capital Cost | Capital Cost    | Capital Cost           | Capital Cost     | Capital Cost     | Capital Cost       | Capital Cost              |                      |
| rect Costs   | Cover Material Excav, Haul, Grade <sup>1</sup>         | \$4,601            | \$417,462            | \$1,105,051              | \$951,854    | \$3,601,520      | \$22,264,535    | \$421,745         | \$0          | \$0             | \$0                    | \$0              | \$0              | \$0                | \$0                       | \$46,174,8           |
|              | Top/Outslope Adjustment Grading <sup>2</sup>           | \$0                | \$5,928              | \$34,128                 | \$16,092     | \$43,114         | \$273,602       | \$6,975           | \$0          | \$0             | \$0                    | \$0              | \$0              | \$0                | \$3,366                   | \$67,045,            |
|              | Scarify, Seed & Mulch, Reveg <sup>3</sup>              | \$1,648            | \$63,143             | \$164,794                | \$80,005     | \$215,598        | \$1,368,187     | \$49,636          | \$59,145     | \$46,946        | \$64,238               | \$104,052        | \$156,271        | \$475,028          | \$22,690                  | \$5,075,             |
|              | Channels & Benches <sup>4</sup>                        | \$0                | \$10,645             | \$0                      | \$24,416     | \$166,449        | \$1,158,722     | \$0               | \$0          | \$0             | \$0                    | \$0              | \$0              | \$0                | \$0                       | \$12,408,            |
|              | Demolition   | \$0                | \$0                  | \$0                      | \$0          | \$0              | \$0             | \$0               | \$0          | \$0             | \$0                    | \$0              | \$0              | \$0                | \$0                       | \$4,591,2            |
|              | Other <sup>5</sup>                                     | \$0                | \$0                  | \$0                      | \$0          | \$0              | \$0             | \$0               | \$0          | \$0             | \$0                    | \$0              | \$0              | \$0                | \$649,820                 | \$780,5              |
|              | Capital Cost Totals                                    | \$6,249            | \$497,178            | \$1,303,973              | \$1,072,368  | \$4,026,681      | \$25,065,046    | \$478,356         | \$59,145     | \$46,946        | \$64,238               | \$104,052        | \$156,271        | \$475,028          | \$675,875                 | \$136,076            |
|              | Capital Cost/Acre                                      | \$3,125            | \$8,125              | \$6,520                  | \$11,044     | \$15,389         | \$15,095        | \$7,938           | \$946        | \$946           | \$946                  | \$946            | \$946            | \$946              | \$24,544                  | \$22,67              |
| lirect Costs | Cover Material Excav, Haul, Grade1                     | \$1,380            | \$125,239            | \$331,515                | \$285,556    | \$1,080,456      | \$6,679,360     | \$126,524         | \$0          | \$0             | \$0                    | \$0              | \$0              | \$0                | \$0                       | \$13,852,            |
|              | Top/Outslope Adjustment Grading <sup>2</sup>           | \$0                | \$1,778              | \$10,238                 | \$4,828      | \$12,934         | \$82,081        | \$2,092           | \$0          | \$0             | \$0                    | \$0              | \$0              | \$0                | \$1,010                   | \$20,113,            |
|              | Scarify, Seed & Mulch, Reveg <sup>3</sup>              | \$494              | \$18,943             | \$49,438                 | \$24,002     | \$64,679         | \$410,456       | \$14,891          | \$17,743     | \$14,084        | \$19,271               | \$31,215         | \$46,881         | \$142,508          | \$6,807                   | \$1,522,             |
|              | Channels & Benches <sup>4</sup>                        | \$0                | \$3,193              | \$0                      | \$7,325      | \$49,935         | \$347,617       | \$0               | \$0          | \$0             | \$0                    | \$0              | \$0              | \$0                | \$0                       | \$3,722,             |
|              | Demolition   | \$0                | \$0                  | \$0                      | \$0          | \$0              | \$0             | \$0               | \$0          | \$0             | \$0                    | \$0              | \$0              | \$0                | \$0                       | \$1,377,             |
|              | Other <sup>5</sup>                                     | \$0                | \$0                  | \$0                      | \$0          | \$0              | \$0             | \$0               | \$0          | \$0             | \$0                    | \$0              | \$0              | \$0                | \$194,946                 | \$234,1              |
|              | Indirect Cost Totals                                   | \$1,875            | \$149,153            | \$391,192                | \$321,710    | \$1,208,004      | \$7,519,514     | \$143,507         | \$17,743     | \$14,084        | \$19,271               | \$31,215         | \$46,881         | \$142,508          | \$202,763                 | \$40,823,            |
|              | Indirect Cost/Acre                                     | \$937              | \$2,437              | \$1,956                  | \$3,313      | \$4,617          | \$4,529         | \$2,381           | \$284        | \$284           | \$284                  | \$284            | \$284            | \$284              | \$7,363                   | \$6,802              |
|              | Total Cost   | \$8,124            | \$646,332            | \$1,695,164              | \$1,394,078  | \$5,234,685      | \$32,584,560    | <b>\$621,863</b>  | \$76,888     | \$61,030        | \$83,509               | <b>\$135,267</b> | \$203,152        | \$617,537          | \$878,638                 | \$176,899,7          |
|              | Total Cost Cover                                       | \$5,982            | \$542,700            | \$1,436,566              | \$1,237,411  | \$4,681,975      | \$28,943,895    | \$548,269         | \$0          | \$0             | \$0<br>\$0             | \$0              | \$0              | \$017,537          | \$0                       | \$60,027,            |
|              | Total Cost Cover  Total Cost Top/Outslope Adjustment   | \$5,962<br>\$0     | \$542,700<br>\$7,707 | \$44,367                 | \$20,920     | \$56,048         | \$355,683       | \$9,067           | \$0<br>\$0   | \$0<br>\$0      | \$0<br>\$0             | \$0<br>\$0       | \$0<br>\$0       | \$0<br>\$0         | \$4.376                   | \$87,159,            |
|              |  | \$5,982            | \$550,407            | \$44,367<br>\$1,480,933  | \$1,258,331  | \$4,738,024      | \$29,299,578    | \$557,336         | \$0<br>\$0   | \$0<br>\$0      | \$0<br>\$0             | \$0<br>\$0       | \$0<br>\$0       | \$0<br>\$0         | \$4,376<br>\$4,376        | \$147,186            |
|              | Total Cost Earthwork                                   | \$5,962<br>\$2,142 | \$82,086             | \$1,460,933<br>\$214,232 | \$1,256,331  | \$280,277        | \$1,778,643     | \$64,527          | \$76,888     | \$61,030        | \$83,509               | \$135,267        | \$203,152        | \$617,537          | \$29,497                  | \$6,598,             |
|              | Capital Cost Re-Veg<br>Capital Cost Other <sup>5</sup> | \$2,142<br>\$0     | \$02,000<br>\$0      | \$214,232<br>\$0         | \$104,007    | \$200,277<br>\$0 | \$1,770,043     | \$04,52 <i>1</i>  | \$70,000     | \$61,030<br>\$0 | \$63,509<br>\$0        | \$135,267        | \$203,132<br>\$0 | \$017,537<br>\$0   | \$29,497<br>\$844,766     | \$0,596,<br>\$1,014, |
|              | Capital Cost Other                                     | ΦU                 | <b>\$</b> 0          | ΦU                       | Φ0           | ΦU               | φU              | ΦΟ                | Φ0           | φU              | <b>\$</b> 0            | ΦU               | Φ0               | Φ0                 | <b>\$</b> 044,700         | \$1,014              |
|              | Total Cost/Acre  | \$4,062            | \$10,562             | \$8,476                  | \$14,358     | \$20,006         | \$19,624        | \$10,319          | \$1,230      | \$1,230         | \$1,230                | \$1,230          | \$1,230          | \$1,230            | \$31,907                  | \$29,47              |
|              | Total Cost/Acre Cover                                  | 2,991              | 8,869                | 7,183                    | 12,744       | 17,893           | 17,431          | 9,098             | 0            | 0               | 0                      | 0                | 0                | 0                  | 0                         | \$10,00              |
|              | Total Cost/Acre Top/Outslope Adjustment                | 0                  | 126                  | 222                      | 215          | 214              | 214             | 150               | 0            | 0               | 0                      | 0                | 0                | 0                  | 159                       | \$14,5               |
|              | Total Cost/Acre Earthwork                              | \$2,991            | \$8,995              | \$7,405                  | \$12,959     | \$18,108         | \$17,645        | \$9,248           | \$0          | \$0             | \$0                    | \$0              | \$0              | \$0                | \$159                     | \$24,5               |
|              | Capital Cost/Acre Re-Veg                               | 1,071              | 1,341                | 1,071                    | 1,071        | 1,071            | 1,071           | 1,071             | 1,230        | 1,230           | 1,230                  | 1,230            | 1,230            | 1,230              | 1,071                     | \$1,09               |
|              | Capital Cost/Acre Other <sup>5</sup>                   | \$0                | \$0                  | \$0                      | \$0          | \$0              | \$0             | \$0               | \$0          | \$0             | \$0                    | \$0              | \$0              | \$0                | \$30,677                  | \$16                 |

<sup>1</sup> Cover Material includes dozer assist, load, haul, ç

Top/Outslope Adjustment Grading includes rough
 Revegetation includes scarifying, discing, drill spe

<sup>4</sup> Channels & Benches includes bench channels, ( 5 Other includes well installation/closure, and seep

<sup>6</sup> Total area does not include 599 previously reclair

### Truck Optimization

This sheet calculates the most efficient number of trucks (up to 10) per loader or shovel for loading cover material at borrow stockpiles. See the calculation sheet for more information.

|                              |                  |  |                                   |                              |           |                  |                     |                        |                  |                   |               |                        |                   |                        |                  |                  |                | Product        | tivity for X Truc | ks (cy/hr)     |       |       |       |       |
|------------------------------|------------------|--|-----------------------------------|------------------------------|-----------|------------------|---------------------|------------------------|------------------|-------------------|---------------|------------------------|-------------------|------------------------|------------------|------------------|----------------|----------------|-------------------|----------------|-------|-------|-------|-------|
|                              |                  |  |                                   |                              | 1         |                  |                     |                        |                  |                   |               |                        | Loader/Shovel Net |                        |                  |                  |                |                |                   |                |       |       |       |       |
|                              |                  |  |                                   |                              | Work Hour | Loader/Shovel    | Loader/Shovel Cycle | Loader/Shovel Time Per | Truck Cycle Time | Max Number Trucks | Loader/Shovel | Loader/Shovel          | Bucket Capacity   | Haul Volume            | Max Trucks Round | Max Trucks Round |                | - 1            |                   |                |       |       |       |       |
| ID                           | Task Description | Source Location 1                      | Destination Location 2            | Equipment                    | (min/hr)  | Cycles per Truck | Time (min)          | Truck (min)            | Per Truck (min)  | Per Loader/Shovel | Type          | Cost (\$/hr)           | (cy)              | (cy)                   | Up               | Down             | 9              | 8              | 7                 | 6              | 5     | 4     | 3     | 2     |
| 1000-D-b-Tk4                 | Haul-Cover       | Upper South                            | Triangle Stockpile                | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   | 8.0              | 3.6               | Sh1           | \$ 535.68              | 27.4              | 394.621                | 3,425            | 2.569            | 7.707          | 6,850          | 5,994             | 5.138          | 4.281 | 3,425 | 2,569 | 1.713 |
| 1100-D-b-Tk4                 | Haul-Cover       | Upper South & STS2                     | South Stockpile                   | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   |                  | 5.2               |               | \$ 535.68              | 27.4              | 2,829,473              |                  | 2,916            | 5,249          | 4,665          | 4,082             | 3.499          | 2,916 | 2,333 | 1,750 | 1,166 |
| 1200-D-b-Tk4                 | Haul-Cover       | Upper South                            | West Stockpile                    | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   |                  | 10.1              | Sh1           | \$ 535.68              | 27.4              | 3.031.924              |                  | 3.016            | 2.714          | 2.412          | 2,111             | 1.809          | 1,508 | 1,206 | 905   | 603   |
| 1300-D-b-Tk4                 | Haul-Cover       | Upper South & White House              | Lambright Stockpile               | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   |                  | 13.0              | Sh1           | \$ 535.68              | 27.4              | 3,801,209              |                  | 2,821            | 2,116          | 1,881          | 1,645             | 1,410          | 1,175 | 940   | 705   | 470   |
| 1400-D-b-Tk4                 | Haul-Cover       | Upper South                            | Southwest Lampbright              | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   |                  | 12.2              | Sh1           | \$ 535.68              | 27.4              | 456,400                |                  | 2,988            | 2,241          | 1,992          | 1,743             | 1,494          | 1,245 | 996   | 747   | 498   |
| 1500-D-b-Tk4                 | Haul-Cover       | Upper South                            | South and East In-Pit Stockpiles  | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   | 31.9             | 14.2              | Sh1           | \$ 535.68              | 27.4              | 222,640                | 3,220            | 3,006            | 1,932          | 1,718          | 1,503             | 1,288          | 1,073 | 859   | 644   | 429   |
| 1600-D-b-Tk4                 | Haul-Cover       | Upper South                            | Northwest Stockpile               | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   | 25.6             | 11.4              | Sh1           | \$ 535.68              | 27.4              | 39,781                 | 3,207            | 2,940            | 2,406          | 2,138          | 1,871             | 1,604          | 1,336 | 1,069 | 802   | 535   |
| 1700-D-b-Tk4                 | Haul-Cover       | Upper South                            | LeeHill Stockpile                 | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   | 24.6             | 10.9              | Sh1           | \$ 535.68              | 27.4              | 122,964                | 3,068            | 2,789            | 2,510          | 2,231          | 1,952             | 1,673          | 1,394 | 1,116 | 837   | 558   |
| 1800-D-b-Tk4                 | Haul-Cover       | Upper South                            | Northeast Stockpile               | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   | 36.2             | 16.1              | Sh1           | \$ 535.68              | 27.4              | 59,273                 | 3,221            | 3,032            | 1,705          | 1,516          | 1,326             | 1,137          | 947   | 758   | 568   | 379   |
| 1900-D-b-Tk4                 | Haul-Cover       | Upper South                            | North Stockpile                   | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   | 32.4             | 14.4              | Sh1           | \$ 535.68              | 27.4              | 33,437                 | 3,173            | 2,961            | 1,904          | 1,692          | 1,481             | 1,269          | 1,058 | 846   | 635   | 423   |
| 2200-D-b-Tk4                 | Haul-Cover       | STS2                                   | 9 Waste Rock                      | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   | 10.3             | 4.6               | Sh1           | \$ 535.68              | 27.4              | 780,208                | 3,318            | 2,654            | 5,972          | 5,308          | 4,645             | 3,981          | 3,318 | 2,654 | 1,991 | 1,327 |
| 2309-D-b-Tk4                 |                  | STS2                                   | Dam 15                            | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   | 22.7             | 10.1              | Sh1           | \$ 535.68              | 27.4              | 484                    | 3,317            | 3,016            | 2,714          | 2,412          | 2,111             | 1,809          | 1,508 | 1,206 | 905   | 603   |
| 2310-D-b-Tk4                 |                  | STS2                                   | Dam 16                            | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   |                  | 10.1              | Sh1           | \$ 535.68              | 27.4              | 484                    |                  | 3,016            | 2,714          | 2,412          | 2,111             | 1,809          | 1,508 | 1,206 | 905   | 603   |
| 2313-D-b-Tk4                 |                  | STS2                                   | Dam 20                            | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   |                  | 10.1              | Sh1           | \$ 535.68              | 27.4              | 1,549                  |                  | 3,016            | 2,714          | 2,412          | 2,111             | 1,809          | 1,508 | 1,206 | 905   | 603   |
| 2316-D-b-Tk4                 | Haul-Cover       | STS2                                   | Reservoir 17                      | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   | 11.7             | 5.2               | Sh1           | \$ 535.68              | 27.4              | 16,262                 | 3,499            | 2,916            | 5,249          | 4,665          | 4,082             | 3,499          | 2,916 | 2,333 | 1,750 | 1,166 |
| 2318-D-b-Tk4                 |                  | STS2                                   | Fleming Pond                      | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   | 29.1             | 13.0              | Sh1           | \$ 535.68              | 27.4              | 3,775                  |                  | 2,821            | 2,116          | 1,881          | 1,645             | 1,410          | 1,175 | 940   | 705   | 470   |
| 2320-D-b-Tk4                 |                  | STS2                                   | Tailing Thickener 1               | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   |                  | 14.2              | Sh1           | \$ 535.68              | 27.4              | 12,584                 | 3,220            | 3,006            | 1,932          | 1,718          | 1,503             | 1,288          | 1,073 | 859   | 644   | 429   |
| 2321-D-b-Tk4                 |                  | STS2                                   | PLS Pond & Launder                | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   |                  | 13.0              | Sh1           | \$ 535.68              | 27.4              | 1,258                  |                  | 2,821            | 2,116          | 1,881          | 1,645             | 1,410          | 1,175 | 940   | 705   | 470   |
| 2323-D-b-Tk4                 |                  | STS2                                   | Raffinate Pond                    | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   |                  | 17.6              | Sh1           | \$ 535.68              | 27.4              | 532                    |                  | 2,933            | 1,553          | 1,380          | 1,208             | 1,035          | 863   | 690   | 518   | 345   |
| 2324-D-b-Tk4                 |                  | STS2                                   | Reservoir 2                       | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   |                  | 5.2               | Sh1           | \$ 535.68              | 27.4              | 1,065                  |                  | 2,916            | 5,249          | 4,665          | 4,082             | 3,499          | 2,916 | 2,333 | 1,750 | 1,166 |
| 2327-D-b-Tk4                 |                  | STS2                                   | Reservoir 6                       | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   |                  | 10.9              | Sh1           | \$ 535.68              | 27.4              | 7,260                  |                  | 2,789            | 2,510          | 2,231          | 1,952             | 1,673          | 1,394 | 1,116 | 837   | 558   |
| 2328-D-b-Tk4                 |                  | STS2                                   | Reservoir 7                       | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   |                  | 10.9              | Sh1           | \$ 535.68              | 27.4              | 11,664                 |                  | 2,789            | 2,510          | 2,231          | 1,952             | 1,673          | 1,394 | 1,116 | 837   | 558   |
| 2341-D-b-Tk4                 |                  | STS2                                   | Elmo's Pond                       | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   |                  | 3.8               |               | \$ 535.68              | 27.4              | 6,002                  |                  | 2,423            | 7,270          | 6,462          | 5,654             | 4,846          | 4,039 | 3,231 | 2,423 | 1,615 |
| 2342-D-b-Tk4                 |                  | STS2                                   | Lower Lined Pond                  | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   |                  | 3.8               |               | \$ 535.68              | 27.4              | 10,793                 |                  | 2,423            | 7,270          | 6,462          | 5,654             | 4,846          | 4,039 | 3,231 | 2,423 | 1,615 |
| 2343-D-b-Tk4                 |                  | STS2                                   | Upper Lined Pond                  | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   |                  | 3.8               |               | \$ 535.68              | 27.4              | 1,984                  |                  | 2,423            | 7,270          | 6,462          | 5,654             | 4,846          | 4,039 | 3,231 | 2,423 | 1,615 |
| 2344-D-b-Tk4                 |                  | STS2                                   | 5900 PLS Sump                     | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   |                  | 14.2              | Sh1           | \$ 535.68              | 27.4              | 2,759                  |                  | 3,006            | 1,932          | 1,718          | 1,503             | 1,288          | 1,073 | 859   | 644   | 429   |
| 2345-D-b-Tk4                 |                  | STS2                                   | 6300 PLS Booster Station          | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   |                  | 14.2              | Sh1           | \$ 535.68              | 27.4              | 145                    |                  | 3,006            | 1,932          | 1,718          | 1,503             | 1,288          | 1,073 | 859   | 644   | 429   |
| 2346-D-b-Tk4                 |                  | STS2                                   | Lee Hill #2 Booster               | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   |                  | 14.2              | Sh1           | \$ 535.68              | 27.4              | 678                    |                  | 3,006            | 1,932          | 1,718          | 1,503             | 1,288          | 1,073 | 859   | 644   | 429   |
| 2400-D-b-Tk4                 |                  | STS2                                   | Ground Hog #5                     | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   |                  | 9.0               | Sh1           | \$ 535.68              | 27.4              | 3,227                  |                  | 2,720            | 3,060          | 2,720          | 2,380             | 2,040          | 1,700 | 1,360 | 1,020 | 680   |
| 2512-D-b-Tk4                 |                  | STS2                                   | East Pit Access Disturbed Area    | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   |                  | 6.3               | Sh1           | \$ 535.68              | 27.4              | 17,763                 |                  | 2,897            | 4,346          | 3,863          | 3,380             | 2,897          | 2,414 | 1,931 | 1,449 | 966   |
| 2513-D-b-Tk4                 |                  | STS2                                   | Chino part of Cobre Haul Road     | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   |                  | 3.0               |               | \$ 535.68              | 27.4              | 15,536                 |                  | 3,032            | 9,096          | 8,085          | 7,075             | 6,064          | 5,053 | 4,043 | 3,032 | 2,021 |
| 2514-D-b-Tk4                 |                  | STS2                                   | Highway to Heaven Haul Road       | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   |                  | 6.3               | Sh1           | \$ 535.68              | 27.4              | 157,015                |                  | 2,897            | 4,346          | 3,863          | 3,380             | 2,897          | 2,414 | 1,931 | 1,449 | 966   |
| 2515-D-b-Tk4                 |                  | STS2                                   | Disturbed Area Around Reservoir 5 | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   |                  | 7.7               |               | \$ 535.68              | 27.4              | 157,213                | 3,167            | 2,771            | 3,563          | 3,167          | 2,771             | 2,375          | 1,979 | 1,583 | 1,188 | 792   |
| 3307-D-b-Tk4                 |                  | West of Borrow E&H                     | Filter Plant                      | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   |                  | 6.3               | Sh1<br>Sh1    | \$ 535.68              | 27.4              | 82,474                 |                  | 2,897            | 4,346          | 3,863          | 3,380             | 2,897          | 2,414 | 1,931 | 1,449 | 966   |
| 2600-D-b-Tk4                 |                  | Upper South                            | Unplanned Disturbed Area          | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   |                  | 6.3               | Sni           | \$ 535.68              | 27.4              | 968,000                |                  | 2,897            | 4,346          | 3,863          | 3,380             | 2,897          | 2,414 | 1,931 | 1,449 | 966   |
| 3000-D-b-Tk4                 |                  | Borrow Area F & North of Borrow Area F | Axiflo                            | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   |                  | 3.6               | Sh1           | \$ 535.68              | 27.4              | 469,952                |                  | 2,560            | 7,681          | 6,828          | 5,974             | 5,121          | 4,267 | 3,414 | 2,560 | 1,707 |
| 3100-D-b-Tk4<br>3200-D-b-Tk4 |                  | Borrow Area F                          | Tailings Pond 6                   | Komatsu 730E<br>Komatsu 730E | 50        | 5                | 0.45                | 2.25                   |                  | 5.4<br>4.7        | Sh1<br>Sh1    | \$ 535.68<br>\$ 535.68 | 27.4<br>27.4      | 1,266,425<br>8.036,747 |                  | 2,830            | 5,094<br>5,773 | 4,528<br>5.132 | 3,962             | 3,396<br>3,849 | 2,830 | 2,264 | 1,698 | 1,132 |
| 3200-D-b-1k4<br>3301-D-b-Tk4 |                  | West of Borrow E&H                     | Tailings Pond 7                   |                              | 50        | 5                | 0.45                | 2.25                   |                  | ***               | Sh1<br>Sh1    |                        | 27.4              |                        |                  | 2,566            |                |                | 4,490             |                | 3,207 | 2,566 | 1,924 | 1,283 |
|                              |                  | West of Borrow E&H                     | Slag Pile Outslopes W side        | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   |                  | 6.3               | 0             | \$ 535.68              | 27.4              | 39,688                 |                  | 2,897            | 4,346          | 3,863          | 3,380             | 2,897          | 2,414 | 1,931 | 1,449 | 966   |
| 3308-D-b-Tk4                 | Haul-Cover       | West of Borrow E&H                     | 35 Acre Misc. Area                | Komatsu 730E                 | 50        | 5                | 0.45                | 2.25                   | 14.2             | 6.3               | Sh1           | \$ 535.68              | 27.4              | 169,400                | 3.380            | 2.897            | 4.346          | 3.863          | 3.380             | 2.897          | 2.414 | 1.931 | 1.449 | 966   |

### Truck Optimization

This sheet calculates the most efficient number of trucks (up to 10) per loader or shovel for loading cover material at borrow stockpiles. See the calculation sheet for more information.

|                  |  |                                   |              |                        |                          |         | Task T  | ime for X | rucks (hr) |         |         |         |         | 1                               |                       |                        |                          |                 | Cost         | of Using X Trucks | per Loader (\$) |              |              |              |              |                  |  |  |
|------------------|--|-----------------------------------|--------------|------------------------|--------------------------|---------|---------|-----------|------------|---------|---------|---------|---------|---------------------------------|-----------------------|------------------------|--------------------------|-----------------|--------------|-------------------|-----------------|--------------|--------------|--------------|--------------|------------------|--|--|
| Task Description | Source Location 1                      | Destination Location 2            | Equipment    | Max Trucks<br>Round Up | Max Trucks<br>Round Down | q       | 8       | 7         | 6          | 5       | 4       | 3       | 2       | Loader/Shovel<br>Task Time (hr) | Truck Cost<br>(\$/hr) | Max Trucks<br>Round Up | Max Trucks<br>Round Down | q               | 8            | 7                 | 6               | 5            | 4            | 3            | 2            | Lowest Cost (\$) | Optimum Number of<br>Trucks Per<br>Loader/Shovel | of Optimum Number of Trucks Per Loader/Shovel Within Max |
|                  | Upper South                            | Triangle Stockpile                | Komatsu 730E | 115.2                  | 153.6                    | 51.2    | 57.6    | 65.8      | 76.8       | 92.2    | 115.2   | 153.6   | 230.4   | / .                             | \$ 246.06             |                        | \$ 195.688               | \$ 356,485 \$   | 324.591 \$   | 292,696 \$        | 260.802         | \$ 228.907   | \$ 197.013   | \$ 105.688   | \$ 236.833   | (+)              | 200000707070707                                  | l max  |
|                  | Upper South & STS2                     | South Stockpile                   | Komatsu 730E | 808.6                  | 970.4                    | 539.1   | 606.5   |           | 808.6      | 970.4   | 1.213.0 | 1.617.3 |         | 929.4                           |                       | \$ 1.869.977           |                          | \$ 2.556.036    | 2.327.350 \$ | 2.098.663 \$      | 1.869.977       | \$ 1.713.649 | \$ 1.843.601 | \$ 2.060.187 | \$ 2,493,360 | \$ 1.713.649     |  |  |
| Haul-Cover       | Upper South                            | West Stockpile                    | Komatsu 730E | 914.0                  |                          |         |         |           |            | 2.010.9 | 2.513.6 | 3.351.5 |         | 995.9                           |                       | \$ 3,229,021           |                          | \$ 3.072.458    | 3.147.264 \$ | , ,               | ,,              | \$ 3.551.215 |              |              | \$ 5.167.019 | \$ 3.012.613     | 10   | 1  |
| Haul-Cover       | Upper South & White House              | Lambright Stockpile               | Komatsu 730E | 1.243.9                | 1.347.6                  |         | 2.021.3 | 2.310.1   | 2.695.1    | 3.234.1 | 4.042.7 | 5.390.2 | 8.085.3 | 1.248.6                         |                       | \$ 4,662,765           | \$ 4.700.842             | \$ 4.941.463    | 5.061.774 \$ | 5.216.459 \$      | 5.422.706       | \$ 5.711.452 |              | \$ 6.866.436 | \$ 8.310.166 | \$ 4.662.765     | 13   | 1:   |
|                  | Upper South                            | Southwest Lampbright              | Komatsu 730E | 141.0                  | 152.8                    | 203.7   | 229.2   | 261.9     | 305.5      | 366.6   | 458.3   | 611.1   | 916.6   | 149.9                           |                       | \$ 559.845             | \$ 532,921               | \$ 560,199      | 573.838 \$   | 591.375 \$        | 614.756         | \$ 647.491   | \$ 696.592   | \$ 778.428   | \$ 942.099   | \$ 532,921       | 12   | 1:   |
| Haul-Cover       | Upper South                            | South and East In-Pit Stockpiles  | Komatsu 730E | 69.1                   | 74.1                     | 115.2   | 129.6   | 148.1     | 172.8      | 207.4   | 259.2   | 345.7   | 518.5   | 73.1                            | \$ 246.06             | \$ 309.091             | \$ 294,840               | \$ 316.883      | 324.598 \$   | 334.518 \$        | 347.744         | \$ 366,260   | \$ 394.035   | \$ 440,327   | \$ 532,909   | \$ 294.840       | 14   | 1  |
| Haul-Cover       | Upper South                            | Northwest Stockpile               | Komatsu 730E | 12.4                   | 13.5                     | 16.5    | 18.6    | 21.3      | 24.8       | 29.8    | 37.2    | 49.6    | 74.4    | 13.1                            | \$ 246.06             | \$ 45,583              | \$ 43.870                | \$ 45,481 \$    | 46,588 \$    | 48.012 \$         | 49.910          | \$ 52.568    | \$ 56,554    | \$ 63,198    | \$ 76,487    | \$ 43.870        | 11   | 1  |
| Haul-Cover       | Upper South                            | LeeHill Stockpile                 | Komatsu 730E | 40.1                   | 44.1                     | 49.0    | 55.1    | 63.0      | 73.5       | 88.2    | 110.2   | 147.0   | 220.5   | 40.4                            | \$ 246.06             | \$ 130,958             | \$ 132,110               | \$ 134,734 \$   | 138,014 \$   | 142,232 \$        | 147.856         | \$ 155,728   | \$ 167.538   | \$ 187,220   | \$ 226,585   | \$ 130.958       | 11   | 1  |
| Haul-Cover       | Upper South                            | Northeast Stockpile               | Komatsu 730E | 18.4                   | 19.6                     | 34.8    | 39.1    | 44.7      | 52.1       | 62.6    | 78.2    | 104.3   | 156.4   | 19.5                            | \$ 246.06             | \$ 91.871              | \$ 87,444                | \$ 95,590 \$    | 97.917 \$    | 100,909 \$        | 104.899         | \$ 110.485   | \$ 118.863   | \$ 132.827   | \$ 160,755   | \$ 87,444        | 16   | 5 1  |
| Haul-Cover       | Upper South                            | North Stockpile                   | Komatsu 730E | 10.5                   | 11.3                     | 17.6    | 19.8    | 22.6      | 26.3       | 31.6    | 39.5    | 52.7    | 79.0    | 11.0                            | \$ 246.06             | \$ 46,421              | \$ 44,948                | \$ 48,308 \$    | 49,485 \$    | 50,997 \$         | 53,013          | \$ 55,836    | \$ 60,070    | \$ 67,127    | \$ 81,241    | \$ 44,948        | 14   | 1-   |
| Haul-Cover       | STS2                                   | 9 Waste Rock                      | Komatsu 730E | 235.2                  | 294.0                    | 130.7   | 147.0   | 168.0     | 196.0      | 235.2   | 294.0   | 392.0   | 587.9   | 256.3                           | \$ 246.06             | \$ 452,575             | \$ 446,804               | \$ 704,810 \$   | 641,751 \$   | 578,692 \$        | 515,633         | \$ 452,575   | \$ 446,804   | \$ 499,295   | \$ 604,276   | \$ 446,804       | 4  |  |
| Haul-Cover       | STS2                                   | Dam 15                            | Komatsu 730E | 0.1                    | 0.2                      | 0.2     | 0.2     | 0.2       | 0.3        | 0.3     | 0.4     | 0.5     | 0.8     | 0.2                             | \$ 246.06             | \$ 515                 | \$ 481                   | \$ 490 \$       | 502 \$       | 518 \$            | 538 5           | \$ 567       | \$ 610       | \$ 682       | \$ 825       | \$ 481           | 10   | ) 10   |
| Haul-Cover       | STS2                                   | Dam 16                            | Komatsu 730E | 0.1                    | 0.2                      | 0.2     | 0.2     | 0.2       | 0.3        | 0.3     | 0.4     | 0.5     | 0.8     |                                 | \$ 246.06             | \$ 515                 |                          | \$ 490 \$       | 502 \$       | 518 \$            | 538 9           | \$ 567       | \$ 610       | \$ 682       | \$ 825       | \$ 481           | 10   | ) 10   |
| Haul-Cover       | STS2                                   | Dam 20                            | Komatsu 730E | 0.5                    | 0.5                      | 0.6     | 0.6     | 0.7       | 0.9        | 1.0     | 1.3     | 1.7     | 2.6     | 0.5                             | \$ 246.06             | \$ 1,649               | \$ 1,539                 | \$ 1,570 \$     | 1,608 \$     | 1,657 \$          | 1,722           | \$ 1,814     | \$ 1,952     | \$ 2,181     | \$ 2,639     | \$ 1,539         | 10   | ) 10   |
| Haul-Cover       | STS2                                   | Reservoir 17                      | Komatsu 730E | 4.6                    | 5.6                      | 3.1     | 3.5     | 4.0       | 4.6        | 5.6     | 7.0     | 9.3     | 13.9    | 5.3                             | \$ 246.06             | \$ 10,748              | \$ 9,849                 | \$ 14,691 \$    | 13,376 \$    | 12,062 \$         | 10,748          | \$ 9,849     | \$ 10,596    | \$ 11,841    | \$ 14,331    | \$ 9,849         | 5  | 5  |
| Haul-Cover       | STS2                                   | Fleming Pond                      | Komatsu 730E | 1.2                    | 1.3                      | 1.8     | 2.0     | 2.3       | 2.7        | 3.2     | 4.0     | 5.4     | 8.0     | 1.2                             | \$ 246.06             | \$ 4.631               | \$ 4.669                 | \$ 4.908 \$     | 5.027 \$     | 5.181 \$          | 5.386           | \$ 5.672     | \$ 6.103     | \$ 6.819     | \$ 8.253     | \$ 4.631         | 13   | 3 1:   |
| Haul-Cover       | STS2                                   | Tailing Thickener 1               | Komatsu 730E | 3.9                    | 4.2                      | 6.5     | 7.3     | 8.4       | 9.8        | 11.7    | 14.7    | 19.5    | 29.3    | 4.1                             | \$ 246.06             | \$ 17,470              | \$ 16,665                | \$ 17,911       | 18,347 \$    | 18,908 \$         | 19,655          | \$ 20,702    | \$ 22,272    | \$ 24,888    | \$ 30,121    | \$ 16,665        | 14   | 1-   |
| Haul-Cover       | STS2                                   | PLS Pond & Launder                | Komatsu 730E | 0.4                    | 0.4                      | 0.6     | 0.7     | 0.8       | 0.9        | 1.1     | 1.3     | 1.8     | 2.7     | 0.4                             | \$ 246.06             | \$ 1,544               | \$ 1,556                 | \$ 1,636 \$     | 1,676 \$     | 1,727 \$          | 1,795           | \$ 1,891     | \$ 2,034     | \$ 2,273     | \$ 2,751     | \$ 1,544         | 13   | 3 1:   |
| Haul-Cover       | STS2                                   | Raffinate Pond                    | Komatsu 730E | 0.2                    | 0.2                      | 0.3     | 0.4     | 0.4       | 0.5        | 0.6     | 0.8     | 1.0     | 1.5     | 0.2                             | \$ 246.06             | \$ 868                 | \$ 857                   | \$ 943 5        | 966 \$       | 996 \$            | 1.035           | \$ 1,090     | \$ 1.173     | \$ 1,310     | \$ 1,586     | \$ 857           | 17   | 1  |
| Haul-Cover       | STS2                                   | Reservoir 2                       | Komatsu 730E | 0.3                    | 0.4                      | 0.2     | 0.2     | 0.3       | 0.3        | 0.4     | 0.5     | 0.6     | 0.9     | 0.3                             | \$ 246.06             | \$ 704                 | \$ 645                   | \$ 962 9        | 876 \$       | 790 \$            | 704 9           | \$ 645       | \$ 694       | \$ 775       | \$ 938       | \$ 645           | 5  | 5  |
| Haul-Cover       | STS2                                   | Reservoir 6                       | Komatsu 730E | 2.4                    | 2.6                      | 2.9     | 3.3     | 3.7       | 4.3        | 5.2     | 6.5     | 8.7     | 13.0    | 2.4                             | \$ 246.06             | \$ 7,732               | \$ 7,800                 | \$ 7,955 \$     | 8,149 \$     | 8,398 \$          | 8,730           | \$ 9,194     | \$ 9,892     | \$ 11,054    | \$ 13,378    | \$ 7,732         | 11   | 11   |
| Haul-Cover       | STS2                                   | Reservoir 7                       | Komatsu 730E | 3.8                    | 4.2                      | 4.6     | 5.2     | 6.0       | 7.0        | 8.4     | 10.5    | 13.9    | 20.9    | 3.8                             | \$ 246.06             | \$ 12,423              | \$ 12,532                | \$ 12,781 \$    | 13,092 \$    | 13,492 \$         | 14,026          | \$ 14,772    | \$ 15,893    | \$ 17,760    | \$ 21,494    | \$ 12,423        | 11   | 1  |
| Haul-Cover       | STS2                                   | Elmo's Pond                       | Komatsu 730E | 1.9                    | 2.5                      | 0.8     | 0.9     | 1.1       | 1.2        | 1.5     | 1.9     | 2.5     | 3.7     | 2.0                             | \$ 246.06             | \$ 2,996               | \$ 3,155                 | \$ 5,422 \$     | 4,937 \$     | 4,451 \$          | 3,966           | \$ 3,481     | \$ 2,996     | \$ 3,155     | \$ 3,818     | \$ 2,996         | 4  |  |
| Haul-Cover       | STS2                                   | Lower Lined Pond                  | Komatsu 730E | 3.3                    | 4.5                      | 1.5     | 1.7     | 1.9       | 2.2        | 2.7     | 3.3     | 4.5     | 6.7     | 3.5                             | \$ 246.06             | \$ 5,388               | \$ 5,674                 | \$ 9,750 \$     | 8,878 \$     | 8,005 \$          | 7,133           | \$ 6,261     | \$ 5,388     | \$ 5,674     | \$ 6,867     | \$ 5,388         | 4  |  |
| Haul-Cover       | STS2                                   | Upper Lined Pond                  | Komatsu 730E | 0.6                    | 0.8                      | 0.3     | 0.3     | 0.4       | 0.4        | 0.5     | 0.6     | 0.8     | 1.2     | 0.7                             | \$ 246.06             | \$ 991                 | \$ 1,043                 | \$ 1,793 \$     | 1,632 \$     | 1,472 \$          | 1,311           | \$ 1,151     | \$ 991       | \$ 1,043     | \$ 1,263     | \$ 991           | 4  |  |
| Haul-Cover       | STS2                                   | 5900 PLS Sump                     | Komatsu 730E | 0.9                    | 0.9                      | 1.4     | 1.6     | 1.8       | 2.1        | 2.6     | 3.2     | 4.3     | 6.4     | 0.9                             | \$ 246.06             | \$ 3,830               | \$ 3,653                 | \$ 3,927 \$     | 4,022 \$     | 4,145 \$          | 4,309           | \$ 4,538     | \$ 4,883     | \$ 5,456     | \$ 6,603     | \$ 3,653         | 14   | 1-   |
| Haul-Cover       | STS2                                   | 6300 PLS Booster Station          | Komatsu 730E | 0.0                    | 0.0                      | 0.1     | 0.1     | 0.1       | 0.1        | 0.1     | 0.2     | 0.2     | 0.3     | 0.0                             | \$ 246.06             | \$ 202                 | \$ 192                   | \$ 207 9        | 212 \$       | 218 \$            | 227             | \$ 239       | \$ 257       | \$ 287       | \$ 348       | \$ 192           | 14   | 1-   |
| Haul-Cover       | STS2                                   | Lee Hill #2 Booster               | Komatsu 730E | 0.2                    | 0.2                      | 0.4     | 0.4     | 0.5       | 0.5        | 0.6     | 8.0     | 1.1     | 1.6     | 0.2                             | \$ 246.06             | \$ 941                 | \$ 897                   | \$ 964 9        | 988 \$       | 1,018 \$          | 1,058           | \$ 1,115     | \$ 1,199     | \$ 1,340     | \$ 1,622     | \$ 897           | 14   | 1-   |
| Haul-Cover       | STS2                                   | Ground Hog #5                     | Komatsu 730E | 1.1                    | 1.2                      | 1.1     | 1.2     | 1.4       | 1.6        | 1.9     | 2.4     | 3.2     | 4.7     |                                 | \$ 246.06             | \$ 2,915               |                          | \$ 2,915        | 2,971 \$     | 3,061 \$          | 3,182           | \$ 3,352     | \$ 3,606     | \$ 4,030     | \$ 4,877     | \$ 2,915         | 9  | ) !  |
| Haul-Cover       | STS2                                   | East Pit Access Disturbed Area    | Komatsu 730E | 5.3                    | 6.1                      | 4.1     | 4.6     | 5.3       | 6.1        | 7.4     | 9.2     | 12.3    | 18.4    | 5.8                             | \$ 246.06             | \$ 13,175              | \$ 12,336                | \$ 16,046 \$    | 14,611 \$    | 13,175 \$         | 12,336          | \$ 12,993    | \$ 13,979    | \$ 15,621    | \$ 18,905    | \$ 12,336        | 6  | 5  |
| Haul-Cover       | STS2                                   | Chino part of Cobre Haul Road     | Komatsu 730E | 3.8                    | 5.1                      | 1.7     | 1.9     | 2.2       | 2.6        | 3.1     | 3.8     | 5.1     | 7.7     | 5.1                             | \$ 246.06             | \$ 7,756               | \$ 6,527                 | \$ 14,035 \$    | 12,779 \$    | 11,524 \$         | 10,268          | \$ 9,012     | \$ 7,756     | \$ 6,527     | \$ 7,900     | \$ 6,527         | 3  | 3  |
| Haul-Cover       | STS2                                   | Highway to Heaven Haul Road       | Komatsu 730E | 46.5                   | 54.2                     | 36.1    | 40.6    | 46.5      | 54.2       | 65.0    | 81.3    | 108.4   | 162.6   |                                 | \$ 246.06             | \$ 116,461             | \$ 109,049               | \$ 141,842 \$   | 129,151 \$   | 116,461 \$        | 109,049         | \$ 114,856   | \$ 123,566   | \$ 138,082   | \$ 167,115   | \$ 109,049       | 6  | 6  |
| Haul-Cover       | STS2                                   | Disturbed Area Around Reservoir 5 | Komatsu 730E | 49.6                   | 56.7                     | 44.1    | 49.6    | 56.7      | 66.2       | 79.4    | 99.3    | 132.4   | 198.6   |                                 | \$ 246.06             | \$ 129,313             | \$ 128,114               | \$ 142,020 \$   | 129,313 \$   | 128,114 \$        | 133,179         | \$ 140,271   | \$ 150,908   | \$ 168,637   | \$ 204,094   | \$ 128,114       | 7  | •  |
|                  | West of Borrow E&H                     | Filter Plant                      | Komatsu 730E | 24.4                   | 28.5                     | 19.0    | 21.4    | 24.4      | 28.5       | 34.2    | 42.7    | 56.9    | 85.4    |                                 | \$ 246.06             | \$ 61,172              | \$ 57,279                | \$ 74,503 \$    | 67,838 \$    | 61,172 \$         | 57,279          | \$ 60,329    | \$ 64,904    | \$ 72,529    | \$ 87,779    | \$ 57,279        | 6  | 5  |
|                  | Upper South                            | Unplanned Disturbed Area          | Komatsu 730E | 286.4                  | 334.1                    | 222.8   | 250.6   | 286.4     | 334.1      | 401.0   | 501.2   | 668.3   | 1,002.4 | 318.0                           | \$ 246.06             | \$ 717,980             | \$ 672,287               | \$ 874,454 \$   | 796,217 \$   | 717,980 \$        | 672,287         | \$ 708,085   | \$ 761,782   | \$ 851,276   | \$ 1,030,264 | \$ 672,287       | 6  | 5  |
| Haul-Cover       | Borrow Area F & North of Borrow Area F | Axiflo                            | Komatsu 730E | 137.7                  | 183.5                    | 61.2    | 68.8    | 78.7      | 91.8       | 110.1   | 137.7   | 183.5   | 275.3   | 154.4                           | \$ 246.06             | \$ 234,622             | \$ 233,807               | \$ 424,536 \$   | 386,553 \$   | 348,570 \$        | 310,587         | \$ 272,605   | \$ 234,622   | \$ 233,807   | \$ 282,967   | \$ 233,807       | 3  | 3  |
| Haul-Cover       | Borrow Area F                          | Tailings Pond 6                   | Komatsu 730E | 372.9                  | 447.5                    | 248.6   | 279.7   | 319.6     | 372.9      | 447.5   | 559.4   | 745.8   | 1,118.7 | 415.98                          | \$ 246.06             | \$ 836,970             | \$ 790,256               | \$ 1,144,039 \$ | 1,041,683 \$ | 939,327 \$        | 836,970         | \$ 790,256   | \$ 850,184   | \$ 950,064   | \$ 1,149,823 | \$ 790,256       | 5  | i  |
| Haul-Cover       | West of Borrow E&H                     | Tailings Pond 7                   | Komatsu 730E | 2,505.7                | 3,132.1                  | 1,392.0 | 1,566.1 | 1,789.8   | 2,088.1    | 2,505.7 | 3,132.1 | 4,176.1 | 6,264.2 | 2,639.81                        | \$ 246.06             | \$ 4,661,871           | \$ 4,760,574             | \$ 7,260,086 \$ | 6,610,532 \$ | 5,960,978 \$      | 5,311,424       | \$ 4,661,871 | \$ 4,760,574 | \$ 5,319,847 | \$ 6,438,392 | \$ 4,661,871     | 5  | 5  |
| Haul-Cover       | West of Borrow E&H                     | Slag Pile Outslopes W side        | Komatsu 730E | 11.7                   | 13.7                     | 9.1     | 10.3    | 11.7      | 13.7       | 16.4    | 20.5    | 27.4    | 41.1    | 13.04                           | \$ 246.06             | \$ 29,437              | \$ 27,564                | \$ 35,853 \$    | 32,645 \$    | 29,437 \$         | 27,564          | \$ 29,031    | \$ 31,233    | \$ 34,902    | \$ 42,241    | \$ 27,564        | 6  | 6  |
| Haul-Cover       | West of Borrow E&H                     | 35 Acre Misc. Area                | Komatsu 730E | 50.1                   | 58.5                     | 39.0    | 43.9    | 50.1      | 58.5       | 70.2    | 87.7    | 116.9   | 175.4   | 55.64                           | \$ 246.06             | \$ 125,647             | \$ 117,650               | \$ 153,029 \$   | 139,338 \$   | 125,647 \$        | 117,650         | \$ 123,915   | \$ 133,312   | \$ 148,973   | \$ 180,296   | \$ 117,650       | 6  | 6  |

### Scraper Optimization

This sheet calculates the most efficient number of scrapers (up to 10) per dozer. The dozer assists scrapers for rough grading at waste rock stockpiles. See the calculation sheet for more information.

|              |                                |                             |             |           |            |                   |                    |       |            |                   |              |              |       | Task Time f | or X Scrapers | s (hr) |       |       |       |           |               |
|--------------|--------------------------------|-----------------------------|-------------|-----------|------------|-------------------|--------------------|-------|------------|-------------------|--------------|--------------|-------|-------------|---------------|--------|-------|-------|-------|-----------|---------------|
|              |                                |                             | Destination |           | 1 '        | Pusher Cycle Time | Max Number of      | Dozer | Dozer Cost | Task Time for one | Max Scrapers | Max Scrapers |       | _           | _ [           |        | _ [   |       |       |           | Scrapers Cost |
| ID           | Task Description               | Source Location 1           | Location 2  | Equipment | Time (min) | (min/cycle)       | Scrapers per Dozer | Туре  | (\$/hr)    | Scraper (hr)      | Round Up     | Round Down   | 9     | 8           | 7             | 6      | 5     | 4     | 3     | 2         | (\$/hr)       |
| 1101-A-a-Sc2 | Grade-Outslope-Existing Ground | South Stockpile S-1         | -           | Cat 657G  | 6.1        | 1.44              | 4.2                | Dz3   | 225.78     | 1,380             | 276          | 345          | 153   | 173         | 197           | 230    | 276   | 345   | 460   | 690 \$    | \$ 222.44     |
| 1102-A-a-Sc2 | Grade-Outslope-Existing Ground | South Stockpile S-2         | -           | Cat 657G  | 6.9        | 1.44              | 4.8                | Dz3   | 225.78     | 21,260            | 4,252        | 5,315        | 2,362 | 2,658       | 3,037         | 3,543  | 4,252 | 5,315 | 7,087 | 10,630 \$ | \$ 222.44     |
| 1103-A-a-Sc2 | Grade-Outslope-Existing Ground | South Stockpile S-3         | -           | Cat 657G  | 4.1        | 1.44              | 2.8                | Dz3   | 225.78     | 10,847            | 3,616        | 5,423        | 1,205 | 1,356       | 1,550         | 1,808  | 2,169 | 2,712 | 3,616 | 5,423 \$  | \$ 222.44     |
| 1104-A-a-Sc2 | Grade-Outslope-Existing Ground | South Stockpile S-4         | -           | Cat 657G  | 4.4        | 1.44              | 3.1                | Dz3   | 225.78     | 5,898             | 1,474        | 1,966        | 655   | 737         | 843           | 983    | 1,180 | 1,474 | 1,966 | 2,949 \$  | \$ 222.44     |
| 1105-A-a-Sc2 | Grade-Outslope-Existing Ground | South Stockpile S-5         | -           | Cat 657G  | 3.8        | 1.44              | 2.7                | Dz3   | 225.78     | 11,797            | 3,932        | 5,898        | 1,311 | 1,475       | 1,685         | 1,966  | 2,359 | 2,949 | 3,932 | 5,898 \$  | \$ 222.44     |
| 1106-A-a-Sc2 | Grade-Outslope-Existing Ground | South Stockpile S-6         | -           | Cat 657G  | 4.1        | 1.44              | 2.9                | Dz3   | 225.78     | 13,017            | 4,339        | 6,509        | 1,446 | 1,627       | 1,860         | 2,170  | 2,603 | 3,254 | 4,339 | 6,509 \$  | \$ 222.44     |
| 1107-A-a-Sc2 | Grade-Outslope-Existing Ground | South Stockpile S-7         | -           | Cat 657G  | 4.1        | 1.44              | 2.9                | Dz3   | 225.78     | 6,801             | 2,267        | 3,401        | 756   | 850         | 972           | 1,134  | 1,360 | 1,700 | 2,267 | 3,401 \$  | \$ 222.44     |
| 1108-A-a-Sc2 | Grade-Outslope-Existing Ground | South Stockpile S-8         | -           | Cat 657G  | 3.5        | 1.44              | 2.4                | Dz3   | 225.78     | 8,297             | 2,766        | 4,149        | 922   | 1,037       | 1,185         | 1,383  | 1,659 | 2,074 | 2,766 | 4,149 \$  | \$ 222.44     |
| 1109-A-a-Sc2 | Grade-Outslope-Existing Ground | South Stockpile S-9(1)      | -           | Cat 657G  | 2.0        | 1.44              | 1.4                | Dz3   | 225.78     | 175               | 87           | 175          | 19    | 22          | 25            | 29     | 35    | 44    | 58    | 87 \$     | \$ 222.44     |
| 1207-A-a-Sc2 | Grade-Outslope-Existing Ground | West Stockpile W-7          | -           | Cat 657G  | 4.4        | 1.44              | 3.0                | Dz3   | 225.78     | 6,488             | 1,622        | 2,163        | 721   | 811         | 927           | 1,081  | 1,298 | 1,622 | 2,163 | 3,244 \$  | \$ 222.44     |
| 1209-A-a-Sc2 | Grade-Outslope-Existing Ground | West Stockpile W-8(1)       | -           | Cat 657G  | 4.4        | 1.44              | 3.0                | Dz3   | 225.78     | 1,002             | 251          | 334          | 111   | 125         | 143           | 167    | 200   | 251   | 334   | 501 \$    | \$ 222.44     |
| 1210-A-a-Sc2 | Grade-Outslope-Existing Ground | West Stockpile W-8(2)       | -           | Cat 657G  | 3.6        | 1.44              | 2.5                | Dz3   | 225.78     | 5,493             | 1,831        | 2,746        | 610   | 687         | 785           | 915    | 1,099 | 1,373 | 1,831 | 2,746 \$  | \$ 222.44     |
| 1211-A-a-Sc2 | Grade-Outslope-Existing Ground | West Stockpile W-9          | -           | Cat 657G  | 3.0        | 1.44              | 2.1                | Dz3   | 225.78     | 2,371             | 790          | 1,185        | 263   | 296         | 339           | 395    | 474   | 593   | 790   | 1,185 \$  | \$ 222.44     |
| 1212-A-a-Sc2 | Grade-Outslope-Existing Ground | West Stockpile W-10         | -           | Cat 657G  | 3.0        | 1.44              | 2.1                | Dz3   | 225.78     | 1,270             | 423          | 635          | 141   | 159         | 181           | 212    | 254   | 318   | 423   | 635 \$    | \$ 222.44     |
| 1213-A-a-Sc2 | Grade-Outslope-Existing Ground | West Stockpile W-11         | -           | Cat 657G  | 3.0        | 1.44              | 2.1                | Dz3   | 225.78     | 8,916             | 2,972        | 4,458        | 991   | 1,114       | 1,274         | 1,486  | 1,783 | 2,229 | 2,972 | 4,458 \$  | \$ 222.44     |
| 1301-A-a-Sc2 | Grade-Outslope-Existing Ground | Lambright Stockpile LB-1    | -           | Cat 657G  | 4.3        | 1.44              | 3.0                | Dz3   | 225.78     | 7,477             | 1,869        | 2,492        | 831   | 935         | 1,068         | 1,246  | 1,495 | 1,869 | 2,492 | 3,739 \$  | \$ 222.44     |
| 1302-A-a-Sc2 | Grade-Outslope-Existing Ground | Lambright Stockpile LB-2    | -           | Cat 657G  | 4.0        | 1.44              | 2.8                | Dz3   | 225.78     | 3,679             | 1,226        | 1,840        | 409   | 460         | 526           | 613    | 736   | 920   | 1,226 | 1,840 \$  | \$ 222.44     |
| 1303-A-a-Sc2 | Grade-Outslope-Existing Ground | Lambright Stockpile LB-3    | -           | Cat 657G  | 4.6        | 1.44              | 3.2                | Dz3   | 225.78     | 3,821             | 955          | 1,274        | 425   | 478         | 546           | 637    | 764   | 955   | 1,274 | 1,911 \$  | \$ 222.44     |
| 1304-A-a-Sc2 | Grade-Outslope-Existing Ground | Lambright Stockpile LB-4    | -           | Cat 657G  | 5.1        | 1.44              | 3.6                | Dz3   | 225.78     | 5,331             | 1,333        | 1,777        | 592   | 666         | 762           | 888    | 1,066 | 1,333 | 1,777 | 2,665 \$  | \$ 222.44     |
| 1305-A-a-Sc2 | Grade-Outslope-Existing Ground | Lambright Stockpile LB-5    | -           | Cat 657G  | 4.8        | 1.44              | 3.3                | Dz3   | 225.78     | 6,652             | 1,663        | 2,217        | 739   | 831         | 950           | 1,109  | 1,330 | 1,663 | 2,217 | 3,326 \$  | \$ 222.44     |
| 1306-A-a-Sc2 | Grade-Outslope-Existing Ground | Lambright Stockpile LB-6    | -           | Cat 657G  | 4.8        | 1.44              | 3.3                | Dz3   | 225.78     | 1,632             | 408          | 544          | 181   | 204         | 233           | 272    | 326   | 408   | 544   | 816 \$    | \$ 222.44     |
| 1307-A-a-Sc2 | Grade-Outslope-Existing Ground | Lambright Stockpile LB-7(1) | -           | Cat 657G  | 3.3        | 1.44              | 2.3                | Dz3   | 225.78     | 848               | 283          | 424          | 94    | 106         | 121           | 141    | 170   | 212   | 283   | 424 \$    | \$ 222.44     |
| 1308-A-a-Sc2 | Grade-Outslope-Existing Ground | Lambright Stockpile LB-7(2) | -           | Cat 657G  | 3.3        | 1.44              | 2.3                | Dz3   | 225.78     | 531               | 177          | 266          | 59    | 66          | 76            | 89     | 106   | 133   | 177   | 266 \$    | \$ 222.44     |
| 1309-A-a-Sc2 | Grade-Outslope-Existing Ground | Lambright Stockpile LB-8    | -           | Cat 657G  | 4.8        | 1.44              | 3.3                | Dz3   | 225.78     | 4,087             | 1,022        | 1,362        | 454   | 511         | 584           | 681    | 817   | 1,022 | 1,362 | 2,043 \$  | \$ 222.44     |
| 1310-A-a-Sc2 | Grade-Outslope-Existing Ground | Lambright Stockpile LB-9    | -           | Cat 657G  | 5.0        | 1.44              | 3.5                | Dz3   | 225.78     | 6,077             | 1,519        | 2,026        | 675   | 760         | 868           | 1,013  | 1,215 | 1,519 | 2,026 | 3,038 \$  | \$ 222.44     |
| 1311-A-a-Sc2 | Grade-Outslope-Existing Ground | Lambright Stockpile LB-10   | -           | Cat 657G  | 5.3        | 1.44              | 3.7                | Dz3   | 225.78     | 7,756             | 1,939        | 2,585        | 862   | 970         | 1,108         | 1,293  | 1,551 | 1,939 | 2,585 | 3,878 \$  | \$ 222.44     |
| 1312-A-a-Sc2 | Grade-Outslope-Existing Ground | Lambright Stockpile LB-11   | -           | Cat 657G  | 4.7        | 1.44              | 3.3                | Dz3   | 225.78     | 4,063             | 1,016        | 1,354        | 451   | 508         | 580           | 677    | 813   | 1,016 | 1,354 | 2,032 \$  | \$ 222.44     |
| 1313-A-a-Sc2 | Grade-Outslope-Existing Ground | Lambright Stockpile LB-12   | -           | Cat 657G  | 4.5        | 1.44              | 3.1                | Dz3   | 225.78     | 12,493            | 3,123        | 4,164        | 1,388 | 1,562       | 1,785         | 2,082  | 2,499 | 3,123 | 4,164 | 6,246 \$  | \$ 222.44     |
| 1314-A-a-Sc2 | Grade-Outslope-Existing Ground | Lambright Stockpile LB-13   | -           | Cat 657G  | 4.6        | 1.44              | 3.2                | Dz3   | 225.78     | 9,644             | 2,411        | 3,215        | 1,072 | 1,205       | 1,378         | 1,607  | 1,929 | 2,411 | 3,215 | 4,822 \$  | \$ 222.44     |
| 1315-A-a-Sc2 | Grade-Outslope-Existing Ground | Lambright Stockpile LB-14   | -           | Cat 657G  | 4.0        | 1.44              | 2.8                | Dz3   | 225.78     | 4.959             | 1.653        | 2,480        | 551   | 620         | 708           | 827    | 992   | 1.240 | 1.653 | 2.480 \$  | \$ 222.44     |

### Scraper Optimization

This sheet calculates the most efficient number of scrapers (up to 10) per dozer. The dozer assists scrapers for rough grading at waste rock stockpiles. See the calculation sheet for more information.

|                                |                             |             |           |              |              |              | Co           | ost of Using X S | Scrapers per Doz | zer (\$)     |              |              |              |              |                  |                    |                            |
|--------------------------------|-----------------------------|-------------|-----------|--------------|--------------|--------------|--------------|------------------|------------------|--------------|--------------|--------------|--------------|--------------|------------------|--------------------|----------------------------|
|                                |                             | Destination |           | Max Scrapers | Max Scrapers |              |              |                  |                  |              |              |              |              |              |                  | Optimum Number of  | Optimum Number of Scrapers |
| Task Description               | Source Location 1           | Location 2  | Equipment | Round Up     | Round Down   | 9            | 8            | 7                | 6                | 5            | 4            | 3            | 2            | 1            | Lowest Cost (\$) | Scrapers Per Dozer | Per Dozer Within Max       |
| Grade-Outslope-Existing Ground | South Stockpile S-1         | -           | Cat 657G  | \$ 369,418   | \$ 385,002   | \$ 341,712   | \$ 346,041   | \$ 351,607       | \$ 359,028       | \$ 369,418   | \$ 385,002   | \$ 410,975   | \$ 462,922   | \$ 618,764   | \$ 341,712       | 9                  |                            |
| Grade-Outslope-Existing Ground | South Stockpile S-2         | -           | Cat 657G  | \$ 5,689,194 | \$ 5,929,196 | \$ 5,262,522 | \$ 5,329,190 | \$ 5,414,905     | \$ 5,529,192     | \$ 5,689,194 | \$ 5,929,196 | \$ 6,329,200 | \$ 7,129,209 | \$ 9,529,235 | \$ 5,262,522     | 9                  | 5                          |
| Grade-Outslope-Existing Ground | South Stockpile S-3         | -           | Cat 657G  | \$ 3,229,063 | \$ 3,637,215 | \$ 2,684,860 | \$ 2,718,872 | \$ 2,762,603     | \$ 2,820,910     | \$ 2,902,541 | \$ 3,024,987 | \$ 3,229,063 | \$ 3,637,215 | \$ 4,861,672 | \$ 2,684,860     | 9                  | 3                          |
| Grade-Outslope-Existing Ground | South Stockpile S-4         | -           | Cat 657G  | \$ 1,644,805 | \$ 1,755,769 | \$ 1,459,864 | \$ 1,478,358 | \$ 1,502,137     | \$ 1,533,841     | \$ 1,578,226 | \$ 1,644,805 | \$ 1,755,769 | \$ 1,977,698 | \$ 2,643,484 | \$ 1,459,864     | 9                  | 4                          |
| Grade-Outslope-Existing Ground | South Stockpile S-5         | -           | Cat 657G  | \$ 3,511,904 | \$ 3,955,807 | \$ 2,920,033 | \$ 2,957,025 | \$ 3,004,586     | \$ 3,068,001     | \$ 3,156,781 | \$ 3,289,952 | \$ 3,511,904 | \$ 3,955,807 | \$ 5,287,518 | \$ 2,920,033     | 9                  | 3                          |
| Grade-Outslope-Existing Ground | South Stockpile S-6         | -           | Cat 657G  | \$ 3,875,247 | \$ 4,365,076 | \$ 3,222,140 | \$ 3,262,959 | \$ 3,315,441     | \$ 3,385,417     | \$ 3,483,383 | \$ 3,630,332 | \$ 3,875,247 | \$ 4,365,076 | \$ 5,834,566 | \$ 3,222,140     | 9                  | 3                          |
| Grade-Outslope-Existing Ground | South Stockpile S-7         | -           | Cat 657G  | \$ 2,024,782 | \$ 2,280,714 | \$ 1,683,540 | \$ 1,704,867 | \$ 1,732,288     | \$ 1,768,850     | \$ 1,820,036 | \$ 1,896,816 | \$ 2,024,782 | \$ 2,280,714 | \$ 3,048,509 | \$ 1,683,540     | 9                  | 3                          |
| Grade-Outslope-Existing Ground | South Stockpile S-8         | -           | Cat 657G  | \$ 2,470,062 | \$ 2,782,277 | \$ 2,053,775 | \$ 2,079,793 | \$ 2,113,245     | \$ 2,157,847     | \$ 2,220,290 | \$ 2,313,954 | \$ 2,470,062 | \$ 2,782,277 | \$ 3,718,922 | \$ 2,053,775     | 9                  | 3                          |
| Grade-Outslope-Existing Ground | South Stockpile S-9(1)      | -           | Cat 657G  | \$ 58,598    | \$ 78,325    | \$ 43,255    | \$ 43,803    | \$ 44,508        | \$ 45,447        | \$ 46,762    | \$ 48,735    | \$ 52,023    | \$ 58,598    | \$ 78,325    | \$ 43,255        | 9                  | 2                          |
| Grade-Outslope-Existing Ground | West Stockpile W-7          | -           | Cat 657G  | \$ 1,809,518 | \$ 1,931,594 | \$ 1,606,057 | \$ 1,626,403 | \$ 1,652,562     | \$ 1,687,441     | \$ 1,736,272 | \$ 1,809,518 | \$ 1,931,594 | \$ 2,175,747 | \$ 2,908,205 | \$ 1,606,057     | 9                  | 4                          |
| Grade-Outslope-Existing Ground | West Stockpile W-8(1)       | -           | Cat 657G  | \$ 279,513   | \$ 298,370   | \$ 248,085   | \$ 251,228   | \$ 255,269       | \$ 260,656       | \$ 268,199   | \$ 279,513   | \$ 298,370   | \$ 336,084   | \$ 449,226   | \$ 248,085       | 9                  | 4                          |
| Grade-Outslope-Existing Ground | West Stockpile W-8(2)       | -           | Cat 657G  | \$ 1,635,158 | \$ 1,841,842 | \$ 1,359,580 | \$ 1,376,804 | \$ 1,398,949     | \$ 1,428,475     | \$ 1,469,811 | \$ 1,531,816 | \$ 1,635,158 | \$ 1,841,842 | \$ 2,461,892 | \$ 1,359,580     | 9                  | 3                          |
| Grade-Outslope-Existing Ground | West Stockpile W-9          | -           | Cat 657G  | \$ 705,832   | \$ 795,049   |              | \$ 594,311   | \$ 603,870       | \$ 616,615       | \$ 634,459   | \$ 661,224   | \$ 705,832   | \$ 795,049   | \$ 1,062,700 | \$ 586,876       | 9                  | 3                          |
| Grade-Outslope-Existing Ground | West Stockpile W-10         | -           | Cat 657G  | \$ 378,226   | \$ 426,033   | \$ 314,482   | \$ 318,466   | \$ 323,589       | \$ 330,418       | \$ 339,980   | \$ 354,322   | \$ 378,226   | \$ 426,033   | \$ 569,456   | \$ 314,482       | 9                  | 3                          |
| Grade-Outslope-Existing Ground | West Stockpile W-11         | -           | Cat 657G  | \$ 2,654,172 | \$ 2,989,659 | \$ 2,206,857 | \$ 2,234,814 | \$ 2,270,759     | \$ 2,318,686     | \$ 2,385,783 | \$ 2,486,429 | \$ 2,654,172 | \$ 2,989,659 | \$ 3,996,118 | \$ 2,206,857     | 9                  | 3                          |
| Grade-Outslope-Existing Ground | Lambright Stockpile LB-1    | -           | Cat 657G  | \$ 2,085,324 | \$ 2,226,007 |              | \$ 1,874,299 | \$ 1,904,445     | \$ 1,944,641     | \$ 2,000,914 | \$ 2,085,324 | \$ 2,226,007 | \$ 2,507,374 | \$ 3,351,473 | \$ 1,850,852     | 9                  | 4                          |
| Grade-Outslope-Existing Ground | Lambright Stockpile LB-2    | -           | Cat 657G  | \$ 1,095,277 | \$ 1,233,720 |              | \$ 922,224   | \$ 937,057       | \$ 956,835       | \$ 984,523   | \$ 1,026,056 | \$ 1,095,277 | \$ 1,233,720 | \$ 1,649,048 | \$ 910,687       | 9                  | 3                          |
| Grade-Outslope-Existing Ground | Lambright Stockpile LB-3    | -           | Cat 657G  | \$ 1,065,750 | \$ 1,137,649 |              | \$ 957,901   | \$ 973,308       | \$ 993,851       | \$ 1,022,610 | \$ 1,065,750 | \$ 1,137,649 | \$ 1,281,447 | \$ 1,712,843 | \$ 945,918       | 9                  | 4                          |
| Grade-Outslope-Existing Ground | Lambright Stockpile LB-4    | -           | Cat 657G  | \$ 1,486,651 | \$ 1,586,946 | \$ 1,319,493 | \$ 1,336,209 | \$ 1,357,701     | \$ 1,386,357     | \$ 1,426,474 | \$ 1,486,651 | \$ 1,586,946 | \$ 1,787,535 | \$ 2,389,304 | \$ 1,319,493     | 9                  | 4                          |
| Grade-Outslope-Existing Ground | Lambright Stockpile LB-5    | -           | Cat 657G  | \$ 1,855,087 | \$ 1,980,237 | \$ 1,646,502 | \$ 1,667,361 | \$ 1,694,179     | \$ 1,729,936     | \$ 1,779,996 | \$ 1,855,087 | \$ 1,980,237 | \$ 2,230,539 | \$ 2,981,443 | \$ 1,646,502     | 9                  | 4                          |
| Grade-Outslope-Existing Ground | Lambright Stockpile LB-6    | -           | Cat 657G  | \$ 455,113   | \$ 485,816   |              | \$ 409,058   | \$ 415,637       | \$ 424,409       | \$ 436,691   | \$ 455,113   | \$ 485,816   | \$ 547,223   | \$ 731,445   | \$ 403,940       | 9                  | 4                          |
| Grade-Outslope-Existing Ground | Lambright Stockpile LB-7(1) | -           | Cat 657G  | \$ 252,449   | \$ 284,359   | \$ 209,903   | \$ 212,563   | \$ 215,981       | \$ 220,540       | \$ 226,922   | \$ 236,495   | \$ 252,449   | \$ 284,359   | \$ 380,088   | \$ 209,903       | 9                  | 3                          |
| Grade-Outslope-Existing Ground | Lambright Stockpile LB-7(2) | -           | Cat 657G  | \$ 158,174   | \$ 178,167   | \$ 131,516   | \$ 133,183   | \$ 135,325       | \$ 138,181       | \$ 142,179   | \$ 148,177   | \$ 158,174   | \$ 178,167   | \$ 238,146   | \$ 131,516       | 9                  | 3                          |
| Grade-Outslope-Existing Ground | Lambright Stockpile LB-8    | -           | Cat 657G  | \$ 1,139,698 | \$ 1,216,586 | \$ 1,011,551 | \$ 1,024,366 | \$ 1,040,842     | \$ 1,062,810     | \$ 1,093,565 | \$ 1,139,698 | \$ 1,216,586 | \$ 1,370,362 | \$ 1,831,690 | \$ 1,011,551     | 9                  | 4                          |
| Grade-Outslope-Existing Ground | Lambright Stockpile LB-9    | -           | Cat 657G  | \$ 1,694,683 | \$ 1,809,012 | \$ 1,504,134 | \$ 1,523,189 | \$ 1,547,688     | \$ 1,580,354     | \$ 1,626,085 | \$ 1,694,683 | \$ 1,809,012 | \$ 2,037,671 | \$ 2,723,646 | \$ 1,504,134     | 9                  | 4                          |
| Grade-Outslope-Existing Ground | Lambright Stockpile LB-10   | -           | Cat 657G  | \$ 2,163,059 | \$ 2,308,986 |              | \$ 1,944,167 | \$ 1,975,438     | \$ 2,017,131     | \$ 2,075,502 | \$ 2,163,059 | \$ 2,308,986 | \$ 2,600,841 | \$ 3,476,406 | \$ 1,919,846     | 9                  | 4                          |
| Grade-Outslope-Existing Ground | Lambright Stockpile LB-11   | -           | Cat 657G  | \$ 1,133,210 | \$ 1,209,660 | \$ 1,005,793 | \$ 1,018,535 | \$ 1,034,917     | \$ 1,056,760     | \$ 1,087,340 | \$ 1,133,210 | \$ 1,209,660 | \$ 1,362,561 | \$ 1,821,263 | \$ 1,005,793     | 9                  | 4                          |
| Grade-Outslope-Existing Ground | Lambright Stockpile LB-12   | -           | Cat 657G  | \$ 3,484,084 | \$ 3,719,133 | \$ 3,092,337 | \$ 3,131,511 | \$ 3,181,879     | \$ 3,249,036     | \$ 3,343,055 | \$ 3,484,084 | \$ 3,719,133 | \$ 4,189,230 | \$ 5,599,521 | \$ 3,092,337     | 9                  | 4                          |
| Grade-Outslope-Existing Ground | Lambright Stockpile LB-13   | -           | Cat 657G  | \$ 2,689,555 | \$ 2,871,002 | \$ 2,387,143 | \$ 2,417,385 | \$ 2,456,266     | \$ 2,508,108     | \$ 2,580,687 | \$ 2,689,555 | \$ 2,871,002 | \$ 3,233,895 | + .,,        | \$ 2,387,143     | 9                  | 4                          |
| Grade-Outslope-Existing Ground | Lambright Stockpile LB-14   | -           | Cat 657G  | \$ 1,476,330 | \$ 1,662,938 | \$ 1,227,520 | \$ 1,243,071 | \$ 1,263,064     | \$ 1,289,722     | \$ 1,327,044 | \$ 1,383,026 | \$ 1,476,330 | \$ 1,662,938 | \$ 2,222,760 | \$ 1,227,520     | 9                  | 3                          |

Vegetation Maintenance Costs - Full site

Based on observations of previously reclaimed areas, the annual vegetation failure is conservatively estimated to be 2% failure every year for a total of 12 years, starting the year reclamation is completed. Vegetation maintenance begins at each facility sub-area/location the year that reclamation is completed for that facility sub-area/location.

Assumptions/Inputs:

Year 0 = 2018 Year 99 = 2118 No. Years Veg Maint = 12 % loss per year = 2%

|            |  |   |                        |            | Approx. Year |                   |                      | Number of    |                 |           |                |                |                |                |   |
|------------|--|---|------------------------|------------|--------------|-------------------|----------------------|--------------|-----------------|-----------|----------------|----------------|----------------|----------------|---|
|            |  |   |                        | Total Area | Reclamation  | Approx. Year Veg  | Approx. Year Veg     | Years of Veg |                 | Veg Maint | Fuel Unit Cost | Veg Maint Unit |                | Veg Maint Cost |   |
| ID         | Description  | Source Location 1                                   | Destination Location 2 | (ac)       | Start        | Maintenance Start | Maintenance Complete | Maintenance  | % Loss Per Year | Area (ac) | (\$/ac)        | Cost (\$/ac)   | Fuel Cost (\$) | (\$)           | Maint, Description                      |
| 1000-M-e-U | Post-Closure O&M-Entire Stockpile-Final Grade                      | Triangle Stockpile                                  | '-                     | 81.5       | 2031         | 2034              | 2045                 | 12           | 2%              | 19.57     | \$3.85         | \$820.12       | \$75           | \$16.048       | 2% of veg fails every year for 12 years |
| 1100-M-e-U | Post-Closure O&M-Entire Stockpile-Final Grade                      | South Stockpile                                     | _                      | 584.6      | 2030         | 2033              | 2044                 | 12           | 2%              | 140.30    | \$3.85         | \$820.12       | \$540          | \$115.066      |   |
| 1200-M-e-U | Post-Closure O&M-Entire Stockpile-Final Grade                      | West Stockpile                                      | _                      | 626.4      | 2020         | 2023              | 2034                 | 12           | 2%              | 150.34    | \$3.85         | \$820.12       | \$579          | \$123,300      | 3 ,,                                    |
| 1300-M-e-U | Post-Closure O&M-Entire Stockpile-Final Grade                      | Lambright Stockpile                                 | _                      | 785.4      | 2024         | 2027              | 2038                 | 12           | 2%              | 188.49    | \$3.85         | \$820.12       | \$725          | \$154.584      |   |
| 1400-M-e-U | Post-Closure O&M-Entire Stockpile-Final Grade                      | Southwest Lampbright                                | _                      | 94.3       | 2030         | 2033              | 2044                 | 12           | 2%              | 22.63     | \$3.85         | \$820.12       | \$87           | \$18,560       | 3 ,, ,                                  |
| 1500-M-e-U | Post-Closure O&M-Entire Stockpile-Final Grade                      | South and East In-Pit Stockpiles                    | _                      | 46.0       | 2031         | 2034              | 2045                 | 12           | 2%              | 11.04     | \$3.85         | \$820.12       | \$42           | \$9.054        |   |
| 1600-M-e-U | Post-Closure O&M-Entire Stockpile-Final Grade                      | Northwest Stockpile                                 | _                      | 8.2        | 2031         | 2034              | 2045                 | 12           | 2%              | 1.97      | \$3.85         | \$820.12       | \$8            | \$1,618        | 3 ,, ,                                  |
| 1700-M-e-U | Post-Closure O&M-Entire Stockpile-Final Grade                      | LeeHill Stockpile                                   | _                      | 25.4       | 2031         | 2034              | 2045                 | 12           | 2%              | 6.10      | \$3.85         | \$820.12       | \$23           | \$5,001        | 2% of veg fails every year for 12 years |
| 1800-M-e-U | Post-Closure O&M-Entire Stockpile-Final Grade                      | Northeast Stockpile                                 | _                      | 12.2       | 2031         | 2034              | 2045                 | 12           | 2%              | 2.94      | \$3.85         | \$820.12       | \$11           | \$2,410        |   |
| 1900-M-e-U | Post-Closure O&M-Entire Stockpile-Final Grade                      | North Stockpile                                     | _                      | 6.9        | 2031         | 2034              | 2045                 | 12           | 2%              | 1.66      | \$3.85         | \$820.12       | \$6            | \$1,360        | 3 ,, ,                                  |
| 2000-M-e-U | Post-Closure O&M-Entire Stockpile-Final Grade                      | STS2  | _                      | 83.8       | 2031         | 2034              | 2045                 | 12           | 2%              | 20.11     | \$3.85         | \$820.12       | \$77           | \$16,490       | 3 ,, ,                                  |
| 2100-M-e-U | Post-Closure O&M-Entire Stockpile-Final Grade                      | Upper South   | _                      | 142.7      | 2031         | 2034              | 2045                 | 12           | 2%              | 34.24     | \$3.85         | \$820.12       | \$132          | \$28.080       |   |
| 2200-M-e-U | Post-Closure O&M-Entire Stockpile-Final Grade                      | 9 Waste Rock  | _                      | 161.2      | 2018         | 2021              | 2032                 | 12           | 2%              | 38.69     | \$3.85         | \$820.12       | \$149          | \$31,729       | 3 ,, ,                                  |
| 2309-M-e-U | Post-Closure O&M-Dam 15-Final Grade                                | Dams and Reservoirs Dam 15                          | _                      | 0.1        | 2031         | 2034              | 2045                 | 12           | 2%              | 0.02      | \$3.85         | \$820.12       | \$0            | \$20           |   |
| 2310-M-e-U | Post-Closure O&M-Dam 16-Final Grade                                | Dams and Reservoirs Dam 16                          | _                      | 0.1        | 2031         | 2034              | 2045                 | 12           | 2%              | 0.02      | \$3.85         | \$820.12       | \$0            | \$20           |   |
| 2313-M-e-U | Post-Closure O&M-Dam 20-Final Grade                                | Dams and Reservoirs Dam 20                          | _                      | 0.3        | 2031         | 2034              | 2045                 | 12           | 2%              | 0.08      | \$3.85         | \$820.12       | \$0            | \$63           | 3 ,, ,                                  |
| 2316-M-e-U | Post-Closure O&M-Reservoir 17-Final Grade                          | Dams and Reservoirs Reservoir 17                    | _                      | 3.4        | 2031         | 2034              | 2045                 | 12           | 2%              | 0.81      | \$3.85         | \$820.12       | \$3            | \$661          | 2% of veg fails every year for 12 years |
| 2318-M-e-U | Post-Closure O&M-Fleming Pond-Final Grade                          | Dams and Reservoirs Fleming Pond                    | _                      | 0.8        | 2031         | 2034              | 2045                 | 12           | 2%              | 0.19      | \$3.85         | \$820.12       | \$1            | \$154          |   |
| 2320-M-e-U | Post-Closure O&M-Tailing Thickener 1-Final Grade                   | Dams and Reservoirs Tailing Thickener 1             | _                      | 2.6        | 2031         | 2034              | 2045                 | 12           | 2%              | 0.62      | \$3.85         | \$820.12       | \$2            |                | 2% of veg fails every year for 12 years |
| 2321-M-e-U | Post-Closure O&M-PLS Pond & Launder-Final Grade                    | Dams and Reservoirs PLS Pond & Launder              | _                      | 0.3        | 2031         | 2034              | 2045                 | 12           | 2%              | 0.06      | \$3.85         | \$820.12       | \$0            | \$51           | 2% of veg fails every year for 12 years |
| 2323-M-e-U | Post-Closure O&M-Raffinate Pond-Final Grade                        | Dams and Reservoirs Raffinate Pond                  | _                      | 0.1        | 2031         | 2034              | 2045                 | 12           | 2%              | 0.03      | \$3.85         | \$820.12       | \$0            | \$22           |   |
| 2324-M-e-U | Post-Closure O&M-Reservoir 2-Final Grade                           | Dams and Reservoirs Reservoir 2                     | _                      | 0.2        | 2031         | 2034              | 2045                 | 12           | 2%              | 0.05      | \$3.85         | \$820.12       | \$0            | \$43           |   |
| 2327-M-e-U | Post-Closure O&M-Reservoir 6-Final Grade                           | Dams and Reservoirs Reservoir 6                     | _                      | 1.5        | 2031         | 2034              | 2045                 | 12           | 2%              | 0.36      | \$3.85         | \$820.12       | \$1            | \$295          | 3 ,, ,                                  |
| 2328-M-e-U | Post-Closure O&M-Reservoir 7-Final Grade                           | Dams and Reservoirs Reservoir 7                     | _                      | 2.4        | 2031         | 2034              | 2045                 | 12           | 2%              | 0.58      | \$3.85         | \$820.12       | \$2            | \$474          |   |
| 2341-M-e-U | Post-Closure O&M-Elmo's Pond -Final Grade                          | Dams and Reservoirs Elmo's Pond                     | _                      | 1.2        | 2031         | 2034              | 2045                 | 12           | 2%              | 0.30      | \$3.85         | \$820.12       | \$1            | \$244          | 3 ,,                                    |
| 2342-M-e-U | Post-Closure O&M-Lower Lined Pond -Final Grade                     | Dams and Reservoirs Lower Lined Pond                | -                      | 2.2        | 2031         | 2034              | 2045                 | 12           | 2%              | 0.54      | \$3.85         | \$820.12       | \$2            | \$439          | 3 ,,                                    |
| 2343-M-e-U | Post-Closure O&M-Upper Lined Pond -Final Grade                     | Dams and Reservoirs Upper Lined Pond                | -                      | 0.4        | 2031         | 2034              | 2045                 | 12           | 2%              | 0.10      | \$3.85         | \$820.12       | \$0            | \$81           | 2% of veg fails every year for 12 years |
| 2344-M-e-U | Post-Closure O&M-5900 PLS Sump -Final Grade                        | Dams and Reservoirs 5900 PLS Sump                   | -                      | 0.6        | 2031         | 2034              | 2045                 | 12           | 2%              | 0.14      | \$3.85         | \$820.12       | \$1            | \$112          | 2% of veg fails every year for 12 years |
| 2345-M-e-U | Post-Closure O&M-6300 PLS Booster Station -Final Grade             | Dams and Reservoirs 6300 PLS Booster Station        | -                      | 0.0        | 2031         | 2034              | 2045                 | 12           | 2%              | 0.01      | \$3.85         | \$820.12       | \$0            | \$6            | 2% of veg fails every year for 12 years |
| 2346-M-e-U | Post-Closure O&M-Lee Hill #2 Booster -Final Grade                  | Dams and Reservoirs Lee Hill #2 Booster             | -                      | 0.1        | 2031         | 2034              | 2045                 | 12           | 2%              | 0.03      | \$3.85         | \$820.12       | \$0            | \$28           | 2% of veg fails every year for 12 years |
| 2502-M-e-U | Post-Closure O&M-Northwest Haul Road-Final Grade                   | Miscellaneous NMA Northwest Haul Road               | -                      | 4.8        | 2032         | 2035              | 2046                 | 12           | 2%              | 1.16      | \$3.85         | \$820.12       | \$4            | \$951          | 2% of veg fails every year for 12 years |
| 2512-M-e-U | Post-Closure O&M-East Pit Access Disturbed Area-Final Grade        | Miscellaneous NMA East Pit Access Disturbed Area    | -                      | 3.7        | 2032         | 2035              | 2046                 | 12           | 2%              | 0.88      | \$3.85         | \$820.12       | \$3            | \$722          | 2% of veg fails every year for 12 years |
| 2513-M-e-U | Post-Closure O&M-Chino part of Cobre Haul Road-Final Grade         | Miscellaneous NMA Chino part of Cobre Haul Road     | -                      | 3.2        | 2032         | 2035              | 2046                 | 12           | 2%              | 0.77      | \$3.85         | \$820.12       | \$3            | \$632          | 2% of veg fails every year for 12 years |
| 2514-M-e-U | Post-Closure O&M-Highway to Heaven Haul Road-Final Grade           | Miscellaneous NMA Highway to Heaven Haul Road       | -                      | 32.4       | 2032         | 2035              | 2046                 | 12           | 2%              | 7.79      | \$3.85         | \$820.12       | \$30           | \$6,385        | 2% of veg fails every year for 12 years |
| 2515-M-e-U | Post-Closure O&M-Disturbed Area Around Reservoir 5-Final Grade     | Miscellaneous NMA Disturbed Area Around Reservoir 5 | -                      | 32.5       | 2031         | 2034              | 2045                 | 12           | 2%              | 7.80      | \$3.85         | \$820.12       | \$30           | \$6,393        | 2% of veg fails every year for 12 years |
| 3307-M-e-U | Post-Closure O&M-Filter Plant-Final Grade                          | Miscellaneous NMA Filter Plant                      | -                      | 17.0       | 2032         | 2035              | 2046                 | 12           | 2%              | 4.09      | \$3.85         | \$820.12       | \$16           | \$3,354        | 2% of veg fails every year for 12 years |
| 2600-M-e-U | Post-Closure O&M-200-Acre Unplanned Future Disturbance-Final Grade | Unplanned Disturbed Area                            | -                      | 200.0      | 2031         | 2034              | 2045                 | 12           | 2%              | 48.00     | \$3.85         | \$820.12       | \$185          | \$39,366       | 2% of veg fails every year for 12 years |
| 3000-M-e-U | Post-Closure O&M-Entire Impoundment-Final Grade                    | Axiflo  | -                      | 97.1       | 2020         | 2023              | 2034                 | 12           | 2%              | 23.30     | \$3.85         | \$820.12       | \$90           | \$19,112       | 2% of veg fails every year for 12 years |
| 3100-M-e-U | Post-Closure O&M-Entire Impoundment-Final Grade                    | Tailings Pond 6                                     | -                      | 261.7      | 2020         | 2023              | 2034                 | 12           | 2%              | 62.80     | \$3.85         | \$820.12       | \$242          | \$51,502       | 2% of veg fails every year for 12 years |
| 3106-M-e-U | Post-Closure O&M-Previously Reclaimed-Final Grade                  | Tailings Pond 6 TP-6E and TP-6W                     | -                      | 599.0      | 2012         | 2015              | 2026                 | 9            | 2%              | 107.82    | \$3.85         | \$820.12       | \$415          | \$88,425       | 2% of veg fails every year for 12 years |
| 3200-M-e-U | Post-Closure O&M-Entire Impoundment-Final Grade                    | Tailings Pond 7                                     | -                      | 1,660.5    | 2023         | 2026              | 2037                 | 12           | 2%              | 398.52    | \$3.85         | \$820.12       | \$1,534        | \$326,831      | 2% of veg fails every year for 12 years |
| 3301-M-e-U | Post-Closure O&M-Slag Pile Outslopes W side-Final Grade            | Miscellaneous SMA Slag Pile Outslopes W side        | -                      | 8.2        | 2015         | 2018              | 2029                 | 12           | 2%              | 1.97      | \$3.85         | \$820.12       | \$8            | \$1,614        | 2% of veg fails every year for 12 years |
| 2400-M-e-U | Post-Closure O&M-Previously Reclaimed-Final Grade                  | Ground Hog #5                                       | -                      | 2.0        | 2008         | 2011              | 2022                 | 5            | 2%              | 0.20      | \$3.85         | \$820.12       | \$1            | \$164          | 2% of veg fails every year for 12 years |
| 3302-M-e-U | Post-Closure O&M-Previously Reclaimed-Final Grade                  | Miscellaneous SMA Tailings Pond 1                   | -                      | 0.0        | 2013         | 2016              | 2027                 | 10           | 2%              | 0.00      | \$3.85         | \$820.12       | \$0            | \$1            | 2% of veg fails every year for 12 years |
| 3303-M-e-U | Post-Closure O&M-Previously Reclaimed-Final Grade                  | Miscellaneous SMA Tailings Pond 2                   | -                      | 0.0        | 2013         | 2016              | 2027                 | 10           | 2%              | 0.00      | \$3.85         | \$820.12       | \$0            | \$1            | 2% of veg fails every year for 12 years |
| 3304-M-e-U | Post-Closure O&M-Previously Reclaimed-Final Grade                  | Miscellaneous SMA Tailings Pond B                   | -                      | 0.0        | 2010         | 2013              | 2024                 | 7            | 2%              | 0.00      | \$3.85         | \$820.12       | \$0            | \$1            | 2% of veg fails every year for 12 years |
| 3305-M-e-U | Post-Closure O&M-Previously Reclaimed-Final Grade                  | Miscellaneous SMA Tailings Pond C                   | -                      | 0.0        | 2010         | 2013              | 2024                 | 7            | 2%              | 0.00      | \$3.85         | \$820.12       | \$0            | \$0            | 2% of veg fails every year for 12 years |
| 3306-M-e-U | Post-Closure O&M-Previously Reclaimed-Final Grade                  | Miscellaneous SMA Tailings Pond 4                   | -                      | 0.0        | 2012         | 2015              | 2026                 | 9            | 2%              | 0.00      | \$3.85         | \$820.12       | \$0            | \$1            | 2% of veg fails every year for 12 years |
| 3308-M-e-U | Post-Closure O&M-35 Acre Misc. Area-Final Grade                    | Miscellaneous SMA 35 Acre Misc. Area                | -                      | 35.0       | 2032         | 2035              | 2046                 | 12           | 2%              | 8.40      | \$3.85         | \$820.12       | \$32           | \$6,889        | 2% of veg fails every year for 12 years |
| 5005-M-e-U | Post-Closure O&M-Haul Road   | Upper South & White House                           | -                      | 27.5       | 2032         | 2035              | 2046                 | 12           | 2%              | 6.61      | \$3.85         | \$820.12       | \$25           | \$5,420        | 2% of veg fails every year for 12 years |
|            |  |   |                        |            |              |                   |                      |              |                 |           |                |                |                |                |   |

\$5,022 \$1,070,197 TOTAL O&M AREA 5660 AC TOTAL VEG MAINT AREA 1305 AC TOTAL

Years 40-99 \$4,946 \$/day \$1,240 4 days/yr \$19,784 \$/yr \$4,961 \$/yr Years 40-99 \$825 \$/day \$1,458 \$/day Years 40-99 Years 20-39 Years 20-39 \$2,923 \$/day \$382 5 day/yr \$14,617 \$/yr \$1,911 \$/yr Years 0.19
Equipment Base: \$825
Aqueous Chemistry Base: \$1,458
Time: 20
Equipment Annual: \$16,508.80
Aqueous Chemistry Annual: \$29,150 \$2,923 \$382 \$2,923 \$382 Equipment Base: Fuel Base \$4,946 \$1,240 \$4,946 \$1,240 \$825 \$1,458 Fuel Base 5 day/yr \$4,127 \$/yr \$7,288 \$/yr Time: Equiment Annual: Fuel Annual: \$23,387 \$3,058 Time: 4 \$19,784 \$4,961 4 \$19,784 \$4,961 \$29,234 \$3,823 Annual Current Equipment Cost Annual Current Euipment Cost Annual Current Cost Annual Current Fuel. Cost (\$) \$1 Notes
\$520 Weighted based on total reclaimed area
\$520 Weighted based on total reclaimed area
\$1.168 Weighted based on total reclaimed area
\$2.307 Weighted based on total reclaimed area
\$2.307 Weighted based on total reclaimed area
\$2.838 Weighted based on total reclaimed area
\$3.828 Weighted based on total reclaimed area
\$3.329 Weighted based on total reclaimed area
\$3.739 Weighted based on total reclaimed area
\$3.823 Weighted based on total reclaimed area (8) Notes
\$20.477 Weighted based on total reclaimed area
\$20.477 Weighted based on total reclaimed area
\$20.575 Weighted based on total reclaimed area
\$25.551 Weighted based on total reclaimed area
\$25.5551 Weighted based on total reclaimed area
\$25.5551 Weighted based on total reclaimed area
\$35.1403 Weighted based on total reclaimed area
\$38.148 Weighted based on total reclaimed area
\$38.149 Weighted based on total reclaimed area
\$45.022 Weighted based on total reclaimed area
\$45.029 Weighted based on total reclaimed area
\$45.029 Weighted based on total reclaimed area
\$45.029 Weighted based on total reclaimed area (\$) (\$) Notes
8675 Weighted based on total reclaimed area
\$675 Weighted based on total reclaimed area
\$1,539 Weighted based on total reclaimed area
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Total Direct Cost Erosion Control, Road Maintenance, and Groundwater Monitoring \$5,501,334

Direct Cost

[1] Erosion Control

Equipment - EquipmentWatch
Labor -2019 NM Department of Labor Type H (Heavy Engineering) labor rates

\$1,756,968

|                           | # | \$/hour         | \$/day     |                  |             |
|---------------------------|---|-----------------|------------|------------------|-------------|
| Labor Foreman (outside)   | 1 | \$23.84         | \$190.72   |                  |             |
| Laborers                  | 2 | \$23.09         | \$369.44   |                  |             |
| Equipment Operators (med) | 1 | \$27.52         | \$220.16   |                  |             |
| Truck Drivers (heavy)     | 2 | \$24.27         | \$388.32   | 4                |             |
|                           |   | equipment \$/hr | fuel \$/hr | equipment \$/day | fuel \$/day |
| Cat 966H                  | 1 | \$73.11         | \$19.61    | \$584.90         | \$156.87    |
| Cat 725                   | 2 | \$73.11         | \$14.09    | \$1,169.82       | \$225.39    |
|                           |   |                 |            | Equipment Cost   | Fuel Cost   |

\$2,923

\$229,743

[2] Road Maintenance Crew Equipment - EquipmentWatch Labor -2019 NM Department of Labor Type H (Heavy Engineering) labor rates

|                       | Equipment | Fuel    | Labor   | Equipment Subtotal | Fuel Subtotal |
|-----------------------|-----------|---------|---------|--------------------|---------------|
|                       | Cost      | Cost    | Rate    | 24 hrs/month       | 24 hrs/month  |
|                       | (\$/hr)   | (\$/hr) | (\$/hr) | (\$/month)         | (\$/month)    |
| Cat 14M Motor Grader  | \$86.71   | \$19.40 | \$27.41 | \$2,739            | \$658         |
| 6,000-gal Water Truck | \$67.69   | \$26.33 | \$24.27 | \$2,207            | \$582         |
|                       |           |         |         |                    |               |

Equipment Cost Fuel Cost
Total Direct Cost \$4,946

Direct Cost \$1,882,688

[3] Groundwater Monitoring
Equipment - EquipmentWater
Labor 2019 Mb Department of Labor Type H (Heavy Engineering) labor rates.
Aqueous Chemistry Sample Numbers - From the CCP in consultation with NMED and the DP-1340 re

| #  | \$/hour                           | \$/day                 |
|----|-----------------------------------|------------------------|
| 1  | \$23.84                           | \$190.72               |
| 1  | \$23.09                           | \$184.72               |
|    |                                   |                        |
|    | \$/year                           | \$/day                 |
| 1  | \$8,000.00                        | \$400.00               |
| 1  | \$1,000.00                        | \$50.00                |
| 53 | \$29,150.00                       | \$1,457.50             |
| 27 | \$14,575.00                       | \$1,457.50             |
| 13 | \$7,287.50                        | \$1,457.50             |
|    | 1<br>1<br>1<br>1<br>1<br>53<br>27 | 1 \$23.84<br>1 \$23.09 |

Total Direct Cost Years 0-19 Total Direct Cost Years 20-39 Total Direct Cost Years 40-99 \$825 \$825 \$825 \$825 \$1,458 \$/day \$1,458 \$/day \$1,458 \$/day

# Chino Mine

**Operations and Maintenance Summary** 

|                |                                | Current Value |
|----------------|--------------------------------|---------------|
| DIRECT COSTS   | Facility and Structure Removal | \$0           |
|                | Earthmoving                    | \$0           |
|                | Vegetation                     | \$1,075,219   |
|                | Other                          | \$6,197,939   |
|                | Subtotal, Direct Costs         | \$7,273,158   |
| INDIRECT COSTS | Subtotal, Indirect Costs 17.5% | \$1,272,803   |
| TOTAL COST     |                                | \$8,545,960   |

## Notes:

Indirect costs are based on 2019 agreement between FMI and agencies

Indirect costs include mobilization and demobilization, engineering redesign fee, contingencies, contractor profit and overhead, project management fee, and state procurement cost

### **Building Demolition**

|                               |                                      |     |         |                |          |          |      | Buildir   | ng Demolition |                          | Building Description  |
|-------------------------------|--------------------------------------|-----|---------|----------------|----------|----------|------|-----------|---------------|--------------------------|---|
|                               |                                      |     |         |                |          |          |      | Unit      | Item          |                          |   |
| Chino Tag Number              | Description <sup>2</sup>             |     | Dimensi | ons            |          | Demo     |      | Cost      | Cost          | Description              |   |
| · ·                           |                                      | 1   | w       | H <sup>3</sup> | Diameter | Quantity | Unit | (\$/unit) | (\$)          | ·                        |   |
| Mine Maintenance Facilities A | rea                                  | =   |         |                |          |          |      | (47)      | (+)           |                          |   |
| MF-02                         | Wash Shop                            | 40  | 25      | 24             | -        | 24000    | cf   | \$0.25    | \$6,000       | Structure Demolition     | Wash rack; Hoses; Concrete pad  |
| MF-05                         | Maintenance Shop                     | 150 | 57      | 24             | -        | 205200   | cf   | \$0.25    | \$51,300      | Structure Demolition     | Saws; Drills; Warehouse w/ handtools                                    |
| MF-07                         | Storage                              | 74  | 19      | 24             | -        | 33744    | cf   | \$0.25    | \$8,436       | Structure Demolition     | Lean-to storage for Electric Shop                                       |
| MF-15                         | Storage Shed                         | 20  | 118     | 24             | -        | 56640    | cf   | \$0.25    | \$14,160      | Structure Demolition     | Core Samples  |
| MF-16                         | Primary Crusher                      | 31  | 22      | 24             | -        | 19642    | cf   | \$0.25    | \$4,910       | Structure Demolition     | Added 20% for equipment removal   |
| MF-17                         | Wash Shop Wastewater                 | 80  | 150     | 24             | -        | 288000   | cf   | \$0.25    | \$72,000      | Structure Demolition     | Sump for wash rack; settling pond with skimmer                          |
| MF-19                         | Shop Fast Fuel                       | -   | -       | 21.3           | 8        | 1        | each | \$1,006   | \$1,006       | Storage Tank Demolition  | Hoses & pumps   |
| SX/EW Plant Area              |                                      |     |         |                |          |          |      |           |               |                          |   |
|                               |                                      |     |         |                |          |          |      |           |               |                          | Will be used during the first 6 years following clousure as part of the |
| SX-11                         | Plant Feed Pond                      | 108 | 238     | 24             | -        | 616896   | cf   | \$0.25    | \$154,224     | Structure Demolition     | Evaporative Treatment System  |
|                               |                                      |     |         |                |          |          |      |           |               |                          | Will be used during the first 6 years following clousure as part of the |
| SX-12                         | Raffinate Pond                       | 110 | 330     | 24             | -        | 871200   | cf   | \$0.25    | \$217,800     | Structure Demolition     | Evaporative Treatment System  |
| SX-13                         | Wash Rack                            | 21  | 15      | 24             | -        | 7560     | cf   | \$0.25    | \$1,890       | Structure Demolition     |   |
| SX-17                         | Temporary Storage                    | 76  | 43      | 24             | -        | 78432    | cf   | \$0.25    | \$19,608      | Structure Demolition     |   |
| Ivanhoe Concentrator/Precipit | ation Plant Area                     |     |         |                |          |          |      |           |               |                          |   |
|                               |                                      |     |         |                |          |          |      |           |               |                          | Crushers; Screens; Pumps; Conveyor system - added 20% for equipmen      |
| CP-32                         | Wet Recycle Crush Plant              | 153 | 74      | 24             | -        | 326074   | cf   | \$0.25    | \$81,518      | Structure Demolition     | removal   |
| CP-35                         | Portable Storage Shed                | 40  | 19      | 24             | -        | 18240    | cf   | \$0.25    | \$4,560       | Structure Demolition     | Miscellaneous supplies  |
|                               |                                      | 90  | 42      | 24             | -        | 90720    | cf   | \$0.25    | \$22,680      | Structure Demolition     |   |
| CP-39                         | Hoist House & Headframe              | 44  | 25      | 24             | -        | 26400    | cf   | \$0.25    | \$6,600       | Structure Demolition     |   |
| CP-42                         | Waste Oil Pad                        | 30  | 12      | -              | -        | 360      | sf   | \$0.62    | \$223         | Concrete Slab Demolition |   |
| Lampbright Stockpile          |                                      |     | •       |                |          |          |      |           |               | •                        |   |
|                               |                                      |     |         |                |          |          |      |           |               |                          | 400,000 gal stainless steel tank in the northeast corner of Main        |
| N/A                           | Northeast Lampbright Booster Station | -   | -       | -              | -        | 53476    | cf   | \$0.25    | \$13,369      | Storage Tank Demolition  | Lampbright Stockpile  |
| South Stockpile               |                                      |     | ·       |                |          |          |      |           |               | <u> </u>                 |   |
|                               | ·                                    |     | •       |                |          |          | •    |           |               | •                        |   |
| N/A                           | 6525 Raffinate Tank                  | -   | -       | -              | -        | 13369    | each | \$0.25    | \$3,342       | Storage Tank Demolition  | 100,000 gal stainless steel tank on the northwest end of South Stockpil |

Demolition Total Direct Cost \$683,627

| ID                       | Unit Cost (\$/unit) <sup>1</sup> | Units       | RS Means Line<br>Item     | Description  |
|--------------------------|----------------------------------|-------------|---------------------------|--|
| Structure Demolition     | \$0.25                           | \$/cf       | 024116.13 0100 Bu         | ilding demolition, large urban projects, mixture of types, excludes foundation demolition, dump fees                           |
| Concrete Slab Demolition | \$0.62                           | \$/sf floor | 024116.17-0400 Bu         | ilding footing and foundation demolition 6" thick plain concrete   |
| Storage Tank Demolition  | \$1,005.97                       | \$/each     | Sel<br>130505.75-0530 thr | ective Demolition- Storage Tanks, steel tank, single wall, above ground, not incl fdn, pumps or piping, 5,000 u 10,000 gallon. |

<sup>1.</sup> RS Means Online 2019

<sup>2.</sup> Chino response to MMD November 13, 2003 Letter RE: August 2003 Building Inspection Report, Permit GR009RE December 3, 2003; building list updated in 2018 in CCP

<sup>3. 24&#</sup>x27; eave height assumed

**Building Demolition - Cover** 

Soil Cover Depth ft:

|                                   |                         |     |      |         |          |               | Unit    | Item    |
|-----------------------------------|-------------------------|-----|------|---------|----------|---------------|---------|---------|
| Chino Tag Number                  | Description             |     | Dime | ensions |          |               | Cost    | Cost    |
|                                   |                         | L   | W    | Н       | Diameter | Quantity (cy) | (\$/cy) | (\$)    |
| Mine Maintenance Facilities Area  |                         |     |      |         |          |               |         |         |
| MF-02                             | Wash Shop               | 40  | 25   | -       | -        | 111           | \$1.99  | \$221   |
| MF-05                             | Maintenance Shop        | 150 | 57   | -       | -        | 950           | \$1.99  | \$1,894 |
| MF-07                             | Storage                 | 74  | 19   | -       | -        | 156           | \$1.99  | \$311   |
| MF-15                             | Storage Shed            | 20  | 118  | -       | -        | 262           | \$1.99  | \$523   |
| MF-16                             | Primary Crusher         | 31  | 22   | -       | -        | 76            | \$1.99  | \$151   |
| MF-17                             | Wash Shop Wastewater    | 80  | 150  | -       | -        | 1333          | \$1.99  | \$2,658 |
| MF-19                             | Shop Fast Fuel          | -   | -    | 21.3    | 8        | 6             | \$1.99  | \$11    |
| SX/EW Plant Area                  |                         |     |      |         |          |               |         |         |
| SX-11                             | Plant Feed Pond         | 108 | 238  | -       | -        | 2856          | \$1.99  | \$5,693 |
| SX-12                             | Raffinate Pond          | 110 | 330  | -       | -        | 4033          | \$1.99  | \$8,040 |
| SX-13                             | Wash Rack               | 21  | 15   | -       | -        | 35            | \$1.99  | \$70    |
| SX-17                             | Temporary Storage       | 76  | 43   | -       | -        | 363           | \$1.99  | \$724   |
| Ivanhoe Concentrator/Precipitatio | n Pant Area             |     |      |         |          |               |         |         |
| CP-32                             | Wet Recycle Crush Plant | 153 | 74   | -       | -        | 1258          | \$1.99  | \$2,508 |
| CP-35                             | Portable Storage Shed   | 40  | 19   | -       | -        | 84            | \$1.99  | \$168   |
| CP-39                             | Hoist House & Headframe | 90  | 42   | -       | -        | 420           | \$1.99  | \$837   |
|                                   |                         | 44  | 25   | -       | -        | 122           | \$1.99  | \$244   |
| CP-42                             | Waste Oil Pad           | 30  | 12   | _       | _        | 40            | \$1.99  | \$80    |

| Cover Total Direct Cost: \$24,132 |
|-----------------------------------|
|-----------------------------------|

Item Unit Cost Description \$/cy

Load and Haul cover material \$1.99 Cost to excavate, haul, and grade cover material per cubic yard of cover

material at the North Stockpile

## **Calculation:**

### Assumptions:

\*\*Values from the North Stockpile are used to generate unit cost.

\*\*Cost Cover Material (Tab 17b): \$66,651 \*\*Volume of Hauled Cover (Tab 4): 33,437 CY

<sup>1</sup>North Stockpile Unit Cost: 1.99 \$/cy

 $<sup>^{1}</sup>$  Cost Cover Material Excavate, Haul, Grade / Volume of Hauled Cover Material

<sup>\*</sup>Similar calculation used in Cobre\_Demolition\_2018

## **Beuilding Demolition - Vegetation**

| Chino Tag Number | Description                 |          | Dime | nsions |          |       |      |
|------------------|-----------------------------|----------|------|--------|----------|-------|------|
|                  |                             | L        | W    | Н      | Diameter | Area  | Unit |
| Mine Maintenance | Facilities Area             |          |      |        |          |       |      |
| MF-02            | Wash Shop                   | 40       | 25   | -      | -        | 0.02  | acre |
| MF-05            | Maintenance Shop            | 150      | 57   | -      | -        | 0.20  | acre |
| MF-07            | Storage                     | 74       | 19   | -      | -        | 0.03  | acre |
| MF-15            | Storage Shed                | 20       | 118  | -      | -        | 0.05  | acre |
| MF-16            | Primary Crusher             | 31       | 22   | -      | -        | 0.02  | acre |
| MF-17            | Wash Shop Wastewater        | 80       | 150  | -      | -        | 0.28  | acre |
| MF-19            | Shop Fast Fuel              | -        | -    | 21.3   | 8        | 0.001 | acre |
| SX/EW Plant Area |                             |          |      |        |          |       |      |
| SX-11            | Plant Feed Pond             | 108      | 238  | -      | -        | 0.59  | acre |
| SX-12            | Raffinate Pond              | 110      | 330  | -      | -        | 0.83  | acre |
| SX-13            | Wash Rack                   | 21       | 15   | -      | -        | 0.01  | acre |
| SX-17            | Temporary Storage           | 76       | 43   | -      | -        | 0.08  | acre |
| Ivanhoe Concentr | ator/Precipitation Pant Are | <u>a</u> |      |        |          |       |      |
| CP-32            | Wet Recycle Crush Plant     | 153      | 74   | -      | -        | 0.26  | acre |
| CP-35            | Portable Storage Shed       | 40       | 19   | -      | -        | 0.02  | acre |
|                  |                             | 90       | 42   | -      | -        | 0.09  | acre |
| CP-39            | Hoist House & Headframe     | 44       | 25   | -      | -        | 0.03  | acre |
| CP-42            | Waste Oil Pad               | 30       | 12   | _      | -        | 0.01  | acre |

Revegetation Area: 2.50 acres
Revegetation unit cost: \$ 823.97 \$/acre

Revegetation Total Direct Cost: \$ 2,061

Data Sources: See "Revegetation\_UC"

### Building Demolition - Wastes Requiring Special Handling

|  |                         |     |     |         |          |               |          |       | Wastes F    | equiring Spe | cial Handlir | ng    |       |           |           |
|--|-------------------------|-----|-----|---------|----------|---------------|----------|-------|-------------|--------------|--------------|-------|-------|-----------|-----------|
|  |                         |     |     |         |          |               |          | Clean | up& Disposa | ıl           |              |       | Trans | portaion  |           |
| Chino Tag Number                             | Description             |     | Dim | ensions |          |               |          |       | Unit Cost   | Item Cost    |              |       |       | Unit Cost | Item Cost |
|  |                         | L   | W   | Н       | Diameter | Quantity Unit | Quantity | Unit  | (\$/unit)   | (\$)         | Drums        | Trips | Miles | (\$/unit) | (\$)      |
| Mine Maintenance Facilities Area             |                         |     |     |         |          |               |          |       |             |              |              |       |       |           |           |
| MF-02  | Wash Shop               | 40  | 25  | 24      | -        | 4 cy          | 3        | tons  | \$335.20    | \$1,292      | 12           | 0     | 337   | \$4.78    | \$248     |
| MF-05  | Maintenance Shop        | 150 | 57  | 24      | -        | 33 cy         | 24       | tons  | \$335.20    | \$11,044     | 105          | 1     | 337   | \$4.78    | \$2,123   |
| MF-07  | Storage                 | 74  | 19  | 24      | -        | 5 cy          | 4        | tons  | \$335.20    | \$1,816      | 17           | 0     | 337   | \$4.78    | \$349     |
| MF-15  | Storage Shed            | 20  | 118 | 24      | -        | 9 cy          | 7        | tons  | \$335.20    | \$3,048      | 29           | 0     | 337   | \$4.78    | \$586     |
| MF-16  | Primary Crusher         | 31  | 22  | 8       | -        | 1 cy          | 1        | tons  | \$335.20    | \$294        | 3            | 0     | 337   | \$4.78    | \$56      |
| MF-17  | Wash Shop Wastewater    | 80  | 150 | 24      | -        | 46 cy         | 33       | tons  | \$335.20    | \$15,500     | 148          | 2     | 337   | \$4.78    | \$2,980   |
| MF-19  | Shop Fast Fuel          | -   | -   | 21.3    | 8        |               |          |       |             |              |              |       |       |           |           |
| SX/EW Plant Area                             |                         |     |     |         |          |               |          |       |             |              |              |       |       |           |           |
| SX-11  | Plant Feed Pond         | 108 | 238 | 24      | -        | 33 cy         | 24       | tons  | \$335.20    | \$10,956     | 105          | 1     | 337   | \$4.78    | \$2,106   |
| SX-12  | Raffinate Pond          | 110 | 330 | 24      | -        | 140 cy        | 101      | tons  | \$335.20    | \$46,888     | 448          | 6     | 337   | \$4.78    | \$9,013   |
| SX-13  | Wash Rack               | 21  | 15  | 24      | -        | 1 cy          | 1        | tons  | \$335.20    | \$407        | 4            | 0     | 337   | \$4.78    | \$78      |
| SX-17  | Temporary Storage       | 76  | 43  | 24      | -        | 13 cy         | 9        | tons  | \$335.20    | \$4,221      | 40           | 1     | 337   | \$4.78    | \$811     |
| Ivanhoe Concentrator/Precipitation Pant Area |                         |     |     |         |          |               |          |       |             |              |              |       |       |           |           |
| CP-32  | Wet Recycle Crush Plant | 153 | 74  | 24      | -        | 44 cy         | 31       | tons  | \$335.20    | \$14,624     | 140          | 2     | 337   | \$4.78    | \$2,811   |
| CP-35  | Portable Storage Shed   | 40  | 19  | 24      | -        | 3 cy          | 2        | tons  | \$335.20    | \$982        | 9            | 0     | 337   | \$4.78    | \$189     |
| CP-39  | Hoist House & Headframe | 90  | 42  | 24      | -        | 15 cy         | 10       | tons  | \$335.20    | \$4,883      | 47           | 1     | 337   | \$4.78    | \$939     |
| Cr-39  | noist nouse & neautrame | 44  | 25  | 24      | -        | 4 cy          | 3        | tons  | \$335.20    | \$1,421      | 14           | 0     | 337   | \$4.78    | \$273     |
| CP-42  | Waste Oil Pad           | 30  | 12  | -       | -        |               |          |       |             |              |              |       |       |           |           |

Total Cost \$139,940

| Item  | Min. Base Cost | Max. Base |          | Units   | Means Line  |
|---|----------------|-----------|----------|---------|-------------|
|   |                | Cost      | Cost     |         | Item        |
|   | \$/unit        | \$/unit   | \$/unit  |         |             |
| Hazardous Waste Cleanup & Disposal  | \$162.26       | \$508.13  | \$335.20 | \$/ton  | 02 81 20.10 |
| Hazardous Waste Transportation (Truckload = 80 drums or 25 cy or 18 tons) | \$3.37         | \$6.19    | \$4.78   | \$/mile | 02 81 20.10 |

R.S. Means Online Heavy Construction Cost Data, 2019
Volume of wastes requiring special handling is assumed to be in the same proportion to
the structural material volume as for the Continental Mine RCE
Disposal Location: Veolia 5736 W Jefferson St, Phoenix, AZ 85043

0.0001606 cy/cf 337 miles

# Chino Mine

**Facility Demolition Summary** 

|                |                                   | <b>Current Value</b> |
|----------------|-----------------------------------|----------------------|
| DIRECT COSTS   | Facility and Structure Removal    | \$683,627            |
|                | Cover                             | \$24,132             |
|                | Ripping & Revegetation            | \$2,061              |
|                | Wastes Requiring Special Handling | \$139,940            |
|                | Subtotal, Direct Costs            | \$849,760            |
| INDIRECT COSTS | Subtotal, Indirect Costs 30.0%    | \$254,928            |
| TOTAL COST     |                                   | \$1,104,688          |

### Notes:

Indirect costs are based on 2019 agreement between FMI and agencies

Indirect costs include mobilization and demobilization, engineering redesign fee, contingencies, contractor profit and overhead, project management fee, and state procurement cost

| Total            | \$185,445,696 |
|------------------|---------------|
|                  |               |
| Veg O&M          | \$1,263,382   |
| Other O&M        | \$7,282,578   |
| Earthwork & Demo | \$176,899,735 |
| Component        | Current Cost  |

|  |       |             | Earth             | work        |                                       |
|--|-------|-------------|-------------------|-------------|---------------------------------------|
| 1  |       |             | Vegetation Maint. | O&M         |                                       |
| 2  |       |             |                   |             |                                       |
| 3 9,935,279 15,000 51,090 10,001,388   5 9,935,279 15,000 51,090 10,001,388   6 9,935,279 45,707 81,041 10,002,007   7 9,935,279 45,707 95,242 10,076,227   9 9,935,279 45,707 95,242 10,076,227   10 9,935,279 45,707 95,242 10,076,227   11 9,935,279 45,707 95,242 10,076,227   12 9,935,279 45,707 95,242 10,076,227   13 9,935,279 45,707 95,242 10,076,227   14 9,935,279 45,707 95,242 10,076,227   15 9,935,279 45,707 95,242 10,076,227   16 9,935,279 45,707 19,542 10,076,227   17 9,935,279 45,707 113,332 10,100,318   18 9,935,279 45,707 121,566 10,102,551   17 9,935,279 45,707 1,103,207 1 12 1,000,000 45,707 1,103,207 1 12 1,000,000 45,707 1,103,207 1 12 1,000,000 45,707 1 12 1,000,000 45,707 1 12 1,000,000 45,707 1 12 1,000,000 45 |       | ' '         | ·                 |             |                                       |
| 5 9,935,279 45,707 81,004 10,002,003,003,003,003,003,003,003,003,00  |       | 9,935,279   |                   | · ·         |                                       |
| 6 9,935,279 45,707 95,242 10,076,227 8 9,935,279 45,707 95,242 10,076,227 10 9,935,279 45,707 95,242 10,076,227 11 9,935,279 45,707 95,242 10,076,227 12 9,935,279 45,707 95,242 10,076,227 13 9,935,279 45,707 95,242 10,076,227 14 9,935,279 45,707 107,497 10,084,33 14 9,935,279 45,707 107,497 10,084,33 14 9,935,279 45,707 121,566 10,102,551 15 9,935,279 45,707 121,566 10,102,551 16 9,935,279 45,707 121,566 10,102,551 18 9,935,279 45,707 121,566 10,102,551 18 9,935,279 45,707 121,566 10,102,551 18 9,935,279 45,707 121,566 10,102,551 19 9,935,279 45,707 121,566 10,102,551 20 3,000,000 45,707 121,566 10,102,551 21 45,707 86,973 132,850 22 4 5,707 86,973 132,850 23 4 5,707 86,973 132,850 24 5,707 86,973 132,850 24 5,707 86,973 132,850 25 45,707 86,973 132,850 26 45,707 86,973 132,850 27 45,707 86,973 132,850 28 45,707 86,973 132,850 29 45,707 86,973 132,850 20 45,707 86,973 132,850 21 45,707 86,973 132,850 22 4 5,707 86,973 132,850 23 4 5,707 86,973 132,850 24 5,707 86,973 132,850 25 45,707 86,973 132,850 26 45,707 86,973 132,850 27 45,707 86,973 132,850 28 45,707 86,973 132,850 29 45,707 86,973 132,850 20 45,707 86,973 132,850 21 45,707 86,973 132,850 21 45,707 86,973 132,850 22 4 5,707 86,973 132,850 23 4 5,707 86,973 132,850 24 5,707 86,973 86,973 25 5 5 6 86,973 86,973 26 6,973 86,973 27 6 86,973 86,973 28 6 6 86,973 86,973 29 6 6 86,973 86,973 20 6 86,973 86,973 21 22 6 86,973 86,973 21 22 6 86,973 86,973 21 22 6 86,973 86,973 21 22 6 86,973 86,973 21 22 6 86,973 86,973 21 22 6 86,973 86,973 21 22 6 86,973 86,973 21 22 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8  |       |             |                   |             |                                       |
| 7 9,935,279 45,707 95,242 10,076,227 9 9,935,279 45,707 95,242 10,076,227 11 9,935,279 45,707 95,242 10,076,227 11 9,935,279 45,707 95,242 10,076,227 12 9,935,279 45,707 95,242 10,076,227 13 9,935,279 45,707 95,242 10,076,227 13 9,935,279 45,707 119,332 10,100,318 14 9,935,279 45,707 119,332 10,100,318 15 9,935,279 45,707 121,566 10,102,551 17 9,935,279 45,707 121,566 10,102,551 18 9,935,279 45,707 121,566 10,102,551 19 9,935,279 45,707 121,566 10,102,551 19 9,935,279 45,707 121,566 10,102,551 20 3,000,000 45,707 121,566 10,102,551 20 3,000,000 45,707 121,566 10,102,551 21 45,707 86,973 132,680 22 45,707 86,973 132,680 23 - 45,707 86,973 132,680 24 - 45,707 86,973 132,680 25 - 45,707 86,973 132,680 26 - 45,707 86,973 132,680 27 - 45,707 86,973 132,680 28 - 45,707 86,973 132,680 29 - 45,707 86,973 132,680 31 - 45,707 86, |       |             |                   |             |                                       |
| 9 9,935,279 45,707 95,242 10,076,227 111 9,935,279 45,707 95,242 10,076,227 12 9,935,279 45,707 95,242 10,076,227 13 9,935,279 45,707 119,332 14 9,935,279 45,707 119,332 15 9,935,279 45,707 121,566 10,102,551 16 9,935,279 45,707 121,566 10,102,551 17 9,935,279 45,707 121,566 10,102,551 18 9,935,279 45,707 121,566 10,102,551 19 9,935,279 45,707 121,566 10,102,551 19 9,935,279 45,707 121,566 10,102,551 19 9,935,279 45,707 121,566 10,102,551 19 9,935,279 45,707 121,566 10,102,551 19 9,935,279 45,707 121,566 10,102,551 19 9,935,279 45,707 121,566 10,102,551 19 9,935,279 45,707 121,566 10,102,551 19 9,935,279 45,707 121,566 10,102,551 20 3,000,000 45,707 121,566 10,102,551 21 45,707 86,973 132,680 22 45,707 86,973 132,680 23 45,707 86,973 132,680 24 45,707 86,973 132,680 25 45,707 86,973 132,680 26 45,707 86,973 132,680 27 45,707 86,973 132,680 28 45,707 86,973 132,680 29 45,707 86,973 132,680 29 45,707 86,973 132,680 29 45,707 86,973 132,680 20 45,707 86,973 132,680 21 45,707 86,973 132,680 21 45,707 86,973 132,680 22 5 45,707 86,973 132,680 23 6 5,73 86,973 24 6 7,707 86,973 132,680 25 6 86,973 86,973 27 6 86,973 86,973 28 6 86,973 86,973 29 6 86,973 86,973 29 6 86,973 86,973 29 7 86,973 33 20 6 86,973 86,973 20 86,973  |       |             |                   |             |                                       |
| 10   |       |             |                   |             |                                       |
| 11   |       |             |                   |             |                                       |
| 13   |       |             |                   |             |                                       |
| 14   |       |             |                   |             |                                       |
| 15   |       |             |                   | · ·         |                                       |
| 15   |       |             |                   | · ·         |                                       |
| 18   |       |             |                   |             |                                       |
| 19   |       |             |                   |             |                                       |
| 200   3,000,000   45,707   121,566   3,162,738   |       |             |                   |             |                                       |
| 22   |       |             | ,                 |             | , , , , , , , , , , , , , , , , , , , |
| 23   |       | -           |                   |             |                                       |
| 24   |       | -           |                   | · ·         |                                       |
| 26   |       | -           | ,                 | · ·         |                                       |
| 27   | 25    |             | 45,707            | 86,973      | 132,680                               |
| 28   |       | -           |                   |             |                                       |
| 29   |       | -           |                   |             |                                       |
| 31   | 29    | -           | 45,707            | 86,973      | 132,680                               |
| 32   |       | -           |                   |             |                                       |
| 33   |       | -           | 45,707<br>-       |             |                                       |
| 34   |       | -           | -                 |             |                                       |
| 36   |       | -           | -                 | · ·         | 86,973                                |
| 37   |       | -           | -                 |             |                                       |
| 38   |       |             | -                 | · ·         |                                       |
| 40   |       | -           | -                 | 86,973      |                                       |
| 41   |       | -           | -                 | · · · · · · |                                       |
| 42   |       | -           | -                 |             |                                       |
| 44   |       | -           | -                 | · ·         |                                       |
| 45   |       | -           | -                 |             |                                       |
| 46   |       | -           | -                 |             |                                       |
| 48   |       | -           | -                 |             |                                       |
| 49   | 47    | -           | -                 |             |                                       |
| 50         -         -         61,908         61,908           51         -         -         61,908         61,908           52         -         -         61,908         61,908           53         -         -         61,908         61,908           54         -         -         61,908         61,908           55         -         -         61,908         61,908           56         -         -         61,908         61,908           57         -         -         61,908         61,908           59         -         -         61,908         61,908           60         -         -         61,908         61,908           61         -         -         61,908         61,908           61         -         -         61,908         61,908           61         -         -         61,908         61,908           62         -         -         61,908         61,908           63         -         -         61,908         61,908           64         -         -         61,908         61,908           67         - </td <td></td> <td>-</td> <td>-</td> <td></td> <td></td>  |       | -           | -                 |             |                                       |
| 51         -         61,908         61,908           52         -         -         61,908         61,908           53         -         -         61,908         61,908           54         -         -         61,908         61,908           55         -         -         61,908         61,908           55         -         -         61,908         61,908           57         -         -         61,908         61,908           59         -         -         61,908         61,908           60         -         -         61,908         61,908           61         -         -         61,908         61,908           62         -         -         61,908         61,908           63         -         -         61,908         61,908           64         -         -         61,908         61,908           65         -         -         61,908         61,908           67         -         -         61,908         61,908           68         -         -         61,908         61,908          69         -         -  |       | _           | _                 |             |                                       |
| 53         -         61,908         61,908           54         -         61,908         61,908           55         -         61,908         61,908           56         -         -         61,908         61,908           57         -         -         61,908         61,908           58         -         -         61,908         61,908           60         -         -         61,908         61,908           60         -         -         61,908         61,908           61         -         -         61,908         61,908           62         -         -         61,908         61,908           63         -         -         61,908         61,908           64         -         -         61,908         61,908           65         -         -         61,908         61,908           67         -         -         61,908         61,908           67         -         -         61,908         61,908           67         -         -         61,908         61,908           67         -         61,908         61,908     <   |       | -           | -                 |             |                                       |
| 54         -         61,908         61,908         61,908           55         -         61,908         61,908         61,908           56         -         61,908         61,908         61,908           57         -         -         61,908         61,908         61,908           58         -         -         61,908         61,908         61,908           60         -         -         61,908         61,908         61,908           60         -         -         61,908  |       | -           | -                 |             |                                       |
| 55         -         -         61,908         61,908           56         -         -         61,908         61,908           57         -         -         61,908         61,908           58         -         -         61,908         61,908           59         -         -         61,908         61,908           60         -         -         61,908         61,908           61         -         -         61,908         61,908           61         -         -         61,908         61,908           63         -         -         61,908         61,908           64         -         -         61,908         61,908           65         -         -         61,908         61,908           67         -         -         61,908         61,908           68         -         -         61,908         61,908           69         -         -         61,908         61,908           70         -         -         61,908         61,908           71         -         -         61,908         61,908           71         - </td <td></td> <td>-</td> <td>-</td> <td>· ·</td> <td></td>   |       | -           | -                 | · ·         |                                       |
| 57         -         61,908  |       | -           | -                 |             |                                       |
| 58         -         -         61,908         61,908           59         -         -         61,908         61,908           60         -         -         61,908         61,908           61         -         -         61,908         61,908           62         -         -         61,908         61,908           63         -         -         61,908         61,908           64         -         -         61,908         61,908           65         -         -         61,908         61,908           66         -         -         61,908         61,908           67         -         -         61,908         61,908           68         -         -         61,908         61,908           69         -         -         61,908         61,908           70         -         -         61,908         61,908           71         -         -         61,908         61,908           72         -         -         61,908         61,908           73         -         -         61,908         61,908           74         - </td <td></td> <td>-</td> <td>-</td> <td>·</td> <td></td>   |       | -           | -                 | ·           |                                       |
| 59         -         61,908         61,908         61,908           60         -         -         61,908         61,908         61,908           61         -         -         61,908  |       | -           | -                 |             |                                       |
| 61 61,908 61,908 63,908 63,908 64 61,908 61,908 65 61,908 61,908 65 61,908 61,908 65 61,908 61,908 66,908 66 61,908 61,908 66,908 66 61,908 61,908 66,908 66 61,908 61,908 66,908 67 61,908 61,908 69 61,908 61,908 61,908 70 61,908 61,908 71 61,908 61,908 72 61,908 61,908 73 61,908 61,908 74 61,908 61,908 75 61,908 61,908 77 61,908 61,908 77 61,908 61,908 78 61,908 61,908 79   |       | -           | -                 | · ·         |                                       |
| 62   |       | -           | -                 |             |                                       |
| 63   |       | -           | -                 |             |                                       |
| 64   |       | -           | -                 |             |                                       |
| 66   | 64    | -           | -                 |             | 61,908                                |
| 67   |       | -           | -                 |             |                                       |
| 68         -         -         61,908         61,908           69         -         -         61,908         61,908           70         -         -         61,908         61,908           71         -         -         61,908         61,908           72         -         -         61,908         61,908           73         -         -         61,908         61,908           74         -         -         61,908         61,908           75         -         -         61,908         61,908           76         -         -         61,908         61,908           77         -         -         61,908         61,908           78         -         -         61,908         61,908           80         -         -         61,908         61,908           81         -         -         61,908         61,908           82         -         -         61,908         61,908           83         -         -         61,908         61,908           84         -         -         61,908         61,908           85         - </td <td></td> <td>[ ]</td> <td>  </td> <td></td> <td></td>   |       | [ ]         |                   |             |                                       |
| 70         -         -         61,908         61,908           71         -         -         61,908         61,908           72         -         -         61,908         61,908           73         -         -         61,908         61,908           74         -         -         61,908         61,908           75         -         -         61,908         61,908           76         -         -         61,908         61,908           77         -         -         61,908         61,908           78         -         -         61,908         61,908           80         -         -         61,908         61,908           81         -         -         61,908         61,908           81         -         -         61,908         61,908           82         -         -         61,908         61,908           83         -         -         61,908         61,908           84         -         -         61,908         61,908           85         -         -         61,908         61,908           87         - </td <td>68</td> <td>-  </td> <td>-</td> <td>61,908</td> <td>61,908</td>  | 68    | -           | -                 | 61,908      | 61,908                                |
| 71         -         -         61,908         61,908           72         -         -         61,908         61,908           73         -         -         61,908         61,908           74         -         -         61,908         61,908           75         -         -         61,908         61,908           76         -         -         61,908         61,908           77         -         -         61,908         61,908           78         -         -         61,908         61,908           79         -         -         61,908         61,908           80         -         -         61,908         61,908           81         -         -         61,908         61,908           82         -         -         61,908         61,908           83         -         -         61,908         61,908           84         -         -         61,908         61,908           85         -         -         61,908         61,908           87         -         -         61,908         61,908           89         - </td <td></td> <td>-  </td> <td>-</td> <td></td> <td></td>  |       | -           | -                 |             |                                       |
| 72         -         -         61,908         61,908           73         -         -         61,908         61,908           74         -         -         61,908         61,908           75         -         -         61,908         61,908           76         -         -         61,908         61,908           77         -         -         61,908         61,908           78         -         -         61,908         61,908           80         -         -         61,908         61,908           81         -         -         61,908         61,908           82         -         -         61,908         61,908           83         -         -         61,908         61,908           84         -         -         61,908         61,908           85         -         -         61,908         61,908           87         -         -         61,908         61,908           88         -         -         61,908         61,908           89         -         -         61,908         61,908           90         - </td <td></td> <td>-</td> <td>-</td> <td></td> <td></td>  |       | -           | -                 |             |                                       |
| 74         -         -         61,908         61,908           75         -         -         61,908         61,908           76         -         -         61,908         61,908           77         -         -         61,908         61,908           78         -         -         61,908         61,908           79         -         -         61,908         61,908           80         -         -         61,908         61,908           81         -         -         61,908         61,908           82         -         -         61,908         61,908           83         -         -         61,908         61,908           84         -         -         61,908         61,908           85         -         -         61,908         61,908           87         -         -         61,908         61,908           88         -         -         61,908         61,908           89         -         -         61,908         61,908           90         -         -         61,908         61,908           91         - </td <td></td> <td>-  </td> <td>-</td> <td>61,908</td> <td>61,908</td>  |       | -           | -                 | 61,908      | 61,908                                |
| 75         -         -         61,908         61,908           76         -         -         61,908         61,908           77         -         -         61,908         61,908           78         -         -         61,908         61,908           79         -         -         61,908         61,908           80         -         -         61,908         61,908           81         -         -         61,908         61,908           82         -         -         61,908         61,908           83         -         -         61,908         61,908           84         -         -         61,908         61,908           85         -         -         61,908         61,908           86         -         -         61,908         61,908           87         -         -         61,908         61,908           88         -         -         61,908         61,908           89         -         -         61,908         61,908           90         -         -         61,908         61,908           91         - </td <td></td> <td>-  </td> <td>-</td> <td></td> <td></td>  |       | -           | -                 |             |                                       |
| 76         -         -         61,908         61,908           77         -         -         61,908         61,908           78         -         -         61,908         61,908           79         -         -         61,908         61,908           80         -         -         61,908         61,908           81         -         -         61,908         61,908           82         -         -         61,908         61,908           83         -         -         61,908         61,908           84         -         -         61,908         61,908           85         -         -         61,908         61,908           86         -         -         61,908         61,908           87         -         -         61,908         61,908           89         -         -         61,908         61,908           90         -         -         61,908         61,908           91         -         -         61,908         61,908           93         -         -         61,908         61,908           94         - </td <td></td> <td></td> <td>-<br/>-</td> <td></td> <td></td>   |       |             | -<br>-            |             |                                       |
| 77         -         -         61,908         61,908           78         -         -         61,908         61,908           79         -         -         61,908         61,908           80         -         -         61,908         61,908           81         -         -         61,908         61,908           82         -         -         61,908         61,908           83         -         -         61,908         61,908           84         -         -         61,908         61,908           85         -         -         61,908         61,908           86         -         -         61,908         61,908           87         -         -         61,908         61,908           89         -         -         61,908         61,908           90         -         -         61,908         61,908           91         -         -         61,908         61,908           92         -         -         61,908         61,908           94         -         -         61,908         61,908           95         - </td <td></td> <td>-</td> <td>-</td> <td></td> <td></td>  |       | -           | -                 |             |                                       |
| 79         -         -         61,908         61,908           80         -         -         61,908         61,908           81         -         -         61,908         61,908           82         -         -         61,908         61,908           83         -         -         61,908         61,908           84         -         -         61,908         61,908           85         -         -         61,908         61,908           86         -         -         61,908         61,908           87         -         -         61,908         61,908           88         -         -         61,908         61,908           89         -         -         61,908         61,908           90         -         -         61,908         61,908           91         -         -         61,908         61,908           92         -         -         61,908         61,908           93         -         -         61,908         61,908           94         -         -         61,908         61,908           95         - </td <td>77</td> <td>-  </td> <td>-</td> <td>61,908</td> <td>61,908</td>  | 77    | -           | -                 | 61,908      | 61,908                                |
| 80         -         -         61,908         61,908           81         -         -         61,908         61,908           82         -         -         61,908         61,908           83         -         -         61,908         61,908           84         -         -         61,908         61,908           85         -         -         61,908         61,908           86         -         -         61,908         61,908           87         -         -         61,908         61,908           89         -         -         61,908         61,908           90         -         -         61,908         61,908           91         -         -         61,908         61,908           92         -         -         61,908         61,908           93         -         -         61,908         61,908           94         -         -         61,908         61,908           95         -         -         61,908         61,908           96         -         -         61,908         61,908           99         - </td <td></td> <td>-  </td> <td>-</td> <td></td> <td></td>  |       | -           | -                 |             |                                       |
| 81         -         -         61,908         61,908           82         -         -         61,908         61,908           83         -         -         61,908         61,908           84         -         -         61,908         61,908           85         -         -         61,908         61,908           86         -         -         61,908         61,908           87         -         -         61,908         61,908           88         -         -         61,908         61,908           89         -         -         61,908         61,908           90         -         -         61,908         61,908           91         -         -         61,908         61,908           92         -         -         61,908         61,908           93         -         -         61,908         61,908           94         -         -         61,908         61,908           95         -         -         61,908         61,908           96         -         -         61,908         61,908           99         - </td <td></td> <td>[ ]</td> <td>-  </td> <td></td> <td></td>  |       | [ ]         | -                 |             |                                       |
| 83         -         -         61,908         61,908           84         -         -         61,908         61,908           85         -         -         61,908         61,908           86         -         -         61,908         61,908           87         -         -         61,908         61,908           88         -         -         61,908         61,908           89         -         -         61,908         61,908           90         -         -         61,908         61,908           91         -         -         61,908         61,908           92         -         -         61,908         61,908           93         -         -         61,908         61,908           94         -         -         61,908         61,908           95         -         -         61,908         61,908           96         -         -         61,908         61,908           97         -         -         61,908         61,908           99         -         -         61,908         61,908           99         - </td <td>81</td> <td>-</td> <td>-</td> <td>61,908</td> <td>61,908</td>  | 81    | -           | -                 | 61,908      | 61,908                                |
| 84         -         -         61,908         61,908           85         -         -         61,908         61,908           86         -         -         61,908         61,908           87         -         -         61,908         61,908           88         -         -         61,908         61,908           89         -         -         61,908         61,908           90         -         -         61,908         61,908           91         -         -         61,908         61,908           92         -         -         61,908         61,908           93         -         -         61,908         61,908           94         -         -         61,908         61,908           95         -         -         61,908         61,908           96         -         -         61,908         61,908           97         -         -         61,908         61,908           98         -         -         61,908         61,908           99         -         -         61,908         61,908           100         -<   |       | -           | -                 |             |                                       |
| 85         -         -         61,908         61,908           86         -         -         61,908         61,908           87         -         -         61,908         61,908           88         -         -         61,908         61,908           89         -         -         61,908         61,908           90         -         -         61,908         61,908           91         -         -         61,908         61,908           92         -         -         61,908         61,908           93         -         -         61,908         61,908           94         -         -         61,908         61,908           95         -         -         61,908         61,908           96         -         -         61,908         61,908           97         -         -         61,908         61,908           98         -         -         61,908         61,908           99         -         -         61,908         61,908           100         -         61,908         61,908   |       | ] [         | -                 |             |                                       |
| 87         -         -         61,908         61,908           88         -         -         61,908         61,908           89         -         -         61,908         61,908           90         -         -         61,908         61,908           91         -         -         61,908         61,908           92         -         -         61,908         61,908           93         -         -         61,908         61,908           94         -         -         61,908         61,908           95         -         -         61,908         61,908           96         -         -         61,908         61,908           97         -         -         61,908         61,908           98         -         -         61,908         61,908           99         -         -         61,908         61,908           100         -         61,908         61,908   |       |             |                   | 61,908      | 61,908                                |
| 88     -     -     61,908     61,908       89     -     -     61,908     61,908       90     -     -     61,908     61,908       91     -     -     61,908     61,908       92     -     -     61,908     61,908       93     -     -     61,908     61,908       94     -     -     61,908     61,908       95     -     -     61,908     61,908       96     -     -     61,908     61,908       97     -     -     61,908     61,908       98     -     -     61,908     61,908       99     -     -     61,908     61,908       100     -     61,908     61,908  |       | -           | -                 |             |                                       |
| 89     -     -     61,908     61,908       90     -     -     61,908     61,908       91     -     -     61,908     61,908       92     -     -     61,908     61,908       93     -     -     61,908     61,908       94     -     -     61,908     61,908       95     -     -     61,908     61,908       96     -     -     61,908     61,908       97     -     -     61,908     61,908       98     -     -     61,908     61,908       99     -     -     61,908     61,908       100     -     61,908     61,908   |       |             | -<br>-            |             |                                       |
| 90         -         -         61,908         61,908           91         -         -         61,908         61,908           92         -         -         61,908         61,908           93         -         -         61,908         61,908           94         -         -         61,908         61,908           95         -         -         61,908         61,908           96         -         -         61,908         61,908           97         -         -         61,908         61,908           98         -         -         61,908         61,908           99         -         -         61,908         61,908           100         -         61,908         61,908  |       | -           | -                 |             |                                       |
| 92         -         -         61,908         61,908           93         -         -         61,908         61,908           94         -         -         61,908         61,908           95         -         -         61,908         61,908           96         -         -         61,908         61,908           97         -         -         61,908         61,908           98         -         -         61,908         61,908           99         -         -         61,908         61,908           100         -         61,908         61,908  | 90    | -           | -                 | 61,908      | 61,908                                |
| 93     -     -     61,908     61,908       94     -     -     61,908     61,908       95     -     -     61,908     61,908       96     -     -     61,908     61,908       97     -     -     61,908     61,908       98     -     -     61,908     61,908       99     -     -     61,908     61,908       100     -     -     61,908     61,908   |       | -           | -                 |             |                                       |
| 94         -         -         61,908         61,908           95         -         -         61,908         61,908           96         -         -         61,908         61,908           97         -         -         61,908         61,908           98         -         -         61,908         61,908           99         -         -         61,908         61,908           100         -         -         61,908         61,908  |       | ] [         | -                 |             |                                       |
| 96     -     -     61,908     61,908       97     -     -     61,908     61,908       98     -     -     61,908     61,908       99     -     -     61,908     61,908       100     -     -     61,908     61,908  |       | -           | -                 | 61,908      | 61,908                                |
| 97     -     -     61,908     61,908       98     -     -     61,908     61,908       99     -     -     61,908     61,908       100     -     -     61,908     61,908   |       | -           | -                 |             |                                       |
| 98 61,908 61,908<br>99 61,908 61,908<br>100 - 61,908 61,908  |       |             | <u>.</u>          |             |                                       |
| 99 61,908 61,908<br>100 61,908 61,908  |       | -           | -                 |             |                                       |
|  | 99    | -           | -                 | 61,908      | 61,908                                |
| 10.631 1/0,635,755 1,203,382   7,282,578   185,445,696   |       | 176 000 735 | 1 262 202         |             |                                       |
|  | rotai | 1/0,033,/35 | 1,203,382         | 1,202,578   | 103,443,096                           |

### Bench Grading Unit Cost

| Bench Grading - Stockpile | S                    |              |              |                     |        |                     |                       |                              |            |                     |                   |                     |                     |                     |                     |                    |                     |              |         |           |           |          |                 |            |           |
|---------------------------|----------------------|--------------|--------------|---------------------|--------|---------------------|-----------------------|------------------------------|------------|---------------------|-------------------|---------------------|---------------------|---------------------|---------------------|--------------------|---------------------|--------------|---------|-----------|-----------|----------|-----------------|------------|-----------|
|                           |                      | -            |              | Material            | Grade  | Soil                | Production<br>Method/ | Centroid to Centroid<br>Push | Normal     | Operator            | Work              | Visibility          | Elevation           | Transmission        | #                   |                    |                     |              | Fuel    | Equipment | Operator  | Dozer    | Bench Equipment | Bench Fuel |           |
| Task Description          | Equipment            | Productivity | Productivity | Factor <sup>2</sup> | Factor | Weight <sup>2</sup> | Blade                 | Distance <sup>3</sup>        | Production | Factor <sup>2</sup> | Hour <sup>2</sup> | Factor <sup>2</sup> | Factor <sup>2</sup> | Factor <sup>2</sup> | Passes <sup>2</sup> | Speed <sup>2</sup> | Volume <sup>2</sup> | Productivity | Cost    | Cost      | Cost (IV) | Cost     | Cost            | Cost       |           |
|                           |                      | (cy/hr)      | (hrs/ft)     |                     |        | (lb/cy)             | Factor <sup>2</sup>   | (feet)                       | (cy/hr)    |                     | (min/hr)          |                     |                     |                     |                     | (miles/hr)         | (cy/ft)             | (hrs/ft)     | (\$/hr) | (\$/hr)   | (\$/hr)   | (\$/hr)  | (\$/ft)         | (\$/ft)    |           |
| Excavate                  | Cat D11T CD          | 1825         | -            | 1.2                 | 1.0    | 2900                | 1.0                   | 100                          | 3007       | 0.75                | 50                | 1.0                 | 1.0                 | 1.0                 | -                   |                    | 9.26                | 0.0051       | \$69.62 | \$254.44  | \$27.41   | \$281.85 | \$1.43          | \$0.35     |           |
| Finish Grade              | Cat D6T XL, SU Blade | -            | 0.0009       | 1.2                 | 1.0    | 2900                | 1.0                   | -                            | -          | 0.75                | 50                | 1.0                 | 1.0                 | 1.0                 | 3                   | 1.0                | -                   | 0.0009       | \$18.25 | \$65.52   | \$27.41   | \$92.93  | \$0.09          | \$0.02     |           |
|                           |                      |              |              |                     |        |                     |                       |                              |            |                     |                   |                     |                     |                     |                     |                    |                     |              |         |           |           | ſ        | \$1.52          | \$0.37     | \$1.89 To |

| Bench Grading -Tailings |                      |                         |                          |                     |        |                                |                              |                                 |                       |        |                               |        |                     |                     |                     |                                  |      |                          |                 |                 |                      |                 |                 |                 |           |
|-------------------------|----------------------|-------------------------|--------------------------|---------------------|--------|--------------------------------|------------------------------|---------------------------------|-----------------------|--------|-------------------------------|--------|---------------------|---------------------|---------------------|----------------------------------|------|--------------------------|-----------------|-----------------|----------------------|-----------------|-----------------|-----------------|-----------|
|                         |                      |                         |                          | Material            | Grade  | Soil                           | Method/                      | Centroid to Centroid<br>Push    |                       |        |                               |        |                     | Transmission        |                     |                                  |      |                          | Fuel            |                 | Operator             | Dozer           | Bench Equipment | Bench Fuel      |           |
| Task Description        | Equipment            | Productivity<br>(cv/hr) | Productivity<br>(hrs/ft) | Factor <sup>2</sup> | Factor | Weight <sup>2</sup><br>(lb/cv) | Blade<br>Factor <sup>2</sup> | Distance <sup>3</sup><br>(feet) | Production<br>(cv/hr) | Factor | Hour <sup>2</sup><br>(min/hr) | Factor | Factor <sup>2</sup> | Factor <sup>2</sup> | Passes <sup>2</sup> | Speed <sup>2</sup><br>(miles/hr) |      | Productivity<br>(hrs/ft) | Cost<br>(\$/hr) | Cost<br>(\$/hr) | Cost (IV)<br>(\$/hr) | Cost<br>(\$/hr) | Cost<br>(\$/fr) | Cost<br>(\$/ft) |           |
| Excavate                | Cat D11T CD          | 1825                    | - (1113/10)              | 1.2                 | 1.0    | 2900                           | 1.0                          | 100                             | 3007                  | 0.75   | 50                            | 1.0    | 1.0                 | 1.0                 |                     | -                                | 9.26 | 0.0051                   | \$69.62         | \$254.44        | \$27.41              | \$281.85        | \$1.43          | \$0.35          |           |
| Finish Grade            | Cat D6T XL, SU Blade | -                       | 0.0009                   | 1.2                 | 1.0    | 2900                           | 1.0                          |                                 | -                     | 0.75   | 50                            | 1.0    | 1.0                 | 1.0                 | 3                   | 1.0                              |      | 0.0009                   | \$18.25         | \$65.52         | \$27.41              | \$92.93         | \$0.09          | \$0.02          |           |
|                         |                      |                         |                          |                     |        |                                |                              |                                 |                       |        |                               |        |                     |                     |                     |                                  |      |                          |                 |                 |                      |                 | \$1.52          | \$0.37          | \$1.89 To |

Bench width: 31 ft. from Process Summary (SOW), Nov 2017 (Telesto)
 Data from Table 3 and 4 of the Process Summary (SOW), Nov 2017 (Telesto)
 Push distance is assumed to be site average

### Bench Channel Unit Cost

|                |                  |             |                         |                    |  |             | Produc                | tion                      |            |             |  |          |                     |                     |            |          |                   |                     |              |                |               |           |            |
|----------------|------------------|-------------|-------------------------|--------------------|--|-------------|-----------------------|---------------------------|------------|-------------|--|----------|---------------------|---------------------|------------|----------|-------------------|---------------------|--------------|----------------|---------------|-----------|------------|
|                |                  |             |                         |                    |  |             |                       | d/ Centroid to            |            |             |  |          |                     |                     |            |          |                   |                     |              | Beno           | h             |           |            |
|                |                  |             |                         | Mater              | ial                                      |             | Blade                 | Centroid Pus              | n Produ    | ction Opera | itor   | Visibili | y Elevation         | Transmis            | ssion Prod | uctivity |                   | Equipment Opera     | ator Cost Do | zer Cost Equip | ment Cost Ben | ch Fuel   |            |
|                | Task Description | Equipment   | Volume (cy/ft) Producti | vity (cy/hr) Facto | r <sup>2</sup> Grade Factor <sup>2</sup> | Material We | ight² (lb/cy) Factor² | Distance <sup>2</sup> (fe | et) (cy/hr | ) Facto     | r <sup>2</sup> Work Hour <sup>2</sup> (min/hr) | Factor   | Factor <sup>2</sup> | Factor <sup>2</sup> | (hrs/f     | ft)      | Fuel Cost (\$/hr) | Cost (\$/hr) (IV) ( | \$/hr) (\$/  | nr) (\$/ft)    | Cos           | t (\$/ft) |            |
| Bench Channels | Excavate         | Cat D11T CD | 0.78                    | 1123               | 1.20                                     | 1.0         | 2900                  | 1.00                      | 175        | 1851        | 0.75   | 50       | 1.00                | 1.00                | 1.00       | 0.0007   | 69.62             | 254.44              | 27.41        | 281.85         | 0.20          | 0.05      |            |
| Bench Channels | Waste            | Cat D11T CD | 0.78                    | 1001               | 1.20                                     | 1.0         | 2900                  | 1.00                      | 200        | 1649        | 0.75   | 50       | 1.00                | 1.00                | 1.00       | 0.0008   | 69.62             | 254.44              | 27.41        | 281.85         | 0.22          | 0.05      |            |
|                |                  |             |                         |                    |  |             |                       |                           |            |             |  |          |                     |                     |            |          |                   |                     |              |                | 0.41          | 0.10      | 0.52 Total |

| Loading        |                             |              |                       |            |      |                             |        |                     |         |       |                                 |       |          |              |                    |             |               |           |                           |         |             |           |
|----------------|-----------------------------|--------------|-----------------------|------------|------|-----------------------------|--------|---------------------|---------|-------|---------------------------------|-------|----------|--------------|--------------------|-------------|---------------|-----------|---------------------------|---------|-------------|-----------|
|                |                             |              | Load, Dum             | p, Delive  | ry   |                             |        |                     | Equip   | pment | Net                             |       |          |              |                    |             |               |           |                           |         |             |           |
|                |                             |              | Maneuver <sup>-</sup> | Time Trave | Time | Total Time Per Lo           | ad Wor | c Time <sup>2</sup> | Cost    |       | Bucket                          | Fue   | l Cost E | Equipment    | Operator Cost Load | ler Cost Eq | quipment Cost | Fuel Cost | Equipme                   | nt Cost |             |           |
|                | Task Description            | Equipment    | Volume (cy/ft) (min)  | (min)      | Retu | urn Travel Time (min) (min) | (min   | ) Loads/ hr         | (\$/loa | ad)   | (cy/load) Fuel Use Gal per Hour | (\$/h | ır) C    | Cost (\$/hr) | (\$/hr) (\$/hr)    | ) (\$/      | /cy)          | (\$/load) | Fuel Cost (\$/cy) (\$/ft) | Fuel Co | ost (\$/ft) |           |
| Bench Channels | Load riprap                 | Cat 992K     | 0.18                  | 0.65       | 0.26 | 0.26                        | 1.17   | 50                  | 42.61   | 5.72  | 14.00                           | 25.63 | 59.97    | 216.23       | 27.70              | 243.93      | 0.41          | 1.4       | 1 0.10                    | 0.07    | 0.02        |           |
| Bench Channels | Load filter                 | Cat 992K     | 0.22                  | 0.65       | 0.26 | 0.26                        | 1.17   | 50                  | 42.61   | 5.72  | 14.00                           | 25.63 | 59.97    | 216.23       | 27.70              | 243.93      | 0.41          | 1.4       | 1 0.10                    | 0.09    | 0.02        |           |
| Bench Channels | Transfer riprap for placi   | ing Cat 992K | 0.18                  | 0.65       | 0.26 | 0.26                        | 1.17   | 50                  | 42.61   | 5.72  | 14.00                           | 25.63 | 59.97    | 216.23       | 27.70              | 243.93      | 0.41          | 1.4       | 1 0.10                    | 0.07    | 0.02        |           |
| Bench Channels | Transfer filter for placing | ng Cat 992K  | 0.22                  | 0.65       | 0.26 | 0.26                        | 1.17   | 50                  | 42.61   | 5.72  | 14.00                           | 25.63 | 59.97    | 216.23       | 27.70              | 243.93      | 0.41          | 1.4       | 1 0.10                    | 0.09    | 0.02        |           |
|                |                             | -            |                       |            |      |                             |        |                     |         |       |                                 |       |          |              |                    |             |               |           |                           | 0.32    | 0.08        | 0.40 Tota |

|                |                  |              |                      | De      | elivery                    |      |                             |      |                      |      |                                 | Hea    | ped     |              |                          |                   |             |              |                |           |                   |              | Fuel    |             |
|----------------|------------------|--------------|----------------------|---------|----------------------------|------|-----------------------------|------|----------------------|------|---------------------------------|--------|---------|--------------|--------------------------|-------------------|-------------|--------------|----------------|-----------|-------------------|--------------|---------|-------------|
|                |                  |              | Exchange T           | ime Tra | avel Time Unload and Maneu |      | Load Ti                     |      | Work Tin             |      |                                 |        | acity F | Fuel Use Gal |                          | ipment Cost Opera | ator Cost T | ruck Cost Eq | uipment Cost I |           |                   | Equipment    |         |             |
|                | Task Description | Equipment    | Volume (cy/ft) (min) | (m      | in) Time (min)             | Retu | urn Travel Time (min) (min) | Tot  | tal Time (min) (min) | Load | ds/ hr Equipment Cost (\$/load) | ) (cy/ | load) p | per Hour     | Fuel Cost (\$/hr) (\$/hi | r) (\$/hr)        | (5          | \$/hr) (\$/  | (cy) (         | (\$/load) | Fuel Cost (\$/cy) | Cost (\$/ft) | (\$/ft) |             |
| Bench Channels | Haul riprap      | Komatsu 730E | 0.18                 | 0.70    | 13.72                      | 1.10 | 4.70                        | 6.73 | 26.96                | 50   | 1.85                            | 132.65 | 145     | 33.48        | 3 78.34                  | 221.79            | 24.27       | 246.06       | 0.91           | 42.24     | 0.29              | 9 0.1        | 6 0.05  | į.          |
| Bench Channels | Haul filter      | Komatsu 730E | 0.22                 | 0.70    | 13.72                      | 1.10 | 4.70                        | 6.73 | 26.96                | 50   | 1.85                            | 132.65 | 145     | 33.48        | 78.34                    | 221.79            | 24.27       | 246.06       | 0.91           | 42.24     | 0.29              | 9 0.2        | 0.06    | j           |
|                |                  |              |                      |         |                            |      |                             |      |                      |      |                                 |        |         |              |                          |                   |             |              |                |           |                   | 0.3          | 86 0.12 | 2 0.48 Tota |

|                |                  |           |                      | Deli        | very              |            |                           |           |               |                  |                               | Heaped    |              |                          |                  |             |                |                     |          |                     | Fuel         |            |
|----------------|------------------|-----------|----------------------|-------------|-------------------|------------|---------------------------|-----------|---------------|------------------|-------------------------------|-----------|--------------|--------------------------|------------------|-------------|----------------|---------------------|----------|---------------------|--------------|------------|
|                |                  |           | Exchang              | e Time Trav | el Time Unload an | d Maneuver | Load 1                    | Time      | Work Ti       | ime <sup>2</sup> |                               | Capacity  | / Fuel Use ( | Gal Equi                 | pment Cost Opera | tor Cost Tr | uck Cost Equip | ment Cost Fuel Cost |          | Equipm              | nent Cost    |            |
|                | Task Description | Equipment | Volume (cy/ft) (min) | (mir        | ) Time (min       | Return     | n Travel Time (min) (min) | Total Tim | e (min) (min) | Loads            | / hr Equipment Cost (\$/load) | (cy/load) | ) per Hour   | Fuel Cost (\$/hr) (\$/hr | ) (\$/hr)        | (\$         | /hr) (\$/cy)   | (\$/load)           | Fuel Cor | st (\$/cy) Cost (\$ | /ft) (\$/ft) |            |
| Bench Channels | Place riprap     | Cat 725   | 0.18                 | 0.70        | 1.57              | 1.10       | 0.46                      | 0.87      | 4.70          | 50 10            | 0.63                          | 9.16      | 19           | 6.02 14.09               | 73.11            | 24.27       | 97.38          | 0.49                | 1.32     | 0.07                | 0.09 0.01    |            |
| Bench Channels | Place filter     | Cat 725   | 0.22                 | 0.70        | 1.57              | 1.10       | 0.46                      | 0.87      | 4.70          | 50 10            | 0.63                          | 9.16      | 19           | 6.02 14.09               | 73.11            | 24.27       | 97.38          | 0.49                | 1.32     | 0.07                | 0.11 0.02    | :          |
|                |                  |           |                      |             |                   |            |                           |           |               |                  |                               |           |              |                          |                  |             |                |                     |          |                     | 0.19 0.02    | 0.22 Total |

|                |                        |                   |                                       |                    |                             |               | Produ                          | ction                                  |              |          |  |                     |                     |                     |               |              |                       |                    |              |                |          | ,        |
|----------------|------------------------|-------------------|---------------------------------------|--------------------|-----------------------------|---------------|--------------------------------|--|--------------|----------|--|---------------------|---------------------|---------------------|---------------|--------------|-----------------------|--------------------|--------------|----------------|----------|----------|
|                |                        |                   |                                       |                    |                             |               | Metho                          | od/ Centroid t                         | 0 Norm       | nal      |  |                     |                     |                     |               |              |                       |                    | Bench        |                |          |          |
| 1              |                        |                   |                                       | Materia            | I                           |               | Blade                          | Centroid P                             | ush Produ    | uction O | perator  | Visibility          | Elevation           | Transmissio         | n Productivit | ,            | Equipment O           | perator Cost Dozer | Cost Equipme | ent Cost Benci | h Fuel   |          |
|                | Task Description       | Equipment         | Volume <sup>5</sup> (cy/ft) Productiv | ty (cy/hr) Factor2 | 3 Grade Factor <sup>2</sup> | Material Weig | ght <sup>2</sup> (lb/cy) Facto | r <sup>2</sup> Distance <sup>2</sup> ( | (feet) (cy/h | r) Fa    | actor <sup>2</sup> Work Hour <sup>2</sup> (min/hr) | Factor <sup>2</sup> | Factor <sup>2</sup> | Factor <sup>2</sup> | (hrs/ft)      | Fuel Cost (S | /hr) Cost (\$/hr) (I' |                    |              | Cost           |          |          |
| Bench Channels | Finish grade - Channel | Cat D6T, SU Blade | 0.31                                  | 173                | 1.20                        | 1.0           | 2900                           | 1.00                                   | 175          | 284      | 0.75   | 50                  | 1.00                | 1.00                | 1.00          | 0018 16.     | 948 63.65             | 27.41              | 91.06        | 0.16           | 0.03     |          |
| Bench Channels | Finish grade - Riprap  | Cat D6T, SU Blade | 0.07                                  | 80                 | 0.70                        | 1.0           | 3650                           | 1.00                                   | 175          | 284      | 0.75   | 50                  | 1.00                | 1.00                | 1.00          | 0009 16.     | 948 63.65             | 27.41              | 91.06        | 0.08           | 0.01     |          |
| 1              |                        |                   |                                       |                    |                             |               |                                |  |              |          |  |                     |                     |                     |               |              |                       |                    |              | 0.24           | 0.05 0.2 | 29 Total |

### Chino Riprap & Filter Production Rates

| Equipment                             | Equipment Cost |        | Fuel Cost |       | # Equipment | C   | Operator |       | # Operator | Т  | otal Equipment Cost | Total Fuel Cost |       |
|---------------------------------------|----------------|--------|-----------|-------|-------------|-----|----------|-------|------------|----|---------------------|-----------------|-------|
|                                       | (\$/hr)        |        | (\$/hr)   |       |             | (   | \$/hr)   |       |            | (5 | \$/hr)              | (\$/hr)         |       |
| Cat 988H                              | \$             | 128.76 | \$        | 35.57 | 1           |     | \$       | 27.70 | 1          | ,  | \$ 156.46           | \$              | 35.57 |
| Cat 769D                              | \$             | 108.01 | \$        | 22.79 | 3           | 3   | \$       | 24.27 | 3          |    | \$ 396.83           | \$              | 68.37 |
| 1 Deck Screening Plant (5X16, 48X60)  | \$             | 40.59  | \$        | 11.35 | 1           | 1   | \$       | 23.09 | 1          | 5  | \$ 63.68            | \$              | 11.35 |
| 3 Deck Screening Plant (5X16, 42X60)  | \$             | 41.16  | \$        | 11.35 | 1           | 1   | \$       | 23.09 | 1          | 5  | \$ 64.25            | \$              | 11.35 |
| Cat 980H                              | \$             | 77.56  | \$        | 25.27 | 2           | 2   | \$       | 27.70 | 2          |    | \$ 210.53           | \$              | 50.54 |
| Cat 992K                              | \$             | 216.23 | \$        | 59.97 | 0           | ) : | \$       | 27.70 | 0          |    | \$ -                | \$              | -     |
| Cat 966H                              | \$             | 73.11  | \$        | 19.61 | 1           | 1   | \$       | 27.70 | 1          | 5  | \$ 100.81           | \$              | 19.61 |
| Off-Hwy Water Tanker Truck,6,000-gal. | \$             | 67.69  | \$        | 26.33 | 1           | 1   | \$       | 24.27 | 1          | 5  | \$ 91.96            | \$              | 26.33 |
| Supervisor                            | \$             | -      | -         |       | 0           | ) : | \$       | 23.84 | 1          | 5  | \$ 23.84            | \$              | -     |

Equipment Fuel Direct Costs

| Equip | mem   | ruei |       |             |   |
|-------|-------|------|-------|-------------|---|
| \$    | 1,108 | \$   | 223   | \$/hr       |   |
| l     | 8     |      | 8     | hr/work day |   |
| \$    | 8,867 | \$   | 1,785 | \$/day      |   |
|       |       |      |       |             | _ |

Production

| 400     | tons input/hr (total)       |
|---------|-----------------------------|
| 0.30    | % waste                     |
| 0.70    | % rip rap and gravel/filter |
| 280     | tons produced/hr (net)      |
| 560,000 | lb/hr                       |
| 3,650   | ) lb/cy                     |
| 153     | s cy/hr                     |
| 8       | hr/day (net (60 min/hr))    |
| 1,227   | cy/day net production       |
|         | •                           |
| \$ 7.22 | ? \$ 1.45 \$/cy             |
| 0.40    | 0.40 cy/ft                  |

Total Volume

\$ 2.85 \$

ASSUMPTIONS Work Day 8 hrs 50 min hour

Equipment Rates
Source: 2019 EquipmentWatch
Corrected for 50 min work hour
Includes overhaul labor, parts & time

Production

Primary plant fed directly by two 769D haul trucks, 300 to 400 yd haul

400 tons input/hr (per Rusty McCauley, equipment peak production is 900 tons/hr)

30% - 60% waste depending on smallest rip rap size used. (per Rusty McCauley, consistent w/ Mc+C63Cain Springs waste rate of 43% - 1" minus)

3650 lb/cy (Caterpillar Performance Handbook p. 27-4, consistent with 1.8 tons/cy riprap unit weight)

| Equipment & Labor One 988H Loader with Operator (bucket = 8.3 cy)                  | Rate<br>\$ | (\$/hr)<br>156.46 | <b>Comment</b> Used to load stockpiled material to 769D trucks and 777 haul trucks  |
|--|------------|-------------------|---|
| Three 769D haul trucks with drivers (22 cy, 36 ton payload each)                   | \$         | 396.83            | Option: Two used to directly feed primary screening plant, one used to move material from end of conveyor   |
| One 1 Deck Portable Screening Plant w/ 5x16 screen & 48"x60' conveyor + 1 Operator | \$         | 63.68             | Primary screening plant, grizzly used to split oversized,<br>6" - 12" and 6" minus (2 conveyers)<br>One operator required in tower to run screening plant                         |
| One 3 Deck Portable Screening Plant w/ 5x16 screen & 42°x60' conveyor + 1 Operator | \$         | 64.25             | One operator required in tower to run screening plant Fed with 6" minus, Produce 6" - 6", 1.5" - 3", 3/8" - 1.5", 3/8 minus One operator required in tower to run screening plant |
| Two Cat 980H Loaders with Operator (bucket = 7.5 cy)                               | \$         | 210.53            | Used move material to conveyors or load trucks  |
| Zero Cat 992K Loaders with Operator (bucket = 16 cy)                               | \$         | -                 | Unused loader option  |
| One Cat 966H Loader with Operator (bucket = 5.5 cy)                                | \$         | 100.81            | Used to move material from end of conveyors & load trucks   |
| One Water Truck with Driver (10,000 gal)   | \$         | 91.96             | Dust suppression  |
| One Foreman  | \$         | 23.84             |   |

1. Provided from Golder Take off spreadsheet 2018
2. Data from Table 3 and 4 of the Process Summary (SOW), Nov 2017 (Telesto), also see Equipment Tab
3. Material factor for riprap from CPH Ed. 47 pg. 19-55 (rock)
4. Tram distance is assumed
5. Finish grade volume assumed to be 40% of excavation volume
6. Riprap and filter haul assumed to be similar to cover source haul distances
7. Haul route uphill with 7.5% effective grade
8. Riprap/filter placement distance calculation assumes an average of 7 bench channels and 2 downdrains per stockpile; riprap/filter material is hauled 1/4 length of downdrain and then 1/4 length of bench channel distance for an average placement distance
9. Filter and riprap is placed going uphill

|                                  | Bench<br>Channels <sup>1</sup><br>(ft) | Excavation (cy) | Bench<br>Channel<br>Filter<br>(cy) | Bench<br>Channel<br>Riprap <sup>1</sup><br>(cy) | Haul Dist <sup>6</sup> (ft) | Weighted Filter | Weighted Riprap | Weighted<br>Filter Haul<br>(ft) | Weighted<br>Riprap Haul<br>(ft) |
|----------------------------------|--|-----------------|------------------------------------|---|-----------------------------|-----------------|-----------------|---------------------------------|---------------------------------|
| South Stockpile                  | 95,487                                 | 74,268          | 20,878                             | 17,399  | 8,173                       | 170,638,277     | 142,198,564     | 14,487.63                       | 14,786.34                       |
| STS2                             | 6,218                                  | 4,837           | 1,360                              | 1,133   | _                           | _               | -               |                                 |                                 |
| Lambright Stockpile              | 157.574                                | 122,557         | 34.454                             | 28.711  | 17.438                      | 600,801,207     | 500,667,673     |                                 |                                 |
| Southwest Lampbright             | -                                      | -               | -                                  |   | 17,323                      | -               | -               |                                 |                                 |
| West Stockpile                   | 108,831                                | 84,647          | 23,796                             | 19,830  | 22,486                      | 535,069,876     | 445,891,564     |                                 |                                 |
| Northwest Stockpile              | -                                      | -               | -                                  | -   | 23,749                      |                 |                 |                                 |                                 |
| LeeHill Stockpile                | -                                      | -               | -                                  | -   | 25,168                      | -               | -               |                                 |                                 |
| Northeast Stockpile              | _                                      | -               | _                                  | _   | 29,443                      | _               | _               |                                 |                                 |
| North Stockpile                  |  | _               | _                                  | -   | 27,241                      | _               |                 |                                 |                                 |
| South and East In-Pit Stockpiles | -                                      | -               | -                                  | -   | 21,949                      | -               | -               |                                 |                                 |
| Upper South                      | 5,348                                  | 4,160           | 1,169                              | 975   | -                           |                 |                 |                                 |                                 |
| Triangle Stockpile               | 13,831                                 | 10,757          | 3,024                              | 2,520   | 4,778                       | 14,449,396      | 12,041,164      |                                 |                                 |
| 9 Waste Rock                     | 14,085                                 | 10,955          | 3,080                              |   | 5,132                       | 15,804,963      | -               |                                 |                                 |
| Axiflo                           | 3,350                                  | 2,606           | 732                                | 591   | 5,128                       | 3,756,252       | 3,032,979       |                                 |                                 |
| Tailings Pond 7                  | 42,224                                 | 32,841          | 9,232                              | 7,693   | 8,800                       | 81,238,952      | 67,699,127      |                                 |                                 |
| Tailings Pond-6W                 | 3,498                                  | 2,720           | 765                                | 637   | 10,300                      | 7,877,551       | 6,564,626       |                                 |                                 |
| Tailings Pond-6E                 | 2,999                                  | 2,333           | 656                                | 547   | 10,300                      | 6,755,330       | 5,629,442       |                                 |                                 |
|                                  | 453,446                                | 352,680         | 99,146                             | 80,055  | 237,408                     |                 |                 | _                               |                                 |

| ravel | Times |  |
|-------|-------|--|
|       |       |  |

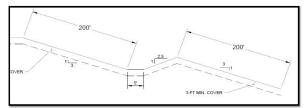
| Cat 992K     | Full  | Tram Distance <sup>4</sup><br>175 ft at  | Speed              | 7.6 mph | Speed | 11.15 ft/sec | Travel Time<br>0.26 min |
|--------------|-------|--|--------------------|---------|-------|--------------|-------------------------|
| Komatsu 730E | Full  | Haul Distance                            | Speed <sup>7</sup> |         | Speed |              | Travel Time             |
|              |       | 14488 ft at                              |                    | 12 mph  |       | 17.60 ft/sec | 13.7 min                |
| Komatsu 730E | Empty | Haul Distance<br>14488 ft at             | Speed              | 35 mph  | Speed | 51.33 ft/sec | Travel Time<br>4.7 min  |
| Cat 725      | Full  | Haul Distance <sup>8</sup><br>1380 ft at | Speed <sup>9</sup> | 10 mph  | Speed | 14.67 ft/sec | Travel Time<br>1.6 min  |
| Cat 725      | Empty | Haul Distance<br>1380 ft at              | Speed              | 34 mph  | Speed | 49.87 ft/sec | Travel Time<br>0.5 min  |

BENCH CHANNELS

Dimensions:
Left Side Slope:
Left Side Slope:
Left Side Slope:
Depth:
Left Side Slope Length:
Right Side Slope Length: 3.00 2.50 2.00 3.61 3.20 Bottom Width: Left Anchor¹ Right Anchor¹ Perimeter:¹ Excavation Area:¹ Filter Area RipRap Area 5.00 0.00 0.00 11.81 21.00 5.90 4.77

bench cross width\* 6" filter thickness (27\* Total Riprap Volume)/Total Bench Length

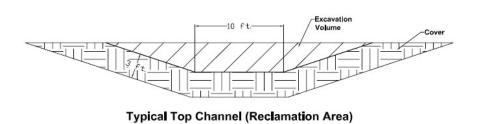
Volume (cy) =Area(sf)\*Length(ft)/27



# **Top Channel Unit Cost**

|                  |                   | Productivity | Material            | Grade               | Soil<br>Weight <sup>2</sup> | Method/Blade        | _                          |         |                     |          |                     |                     | Transmission        |         |          |         |              |         |          | Bench Equipment |              | ı |
|------------------|-------------------|--------------|---------------------|---------------------|-----------------------------|---------------------|----------------------------|---------|---------------------|----------|---------------------|---------------------|---------------------|---------|----------|---------|--------------|---------|----------|-----------------|--------------|---|
| Task Description | Equipment         | (cy/hr)      | Factor <sup>2</sup> | Factor <sup>2</sup> | (lb/cy)                     | Factor <sup>2</sup> | Distance <sup>3</sup> (ft) | (cy/hr) | Factor <sup>2</sup> | (min/hr) | Factor <sup>2</sup> | Factor <sup>2</sup> | Factor <sup>2</sup> | (cy/ft) | (hrs/ft) | (\$/hr) | Cost (\$/hr) | (\$/hr) | (\$/hr)  | Cost (\$/ft)    | Cost (\$/ft) |   |
| Excavate         | Cat D11T CD       | 1102         | 1.2                 | 1.0                 | 2900                        | 1.0                 | 179                        | 1816    | 0.75                | 50       | 1.0                 | 1.0                 | 1.0                 | 2.7     | 0.0024   | \$69.62 | \$254.44     | \$27.41 | \$281.85 | \$0.68          | \$0.17       |   |
| Waste            | Cat D11T CD       | 1001         | 1.2                 | 1.0                 | 2900                        | 1.0                 | 200                        | 1649    | 0.75                | 50       | 1.0                 | 1.0                 | 1.0                 | 2.7     | 0.0027   | \$69.62 | \$254.44     | \$27.41 | \$281.85 | \$0.75          | \$0.18       |   |
| Finish Grade     | Cat D9T, SU Blade | 394          | 1.2                 | 1.0                 | 2900                        | 1.0                 | 179                        | 649     | 0.75                | 50       | 1.0                 | 1.0                 | 1.0                 | 1.1     | 0.0027   | \$33.58 | \$198.37     | \$27.41 | \$225.78 | \$0.61          | \$0.09       |   |
|                  |                   |              |                     |                     |                             |                     |                            |         |                     |          |                     |                     |                     |         |          |         |              |         |          | \$2.04          | \$0.44       | - |

- 1. Volumes based on cross-section area for excavation and waste, unit volume/linear foot of downdrain (73 ft^2 \* 1 ft/27); Finish grade is 40% of excavation volume
- 2. Data from Table 1 the 9 WRS Process Summary (SOW- Appendix A of CCP), March 2017 (Telesto)
- 3. Push distance from Sheet 6 of 9 WRS CCP (Appendix A)



3H:1V side slopes 3.5 ft depth

### Downdrain Unit Cost

### Rough Grade

|                  |             |                      |                              |                     |                     |                     | Centroid to                |            |                     |                   |                     |                     |                     |         |              |           |              |           |            |              |           |                  |
|------------------|-------------|----------------------|------------------------------|---------------------|---------------------|---------------------|----------------------------|------------|---------------------|-------------------|---------------------|---------------------|---------------------|---------|--------------|-----------|--------------|-----------|------------|--------------|-----------|------------------|
|                  |             |                      |                              |                     | Soil                | Production          | Centroid                   | Normal     |                     | Work              |                     |                     |                     |         |              |           |              | Operator  |            | Equipment    |           |                  |
|                  |             |                      |                              | Grade               | Weight <sup>5</sup> | Method/Blade        | Push                       | Production | Operator            | Hour <sup>5</sup> | Visibility          | Elevation           | Transmission        | Volume  | Productivity | Fuel Cost | Equipment    | Cost (IV) | Dozer Cost | w/o Fuel     | Fuel Cost | Total Excavation |
| Task Description | Equipment   | Productivity (cy/hr) | Material Factor <sup>5</sup> | Factor <sup>5</sup> | (lb/cy)             | Factor <sup>5</sup> | Distance <sup>5</sup> (ft) | (cy/hr)    | Factor <sup>5</sup> | (min/hr)          | Factor <sup>5</sup> | Factor <sup>5</sup> | Factor <sup>5</sup> | (cy/ft) | (hrs/ft)     | (\$/hr)   | Cost (\$/hr) | (\$/hr)   | (\$/hr)    | Cost (\$/ft) | (\$/ft)   | Cost (\$/ft)     |
| Excavate         | Cat D11T CD | 1731                 | 1.2                          | 1.6                 | 2900                | 1.0                 | 175                        | 1851       | 0.75                | 50                | 1.0                 | 1.0                 | 1.0                 | 1.9     | 0.0011       | \$69.62   | \$254.44     | \$27.41   | \$281.85   | \$0.31       | 0.0774699 | \$0.39           |
| Waste            | Cat D11T CD | 1542                 | 1.2                          | 1.6                 | 2900                | 1.0                 | 200                        | 1649       | 0.75                | 50                | 1.0                 | 1.0                 | 1.0                 | 1.9     | 0.0012       | \$69.62   | \$254.44     | \$27.41   | \$281.85   | 0.3521381    | 0.086975  | \$0.44           |
|                  |             |                      |                              |                     |                     |                     |                            |            |                     |                   |                     |                     |                     |         |              |           |              |           |            |              |           |                  |

| 31      | \$4.63  | \$143.53                     |
|---------|---------|------------------------------|
|         |         |                              |
| 31      | \$7.42  | \$230.02                     |
|         |         |                              |
| (sf/ft) | (\$/sf) | \$/ft                        |
| Area    | Cost    |                              |
|         | Unit    |                              |
|         | (sf/ft) | Area Cost<br>(sf/ft) (\$/sf) |

| Total Downdrain Cost (\$/ft) | \$374.38 |
|------------------------------|----------|

| Installation <sup>1</sup> | 506  | \$4.63  | \$2,342.78 |
|---------------------------|------|---------|------------|
| 40T <sup>1</sup>          | 506  | \$7.42  | \$3,754.52 |
| Installation <sup>1</sup> | 320  | \$4.63  | \$1,481.60 |
| 70T <sup>1</sup>          | 320  | \$10.65 | \$3,408.00 |
| Dissipater ACBs           | (sf) | (\$/sf) | \$/sf      |
|                           | Area | Cost    |            |
|                           |      | Unit    |            |

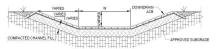
### Install Cutoff Wall Cutoff Wall (cast in place concrete) \$/cubic yard \$/dissipater<sup>3</sup> \$ 254.97 \$3,569.58 cubic yard RSMeans (2019)

| Total Dissinator Cost (S/each) | \$14.556.48 |
|--------------------------------|-------------|

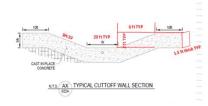
|               | Downdrains Lengths <sup>2</sup> (ft) | Downdrain Dissipators <sup>2</sup><br>(ft) |
|---------------|--------------------------------------|--|
| South         | 6474                                 | 2  |
| STS2          | 0                                    | 0  |
| Main LB       | 9299                                 | 4  |
| South LB      | 0                                    | 0  |
| West          | 4493                                 | 4  |
| NW            | 0                                    | 0  |
| LH            | 0                                    | 0  |
| NE            | 0                                    | 0  |
| N             | 0                                    | 0  |
| 3A            | 0                                    | 0  |
| Santa Rita    | 0                                    | 0  |
| Upper South   | 0                                    | 0  |
| Triangle      | 0                                    | 0  |
| Axiflow       | 0                                    | 0  |
| TP7           | 2280                                 | 0  |
| TP-6W & TP-6E | 319                                  | 0  |
|               | 22866                                | 10   |

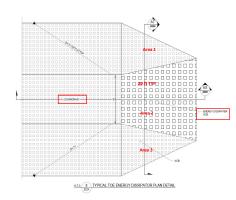
| DOWNDRAIN                     |    |      |
|-------------------------------|----|------|
| Dimensions:                   |    |      |
| Left Side Slope: <sup>2</sup> | 3  | H:1V |
| Left Side Slope: <sup>2</sup> | 3  | H:1V |
| Depth: <sup>2</sup>           | 2  | ft   |
| Perimeter: <sup>2</sup>       | 31 | ft   |
| Excavation Area <sup>2</sup>  | 52 | sf   |
| ACB Area <sup>2</sup>         | 31 | sf   |

| DISSIPATERS               | I | ACB <sup>2</sup> | 1              |         |       | Cutoff Wall <sup>2,4</sup> |           |        |
|---------------------------|---|------------------|----------------|---------|-------|----------------------------|-----------|--------|
| DISSIPATERS               |   | ACB              |                |         |       |                            |           |        |
|                           |   |                  |                | Surface |       | Cross-Sectional            |           |        |
|                           |   | Surface Area 1   | Surface Area 2 | Area 3  | Total | Area                       | Thickness | Volume |
|                           |   | (sf)             | (sf)           | (sf)    | (sf)  | (sf)                       | (ft)      | (cy)   |
| Main Lampbright Stockpile | 1 | 253              | 320            | 253     | 825   | 260                        | 1.5       | 14     |
|                           | 2 | 253              | 320            | 253     | 825   | 260                        | 1.5       | 14     |
|                           | 3 | 253              | 320            | 253     | 825   | 260                        | 1.5       | 14     |
|                           | 4 | 253              | 320            | 253     | 825   | 260                        | 1.5       | 14     |
| West Stockpile            | 1 | 253              | 320            | 253     | 825   | 260                        | 1.5       | 14     |
|                           | 2 | 253              | 320            | 253     | 825   | 260                        | 1.5       | 14     |
|                           | 3 | 253              | 320            | 253     | 825   | 260                        | 1.5       | 14     |
|                           | 4 | 253              | 320            | 253     | 825   | 260                        | 1.5       | 14     |
| South Stockpile           | 1 | 253              | 320            | 253     | 825   | 260                        | 1.5       | 14     |
|                           | 2 | 253              | 320            | 253     | 825   | 260                        | 1.5       | 14     |









<sup>1.</sup> Quote from Contech ES 2018; Downdrain ACB installation includes fine grade base/subgrade soils (assuming subgrade at + 0.5 ft); equipment is D6 LGP dozer with Power Angle Tilt Blade (PAT) and GPS Blade Control
2. Data from Golder TakeoftS spreadsheet 2018
3. One cutoff will per dissipator
4. Typical flow depth is 2′ concrete depth is 5′ (diagram is not drawn to scale); concrete thickness is 1.5′
5. Data from Table 3 and 4 of the Process Summary (SDM), Nov 2017 (Telesto)
6. Excavation volume is smaller than SOW because ACB's require less excavation than riprap

### New Haul Road Unit Cost

### Earthwork

|   |            |             |                 |              |          |                     | Material | Production | Centroid to                |            |          |          |            |           | Direct  |              | Fuel    | Equipment | Operator  | Dozer   | Equipment | Fuel    | Equipment + Fuel |
|---|------------|-------------|-----------------|--------------|----------|---------------------|----------|------------|----------------------------|------------|----------|----------|------------|-----------|---------|--------------|---------|-----------|-----------|---------|-----------|---------|------------------|
|   |            |             |                 |              | Material | Grade               | Weight   | Method/    | Centroid                   | Normal     | Operator | Work     | Visibility | Elevation | Drive I | Productivity | Cost    | Cost      | Cost (IV) | Cost    | Cost      | Cost    | Cost             |
|   | Activity E | quipment    | Volume (cy/ft)1 | Productivity | Factor   | Factor <sup>3</sup> |          | Blade      | Push Distance <sup>2</sup> | Production | Factor   | Hour     | Factor     | Factor    | Trans.  |              |         |           |           |         |           |         |                  |
|   |            |             |                 | (cy/hr)      |          |                     | (lb/cy)  |            | (feet)                     | (cy/hr)    |          | (min/hr) |            |           | (       | (hrs/ft)     | (\$/hr) | (\$/hr)   | (\$/hr)   | (\$/hr) | (\$/ft)   | (\$/ft) | (\$/ft)          |
| Lampbright & Southwest Lampbright Haul Road | Grading    | Cat D11T CD | 266.67          | 2515         | 1.20     | 1.20                | 3300     | 1.00       | 100                        | 3007       | 1.00     | 50       | 1.00       | 1.00      | 1.00    | 0.1060       | 69.62   | 254.44    | 27.41     | 281.85  | 29.88     | 7.38    | 37.26            |

<sup>&</sup>lt;sup>1</sup>Volume based on dozing rock bench to create 120' wide haul road, assuming the existing slope of the rock is 1:1 (120x120/2=7200 sf) <sup>2</sup>100' push distance assumed

<sup>&</sup>lt;sup>3</sup>Maximum haul road grade of 10% used to calculate grade factor

## Plastic Pipe Demolition Unit Cost

| R.S. Means Item 026510300320 | \$306.69 | 9,000-12,000 gal (avg. 10,500 gal) tank sludge removal cost |
|------------------------------|----------|---|
|                              | \$0.03   | sludge removal cost per gal                                 |
|                              | \$0.22   | sludge removal cost per cf                                  |
|                              | \$0.13   | sludge removal per foot of 18" pipe, assuming 1/3 full      |

## Cost Cover Material Excav, Haul, Grade

| Location                         | Cover Material<br>Volume (cy) | Cost Cover Material Excav,<br>Haul, Grade | Unit Cost (\$/cy) |
|----------------------------------|-------------------------------|---|-------------------|
| Triangle Stockpile               | 394,621                       | \$356,732                                 | \$0.90            |
| South Stockpile                  | 2,829,473                     | \$2,885,955                               | \$1.02            |
| West Stockpile                   | 3,031,924                     | \$4,621,914                               | \$1.52            |
| Lambright Stockpile              | 3,801,209                     | \$6,954,185                               | \$1.83            |
| Southwest Lampbright             | 456,400                       | \$801,195                                 | \$1.76            |
| South and East In-Pit Stockpiles | 222,640                       | \$437,234                                 | \$1.96            |
| Northwest Stockpile              | 39,781                        | \$66,625                                  | \$1.67            |
| LeeHill Stockpile                | 122,964                       | \$199,126                                 | \$1.62            |
| Northeast Stockpile              | 59,273                        | \$128,097                                 | \$2.16            |
| North Stockpile                  | 33,437                        | \$66,651                                  | \$1.99            |

10,991,723

\$1.50 Weighted Unit Cover Material Excav, Haul, Grade Cost (\$/cy)

\$3.62 Cover Material Excav, Haul, Grade Cost per ft of pipe (\$/ft)

| Total Cost | \$3.75 |
|------------|--------|

### Assumptions:

All pipes are 18"

Pipe demo cost includes flushing

Cover Material Volumes located in Tab 4

Cost Cover Material located in Tab 18b

Cover material unit cost assumes 65 sf of cover per foot of pipeline - 3' of cover over an 18' pipeline with 3:1 side slopes (and 27 cf per cy)

# Chino RCE Revegetation Unit Cost

Revegetation consists of 5 operations - scarifying, discing, drill seeding, mulching, and crimping.

Cost information is obtained from EquipmentWatch (EQW), if available, or RS Means 2019 rates.

| Tractor used for each operation is Deere 7430  | Cost           | Unit             | Information or Calculation  |
|--|----------------|------------------|---|
| EQW base rate for tractor rental               | \$<br>5,210.05 | \$ per month     | EQW for Deere 7430  |
| EQW base rate for tractor rental               | \$<br>29.60    | \$ per hour      | = (\$/month)/176  |
| EQW field labor rate per hour of operation     | \$<br>2.53     | \$ per hour      | EQW for Deere 7430, which includes mechanic's wage of \$23.09 (NMDOL, 2019) |
| EQW lube material cost                         | \$<br>2.84     | \$ per hour      | EQW for Deere 7430  |
| EQW field parts cost                           | \$<br>0.61     | \$ per hour      | EQW for Deere 7430  |
| EQW tire material cost                         | \$<br>2.42     | \$ per hour      | EQW for Deere 7430  |
| EQW fuel burn rate                             | 5.98           | gallons per hour | EQW for Deere 7430  |
| Local fuel cost                                | \$<br>2.34     | \$ per gallon    | Local quote   |
| Fuel cost                                      | \$<br>13.99    | \$ per hour      | = (EQW fuel burn rate) x (local fuel cost)                                  |
| NM Department of labor equipment operator rate | \$<br>24.27    | \$ per hour      | NM Department of Labor (NMDOL)  |
| Total tractor cost                             | \$<br>76.27    | \$ per hour      | Sum of \$ per hour costs shown in boxes                                     |

| Tractor coverage | rate of operation | fuel cost per acre |
|------------------|-------------------|--------------------|

| Fuel cost per acre                                     | Ş       | 3.85 \$ per acre    | Fuel cost/acre = (fuel cost/hour) x (travel time hour/acre)              |
|--|---------|---------------------|--|
| e al and account                                       | 2.05. 4 | 2.05. 4             | Already included in total tractor cost                                   |
| Time of travel over 1 acre                             |         | 0.275 hour per acre | = [(traveling distance feet/acre)/(5280 ft/mile)]/(travel speed)         |
| For 1 acre, total traveling distance                   |         | 3630 feet per acre  | = (43560 sf/ac)/(net width)  |
| Tractor/equipment travel speed                         |         | 2.5 miles per hour  | Assigned as approximate average speed of equipment (3 mph for 50 min/hr) |
| Tractor/equipment net width                            |         | 12 feet             | Assigned as a typical net width of coverage for each pass                |
| Tractor toverage/rate or operation, ruer tost per acre |         |                     |  |

| Operation   |                 |                 |     |  |
|---|-----------------|-----------------|-----|--|
| Scarifying  |                 |                 |     |  |
| Base rate for ripper rental                           | \$              | 898.90 per mo   | nth | EQW Ripper, Miscellaneous MSR-189H, to 260 HP  |
| Base rate for ripper rental                           | \$              | 5.11 \$ per h   |     | = (\$/month)/176   |
| Field labor rate per hour of operation                | \$              | 0.57 \$ per h   |     | EQW for ripper, incl mechanic's wage \$23.09 (NMDOL, 2019)                                 |
| Lube material cost                                    | \$              | 0.15 \$ per h   |     | EQW for ripper   |
| Field parts cost                                      | ۶<br>\$         | 0.15 \$ per h   |     |  |
| •   | \$<br>\$        |                 |     | EQW for ripper   |
| Ground Engaging Component cost                        | \$<br>\$        | 0.78 \$ per h   |     | EQW for ripper   |
| Total cost with tractor+operator included             | •               | 83.03 per hou   | ur  | = total tractor cost + (rake without tractor, with ratio)                                  |
| Discing   |                 |                 |     |  |
| Disc harrow attachment, for tractor                   | \$              | 616.33 per mo   | nth | RS Means 01 54 33 20 1500  |
| Disc harrow attachment, for tractor                   | \$              | 3.50 per hou    |     | = (\$/month)/176   |
| Ground Engaging Component (GEC) cost                  | \$              | 0.78 \$ per h   |     | Assume similar to GEC cost for ripper (EQW)  |
| Total cost with tractor included                      | <u> </u>        | 80.55 per hou   |     | = total tractor cost + (disc harrow, with ratio)   |
| Total cost with tractor included                      | •               | 80.55 per 1101  | ur  | = total tractor cost + (disc narrow, with ratio)   |
| Drill seeding (assume similar to discing)             |                 |                 |     |  |
| Disc harrow attachment, for tractor                   | \$              | 616.33 per mo   | nth | RS Means 01 54 33 20 1500  |
| Disc harrow attachment, for tractor                   | \$              | 3.50 per hou    |     | = (\$/month)/176   |
| Ground Engaging Component cost                        | \$              | 0.78 \$ per he  |     | Assume similar to GEC cost for ripper (EQW)  |
| Total cost with tractor+operator included             | s s             | 80.55 per hou   |     | Assume similar to dec cost for ripper (EQW)  |
| Total cost with tractor+operator included             | •               | 80.33 per 1100  | uı  |  |
| Mulching  |                 |                 |     |  |
| Mulcher, diesel powered, trailer mounted              | \$              | 2,167.95 per mo | nth | EQW for trailer mounted mulcher (Finn B260)  |
| Mulcher, diesel powered, trailer mounted              | \$              | 12.32 per hou   |     | = (\$/month)/176   |
| Waterier, dieser powered, trailer mounted             | Į.              | 12.52 pci 1100  | 41  | - (2) monthly 170  |
| Field labor rate per hour of operation                | \$              | 1.25 \$ per h   | our | EQW for trailer mounted mulcher (Finn B260), incl mechanic's wage \$23.09 (NMDOL, 2019)    |
| Lube material cost                                    | Ś               | 1.60 \$ per h   | our | EQW for trailer mounted mulcher (Finn B260)  |
| Field parts cost                                      | Ś               | 0.15 \$ per h   |     | EQW for trailer mounted mulcher (Finn B260)  |
| Tire material cost                                    | ¢               | 0.60 \$ per h   |     | EQW for trailer mounted mulcher (Finn B260)  |
| Fuel burn rate  | Į.              | 4.13 gallons    |     | EQW for trailer mounted mulcher (Finn B260)  |
| Local fuel cost                                       | \$              | 2.34 \$ per ga  | •   | Local quote  |
| Fuel cost   | ۶<br>\$         | 9.66 \$ per h   |     | = (EQW fuel burn rate) x (local fuel cost)   |
|   |                 |                 |     | ,  |
| NM Department of labor equipment operator rate        | \$<br><b>\$</b> | 24.27 \$ per h  |     | NM Department of Labor (NMDOL)   |
| Total cost with tractor+operator included             | Þ               | 126.12 per hou  | ur  |  |
| Crimping (assume similar to discing)                  |                 |                 |     |  |
| Disc harrow attachment, for tractor                   | \$              | 616.33 per mo   | nth | RS Means 01 54 33 20 1500  |
| Disc harrow attachment, for tractor                   | \$              | •               |     |  |
| •   |                 | 3.50 per hou    |     | = (\$/month)/176   |
| Ground Engaging Component cost                        | \$              | 0.78 \$ per h   |     | Assume similar to GEC cost for ripper (EQW)  |
| Total cost with tractor+operator included             | \$              | 80.55 per hou   | uı  |  |
| Summary for operations                                |                 |                 |     |  |
| Total cost for all operations combined (hour)         | \$              | 450.79 per hou  | ır  | Each of the 5 operations is done individually as part of revegetation (includes fuel cost) |
| Total cost for all operations combined w/o fuel(acre) | \$              | 120.12 per acre |     |  |
| rotal cost for all operations combined w/o facilaties | Y               | 120.12 pci dcit | _   | Total is based on "tractor coverage/rate of operation" = (total cost of operations/hour) x |
| Total cost for all operations combined w/ fuel(acre)  | \$              | 123.97 per acre | e   | (hours of travel time/acre)  |

# Materials (from sources used at Chino, by Rocky Mountain Reclamation)

| Seed                               | \$<br>210.00 per acre | From supplier (Rocky Mountain Reclamation)  |
|------------------------------------|-----------------------|---|
| Hay mulch                          | \$<br>490.00 per acre | From supplier (Rocky Mountain Reclamation): Mulch is applied at a rate of 2 tons per acre |
| Summary for operations + materials |                       |   |
| Total revegetation unit cost       | \$<br>823.97 per acre | Total is for all operations (combined) + seed material + hay mulch material + fuel        |