COST SUMMARY WORK

| Task descrip | otion: | New Application | l | | | |
|--------------------------------------|-------------------------------------|-----------------------------|----------------------|----------------------------|---------------------|--|
| Site: Rifle Gra | vel Pit #1 | Per | mit Action: New App | Permit/Job | o#: <u>M2021052</u> | |
| PROJECT Task #: Date: User: | IDENTIFIC ACY 6/8/2023 ACY | CATION State: County: | Colorado Garfield | Abbreviation: Filename: | None M052-ACY | |

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

| Task | | Form | Fleet | Task | |
|-------|--|--------------|-------|--------|-----------|
| 1 85K | Description | Used | Size | Hours | Cost |
| 2001B | Phase 1 - Backfill w Overburden | TRUCK1 | 1 | 25.46 | \$46,280 |
| 2002B | Phase 2 - Backfill w Overburden | TRUCK1 | 1 | 13.25 | \$24,084 |
| 2003B | Phase 3 - Backfill w Overburden | TRUCK1 | 1 | 30.87 | \$56,117 |
| 2004B | Misc Backfill w Overburden | TRUCK1 | 1 | 11.79 | \$21,439 |
| 2101B | Phase 1 - Grade Transported Overburden | DOZER | 2 | 12.40 | \$10,578 |
| 2102B | Phase 2 - Grade Transported Overburden | DOZER | 2 | 6.45 | \$5,505 |
| 2103b | Phase 3 - Grade Transported Overburden | DOZER | 2 | 15.03 | \$12,826 |
| 2104B | Misc Grade Transported Overburden | DOZER | 2 | 5.74 | \$4,901 |
| 3001B | Phase 1 - Decompaction | RIPPER | 2 | 3.14 | \$2,817 |
| 3002B | Phase 2 - Decompaction | RIPPER | 2 | 1.63 | \$1,466 |
| 3003B | Phase 3 - Decompaction | RIPPER | 2 | 3.81 | \$3,416 |
| 3004B | Misc Decompaction | RIPPER | 2 | 1.47 | \$1,320 |
| 4001B | Phase 1 - Topsoil Replacement | TRUCK1 | 1 | 5.55 | \$10,085 |
| 4002B | Phase 2 - Topsoil Replacement | TRUCK1 | 1 | 2.89 | \$5,247 |
| 4003B | Phase 3 - Topsoil Replacement | TRUCK1 | 1 | 6.73 | \$12,228 |
| 4004B | Misc, - Topsoil Replacement | TRUCK1 | 1 | 2.57 | \$4,671 |
| 4101B | Phase 1 - Grade Transported Topsoil | DOZER | 2 | 2.06 | \$1,755 |
| 4102B | Phase 2 - Grade Transported Topsoil | DOZER | 2 | 1.07 | \$913 |
| 4103B | Phase 3 - Grade Transported Topsoil | DOZER | 2 | 2.49 | \$2,129 |
| 4104B | Misc Grade Transported Topsoil | DOZER | 2 | 0.95 | \$813 |
| 5001B | Phase 1 - Reveg | REVEGE | 1 | 5.00 | \$6,265 |
| 5002B | Phase 2 - Reveg | REVEGE | 1 | 2.50 | \$3,260 |
| 5003B | Phase 3 - Reveg | REVEGE | 1 | 6.00 | \$7,596 |
| 5004B | Misc Reveg | REVEGE | 1 | 2.50 | \$2,936 |
| 5005 | Phase 4 - Failure Seeding of Berms 30% | REVEGE | 1 | 1.00 | \$1,129 |
| 9001 | Initial Mobilization | MOBILIZE | 1 | 2.62 | \$9,557 |
| 9002 | Secondary Mobilization | MOBILIZE | 1 | 2.62 | \$1,595 |
| | | <u>SUBTO</u> | TALS: | 177.59 | \$260,928 |

INDIRECT COSTS

OVERHEAD AND PROFIT:

| Liability insurance: | 2.02 | Total = | \$5,271 |
|----------------------|-------|------------------------------------|-----------|
| Performance bond: | 1.05 | Total = | \$2,740 |
| Job superintendent: | 88.80 | Total = | \$5,779 |
| Profit: | 10.00 | Total = | \$26,093 |
| | | TOTAL O & P = | \$39,882 |
| | | CONTRACT AMOUNT (direct + O & P) = | \$300,810 |
| | | | |

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

| Financial warranty processing (legal/related costs): | \$500 | Total = | \$500 |
|--|--------------|----------------------|-----------|
| Engineering work and/or contract/bid preparation: | 4.25 | Total = | \$12,784 |
| Reclamation management and/or administration: | 5.00 | _ | \$15,041 |
| | | | |
| CONTINGENCY: | 3.00 | Total = | \$7,828 |
| | | | |
| | TOTAL I | NDIRECT COST = | \$76,035 |
| | | | |
| TOTAL BO | ND AMOUNT (d | lirect + indirect) = | \$336,963 |

| Site: Rifle Gravel Pit | #1 | Permit Actio | on: New App | 1 | Permit/Job#: <u>M</u> | 2021052 |
|--------------------------|---------------------------|-------------------------|-------------------|---------------|-----------------------|---------------|
| PROJECT IDEN | NTIFICATION | | | | | |
| Task #: 2001 | В | State: Colora | ado | Ab | breviation: No | ne |
| Date: 7/19/ | 2023 | County: Garfie | ld | | Filename: M |)52-2001B |
| User: <u>ACY</u> | | | | | | |
| Agency of | r organization nan | ne: DRMS | | | | |
| HOURLY EQU | PMENT COST | <u>[</u> | | Shift bas | is: <u>1 per day</u> | |
| | |] | Equipment Descri | ption | | |
| , | Fruck Loader Tea | m -Truck: Cat | 730 | | | |
| Supr | ort Equipment -I | oad Area: Cat | D8T - 8SU | | | |
| Subt | -Di | imp Area: Cat | D8T - 8SU | | | |
| Road M | laintenance – Mote | or Grader: CA | Г 16М | | | |
| | -Wa | ter Truck: Wat | ter Tanker, 3,500 | Gal. | | |
| Cost Breakdown• | Truck/Log | der Team | Support | Fauinment | Maintenar | ce Equipment |
| <u>Cost Di Cakdown</u> . | Truck | Loader | Load Area | Dump Area | Motor Grader | Water Truck |
| VIItilization machina | 100 | 100 | 20 | 20 | 50 | 50 |
| Ownership cost/hour: | \$108.06 | \$61.60 | \$241.38 | \$241.38 | \$212.21 | \$16.65 |
| Operating cost/hour: | \$108.00 | \$58.92 | \$43.18 | \$43.18 | \$62.44 | \$10.05 |
| %Utilization-riper: | \$71.88 NA | 0 | \$45.18 100 | φ43.18 ΝΑ | \$02.44 NA | \$18.80 NA |
| Ripper own. cost/hour: | NA | \$0.00 | \$14.11 | \$0.00 | \$0.00 | \$0.00 |
| Ripper op. cost/hour: | NA | \$0.00 | \$7.45 | \$0.00 | \$0.00 | \$0.00 |
| Operator cost/hour: | \$32.54 | \$40.71 | \$41.30 | \$41.30 | \$28.56 | \$21.12 |
| Unit Subtotals: | \$212.48 | \$161.32 | \$333.31 | \$325.86 | \$303.21 | \$56.57 |
| Number of Units: | 3 | 1 | 1 | 1 | 1 | 1 |
| Group Subtotals: | Work: | \$798.76 | Support: | \$659.17 | Maint: | \$359.78 |
| Total work team co | st/hour: <u>\$1,817.'</u> | 71 | | | | |
| MATERIAL OU | JANTITIES | | | | | |
| Initial volume | : 14,802 | CCY | Swell | factor: 1.115 | | |
| Loose volume | : 16,50 | 4 LCY | | | | |
| So | ource of estimated | volume: Exhil | bit L & Rec Plan | | | |
| Source | e of estimated swe | Il factor: Cat H | Handbook | | | |
| | Material Purcha | ase Cost: $\$0.00$ |) | | | |
| | 10 | otal Cost: <u>50.00</u> |) | | | |
| HOURLY PRO | DUCTION | | | | | |
| Truck Capacity: | | | | | | |
| Truck Payload (wei | ight) Basis: | | Pounde/I CV | | | |
| Desc | ription: <u>2,100</u> | Loam | | | | |
| Rated Pa | ayload: <u>62,000</u> | | Pounds | | | |
| Payload Ca | pacity: 29.52 | | LCY | | | |

| Truck Bed (volume) Basis: | | | | | | |
|--|-----------------------------------|---------------------------------|-------------------|--------------------------|-------------|--------|
| Struck Volume: | 17.10 L | CY | | | | |
| Heaped Volume: | 22.10 L | CY | | | | |
| Average Volume: | 19.60 L | CY | | | | |
| Adjusted Volume: | 22.10 L | CY | | | | |
| | | | | | | |
| Final | Fruck Volume B | ased on Number of | Loader Passes: | 15.75 | LCY | |
| Loading Tool Capacity | | | - | | | |
| | | | Buc | ket Size Class: <u>N</u> | A | _ |
| Rated Capacity: | 7.500 | LCY (heaped) | | | | - |
| Bucket Fill Factor: | 1.050 | Moist loam or sa | indy clay (100%) | - 110%) 1.050 | | - |
| Adjusted Capacity: | 7.875 | | | | | |
| Job Condition Corrections: | | Sit | e Altitude (ft.): | 5 <u>380</u> feet | | |
| | Truck | Loader | Source | | | |
| Altitude Adj: | 1.000 | 1.000 | (CAT HE | 3) | | |
| Job Efficiency: | 0.830 | 0.830 | (CAT HE | <u>,</u> 3) | | |
| | | | | | | |
| Net Correction: | 0.830 | 0.830 | | | | |
| Loading Tool Cycle Time: | Number | of Loading Tool Pas | ses Required to | Fill Truck | 2 r | 20000 |
| Ebaung 1001 Cycle Time. | Number (| of Loading 10011 as | ses Required to | | <u> </u> | 105505 |
| Excavators and Front Shovels | <u>s:</u> | | | | | |
| Machine Cycle Time vs Selected Value w | . Job Condition vithin this Basic | Rating: <u>NA</u> Rating: NA | | | | |
| Track Loaders – N | Material Descrip | tion: | | | | |
| Cycle Time Elements (min.): | naterial Desemp | | | | | |
| Load: NA | Ma | neuver: NA | | Dump: 0.100 |) | |
| Wheel and Track Loaders | - Unadiusted Basi | ic Loader Cycle Tim | e (load dump r | maneuver): | | Ites |
| | Ollaujusteu Dasi | | ie (10au, uump, 1 | $\frac{1}{2}$ | | ites |
| Cycle Time Factors | Mined meeterial | 0.02 | | Factor (min.) | Source | _ |
| Material: | Dumped by tru | al: 0.02 | | 0.020 | (Cat HB) | _ |
| Truck Ownershine | Common over | CK 0.02 | anders 0.04 | 0.020 | (Cat HB) | _ |
| Operation: | Constant opera | tion 0.04 | 10auers -0.04 | -0.040 | (Cat HD) | - |
| Dump Targati | Nominal target | 0.00 | | -0.040 | (Cat HD) | - |
| Dump Target. | Nominal target | Net Cycle Tim | e Adjustment. | -0.040 | (Cat IID) | _ |
| | | Adjusted Loade | r Cycle Time: | 0.510 | | |
| | | Net Load Ti | me per Truck: | 0.610 | minutes | |
| | | Lot Lot I | Per 1100Ki _ | | | |
| Truck Cycle Time: | | | | | | |
| Truck Exchange Time: | 0.60 | Minutes | Adjusted | for site altitude: | 0.600 | Minute |
| Truck Load Time: | 0.610 | Minutes | Adjusted | for site altitude: | 0.610 | Minute |
| ck Maneuver and Dump Time: | 1.00 | Minutes | Adjusted | for site altitude: | 1.000 | Minute |
| | | - | rajastea | | 1.000 | - |
| Truck Travel (Haul & Return) maintained 3.0 | Time: | Road Condition: <u>F</u> | irm, smooth, rol | ling, dirt/lt. surface | d, watered, | |

| Haul Rout | e: | | | | | | | |
|------------|--|--|--|--|---|--|---|---|
| Seg # | Haul I | Distance | Grade (%) | Roll. Res | Total Res | Velocity | Travel | |
| | (Ft) | | | (%) | (%) | (fpm) | Time (min) | |
| 1 | 1150.0 | 00 | 0.00 | 3.00 | 3.00 | 2183 | 0.790 | |
| 1 | | | | | Haul Time: | 0 790 | minutes | |
| Return Ro | ute: | | | | | 0.790 | minutes | |
| Seg # | Haul I | Distance | Grade (%) | Roll. Res | Total Res | Velocity | Travel | |
| - | (Ft) | | | (%) | (%) | (fpm) | Time (min) | |
| 1 | 1150.0 |)0 | 0.00 | 3.00 | 3.00 | 2936 | 0.546 | |
| | | | | | Return Time: | 0.546 | minute | S |
| | | | | Total Tru | ck Cycle Time: | 3.546 | minute | S |
| ading Too | lunit | | | | | | | |
| Produ | ction | 780.99 | LCY/Hour | | Adjusted for j | ob efficiency: | 648.22 | LCY/Hour |
| Jnit Produ | ction | | | | | | | |
| | _ | 266.50 | LCY/Hour | | Adjusted for j | ob efficiency: | 221.19 | LCY/Hour |
| No. of Tr | ucks: | 3 | Truck(s) | | Selected Num | ber of Trucks: | 3 | Truck(s) |
| | | | Adjuste | d hourly truc | k team production | on: 663 | .58 LCY | //Hour |
| | | | Adjusted sing | le truck/loade | er team production | on: 648 | .22 LCY | /Hour |
| | | | Adjusted multip | le truck/loade | er team production | on: 648 | <u>.22</u> LCY | //Hour |
| JOB TIN | /IE AN | D COST | | | | | | |
| Fleet s | size: | 1 | Team(s) |] | Fotal job time: | 25.4 | 6 Ho | ours |
| Unit c | ost: | \$2.804 | /LCY | , | Total job cost: | \$46,2 | 80 | |
| | Haul Rout Seg # I Return Ro Seg # I Unit Produ No. of Tru IOB TIN Fleet s Unit c | Haul Route: Seg # Haul I (Ft) I 1150.0 Return Route: Return Route: Seg # Haul I (Ft) I I 1150.0 Adding Tool unit (Ft) I 1150.0 Iding Tool unit Production Production - No. of Trucks: - IOB TIME AN Fleet size: Unit cost: - | Haul Route:Seg #Haul Distance (Ft)I1150.00Return Route:Image: Colspan="2">Seg # (Ft)Seg #Haul Distance (Ft)I1150.00uding Tool unit Production Unit Production780.99 266.50No. of Trucks:3JOB TIME AND COST Fleet size:I1Unit cost:\$2.804 | Haul Route:Seg #Haul Distance (Ft)Grade (%)I1150.000.00Return Route:Seg #Haul Distance (Ft)Grade (%)I1150.000.00uding Tool unit Production Unit Production780.99 266.50LCY/HourNo. of Trucks:3Truck(s)Adjusted Adjusted sing Adjusted multipAdjusted sing Adjusted multipIOB TIME AND COST Fleet size:1Team(s)Unit cost:\$2.804/LCY | Haul Route: Grade (%) Roll. Res (%) Seg # Haul Distance Grade (%) Roll. Res (%) I 1150.00 0.00 3.00 Return Route: Seg # Haul Distance Grade (%) Roll. Res (%) Seg # Haul Distance Grade (%) Roll. Res (%) I 1150.00 0.00 3.00 Total Tru uding Tool unit Production 780.99 Production 266.50 LCY/Hour No. of Trucks: 3 Truck(s) Adjusted hourly truc Adjusted single truck/loade Adjusted multiple truck/loade Adjusted multiple truck/loade IOB TIME AND COST Team(s) T Fleet size: 1 Team(s) T | Haul Route:Seg #Haul Distance (Ft)Grade (%)Roll. Res (%)Total Res (%)I1150.000.003.003.00Return Route:Return Route:Seg # (Ft)Haul Distance (%)Roll. Res (%)Total Res (%)I1150.000.003.003.00Return Route:Colspan="4">Colspan="4">Return Route:Seg # (Ft)Haul Distance (%)Total Res (%)I1150.000.003.003.00Return Time: Total Truck Cycle Time:Total Truck Cycle Time:Maing Tool unit ProductionProduction780.99 266.50LCY/HourAdjusted for j266.50LCY/HourNo. of Trucks:3Truck(s)Selected Numl Adjusted hourly truck team production Adjusted single truck/loader team production Adjusted multiple truck/loader team productionIDB TIME AND COSTFleet size:1Team(s)Total job time: Total job cost: | Haul Route:Seg #Haul Distance (Ft)Grade (%)Roll. Res (%)Total Res (%)Velocity (fpm)11150.000.003.003.002183Haul Time:0.790Return Route: | Haul Route:Seg #Haul Distance (Ft)Grade (%)Roll. Res (%)Total Res (%)Velocity (fpm)Travel Time (min)11150.000.003.003.0021830.790Haul Time:0.790minutesReturn Route:Grade (%)Roll. Res (%)Total Res (%)Velocity (fpm)Travel Time (min)Seg #Haul Distance (Ft)Grade (%)Roll. Res (%)Total Res (%)Velocity (fpm)Travel Time (min)11150.000.003.003.0029360.546Return Time:0.546 (%)minutesTotal Truck Cycle Time: 0.546 minuteTotal Truck Cycle Time: 0.546 (min)Production 780.99 (LCY/HourLCY/HourAdjusted for job efficiency: 221.19 No. of Trucks:3Truck(s)Selected Number of Trucks:3Adjusted hourly truck team production: 663.58 (Adjusted multiple truck/loader team production: 663.58 (CYLCYICYIOB TIME AND COSTFleet size:1Team(s)Total job time: 25.46 Houli (LCYTotal job cost:\$\$46,280 |

| Task description: | Phase 2 | - Backfill w Ove | rburden | | | |
|------------------------|---------------------------|------------------|-------------------|--------------|-----------------------|--------------|
| Site: Rifle Gravel Pit | #1 | Permit Acti | on: New App |] | Permit/Job#: <u>M</u> | 2021052 |
| PROJECT IDEN | TIFICATION | | | | | |
| Task #: 2002E | 3 | State: Colora | ado | Ab | breviation: No | ne |
| Date: $7/19/2$ | 2023 | County: Garfie | eld | | Filename: M0 | 52-2002B |
| User. <u>ACT</u> | | | | | | |
| Agency or | organization nan | ne: DRMS | | | | |
| HOURLY EQUI | PMENT COST | | | Shift bas | is: <u>1 per day</u> | |
| | | | Equipment Descri | ption | | |
| 1 | ruck Loader Tea | m - Truck: Cat | 730 T 980H | | | |
| Supp | ort Equipment -L | oad Area: Cat | D8T - 8SU | | | |
| | -Du | Imp Area: Cat | D8T - 8SU | | | |
| Road M | aintenance – Moto | or Grader: CA | T 16M | Cal | | |
| | - vv a | ter Truck: wa | ter Tanker, 5,500 | Gal. | | |
| Cost Breakdown: | Truck/Loa | der Team | Support l | Equipment | Maintenan | ce Equipment |
| | Truck | Loader | Load Area | Dump Area | Motor Grader | Water Truck |
| %Utilization-machine: | 100 | 100 | 30 | 30 | 50 | 50 |
| Ownership cost/hour: | \$108.06 | \$61.69 | \$241.38 | \$241.38 | \$212.21 | \$16.65 |
| Operating cost/hour: | \$71.88 | \$58.92 | \$43.18 | \$43.18 | \$62.44 | \$18.80 |
| %Utilization-riper: | NA | 0 | 100 | NA | NA | NA |
| Ripper own. cost/hour: | NA | \$0.00 | \$14.11 | \$0.00 | \$0.00 | \$0.00 |
| Ripper op. cost/hour: | NA | \$0.00 | \$7.45 | \$0.00 | \$0.00 | \$0.0 |
| Operator cost/hour: | \$32.54 | \$40.71 | \$41.30 | \$41.30 | \$28.56 | \$21.12 |
| Unit Subtotals: | \$212.48 | \$161.32 | \$333.31 | \$325.86 | \$303.21 | \$56.57 |
| Number of Units: | 3 | 1 | 1 | 1 | 1 | - |
| Group Subtotals: | Work: | \$798.76 | Support: | \$659.17 | Maint: | \$359.78 |
| Total work team cos | st/hour: <u>\$1,817.7</u> | /1 | | | | |
| MATERIAL OU | ANTITIES | | | | | |
| Initial volume: | 7 703 | CCY | Swell | factor: 1115 | | |
| Loose volume: | 8,589 | | | | | |
| So | urce of estimated | volume: Exhi | bit L & Rec Plan | | | |
| Source | of estimated swe | ll factor: Cat I | Handbook | | | |
| | Material Purcha | ase Cost: \$0.00 | 0 | | | |
| | Тс | tal Cost: \$0.00 | 0 | | | |
| HOURLY PRO | DUCTION | | | | | |
| Truck Capacity: | | | | | | |
| Truck Payload (wei | ght) Basis: | | | | | |
| Material w | veright: $2,100$ | Loam | Pounds/LCY | | | |
| Rated Pa | yload: 62,000 | | Pounds | | | |
| Payload Ca | pacity: 29.52 | | LCY | | | |

| Struck Volume: | | | | | | |
|--|---|---|--|---|--|---------------------------------------|
| | 17.10 | LCY | | | | |
| Heaped Volume: | 22.10 | LCY | | | | |
| Average Volume: | 19.60 | LCY | | | | |
| Adjusted Volume: | 22.10 | LCY | | | | |
| | | | | | | |
| Final ' | Truck Volume | Based on Number | of Loader Passes. | 15 75 | ICY | |
| 1 mai | Truck volume | Dased on Number v | of Lodder 1 asses. | 13.73 | | |
| Loading Tool Capacity | | | | | | |
| | | | Bucl | ket Size Class: | NA | _ |
| Rated Capacity: | 7.500 | LCY (heaped) | | | | |
| Bucket Fill Factor: | 1.050 | Moist loam or | sandy clay (100% | - 110%) 1.050 | | - |
| Adjusted Capacity: | 7.875 | LCY | ••• | , | | - |
| Job Condition Corrections: | | (| Site Altitude (ft): 4 | 5380 feet | | |
| Job Condition Corrections. | Truck | I oader | Source | <u>5380</u> Ieet | | |
| Altitude Adi: | 1 000 | 1 000 | (CAT HE | 8) | | |
| Job Efficiency: | 0.830 | 0.830 | (CAT HE | 3) | | |
| too Emeloney. | 0.020 | 0.050 | (0.111 112 | | | |
| Net Correction: | 0.830 | 0.830 | | | | |
| | | | | | | |
| Loading Tool Cycle Time: | Number | of Loading Tool P | asses Required to | Fill Truck: | 2 p | basses |
| Excavators and Front Shovels | <u>s:</u> | | | | | |
| Machine Cycle Time vs | Job Condition | n Rating: NA | | | | |
| Selected Value w | vithin this Basic | a Dating: NA | | | | |
| | | C NAUNY. INA | | | | |
| Treak Londora | Matarial Desari | intion: | | | | |
| Track Loaders – I | Material Descri | iption: | | | | |
| Track Loaders – I Cycle Time Elements (min.): | Material Descri | iption: | | | | |
| Track Loaders – I Cycle Time Elements (min.): Load: NA | Material Descri | iption: | | Dump: 0.10 | 00 | |
| Track Loaders – I Cycle Time Elements (min.): Load: <u>NA</u> | Material Descri | iption: | | Dump: 0.10 | 00 | |
| Track Loaders – I Cycle Time Elements (min.): Load: <u>NA</u> Wheel and Track Loaders - | Material Descri Material Descri M - Unadjusted Ba | iption: laneuver:NA sic Loader Cycle T | ime (load, dump, 1 | Dump: 0.10 | 00 mint | ites |
| Track Loaders – I Cycle Time Elements (min.): Load: <u>NA</u> Wheel and Track Loaders - Cycle Time Factors | Material Descri Material Descri M Unadjusted Ba | iption: Ianeuver:NA sic Loader Cycle T | ime (load, dump, r | Dump: 0.10 naneuver): Factor (min.) | 00 0.550 minu Source | utes |
| Track Loaders – I Cycle Time Elements (min.): Load: <u>NA</u> Wheel and Track Loaders - <u>Cycle Time Factors</u> Material: | Material Descri Minadjusted Ba | iption: Ianeuver:NA sic Loader Cycle T al 0.02 | ime (load, dump, r | Dump: 0.10 naneuver): | 00 0.550 minu Source (Cat HB) | utes |
| Track Loaders – I Cycle Time Elements (min.): Load: <u>NA</u> Wheel and Track Loaders - <u>Cycle Time Factors</u> <u>Material:</u> Stockpile: | Material Descri Material Descri Mixed Ba Mixed materia | iption: Ianeuver: Isic Loader Cycle T al 0.02 ruck 0.02 | ime (load, dump, 1 | Dump: 0.10 naneuver): Factor (min.) 0.020 0.020 | 00 0.550 minu Source (Cat HB) (Cat HB) | ites |
| Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: | Material Descri Material Descri Unadjusted Ba Mixed materia Dumped by tr Common owr | iption: ianeuver: sic Loader Cycle T al 0.02 ruck 0.02 hership of trucks an | ime (load, dump, r | Dump: 0.10 naneuver): Factor (min.) 0.020 0.020 -0.040 | 00 0.550 minu Source (Cat HB) (Cat HB) (Cat HB) | ites |
| Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: | Material Descri Material Descri Munadjusted Ba Mixed materia Dumped by tr Common owr Constant oper | iption: ianeuver:NA sic Loader Cycle T al 0.02 ruck 0.02 hership of trucks an ration -0.04 | ime (load, dump, r | Dump: 0.10 naneuver): Factor (min.) 0.020 0.020 -0.040 -0.040 | 00 0.550 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) | ites |
| Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: | Material Descri Material Descri Unadjusted Ba Mixed materia Dumped by tr Common owr Constant oper Nominal targe | iption: ianeuver: sic Loader Cycle T al 0.02 ruck 0.02 hership of trucks an ration -0.04 et 0.00 | ime (load, dump, r | Dump: 0.10 naneuver): Factor (min.) 0.020 0.020 -0.040 -0.040 0.000 | 00 0.550 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) | ites |
| Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: | Material Descri Material Descri Unadjusted Ba Mixed materia Dumped by tr Common owr Constant oper Nominal targe | iption: iption: ianeuver:NA sic Loader Cycle T al 0.02 ruck 0.02 ruck 0.02 hership of trucks an ration -0.04 et 0.00 Net Cycle Ti | ime (load, dump, r d loaders -0.04 me Adjustment: | Dump: 0.10 naneuver): Factor (min.) 0.020 0.020 -0.040 -0.040 0.000 -0.040 | 00 0.550 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes | ites |
| Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: | Material Descri Material Descri Unadjusted Ba Mixed materia Dumped by tr Common owr Constant oper Nominal targe | iption: iption: isic Loader Cycle T al 0.02 ruck 0.02 ruck 0.02 rership of trucks an ration -0.04 et 0.00 Net Cycle Ti Adjusted Loa | ime (load, dump, r d loaders -0.04 me Adjustment: der Cycle Time: | Dump: 0.10 naneuver): Factor (min.) 0.020 0.020 -0.040 -0.040 0.000 -0.040 0.000 0.510 | 00 0.550 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) | ites |
| Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: | Material Descri Material Descri Unadjusted Ba Mixed materia Dumped by tr Common owr Constant oper Nominal targe | iption: iption: isic Loader Cycle T al 0.02 ruck 0.02 hership of trucks an ration -0.04 et 0.00 Net Cycle Ti Adjusted Loa Net Load | ime (load, dump, r d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck: | Dump: 0.10 naneuver): Factor (min.) 0.020 0.020 -0.040 -0.040 0.000 -0.040 0.000 0.510 0.610 | 00 0.550 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes | Ites |
| Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: | Material Descri Material Descri Mixed materia Dunged by tr Common owr Constant oper Nominal targe | iption: iption: isic Loader Cycle T al 0.02 ruck 0.02 hership of trucks an ration -0.04 et 0.00 Net Cycle Ti Adjusted Loa Net Load | ime (load, dump, r d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck: | Dump: 0.10 naneuver): Factor (min.) 0.020 0.020 -0.040 -0.040 0.000 -0.040 0.510 0.510 0.610 | 00 0.550 minu Source (Cat HB) (Cat HB) | ites |
| Track Loaders – I Cycle Time Elements (min.): Load: <u>NA</u> Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: <u>Truck Cycle Time:</u> | Material Descri Material Descri Unadjusted Ba Mixed materia Dumped by tr Common owr Constant oper Nominal targe | iption: iption: isic Loader Cycle T al 0.02 ruck 0.02 hership of trucks an ration -0.04 et 0.00 Net Cycle Ti Adjusted Loa Net Load | ime (load, dump, r d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck: | Dump: 0.10 naneuver): Factor (min.) 0.020 0.020 -0.040 -0.040 0.000 -0.040 0.000 -0.040 0.510 0.610 | 00 0.550 minu Source (Cat HB) (Cat HB) | ites |
| Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time: | Material Descri Material Descri M Unadjusted Ba Mixed materia Dumped by tr Common owr Constant oper Nominal targe | Ianeuver: <u>NA</u> iption: <u>NA</u> isic Loader Cycle T al 0.02 ruck 0.02 hership of trucks an ration -0.04 et 0.00 Net Cycle Ti Adjusted Loa Net Load | ime (load, dump, r d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck: | Dump: 0.10 naneuver): Factor (min.) 0.020 0.020 -0.040 0.000 -0.040 0.000 -0.040 0.510 0.610 for site altitude: | 00 0.550 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) 0.600 | utes Minute |
| Track Loaders – I Cycle Time Elements (min.): Load: <u>NA</u> Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time: Truck Load Time: | Material Descri Material Descri Unadjusted Ba Mixed materia Dumped by tr Common owr Constant oper Nominal targe | iption: iption: isic Loader Cycle T al 0.02 ruck 0.02 ruck 0.02 ruck 0.02 hership of trucks an ration -0.04 et 0.00 Net Cycle Ti Adjusted Loa Net Load ' Minutes Minutes | ime (load, dump, r d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck: Adjusted Adjusted | Dump: 0.10 naneuver): | 00 0.550 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) 0.600 0.610 | utes Minute |
| Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time: Truck Load Time: K Maneuver and Dump Time | Material Descri Material Descri Unadjusted Ba Mixed materia Dumped by tr Common owr Constant oper Nominal targe | Ianeuver: <u>NA</u> iption: <u>NA</u> sic Loader Cycle T al 0.02 ruck 0.02 hership of trucks an ration -0.04 et 0.00 Net Cycle Ti Adjusted Loa Net Load ' Minutes Minutes Minutes Minutes | ime (load, dump, r d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck: Adjusted Adjusted Adjusted | Dump: 0.10 naneuver): | 00 0.550 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) 0.600 0.600 0.610 1.000 | Minute Minute Minute |
| Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time: Truck Load Time: K Maneuver and Dump Time: | Material Descri Material Descri Unadjusted Ba Mixed materia Dumped by tr Common owr Constant oper Nominal targe 0.60 0.610 1.00 | Ianeuver: NA iption: Ianeuver: NA sic Loader Cycle T al 0.02 ruck 0.02 ruck 0.02 rership of trucks an ration -0.04 et 0.00 Net Cycle Ti Adjusted Loa Net Load ' Minutes Minutes Minutes | ime (load, dump, r d loaders -0.04 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck: Adjusted Adjusted Adjusted | Dump: 0.10 naneuver): | 00 minu 0.550 minu (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) 0.600 0.610 1.000 1.000 | utes Minutes Minutes Minutes |
| Track Loaders – I Cycle Time Elements (min.): Load: <u>NA</u> Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time: Truck Load Time: K Maneuver and Dump Time: Truck Travel (Haul & Return) | Material Descri Material Descri Unadjusted Ba Mixed materia Dumped by tr Common owr Constant oper Nominal targe 0.60 0.610 1.00 | Ianeuver: NA iption: Ianeuver: NA sic Loader Cycle T al 0.02 ruck 0.02 nership of trucks an ration -0.04 et 0.00 Net Cycle Ti Adjusted Loa Net Load ' Minutes Minutes Minutes Minutes Minutes | ime (load, dump, r d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck: Adjusted Adjusted Adjusted Firm, smooth, rol | Dump: 0.10 naneuver): | 00 0.550 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) 0.600 0.600 0.610 1.000 ed, watered. | utes |

| Haul Rout | te: | | | | | | | |
|-------------------|---------|----------|-----------------|----------------|--------------------|----------------|---------|----------|
| Seg # | Haul | Distance | Grade (%) | Roll. Res | Total Res | Velocity | Travel | |
| | (Ft) | | | (%) | (%) | (fpm) | Time | |
| 1 | 1150 | 00 | 0.00 | 3.00 | 3.00 | 2183 | (1111) | |
| 1 | 1150. | 00 | 0.00 | 5.00 | 5.00 | 2105 | 0.770 | |
| | | | | | Haul Time: | 0.790 | minutes | |
| Return Ro | oute: | | | | | | | |
| Seg # | Haul | Distance | Grade (%) | Roll. Res | Total Res | Velocity | Travel | |
| | (Ft) | | | (%) | (%) | (fpm) | (min) | |
| 1 | 1150. | 00 | 0.00 | 3.00 | 3.00 | 2936 | 0.546 | |
| | | | | | Return Time: | 0.546 | minutes | 5 |
| | | | | Total Tru | ck Cycle Time: | 3.546 | minutes | 5 |
| Loading Too | l unit | | | | | | | |
| Produ | iction | 780.99 | LCY/Hour | | Adjusted for j | ob efficiency: | 648.22 | LCY/Hour |
| Truck Unit Produ | iction | | | | 5 5 | • | | |
| | - | 266.50 | LCY/Hour | | Adjusted for j | ob efficiency: | 221.19 | LCY/Hour |
| Optimal No. of Tr | ucks: | 3 | Truck(s) | | Selected Num | per of Trucks: | 3 | Truck(s) |
| | | | Adjuste | d hourly truc | k team production | on: 663 | .58 LCY | /Hour |
| | | | Adjusted sing | le truck/loade | er team production | on: 648 | .22 LCY | /Hour |
| | | | Adjusted multip | le truck/loade | er team production | on: 648 | .22 LCY | Hour |
| IOR TIM | ME AN | JD COST | | | | | | |
| JOD III | | | | | | | | |
| Fleet | size: | 1 | Team(s) | <u>_</u> | Fotal job time: | 13.2 | 5 Ho | urs |
| Unit | cost: _ | \$2.804 | /LCY | , | Total job cost: | \$24,0 | 84 | |

| ite: Rifle Gravel Pit | #1 | Permit Action | on: New App | | Permit/Job#: <u>M</u> | 2021052 |
|------------------------|---------------------------|--------------------|--------------------|---------------|-----------------------|---------------|
| PROJECT IDEN | TIFICATION | | | | | |
| Task #: 20031 | 3 | State: Colora | ado | Ab | breviation: No | ne |
| Date: $7/19/2$ | 2023 | County: Garfie | eld | | Filename: M | 052-2003B |
| Agency or | organization nan | ne: DRMS | | | | |
| HOURLY FOUI | PMENT COST | <u></u> י | | Shift bas | is: 1 per dav | |
| <u>HOULLI LQUI</u> | | <u>-</u> | Equipmont Docori | ntion | 13. <u>1 per day</u> | |
| | Fruck Loader Tea | m -Truck: Cat | 730 | ption | | |
| - | | -Loader: CA | Т 980Н | | | |
| Supp | ort Equipment -L | oad Area: Cat | D8T - 8SU | | | |
| Pood M | -Du | imp Area: Cat | D8T - 8SU T 16M | | | |
| Koau M | -Wa | ter Truck: Wat | ter Tanker. 3.500 | Gal. | | |
| | | | , , | | | |
| Cost Breakdown: | Truck/Loa | ider Team | Support l | Equipment | Maintenar | nce Equipment |
| | Truck | Loader | Load Area | Dump Area | Motor Grader | Water Truck |
| %Utilization-machine: | 100 | 100 | 30 | 30 | 50 | 50 |
| Ownership cost/hour: | \$108.06 | \$61.69 | \$241.38 | \$241.38 | \$212.21 | \$16.65 |
| Operating cost/hour: | \$71.88 | \$58.92 | \$43.18 | \$43.18 | \$62.44 | \$18.80 |
| %Utilization-riper: | NA | 0 | 100 | NA | NA | NA |
| Ripper own. cost/hour: | NA | \$0.00 | \$14.11 | \$0.00 | \$0.00 | \$0.00 |
| Ripper op. cost/hour: | NA | \$0.00 | \$7.45 | \$0.00 | \$0.00 | \$0.00 |
| Operator cost/hour: | \$32.54 | \$40.71 | \$41.30 | \$41.30 | \$28.56 | \$21.12 |
| Unit Subtotals: | \$212.48 | \$161.32 | \$333.31 | \$325.86 | \$303.21 | \$56.57 |
| Number of Units: | 3 | 1 | 1 | 1 | 1 | 1 |
| Group Subtotals: | Work: | \$798.76 | Support: | \$659.17 | Maint: | \$359.78 |
| Total work team cos | st/hour: <u>\$1,817.7</u> | 71 | | | | |
| MATERIAL QU | ANTITIES | | | | | |
| Initial volume | : 17,948 | CCY | Swell | factor: 1.115 | | |
| Loose volume | 20,01 | 2 LCY | | | | |
| So | urce of estimated | volume: Exhi | bit L & Rec Plan | | | |
| Source | of estimated swe | Il factor: Cat H | Handbook | | | |
| | Material Purcha | ase Cost: $\$0.00$ |) | | | |
| | 10 | 0.00 tost: \$0.00 | J | | | |
| HOURLY PRO | DUCTION | | | | | |
| Truck Capacity: | aht) Basis | | | | | |
| Material v | veight: 2.100 | | Pounds/LCY | | | |
| Descr | iption: Earth - | Loam | | | | |
| Rated Pa | yload: 62,000 | | Pounds | | | |
| Payload Ca | pacity: 29.52 | | LCY | | | |

| Struck Volume: | | | | | | |
|--|--|--|--|---|--|---|
| | 17.10 L | CY | | | | |
| Heaped Volume: | 22.10 L | CY | | | | |
| Average Volume: | 19.60 L | CY | | | | |
| Adjusted Volume: | 22.10 L | CY | | | | |
| | | | | | | |
| Final | Truck Volume B | ased on Number of | Loader Passes: | 15.75 | LCY | |
| Loading Tool Capacity | | | | | | |
| | | | Buck | et Size Class: N | IA | |
| Rated Capacity: | 7.500 | LCY (heaped) | | | | - |
| Bucket Fill Factor: | 1.050 | Moist loam or sa | ndv clav (100% | - 110%) 1.050 | | |
| Adjusted Capacity: | 7.875 | LCY | | | | |
| Job Condition Corrections: | | Sit | e Altitude (ft) [,] 5 | 380 feet | | |
| | Truck | Loader | Source | | | |
| Altitude Adi: | 1.000 | 1.000 | (CAT HB |) | | |
| Job Efficiency: | 0.830 | 0.830 | (CAT HB |) | | |
| NAC | 0.020 | 0.020 | | | | |
| Net Correction: | 0.830 | 0.830 | | | | |
| Loading Tool Cycle Time: | Number o | of Loading Tool Pas | ses Required to I | Fill Truck: | 2 р | asses |
| Excavators and Front Shovel | ls: | C | | | · | |
| | | | | | | |
| Selected Value v | within this Basic | Rating: NA Rating: NA | | | | |
| Track Loaders – | Material Descrip | tion: | | | | |
| Cycle Time Elements (min.): | | | | | | |
| | | | | | | |
| Load: NA | Mai | neuver: NA | | Dump: 0.100 |) | |
| Load: NA | | neuver: NA | | Dump: 0.100 |) | |
| Load: NA Wheel and Track Loaders - | Unadjusted Basi | neuver: <u>NA</u> c Loader Cycle Tim | ne (load, dump, n | Dump: 0.100 |) .550 minu | tes |
| Load: NA Wheel and Track Loaders - Cycle Time Factors | Mar Unadjusted Basi | neuver: <u>NA</u> c Loader Cycle Tim | ne (load, dump, n | Dump: 0.100 naneuver): 0 Factor (min.) |) .550 minu Source | tes |
| Load: NA Wheel and Track Loaders - Cycle Time Factors Material: | Mar Unadjusted Basi Mixed material | neuver: NA c Loader Cycle Tim | ne (load, dump, n | Dump: 0.100 naneuver): 0 Factor (min.) 0.020 |) <u>.550</u> minu Source (Cat HB) | tes - |
| Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: | Man Unadjusted Basi Mixed material Dumped by tru | neuver: <u>NA</u> c Loader Cycle Tim 0.02 ck 0.02 | ne (load, dump, n | Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.020 |) 550 minu Source (Cat HB) (Cat HB) | tes - - |
| Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: | Man Unadjusted Basi Mixed material Dumped by tru Common owne | neuver: <u>NA</u> c Loader Cycle Tim 0.02 ck 0.02 rship of trucks and 1 | ne (load, dump, n | Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.020 -0.040 |) 550 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) | tes - - - |
| Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: | Mar Unadjusted Basi Mixed material Dumped by true Common owne Constant operat | neuver: NA c Loader Cycle Tim 0.02 ck 0.02 rship of trucks and 1 tion -0.04 | ne (load, dump, n | Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.020 -0.040 -0.040 |) .550 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) | tes |
| Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: | Man Unadjusted Basi Mixed material Dumped by true Common owne Constant operat Nominal target | neuver: NA c Loader Cycle Tim 0.02 ck 0.02 rship of trucks and 2 tion -0.04 0.00 | le (load, dump, n | Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.020 -0.040 -0.040 0.000 |) Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) | tes |
| Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: | Max Unadjusted Basi Mixed material Dumped by true Common owne Constant operat Nominal target | neuver: NA c Loader Cycle Tim 0.02 ck 0.02 rship of trucks and tion -0.04 0.00 Net Cycle Tim Adjusted Loade | loaders -0.04 | Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.020 -0.040 -0.040 0.000 -0.040 0.000 | 0.550 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes | tes |
| Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: | Mar Unadjusted Basi Mixed material Dumped by true Common owne Constant operat Nominal target | neuver: NA c Loader Cycle Tim 0.02 ck 0.02 rship of trucks and 1 tion -0.04 0.00 Net Cycle Tim Adjusted Loade Net Load Ti | e (load, dump, n loaders -0.04 e Adjustment: r Cycle Time: me per Truck: | Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.020 -0.040 -0.040 0.000 -0.040 0.000 -0.040 0.510 0.610 | 0.550 minuton Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes | tes - - - - |
| Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: | Mar Unadjusted Basi Mixed material Dumped by tru Common owne Constant operat Nominal target | neuver: NA c Loader Cycle Tim 0.02 ck 0.02 rship of trucks and 1 tion -0.04 0.00 Net Cycle Tim Adjusted Loade Net Load Ti | e (load, dump, n loaders -0.04 e Adjustment: r Cycle Time: me per Truck: | Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.020 -0.040 -0.040 0.000 -0.040 0.000 -0.040 0.510 0.610 |) minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes | tes - - - - |
| Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time: | Mar Unadjusted Basi Mixed material Dumped by true Common owne Constant operat Nominal target | neuver: NA c Loader Cycle Tim 0.02 ck 0.02 rship of trucks and 1 tion -0.04 0.00 Net Cycle Tim Adjusted Loade Net Load Ti | e (load, dump, n loaders -0.04 e Adjustment: r Cycle Time: me per Truck: | Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.020 -0.040 -0.040 0.000 -0.040 0.000 0.510 0.610 | 0.550 minutestimatest | tes - - - - |
| Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time: | Mar Unadjusted Basi Mixed material Dumped by true Common owne Constant operat Nominal target | neuver: NA c Loader Cycle Tim 0.02 ck 0.02 rship of trucks and tion -0.04 0.00 Net Cycle Tim Adjusted Loade Net Load Ti Minutes | loaders -0.04 e Adjustment: r Cycle Time: me per Truck: | Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.020 -0.040 -0.040 0.000 -0.040 0.510 0.610 for site altitude: |) Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes 0.600 | tes |
| Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time: Truck Load Time: | Mar Unadjusted Basi Mixed material Dumped by tru Common owne Constant operat Nominal target | neuver: <u>NA</u> c Loader Cycle Tim <u>0.02</u> ck 0.02 rship of trucks and 1 tion -0.04 0.00 Net Cycle Tim Adjusted Loade Net Load Ti Minutes Minutes | e (load, dump, n loaders -0.04 e Adjustment: r Cycle Time: me per Truck: Adjusted Adjusted | Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.020 0.040 -0.040 0.000 -0.040 0.000 -0.040 0.610 for site altitude: for site altitude: | 0.550 minutes Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes 0.600 0.610 0.610 | tes - - - - Minute Minute |
| Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time: Truck Load Time: k Maneuver and Dump Time: | Man Unadjusted Basi Mixed material Dumped by true Common owne Constant operat Nominal target | neuver: NA c Loader Cycle Tim 0.02 ck 0.02 rship of trucks and tion -0.04 0.00 Net Cycle Tim Adjusted Loade Net Load Ti Minutes Minutes Minutes | loaders -0.04 e Adjustment: me per Truck: Majusted Adjusted Adjusted | Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.020 0.040 -0.040 0.000 -0.040 0.000 0.0510 0.610 for site altitude: | 0.550 minuton Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) 0.600 0.610 1.000 1.000 | tes |
| Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time: Truck Load Time: K Maneuver and Dump Time: | Mar Unadjusted Basi Mixed material Dumped by true Common owne Constant operat Nominal target | neuver: NA c Loader Cycle Tim 0.02 ck 0.02 rship of trucks and 1 tion -0.04 0.00 Net Cycle Tim Adjusted Loade Net Load Ti Minutes Minutes Minutes | e (load, dump, n loaders -0.04 e Adjustment: r Cycle Time: me per Truck: Adjusted Adjusted Adjusted | Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.020 0.040 -0.040 0.000 -0.040 0.610 for site altitude: - for site altitude: - for site altitude: - | 0.550 minuton Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) 0.600 0.600 0.600 0.610 1.000 0.000 | tes Minute Minute Minute |
| Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time: Truck Load Time: k Maneuver and Dump Time: Truck Travel (Haul & Return | Mar Unadjusted Basi Mixed material Dumped by true Common owne Constant operat Nominal target | neuver: NA c Loader Cycle Tim 0.02 ck 0.02 rship of trucks and tion -0.04 0.00 Net Cycle Tim Adjusted Loade Net Load Ti Minutes Minutes Minutes Road Condition: F | e (load, dump, n loaders -0.04 e Adjustment: r Cycle Time: me per Truck: Adjusted Adjusted Adjusted | Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.020 0.040 -0.040 0.000 -0.040 0.510 0.610 0.610 |) <u>Source</u> (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) 0.600 0.600 0.610 1.000 d. watered. | tes Minute Minute Minute |

| G " | 11 1 1 | | $C = 1 (\alpha/\lambda)$ | D 11 D | T (1 D | X7 1 ' | Traval | |
|----------------------|-----------|--------------------|---------------------------|----------------|--------------------|---------------------|---------------------|----------|
| Seg # | Haul D | Istance | Grade (%) | Roll. Res | Total Res | Velocity | Travel | |
| | (Ft) | | | (%) | (%) | (fpm) | (min) | |
| 1 | 1150.0 | 0 | 0.00 | 3.00 | 3.00 | 2183 | 0.790 | |
| | | | | | Haul Time: | 0.790 | minutes | |
| Return 1 | Route: | | | | - | | | |
| Seg # | Haul D | istance | Grade (%) | Roll. Res | Total Res | Velocity | Travel | |
| | (Ft) | | | (%) | (%) | (fpm) | Time (min) | |
| 1 | 1150.0 | 0 | 0.00 | 3.00 | 3.00 | 2936 | 0.546 | |
| | | | | | Return Time: | 0.546 | minutes | |
| | | | | Total Tru | ck Cycle Time: | 3.546 | minutes | |
| Looding T | o ol umit | | | | | | | |
| Pro | duction | 780.99 | LCY/Hour | | Adjusted for j | ob efficiency: | 648.22 | LCY/Hour |
| Truck Unit Pro | duction | | | | 5 5 | 2 | | - |
| | | 266.50 | LCY/Hour | | Adjusted for j | ob efficiency: | 221.19 | LCY/Hour |
| Optimal No. of ' | Trucks: | 3 | Truck(s) | | Selected Num | per of Trucks: | 3 | Truck(s) |
| | | | Adjuste | d hourly truc | k team production | on: 663 | .58 LCY/H | lour |
| | | | Adjusted sing | le truck/loade | er team productio | on [.] 648 | .22 LCY/H | lour |
| | | | - J | | r touin production | 010 | | |
| | | | Adjusted multip | le truck/loade | er team production | on: 648 | .22 LCY/H | lour |
| JOB T | IME AN | D COST | Adjusted multip | le truck/loade | er team production | on: 648 | .22 LCY/H | lour |
| JOB T | IME AN | D COST | Adjusted multip | le truck/loade | er team productio | on: 648. | .22 LCY/H | lour |
| <u>JOB T</u> Flee | IME AN | D COST 1 | Adjusted multip | le truck/loade | Fotal job time: | 30.8° | .22 LCY/H 7 Hour | s |

| Task description: | Misc Ba | ackfill w Overb | urden | | | |
|--------------------------|-------------------------|-------------------|-------------------|----------------------|-----------------------|--------------|
| Site: Rifle Gravel Pit # | 1 | Permit Action | on: New App | | Permit/Job#: <u>M</u> | 2021052 |
| PROJECT IDENT | TIFICATION | | | | | |
| Task #: 2004B | | State: Colora | ado | Ab | breviation: No | ne |
| Date: 7/19/20 |)23 C | ounty: Garfie | ld | | Filename: M0 | 52-2004B |
| User: <u>ACY</u> | | | | | | |
| Agency or o | organization name | e: DRMS | | | | |
| HOURLY EQUIP | MENT COST | | | Shift bas | is: <u>1 per day</u> | |
| | |] | Equipment Descri | ption | | |
| Tr | uck Loader Tean | n -Truck: Cat | 730 | | | , |
| Sunna | rt Equipment I o | -Loader: CA | I'980H | | | |
| Suppo | n Equipment -Lo Dur | mp Area: Cat | D8T - 8SU | | | |
| Road Ma | intenance – Motor | r Grader: CA' | Г 16М | | | |
| | -Wate | er Truck: Wat | ter Tanker, 3,500 | Gal. | | |
| Cost Breakdown. | Truck/Load | ler Team | Support | Fauinment | Maintenan | ce Fauinment |
| | Truck | Loader | Load Area | Dump Area | Motor Grader | Water Truck |
| %Utilization-machine: | 100 | 100 | 30 | 30 | 50 | 50 |
| Ownership cost/hour: | \$108.06 | \$61.69 | \$241.38 | \$241.38 | \$212.21 | \$16.65 |
| Operating cost/hour: | \$71.88 | \$58.92 | \$43.18 | \$43.18 | \$62.44 | \$18.80 |
| %Utilization-riper: | NA | 0 | 100 | NA NA | NA | NA |
| Ripper own. cost/hour: | NA | \$0.00 | \$14.11 | \$0.00 | \$0.00 | \$0.00 |
| Ripper op. cost/hour: | NA | \$0.00 | \$7.45 | \$0.00 | \$0.00 | \$0.00 |
| Operator cost/hour: | \$32.54 | \$40.71 | \$41.30 | \$41.30 | \$28.56 | \$21.12 |
| Unit Subtotals: | \$212.48 | \$161.32 | \$333.31 | \$325.86 | \$303.21 | \$56.57 |
| Number of Units: | 3 | 1 | 1 | 1 | 1 | 1 |
| Group Subtotals: | Work: | \$798.76 | Support: | \$659.17 | Maint: | \$359.78 |
| Total work team cost | /hour: \$1.817.7 | 1 | | | | |
| | | | | | | |
| MATERIAL QUA | <u>(957</u> | COV | | fastar: 1 115 | | |
| Loose volume: | 7.646 | | Swell | Iactor. <u>1.115</u> | | |
| Loose volume. | | | | | | |
| Sou | rce of estimated v | volume: Exhi | bit L & Rec Plan | | | |
| Source | Material Purchas | $\frac{11}{1000}$ |) | | | |
| | Tot | al Cost: $$0.00$ |) | | | |
| | | | | | | |
| HOURLY PROI | DUCTION | | | | | |
| Truck Capacity: | | | | | | |
| Truck Payload (weight | ht) Basis: | | | | | |
| Material we | eight: $2,100$ | oam | Pounds/LCY | | | |
| Descrit | люн. Банн - Г | 1.1.4111 | | | | |
| Rated Pav | $10ad \cdot 62.000$ | Louin | Pounds | | | |

| Struck Volume: | 17.10 | LCY | | | | |
|--|---|---|---|---|--|--------------------------------------|
| Heaped Volume: | 22.10 | LCY | | | | |
| Average Volume: | 19.60 | LCY | | | | |
| Adjusted Volume: | 22.10 | LCY | | | | |
| | | | | | | |
| Final | Truck Volume | e Based on Number o | f Loader Passes: | 15.75 | LCY | |
| Loading Tool Capacity | | | | | | |
| | 7 500 | | Buch | ket Size Class: <u>N</u> | A | _ |
| Rated Capacity: | /.500 | LCY (heaped) | 1 1 (1000/ | 1100() 1.050 | | |
| Bucket Fill Factor: | 1.050 | Moist loam or s | sandy clay (100%) | - 110%) 1.050 | | |
| Adjusted Capacity: | 7.875 | LCY | | | | |
| Job Condition Corrections: | _ | S | ite Altitude (ft.): | 5 <u>380</u> feet | | |
| | Truck | Loader | Source | | | |
| Altitude Adj: | 1.000 | 1.000 | (CAT HE | 3) | | |
| Job Efficiency: | 0.830 | 0.830 | (CAT HE | 3) | | |
| Net Correction: | 0.830 | 0.830 | | | | |
| | - | | | | | |
| Loading Tool Cycle Time: | Numbe | er of Loading Tool Pa | sses Required to | Fill Truck: | <u>2</u> p | asses |
| Excavators and Front Shovel | <u>s:</u> | | | | | |
| Machine Cycle Time vs Selected Value v | s. Job Conditio vithin this Bas | on Rating: <u>NA</u> ic Rating: NA | | | | |
| Track Loaders – | Material Desc | ription: | | | | |
| Cycle Time Elements (min.): | | 1 | | | | |
| Load: NA | Ν | Maneuver: NA | | Dump: 0.100 |) | |
| | _ | | | | | |
| Wheel and Track Loaders - | Unadjusted B | asic Loader Cycle Ti | me (load, dump, r | maneuver): 0 | . <u>550</u> minu | tes |
| Cycle Time Factors | | | | Factor (min.) | Source | |
| Material: | Mixed mater | rial 0.02 | | | | _ |
| Stocknile | | | | 0.020 | (Cat HB) | _ |
| Stockpile. | Dumped by | truck 0.02 | | 0.020 | (Cat HB) (Cat HB) | - |
| Truck Ownership: | Dumped by Common ow | truck 0.02 mership of trucks and | loaders -0.04 | 0.020 0.020 -0.040 | (Cat HB) (Cat HB) (Cat HB) | - |
| Truck Ownership: Operation: | Dumped by Common ow Constant ope | truck 0.02 ynership of trucks and eration -0.04 | loaders -0.04 | 0.020 0.020 -0.040 -0.040 | (Cat HB) (Cat HB) (Cat HB) (Cat HB) | - |
| Truck Ownership: Operation: Dump Target: | Dumped by Common ow Constant ope Nominal targ | truck 0.02 mership of trucks and eration -0.04 get 0.00 | loaders -0.04 | 0.020 0.020 -0.040 -0.040 0.000 | (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) | - |
| Truck Ownership: Operation: Dump Target: | Dumped by Common ow Constant ope Nominal targ | truck 0.02 mership of trucks and eration -0.04 get 0.00 Net Cycle Tir | l loaders -0.04 ne Adjustment: | 0.020 0.020 -0.040 -0.040 0.000 -0.040 | (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes | - - - - |
| Truck Ownership: Operation: Dump Target: | Dumped by Common ow Constant ope Nominal targ | truck 0.02 mership of trucks and eration -0.04 get 0.00 Net Cycle Tir Adjusted Load | ne Adjustment: | 0.020 0.020 -0.040 -0.040 0.000 -0.040 0.510 | (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes | - |
| Truck Ownership: Operation: Dump Target: | Dumped by Common ow Constant ope Nominal targ | truck 0.02 mership of trucks and eration -0.04 get 0.00 Net Cycle Tir Adjusted Load Net Load T | ne Adjustment: ler Cycle Time: 'ime per Truck: | 0.020 0.020 -0.040 0.000 -0.040 0.000 0.510 0.610 | (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes | - |
| Truck Ownership: Operation: Dump Target: Truck Cycle Time: | Dumped by Common ow Constant ope Nominal targ | truck 0.02 mership of trucks and eration -0.04 get 0.00 Net Cycle Tir Adjusted Load Net Load T | ne Adjustment: er Cycle Time: 'ime per Truck: | 0.020 0.020 -0.040 0.000 -0.040 0.000 0.510 0.610 | (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes | - |
| Truck Ownership: Operation: Dump Target: <u>Truck Cycle Time:</u> Truck Exchange Time: | Dumped by Common ow Constant ope Nominal targ | truck 0.02 vnership of trucks and eration -0.04 get 0.00 Net Cycle Tir Adjusted Load Net Load T Minutes | l loaders -0.04 ne Adjustment: ler Cycle Time: 'ime per Truck: Adjusted | 0.020 0.020 -0.040 0.000 -0.040 0.510 0.610 for site altitude: | (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes 0.600 | - - - - - |
| Truck Ownership: Operation: Dump Target: <u>Truck Cycle Time:</u> Truck Exchange Time: Truck Load Time: | Dumped by Common ow Constant ope Nominal targ | truck 0.02 vnership of trucks and eration -0.04 get 0.00 Net Cycle Tir Adjusted Load Net Load T Minutes Minutes | l loaders -0.04 ne Adjustment: er Cycle Time: 'ime per Truck: Adjusted Adjusted | 0.020 0.020 -0.040 0.000 -0.040 0.510 0.610 for site altitude: for site altitude: | (Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)minutesminutesminutes0.6000.610 | - - - - - - Minute |
| Truck Ownership: Operation: Dump Target: Truck Cycle Time: Truck Exchange Time: Truck Load Time: k Maneuver and Dump Time: | Dumped by Common ow Constant ope Nominal tars : 0.60 : 0.610 : 1.00 | truck 0.02 /nership of trucks and eration -0.04 get 0.00 Net Cycle Tir Adjusted Load Net Load T Minutes Minutes Minutes Minutes | l loaders -0.04 ne Adjustment: ler Cycle Time: 'ime per Truck: Adjusted Adjusted Adjusted | 0.020 0.020 -0.040 0.000 -0.040 0.510 0.610 for site altitude: for site altitude: | (Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)minutesminutesminutes0.6000.6101.000 | Minute Minute |
| Truck Ownership: Operation: Dump Target: Truck Cycle Time: Truck Exchange Time: Truck Load Time: k Maneuver and Dump Time: | Dumped by Common ow Constant ope Nominal targ | truck 0.02 vnership of trucks and eration -0.04 get 0.00 Net Cycle Tir Adjusted Load Net Load T Minutes Minutes Minutes Minutes | l loaders -0.04 ne Adjustment: ler Cycle Time: 'ime per Truck: Adjusted Adjusted Adjusted | 0.020 0.020 -0.040 0.000 -0.040 0.510 0.610 for site altitude: for site altitude: for site altitude: | (Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)minutesminutesminutes0.6000.6101.000 | Minute Minute Minute |

| Haul Ro | oute: | | | | | | | |
|----------------|----------|----------|-----------------|----------------|--------------------|----------------|-------------|----------|
| Seg # | Haul | Distance | Grade (%) | Roll. Res | Total Res | Velocity | Travel | |
| | (Ft) | | | (%) | (%) | (fpm) | Time | |
| 1 | 1150. | 00 | 0.00 | 3.00 | 3.00 | 2183 | 0.790 | |
| - | 1100 | | 0.00 | 0.00 | | | | |
| | | | | | Haul Time: | 0.790 | minutes | |
| Return | Route: | | | | | | | |
| Seg # | Haul | Distance | Grade (%) | Roll. Res | Total Res | Velocity | Travel | |
| | (Ft) | | | (%) | (%) | (fpm) | (min) | |
| 1 | 1150. | .00 | 0.00 | 3.00 | 3.00 | 2936 | 0.546 | |
| | | | | | Return Time: | 0.546 | minute | s |
| | | | | Total Tru | ck Cycle Time: | 3.546 | minute | s |
| Loading T | ool unit | | | | | | | |
| Pro | duction | 780.99 | LCY/Hour | | Adjusted for j | ob efficiency: | 648.22 | LCY/Hour |
| Truck Unit Pro | duction | | | | | - | | |
| | | 266.50 | LCY/Hour | | Adjusted for j | ob efficiency: | 221.19 | LCY/Hour |
| Optimal No. of | Trucks: | 3 | Truck(s) | | Selected Num | ber of Trucks: | 3 | Truck(s) |
| | | | Adjuste | ed hourly true | k team production | on: 663 | .58 LCY | //Hour |
| | | | Adjusted sing | le truck/loade | er team production | on: 648 | .22 LCY | //Hour |
| | | | Adjusted multip | le truck/loade | er team production | on: 648 | .22 LCY | //Hour |
| | | | | | | | | |
| <u>JOB T</u> | IME AN | ND COST | | | | | | |
| Flee | et size: | 1 | Team(s) | r | Fotal job time: | 11.7 | 9 He | ours |
| Un | it cost: | \$2.804 | /LCY | | Total job cost: | \$21,4 | 39 | |
| | | | | | | | | |

Page 1 of 2

BULLDOZER WORK

| rusk desemption. | Thuse I Grude Hunsporte | u Overburuen | | |
|---|---|---|---------------|------------|
| Rifle Gravel Pit #1 | Permit Action: | New App | Permit/Job#: | M2021052 |
| PROJECT IDENTI | FICATION | | | |
| Task #: 2101B | State: Colorado | | Abbreviation: | None |
| Date: 7/19/2023 | County: Garfield | | Filename: | M052-2101B |
| User: ACY | | | - | |
| Agency or orga | anization name: DRMS | | | |
| HOURLY EQUIPM | ENT COST | | | |
| Basic Machine: Ca | at D8T - 8SU | | | |
| Horsepower: 31 | | | | |
| Blade Type: Se | emi-Universal | | | |
| Attachment: N. | A | | | |
| Snin Basis: 1 | per day | | | |
| Data Source: (C | .KU) | | | |
| Cost Breakdown: | | | | |
| | | Utilization % | | |
| Ownership Cost/Hour: | \$241.38 | NA | | |
| Operating Cost/Hour: | \$143.92 | 100 | | |
| Ripper own. Cost/Hour: | \$0.00 | NA | | |
| Ripper op. Cost/Hour: | \$0.00 | 0 | | |
| Operator Cost/Hour: | \$41.30 | NA | | |
| | | | | |
| MATERIAL QUAN | TITIES | | | |
| MATERIAL QUANInitial Volume:16,Swell factor:1.0Loose volume:16, | TITIES 504 00 504 LCY | | | |
| MATERIAL QUAN Initial Volume: 16, Swell factor: 1.0 Loose volume: 16, 1.0 Source of estimated voluce Source of estimated swe HOURLY PRODUC | TITIES 504 00 504 LCY ume: Transported Volume ell factor: Cat Handbook CTION | | | |
| MATERIAL QUAN Initial Volume: 16, Swell factor: 1.0 Loose volume: 16, Source of estimated volu 16, Source of estimated swe 16, HOURLY PRODUC 10, Average push distance: 10, Unadjusted hourly product 10, | TITIES 504 00 504 LCY ume: Transported Volume cat Handbook CTION 400 75 feet uction: 1,017.1 LCY/hr | | | |
| MATERIAL QUAN Initial Volume: 16, Swell factor: 1.0 Loose volume: 16, Source of estimated volu 16, Source of estimated volu 16, Source of estimated swe 16, HOURLY PRODUC 16, Average push distance: 10, Unadjusted hourly produced 16, Materials consistency definition 16, | TITIES 504 00 504 LCY ume: Transported Volume cat Handbook CTION uction: 75 feet 1,017.1 LCY/hr escription: Loose stockpile 1.2 | | | |
| MATERIAL QUAN Initial Volume: 16, Swell factor: 1.0 Loose volume: 16, Source of estimated volu 16, Source of estimated volu 16, Source of estimated sweet 10 HOURLY PRODUC 10 Average push distance: 10 Unadjusted hourly product 10 Materials consistency de 10 Average push gradient: 10 Average site altitude: 10 | TITIES 504 00 504 LCY 00 504 LCY 00 state Transported Volume cat Handbook $Cat Handbook$ CTION 75 feet uction: $1,017.1$ LCY/hr escription: Loose stockpile 1.2 $0 %$ $5,380$ feet | | | |
| MATERIAL QUAN Initial Volume: 16, Swell factor: 1.0 Loose volume: 16, Source of estimated volu 16, Source of estimated swe 16, MATERIAL QUAN 16, Source of estimated volu 16, Source of estimated swe 16, Materials consistence 16, Materials consistency destruction 16, Average push distance: 10, Materials consistency destruction 16, Average push gradient: 10, Average site altitude: 10, Material weight: 10, | TITIES 504 00 504 LCY 00 504 LCY 00 ume: Transported Volume ell factor: Cat Handbook CTION 75 feet uction: 1,017.1 LCY/hr escription: Loose stockpile 1.2 0 % $5,380$ feet 2,100 lbs/LCY | | | |
| MATERIAL QUAN Initial Volume: 16, Swell factor: 1.0 Loose volume: 16, Source of estimated volu 16, Source of estimated swell 16, Materials consistency de 10, Average push distance: 10, Unadjusted hourly produce 10, Average push gradient: 10, Average site altitude: 10, Material weight: 10, Weight description: 10, | TITIES 504 00 504 LCY ume: Transported Volume cat Handbook CTION auction: 75 feet 1,017.1 LCY/hr escription: Loose stockpile 1.2 0 % 5,380 feet 2,100 lbs/LCY Earth - Loam | 2 | | |
| MATERIAL QUAN Initial Volume: 16, Swell factor: 1.0 Loose volume: 16, Source of estimated volu 16, Source of estimated volu 16, Source of estimated swe 16, HOURLY PRODUC 16, Average push distance: 10, Unadjusted hourly produce 16, Average push distance: 10, Materials consistency de 10, Average push gradient: 10, Average site altitude: 10, Material weight: 10, Weight description: 10, Job Condition Correctio 10, | TITIES 504 00 504 LCY ume: Transported Volume cat Handbook 2TION uction: 75 feet 1,017.1 LCY/hr escription: Loose stockpile 1.2 0 % 5,380 feet 2,100 lbs/LCY Earth - Loam on Factor | | | |
| MATERIAL QUAN Initial Volume: 16, Swell factor: 1.0 Loose volume: 16, Source of estimated volu 16, Source of estimated swell Source of estimated swell HOURLY PRODUC Average push distance: Unadjusted hourly product Materials consistency defined Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator | TITIES 504 00 504 LCY $\overline{504 \text{ LCY}}$ ume: Transported Volume cat Handbook $\overline{20100}$ 27ION $\overline{75 \text{ feet}}$ uction: $1,017.1 \text{ LCY/hr}$ escription: Loose stockpile 1.2 0% $5,380 \text{ feet}$ $2,100 \text{ lbs/LCY}$ Earth - Loam on Factor 0.750 | | | |
| MATERIAL QUAN Initial Volume: 16, Swell factor: 1.0 Loose volume: 16, Source of estimated volu 16, Source of estimated swell Source of estimated swell HOURLY PRODUC Average push distance: Unadjusted hourly product Materials consistency defined Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator Material consist Operator | TITIES 504 00 504 LCY $\overline{504 \text{ LCY}}$ ume: Transported Volume cat Handbook $\overline{20100}$ 2710N $\overline{75 \text{ feet}}$ uction: $1,017.1 \text{ LCY/hr}$ escription: Loose stockpile 1.2 0% $5,380 \text{ feet}$ $2,100 \text{ lbs/LCY}$ Earth - Loam on Factor 0.750 r Skill: 0.750 stency: 1.200 | <u>Source</u> (AVG.) (CAT HB) | | |
| MATERIAL QUAN Initial Volume: 16, Swell factor: 1.0 Loose volume: 16, Source of estimated volu 16, Source of estimated sweet 16, Materials consistency de 10 Average push distance: 10 Unadjusted hourly product 10 Materials consistency de 10 Average site altitude: 10 Material weight: 10 Weight description: 10 Job Condition Correction 0 Material consis 10 Dozing m 10 | TITIES 504 00 504 LCY $\overline{504 \text{ LCY}}$ ume: Transported Volume cat Handbook $\overline{204 \text{ LCY}}$ ume: Transported Volume cat Handbook $\overline{204 \text{ LCY}}$ ume: Transported Volume cat Handbook $\overline{204 \text{ LCY}}$ cat Handbook $\overline{204 \text{ LCY}}$ cat Handbook $\overline{204 \text{ LCY}}$ escription: Loose stockpile 1.2 0 % $\overline{5,380 \text{ feet}}$ 2,100 lbs/LCY Earth - Loam on Factor $\overline{750}$ r Skill: 0.750 stency: 1.200 nethod: 1.000 | <u>Source</u> (AVG.) (CAT HB) (GEN.) | | |

Task # 2101B

| Job efficiency: | 0.830 | (1 SHIFT/DAY) |
|------------------------------|---------------|---------------|
| Spoil pile: | 0.800 | (FND-RF) |
| Push gradient: | 1.000 | (CAT HB) |
| Altitude: | 1.000 | (CAT HB) |
| Material Weight: | 1.095 | (CAT HB) |
| Blade type: | 1.000 | (PAT) |
| Net correction: | 0.6544 | |
| Adjusted unit production: 6 | 665.59 LCY/hr | |
| Adjusted fleet production: 1 | 331.18 LCY/hr | |

| Fleet size: | 2 Dozer(s) |
|-------------|-------------|
| Unit cost: | \$0.641/LCY |

| Total job time: | 12.40 Hours |
|-----------------|--------------------|
| Total job cost: | \$10,578 |

BULLDOZER WORK

| Fask description: | Phase 2 - G | Frade Transported | d Overburden | | |
|---|--|--|---|---------------|------------|
| Rifle Gravel Pit #1 | | Permit Action: | New App | Permit/Job#: | M2021052 |
| PROJECT IDENTIF | FICATION | | | | |
| Task #: 2102B | S | tate: Colorado | | Abbreviation: | None |
| Date: 7/19/2023 | Сот | unty: Garfield | | Filename: | M052-2102B |
| User: ACY | | - | | - | |
| Agency or orga | anization name: | DRMS | | | |
| HOURLY EQUIPM | ENT COST | | | | |
| Basic Machine: Ca | t D8T - 8SU | | | | |
| Horsepower: 31 | 0 | | | | |
| Blade Type: Se | mi-Universal | | | | |
| Attachment: NA | 4 | | | | |
| Shift Basis: 1 | per day | | | | |
| Data Source: (C | KG) | | | | |
| Cost Breakdown: | | | | | |
| | | | Utilization % | | |
| Ownership Cost/Hour: | | \$241.38 | NA | | |
| Operating Cost/Hour: | | \$143.92 | 100 | | |
| Ripper own. Cost/Hour: | | \$0.00 | NA | | |
| D : C M | | \$0.00 | 0 | | |
| Ripper op. Cost/Hour: | | \$41.30 | ΝA | | |
| Ripper op. Cost/Hour: Operator Cost/Hour: | | \$41.30 | INA | | |
| Ripper op. Cost/Hour: Operator Cost/Hour: | \$426.60 | \$41.50 | NA | | |
| Ripper op. Cost/Hour: Operator Cost/Hour: Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: | \$426.60 \$853.20 | φ41.30 | | | |
| Ripper op. Cost/Hour: Operator Cost/Hour: Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 8,58 | \$426.60 \$853.20 <u>FITIES</u> 89 | | | | |
| Ripper op. Cost/Hour: Operator Cost/Hour: Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 8,58 Swell factor: 1.00 Loose volume: 8,58 | \$426.60 \$853.20 FITIES 89 00 89 LCY | φ+1.30 | | | |
| Ripper op. Cost/Hour: Operator Cost/Hour: Fotal unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANY Initial Volume: 8,58 Swell factor: 1.00 Loose volume: 8,58 Source of estimated volume 9,59 | \$426.60 \$853.20 <u>FITIES</u> 89 00 89 LCY ume: Tra | nsported Volume | | | |
| Ripper op. Cost/Hour: Operator Cost/Hour: Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: MATERIAL QUAN' Initial Volume: 8,58 Swell factor: Loose volume: 8,58 Source of estimated volu Source of estimated swell | \$426.60 \$853.20 FITIES 89 00 89 LCY ume: Tra 11 factor: Cat | | | | |
| Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN! Initial Volume: 8,58 Swell factor: 1.00 Loose volume: 8,58 Source of estimated volu Source of estimated swell | \$426.60 \$853.20 FITIES 89 00 89 LCY Ime: Tra 11 factor: Cat | nsported Volume | | | |
| Ripper op. Cost/Hour: Operator Cost/Hour: Fotal unit Cost/Hour: Total Initial Cost/Hour: MATERIAL QUANT Initial Volume: 8,58 Swell factor: 1.00 Loose volume: 8,58 Source of estimated volu Source of estimated swell HOURLY PRODUC | \$426.60 \$853.20 <u>TITIES</u> 89 00 89 LCY 100 11 factor: <u>Cat</u> TION | nsported Volume Handbook | | | |
| Apper op. Cost/Hour: Operator Cost/Hour: Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 8,58 Swell factor: 1.00 Loose volume: 8,58 Source of estimated volu Source of estimated swe HOURLY PRODUC | \$426.60 \$853.20 FITIES 89 00 89 LCY 100 11 factor: Tra 11 factor: Cat TION | insported Volume Handbook | | | |
| Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN! Initial Volume: 8,58 Swell factor: 1.00 Loose volume: 8,58 Source of estimated volu Source of estimated swell HOURLY PRODUC Average push distance: | \$426.60 \$853.20 <u>FITIES</u> 89 00 89 LCY Ime: Tra 11 factor: Cat <u>TION</u> <u>75 fee</u> <u>75 fee</u> | insported Volume Handbook | | | |
| Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 8,58 Swell factor: 1.00 Loose volume: 8,58 Source of estimated volu 8,58 Source of estimated swe 8,58 HOURLY PRODUC Average push distance: Unadjusted hourly product 100 | \$426.60 \$853.20 FITIES 89 00 89 LCY 10 me: Tra 11 factor: Cat TION 75 fee 1,017 | nsported Volume Handbook | | | |
| Ripper op. Cost/Hour: Operator Cost/Hour: Fotal unit Cost/Hour: Fotal Initial Cost/Hour: MATERIAL QUANT Initial Volume: 8,58 Swell factor: 1.00 Loose volume: 8,58 Source of estimated volu Source of estimated swell HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de | \$426.60 \$853.20 FITIES 89 00 89 LCY Ime: Tra 11 factor: Cat TION action: 75 fee 1,017 escription: L | insported Volume Handbook et .1 LCY/hr .oose stockpile 1.2 | | | |
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| Ripper op. Cost/Hour: Operator Cost/Hour: Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 8,58 Swell factor: 1.00 Loose volume: 8,58 Source of estimated volu 8,59 Source of estimated swell 8,59 HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description: | \$426.60 \$853.20 FITIES 89 00 89 LCY ume: Tra 11 factor: Cat TION action: 1,017 escription: L 0 % 5,380 feet 2,100 lbs/LC Earth - Loar | et .1 LCY/hr .oose stockpile 1.2 | | | |
| Ripper op. Cost/Hour: Operator Cost/Hour: Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 8,58 Swell factor: 1.00 Loose volume: 8,58 Source of estimated volu 8,59 Source of estimated volu 8,59 Source of estimated volu 8,59 Average push distance: 1.00 Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description: (ob Condition Correction) 100 | \$426.60 \$853.20 FITIES 89 00 89 LCY Ime: Tra 11 factor: Cat TION action: 1,017 action: 1,017 act | et .1 LCY/hr .oose stockpile 1.2 | | | |
| Ripper op. Cost/Hour: Operator Cost/Hour: Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: MATERIAL QUANY Initial Volume: 8,58 Swell factor: 1.00 Loose volume: 8,59 Source of estimated volu Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description: Iob Condition Correction Operator | \$426.60 \$853.20 FITIES 89 00 89 LCY Ime: Tra 11 factor: Cat TION 11 factor: Cat TION 10 (10 100 100 100 100 100 100 100 100 1 | et .1 LCY/hr .oose stockpile 1.2 | | | |
| Ripper op. Cost/Hour: Operator Cost/Hour: Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 8,5% Swell factor: 1.0% Loose volume: 8,5% Source of estimated volu Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description: Iob Condition Correction Operator Material consis | \$426.60 \$853.20 FITTIES 89 00 89 LCY ume: Tra Il factor: Cat TION action: 75 fee inction: 1,017 escription: I 0 % 5,380 feet 2,100 lbs/LC Earth - Loar n Factor Skill: tency: | nsported Volume Handbook et .1 LCY/hr .oose stockpile 1.2 CY n 0.750 1.200 | | | |
| Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 8,58 Swell factor: 1.00 Loose volume: 8,58 Source of estimated volu Source of estimated volu Source of estimated swel HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description: Iob Condition Correction Operator Material consis Dozing material consis | \$426.60 \$853.20 FITTIES 89 00 89 LCY ume: Tra Il factor: Cat TION 75 fea action: 1,017 escription: L 0 % 5,380 feet 2,100 lbs/LC Earth - Loar n Factor Skill: tency: ethod: | | <u>Source</u> (AVG.) (CAT HB) (GEN.) | | |

| Job efficiency: | 0.830 | (1 SHIFT/DAY) |
|------------------------------|---------------|---------------|
| Spoil pile: | 0.800 | (FND-RF) |
| Push gradient: | 1.000 | (CAT HB) |
| Altitude: | 1.000 | (CAT HB) |
| Material Weight: | 1.095 | (CAT HB) |
| Blade type: | 1.000 | (PAT) |
| Net correction: | 0.6544 | |
| Adjusted unit production: 6 | 665.59 LCY/hr | |
| Adjusted fleet production: 1 | 331.18 LCY/hr | |

| Fleet size: | 2 Dozer(s) |
|-------------|-------------|
| Unit cost: | \$0.641/LCY |

| Total job time: | 6.45 Hours |
|-----------------|-------------------|
| Total job cost: | \$5,505 |

BULLDOZER WORK

| Fask description: | Phase 3 - Grade | Transported | l Overburden | | |
|--|---|--|---|---------------|-------------|
| Rifle Gravel Pit #1 | Per | mit Action: | New App | Permit/Job#: | M2021052 |
| PROJECT IDENTIF | ICATION | | | | |
| Task #· 2103B | State: | Colorado | | Abbreviation. | None |
| Date: $7/19/2023$ | County: | Garfield | | Filename: | M052-2103b |
| User: ACY | County. | Guillela | | | 11002 21000 |
| Agency or orga | nization name: DF | RMS | | | |
| HOURLY EQUIPMI | ENT COST | | | | |
| Basic Machine: Cat | t D8T - 8SU | | | | |
| Horsepower: 310 | 0 | | | | |
| Blade Type: Ser | mi-Universal | | | | |
| Attachment: NA | A | | | | |
| Shift Basis: <u>1 p</u> | er day | | | | |
| Data Source: (Cl | RG) | | | | |
| Cost Breakdown: | | | | | |
| | | | Utilization % | | |
| Ownership Cost/Hour: | | \$241.38 | NA | | |
| Operating Cost/Hour: | | \$143.92 | 100 | | |
| Ripper own. Cost/Hour: | | \$0.00 | NA | | |
| Ripper op. Cost/Hour: | | \$0.00 | 0 | | |
| | | \$41.30 | NA | | |
| Operator Cost/Hour: | | φ.1.00 | | | |
| Operator Cost/Hour: | | φ.ricσ | | | |
| Operator Cost/Hour: Fotal unit Cost/Hour: | \$426.60 | ф ПЛСО | | | |
| Operator Cost/Hour: Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: | \$426.60 \$853.20 | ¢ ine c | | | |
| Operator Cost/Hour: Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: MATERIAL QUANT | \$426.60 \$853.20 | <i></i> | | | |
| Operator Cost/Hour: Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: MATERIAL QUANT | \$426.60 \$853.20 | | | | |
| Operator Cost/Hour: Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 20,0 Swell factor: 100 | \$426.60 \$853.20 FITIES 012 | | | | |
| Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 20,0 Swell factor: 1.00 Loose volume: 20,0 | \$426.60 \$853.20 FITIES 012 00 M2 L CX | | | | |
| Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 20,0 Swell factor: 1.00 Loose volume: 20,0 | \$426.60 \$853.20 FITIES 012 00 012 LCY | | | | |
| Operator Cost/Hour: Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 20,0 Swell factor: 1.00 Loose volume: 20,0 Source of estimated volu | \$426.60 \$853.20 FITIES 012 00 012 LCY me:Transport | | | | |
| Operator Cost/Hour: Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 20,0 Swell factor: 1.00 Loose volume: 20,0 Source of estimated volu Source of estimated swel | \$426.60 \$853.20 FITIES 012 00 012 LCY me: Transport 1 factor: Cat Hand | ted Volume | | | |
| Operator Cost/Hour: Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 20,0 Swell factor: 1.00 Loose volume: 20,0 Source of estimated volu Source of estimated volu Source of estimated swel HOURLY PRODUCT | \$426.60 \$853.20 EITIES 012 00 012 LCY me: Transport 1 factor: Cat Hand TION | ted Volume | | | |
| Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 20,0 Swell factor: 1.00 Loose volume: 20,0 Source of estimated volu Source of estimated volu Source of estimated swel HOURLY PRODUCY | \$426.60 \$853.20 TITIES 012 00 012 LCY me: Transport 1 factor: Cat Hand TION | ted Volume | | | |
| Operator Cost/Hour: Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 20,0 Swell factor: 1.00 Loose volume: 20,0 Source of estimated volu Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: | \$426.60 \$853.20 FITIES 012 00 012 LCY me: Transport 1 factor: Cat Hand FION 75 feet 1 017 1 LC | ted Volume book | | | |
| Operator Cost/Hour: Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 20,0 Swell factor: 1.00 Loose volume: 20,0 Source of estimated volu Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ | \$426.60 \$853.20 CITIES 012 00 012 LCY me: Transport 1 factor: Cat Hand TION ction: 75 feet 1,017.1 LC | ted Volume book | | | |
| Operator Cost/Hour: Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 20,0 Swell factor: 1.00 Loose volume: 20,0 Source of estimated volu Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ Materials consistency destinated set | \$426.60 \$853.20 FITIES 012 00 012 LCY me: | ted Volume lbook Y/hr stockpile 1.2 | | | |
| Operator Cost/Hour: Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 20,0 Swell factor: 1.00 Loose volume: 20,0 Source of estimated volu Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ Materials consistency dest Average push gradient: | \$426.60 \$853.20 FITIES 012 00 012 LCY me: Transport 1 factor: Cat Hand TION ction: 75 feet ction: 1,017.1 LC scription: Loose state 0 % | ted Volume book | | | |
| Operator Cost/Hour: Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 20,0 Swell factor: 1.00 Loose volume: 20,0 Source of estimated volu Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ Materials consistency des Average push gradient: Average push gradient: Average push gradient: Average site altitude: | \$426.60 \$853.20 EITIES 012 00 012 LCY me: Transport 1 factor: Cat Hand TION ction: 1,017.1 LC scription: Loose state 0 % 5,380 feet | ted Volume book Y/hr stockpile 1.2 | | | |
| Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 20,0 Swell factor: 1.00 Loose volume: 20,0 Source of estimated volu Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ Materials consistency des Average push gradient: Average site altitude: | \$426.60 \$853.20 TITIES 012 00 012 LCY me: Transport 1 factor: Cat Hand TION ction: 1,017.1 LC scription: Loose state 0 % 5,380 feet | Y/hr stockpile 1.2 | | | |
| Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 20,0 Swell factor: 1.00 Loose volume: 20,0 Source of estimated volu Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ Materials consistency des Average push gradient: Average site altitude: Material weight: | \$426.60 \$853.20 CITIES 012 00 012 LCY me: Transport 1 factor: Cat Hand TION ction: 75 feet 1,017.1 LC scription: Loose state 0 % 5,380 feet 2,100 lbs/LCY | Y/hr stockpile 1.2 | | | |
| Operator Cost/Hour: Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 20,0 Swell factor: 1.00 Loose volume: 20,0 Source of estimated volu Source of estimated volu Source of estimated volu Source of estimated swel HOURLY PRODUCY Average push distance: Unadjusted hourly produ Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: | \$426.60 \$853.20 CITIES 012 00 012 LCY me: Transport 1 factor: Cat Hand TION ction: 75 feet 1,017.1 LC scription: Loose state 0 % 5,380 feet 2,100 lbs/LCY Earth - Loam | ted Volume book | | | |
| Operator Cost/Hour: Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 20,0 Swell factor: 1.00 Loose volume: 20,0 Source of estimated volu Source of estimated volu Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Iob Condition Correction | \$426.60 \$853.20 FITIES 012 00 012 LCY me: Transport 1 factor: Cat Hand TION ction: 75 feet 1,017.1 LC scription: Loose s 0% 5,380 feet 2,100 lbs/LCY Earth - Loam Factor | ted Volume book | | | |
| Operator Cost/Hour: Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 20,0 Swell factor: 1.00 Loose volume: 20,0 Source of estimated volu Source of estimated volu So | \$426.60 \$853.20 FITIES 012 00 012 LCY me: Transport 1 factor: Cat Hand TION ction: 75 feet ction: 1,017.1 LC scription: Loose state 0 % 5,380 feet 2,100 lbs/LCY Earth - Loam h Factor 0. | The value of the v | | | |
| Operator Cost/Hour: Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 20,0 Swell factor: 1.00 Loose volume: 20,0 Source of estimated volu Source of estimated volu Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Iob Condition Correction Operator Material consist | \$426.60 \$853.20 FITIES 012 00 012 LCY me: Transport 1 factor: Cat Hand TION ction: 1,017.1 LC scription: Loose state 0 % 5,380 feet 2,100 lbs/LCY Earth - Loam h Factor Skill: 0. tency: 1. | | <u>Source</u> (AVG.) (CAT HB) | | |
| Operator Cost/Hour: Fotal unit Cost/Hour: Fotal Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 20,0 Swell factor: 1.00 Loose volume: 20,0 Source of estimated volu Source of estimated volu Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: <u>Iob Condition Correction</u> Operator Material consist Dozing me | \$426.60 \$853.20 CITIES 012 00 012 LCY me: Transport 1 factor: Cat Hand TION ction: 1,017.1 LC scription: Loose state 0 % 5,380 feet 2,100 lbs/LCY Earth - Loam n Factor Skill: 0. string: 0. 0. 1. theory: 1. | | <u>Source</u> (AVG.) (CAT HB) (GEN.) | | |

Adjusted fleet production: 1331.18 LCY/hr

| Job efficiency: | 0.830 | (1 SHIFT/DAY) |
|------------------------------|-------------|---------------|
| Spoil pile: | 0.800 | (FND-RF) |
| Push gradient: | 1.000 | (CAT HB) |
| Altitude: | 1.000 | (CAT HB) |
| Material Weight: | 1.095 | (CAT HB) |
| Blade type: | 1.000 | (PAT) |
| Net correction: | 0.6544 | |
| Adjusted unit production: 66 | 5.59 LCY/hr | |

| Fleet size: | 2 Dozer(s) |
|-------------|-------------|
| Unit cost: | \$0.641/LCY |

| Total job time: | 15.03 Hours |
|-----------------|--------------------|
| Total job cost: | \$12,826 |

BULLDOZER WORK

| Task description: | Misc Grade Ti | ansported (| Overburden | | |
|---|--|-------------|---------------|---------------|------------|
| Rifle Gravel Pit #1 | Per | mit Action: | New App | Permit/Job#: | M2021052 |
| PROJECT IDENTIF | ICATION | | | | |
| Task #: 2104B | State: | Colorado | | Abbreviation: | None |
| Date: $7/19/2023$ | County: | Garfield | | Filename: | M052-2104B |
| User: ACY | | | | | |
| Agency or organ | nization name: | RMS | | | |
| HOURLY EQUIPME | ENT COST | | | | |
| Basic Machine: Cat | : D8T - 8SU | | | | |
| Horsepower: 310 |) | | | | |
| Blade Type: Ser | ni-Universal | | | | |
| Attachment: NA | | | | | |
| Shift Basis: <u>1 p</u> | er day | | | | |
| Data Source: (Ch | RG) | | | | |
| Cost Breakdown: | | | | | |
| | | | Utilization % | | |
| Ownership Cost/Hour: | | \$241.38 | NA | | |
| Operating Cost/Hour: | | \$143.92 | 100 | | |
| Ripper own. Cost/Hour: | | \$0.00 | NA | | |
| Ripper op. Cost/Hour: | | \$0.00 | 0 | | |
| inpper opt cost from | | ¢ 41 20 | NT A | | |
| Operator Cost/Hour: | | \$41.30 | INA | | |
| Operator Cost/Hour: | \$426.60 | \$41.30 | INA | | |
| Operator Cost/Hour: Total unit Cost/Hour: | \$426.60 | \$41.30 | | | |
| Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: | \$426.60 \$853.20 | \$41.30 | | | |
| Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: | \$426.60 \$853.20 | \$41.30 | | | |
| Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT | \$426.60 \$853.20 | \$41.30 | | | |
| Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: <u>MATERIAL QUANT</u> Initial Volume: 7.64 | \$426.60 \$853.20 TTIES 6 | \$41.30 | | | |
| Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 7,64 Swell factor: 1.00 | \$426.60 \$ 853.20 TTIES 6 0 | | | | |
| Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 7,64 Swell factor: 1.00 Loose volume: 7,64 | \$426.60 \$853.20 TTIES 6 0 6 LCY | \$41.30 | | | |
| Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 7,64 Swell factor: 1.00 Loose volume: 7,64 | \$426.60 \$853.20 TTIES 6 0 6 LCY Transport | \$41.30 | | | |
| Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 7,64 Swell factor: 1.00 Loose volume: 7,64 Source of estimated volu Source of estimated swell | \$426.60 \$853.20 TTIES 6 0 6 LCY me: Transpor [factor: Cat Hand | | | | |
| Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 7,64 Swell factor: 1.00 Loose volume: 7,64 Source of estimated volu Source of estimated swell | \$426.60 \$853.20 TTIES 6 0 6 LCY me: Transpor 1 factor: Cat Hand | \$41.30 | | | |
| Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 7,64 Swell factor: 1.00 Loose volume: 7,64 Source of estimated volu Source of estimated swell HOURLY PRODUCT | \$426.60 \$853.20 TTIES 6 0 6 LCY me: Transpor 1 factor: Cat Hand FION | \$41.30 | | | |
| Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 7,64 Swell factor: 1.00 Loose volume: 7,64 Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: | \$426.60 \$853.20 TTIES 6 0 6 LCY me: Transpor 1 factor: Cat Hand FION 75 feet | \$41.30 | | | |
| Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 7,64 Swell factor: 1.00 Loose volume: 7,64 Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product | \$426.60 \$853.20 TTIES 6 0 6 LCY me: Transpor 1 factor: Cat Hand TION Cat Hand TION 75 feet 1,017.1 LC | \$41.30 | | | |
| Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 7,64 Swell factor: 1.00 Loose volume: 7,64 Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc | \$426.60 \$853.20 TTIES 6 0 6 LCY me: Transpor 1 factor: Cat Hand FION Cat Hand CION 75 feet 1,017.1 LC scription: Loose | \$41.30 | | | |
| Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 7,64 Swell factor: 1.00 Loose volume: 7,64 Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product | \$426.60 \$853.20 TTIES 6 0 6 LCY me: Transpor 1 factor: Cat Hand FION ction: 75 feet 1,017.1 LC scription: Loose | \$41.30 | | | |
| Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 7,64 Swell factor: 1.00 Loose volume: 7,64 Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: | \$426.60 \$853.20 TTIES 6 0 6 LCY me: Transpor 6 LCY me: Cat Hand FION FION Cat Hand Cat Hand FION Construction: 1,017.1 LC scription: Loose 0 % | \$41.30 | | | |
| Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 7,64 Swell factor: 1.00 Loose volume: 7,64 Source of estimated volut Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: | \$426.60 \$853.20 TTIES 6 0 6 LCY me: Transpor 1 factor: Cat Hand EION ction: 75 feet 1,017.1 LC scription: Loose 0 % 5,380 feet | \$41.30 | | | |
| Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 7,64 Swell factor: 1.00 Loose volume: 7,64 Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: | \$426.60 \$853.20 TTIES 6 0 6 LCY me: Transpor 1 factor: Cat Hand EION ction: 75 feet 1,017.1 LC scription: Loose 0 % 5,380 feet 2,100 lbs/LCY | | | | |
| Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 7,64 Swell factor: 1.00 Loose volume: 7,64 Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: | \$426.60 \$853.20 TTIES 6 0 6 LCY me: Transpor 1 factor: Cat Hand TION Cat Hand TION 75 feet 1,017.1 LC scription: Loose 0 % 5,380 feet 2,100 lbs/LCY Earth - Loam | | | | |
| Materials consistency description: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 7,64 Swell factor: 1.00 Loose volume: 7,64 Source of estimated volu Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction | \$426.60 \$853.20 TTIES 6 0 6 LCY me: Transpor 1 factor: Cat Hand EION ction: 75 feet ction: 1,017.1 LC scription: Loose 0 % 5,380 feet 2,100 lbs/LCY Earth - Loam Factor Earth - Loam | \$41.30 | | | |
| Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 7,64 Swell factor: 1.00 Loose volume: 7,64 Source of estimated volu 50 Source of estimated volu 50 Source of estimated swell 100 HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator 3 | $ \begin{array}{c c} & \$426.60 \\ & \$853.20 \\ \hline & \textbf{TTIES} \\ & 6 \\ & 0 \\ & 6 \\ & 1 \\ & 6 \\ & 1 \\ & 6 \\ & 1 \\ & 6 \\ \hline & 6 \\ & 1 \\ & 6 \\ \hline & 75 \\ \hline & 6 \\ \hline & 1,017.1 \\ \hline & 1 \\ \hline & 6 \\ \hline & 75 \\ \hline & 6 \\ \hline & 1,017.1 \\ \hline & 1 \\ \hline & 6 \\ \hline & 75 \\ \hline & 75 \\ \hline & 6 \\ \hline & 75 \\ \hline \hline & 75 \\ \hline & 75 \\ \hline & 75 \\ \hline & 75 \\ \hline \hline \hline & 75 \\ \hline \hline \hline & 75 \\ \hline \hline \hline \hline & 75 \\ \hline $ | \$41.30 | | | |
| Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 7,64 Swell factor: 1.00 Loose volume: 7,64 Source of estimated volur Source of estimated volur Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator 3 Material consistency | $\begin{array}{c c} \$426.60 \\ \$853.20 \\ \hline \\ $ | \$41.30 | | | |
| Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 7,64 Swell factor: 1.00 Loose volume: 7,64 Source of estimated volur Source of estimated volur Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator Material consiste | \$426.60 \$853.20 TTIES 6 0 6 LCY me: Transpor 1 factor: Cat Hand CION ction: 75 feet 1,017.1 LC scription: Loose 0 % 5,380 feet 2,100 lbs/LCY Earth - Loam Factor Skill: 0 ency: 1 thod: 1 | \$41.30 | | | |

| Job efficiency: | 0.830 | (1 SHIFT/DAY) |
|------------------------------|---------------|---------------|
| Spoil pile: | 0.800 | (FND-RF) |
| Push gradient: | 1.000 | (CAT HB) |
| Altitude: | 1.000 | (CAT HB) |
| Material Weight: | 1.095 | (CAT HB) |
| Blade type: | 1.000 | (PAT) |
| Net correction: | 0.6544 | |
| Adjusted unit production: 6 | 665.59 LCY/hr | |
| Adjusted fleet production: 1 | 331.18 LCY/hr | |

| Fleet size: | 2 Dozer(s) |
|-------------|-------------|
| Unit cost: | \$0.641/LCY |

| Total job time: | 5.74 Hours |
|-----------------|-------------------|
| Total job cost: | \$4,901 |

| | Task description: | Phase 1 - Decompaction | | | | |
|-------------------|---|--|---------------------------------|---|---------------------------|--------|
| Site | : Rifle Gravel Pit | #1 Permit Actio | on: New App | Permit/Job | o#: M2021052 | |
| | PROJECT IDEN | TIFICATION | | | | |
| | Task #: 3001 Date: 7/19/2 User: ACY | B State: Colora 2023 County: Garfiel | do Id | Abbreviation Filename | :: None :: M052-3001B | |
| | Agency of | organization name: DRMS | | | | |
| | HOURLY EQUI | PMENT COST | | | | |
| | Basic Ma Ripper Attac | achine: Cat D8T - 8SU hment: 3-Shank Ripper | | Horsepower: Shift Basis: Data Source: | 310 1 per day (CRG) | |
| | Cost Breakdown [.] | | | | (010) | |
| | Ripper | Ownership Cost/Hour: Operating Cost/Hour: Ownership Cost/Hour: | \$241.38 \$143.92 \$14.11 | Utilization % NA 100 NA | | |
| | Ripper | Operating Cost/Hour: | \$7.45 \$41.30 | 100 NA | | |
| | | Total Unit Cost/Hour: | \$448.16 | 1111 | | |
| | | Total Fleet Cost/Hour: | \$896.32 | | | |
| | MATERIAL QU Alternate Methods: | ANTITIES | Selected estimating | method: Area | | - |
| Seismic: Area: | NA 3.67 | Bank Volume acres Rip Depth (ft | e: NA): 2.00 | BCY Volume: 11,842 | NA BCY | or CCY |
| | 5 | Source of estimated quantity: | hibit L & Rec Plan | | | |
| | HOURLY PROI | DUCTION | | | | |
| | <u>Seismic:</u> | Seismic Velocity: | NA | feet/second | | |
| | Area: | | 2.54 | C | | |
| | | Average Ripping Depth: | 2.56 | feet/pass | | |
| | | Average Ripping Length: | 100.00 | feet/pass | | |
| | | Average Dozer Speed: | 88.00 | feet/minute | | |
| | | Average Maneuver Time: Production per unit area: | 0.25 | minutes/pass acres/hour | | |
| | Job Condition Corr | ection Factors | | | | |
| | <u>Unad</u> | iusted Hourly Unit Production | 0 703 | Acres/hr | | |
| | Chiud | Site Altitude: | 5 280 | fact | | |
| | | Altitude Adj: Job Efficiency: Net Correction: | 1.00 0.83 | (CAT HB) (1 shift/day) | | |
| | | Adjusted Hourly Unit Producti Adjusted Hourly Fleet Producti | on: 0.58 on: 1.17 | Acres/hr Acres/hr | | |
| | JOB TIME AND | <u>) COST</u> | | | | |
| | Fleet size: | 2 Grader(s) | Total job tim | e: <u>3.14</u> | Hours | |
| | Unit cost: | \$767.601 Per acre | Total job cos | st: \$2,817 | | |

| | Task description: | Phas | se 2 - Decompa | action | | | | | |
|----------|---|---|---|--------------------------|--|---|--------------------------|------------------------|------------|
| Site | : Rifle Gravel Pi | t #1 | Perm | it Action: | New App | | Permit/Job#: | M20210 | 52 |
| | PROJECT IDE | NTIFICATI | <u>ON</u> | | | | | | |
| | Task #: 300 Date: 7/19 User: AC | 2B //2023 Y | State: County: | Colorado Garfield | | Ab | breviation: Filename: | None M052-30 | 02B |
| | Agency | or organization | name: DRM | мS | | | | | |
| | HOURLY EOU | JIPMENT CO | OST | | | | | | |
| | Basic M Ripper Atta | Iachine: Cat chment: 3-S | t D8T - 8SU Shank Ripper | | | Horsepower: Shift Basis: Data Source: | <u> </u> | 310 ber day CRG) | |
| | Cost Breakdown: | | | | | | . <u></u> | | |
| | Rippe Rippe | Ownership Co Operating Co r Ownership Co er Operating Co Operator Co Total Unit Co | ost/Hour: ost/Hour: ost/Hour: ost/Hour: ost/Hour: | | \$241.38 \$143.92 \$14.11 \$7.45 \$41.30 \$448.16 | Utilization % NA 100 NA 100 NA | | | |
| | | Total Float C | ost/Hour | \$804 | (2) | | | | |
| | MATERIAL Q | <u>UANTITIES</u> | | Sele | ected estimating | method: <u>Ar</u> | ea | | |
| Seismic: | NA | | Bank | Volume: | NA | BCY | | NA | |
| Area: | 1.91 | acres | Rip D | epth (ft): | 2.00 | Volume: | 6,163 | | BCY or CCY |
| | | Source of estin | mated quantity | : Exhibit | L & Rec Plan | | | | |
| | HOURLY PRO | DUCTION | | | | | | | |
| | Seismic: | | Seismic Veloci | ity: | NA | feet/se | econd | | |
| | Area: | Auoroa | a Dinning Don | the | 256 | faat/p | | | |
| | | Averag | ge Ripping Dep | lth: | 7.08 | feet/pa | ass | | |
| | | Average | e Ripping Leng | gth: | 100.00 | feet/pa | ass | | |
| | | Aver | age Dozer Spe | ed: | 88.00 | feet/m | inute | | |
| | | Produc | tion per unit ar | rea: | 0.703 | acres/ | hour | | |
| | Job Condition Con | rection Factors | 5 | | | | | | |
| | Una | djusted Hourly | Unit Production | on: | 0.703 | Acres | /hr | | |
| | | | Site Altitu | de: | 5,380 | feet | | | |
| | | | Altitude A | .dj: | 1.00 | (CAT) | HB) ft/day) | | |
| | | | Net Correcti | on: | 0.83 | (1 shii multir | olier | | |
| | | Adjusted Adjusted | Hourly Unit P Hourly Fleet P | roduction: roduction: | 0.58 1.17 | Acres/hr Acres/hr | | | |
| | JOB TIME AN | D COST | | | | | | | |
| | Fleet size: | 2 | Grader(s) | | Total job time | e: | 1.64 | Но | urs |
| | Unit cost: | \$767.601 | Per acre | | Total job cos | st: | \$1,466 | | |

| | Task description: | Pha | se 3 - Decompaction | | | | | |
|----------|---|--|--|--|---|--------------------------|------------------------|------------|
| Site | : Rifle Gravel P | it #1 | Permit Action | n: New App |] | Permit/Job#: | M2021052 | 2 |
| | PROJECT IDE | ENTIFICATI | ON | | | | | |
| | Task #: 300 Date: 7/19 User: AC | 3B 9/2023 Y | State: <u>Colorad</u> County: <u>Garfield</u> | lo 1 | Ab | breviation: Filename: | None M052-3003 | BB |
| | Agency | or organization | name: DRMS | | | | | |
| | HOURLY EOU | JIPMENT C | OST | | | | | |
| | Basic M Ripper Atta | Machine: Ca achment: 3-S | t D8T - 8SU Shank Ripper | | Horsepower: Shift Basis: Data Source: | | 310 per day CRG) | _ |
| | Cost Breakdown: | | | | | | | |
| | Rippe Ripp | Ownership C Operating C or Ownership C er Operating C Operator C Total Unit C | ost/Hour: | \$241.38 \$143.92 \$14.11 \$7.45 \$41.30 \$448.16 | Utilization % NA 100 NA 100 NA | | | |
| | | Total Float C | ost/Hour: | 806.32 | | | | |
| | MATERIAL Q | UANTITIES <u>s:</u> | <u> </u> | elected estimating | g method: <u>Are</u> | ea | | |
| Seismic: | NA | | Bank Volume | : NA | BCY | | NA | |
| Area: | 4.45 | acres | Rip Depth (ft): | 2.00 | Volume: | 14,359 | E | BCY or CCY |
| | | Source of estin | mated quantity: Exh | ibit L & Rec Plan | | | | _ |
| | HOURLY PRO | DUCTION | | | | | | |
| | <u>Seismic:</u> | | Seismic Velocity: | NA | feet/se | cond | | |
| | Area: | A | Dinning Douth | 250 | for a t /m | | | |
| | | Averag | ge Ripping Depth: | 7.08 | feet/pa | iss iss | | |
| | | Average | e Ripping Length: | 100.00 | feet/pa | ISS | | |
| | | Aver | age Dozer Speed: | 88.00 | feet/m | inute | | |
| | | Average | tion per unit area: | 0.25 | minute acres/h | our | | |
| | Job Condition Co | rrection Factors | | | | | | |
| | Una | adjusted Hourly | Unit Production: | 0.703 | Acres/ | ĥr | | |
| | | | Site Altitude: | 5,380 | feet | | | |
| | | | Altitude Adj: | 1.00 | (CAT | HB) | | |
| | | | Job Efficiency: | 0.83 | (1 shif | t/day) lier | | |
| | | Adjusted Adjusted | Hourly Unit Productio Hourly Fleet Productio | n: 0.58 n: 1.17 | Acres/hr Acres/hr | | | |
| | JOB TIME AN | D COST | | | | | | |
| | Fleet size: | 2 | _ Grader(s) | Total job tim | ne: | 3.81 | Hour | S |
| | Unit cost: | \$767.601 | Per acre | Total job co | st: | \$3,416 | | |

| , | Task description: | Misc Decompacti | ion | | | | |
|----------|--|---|---|--|---|---|------------|
| Site: | Rifle Gravel Pit #1 | Permi | t Action: 1 | New App | Per | rmit/Job#: <u>M</u> | (2021052 |
| - | PROJECT IDENTIF | FICATION | | | | | |
| | Task #: 3004B | State: | Colorado | | Abbr | eviation: No | one |
| | Date: 7/19/2023 | County: | Garfield | | Fi | lename: M | 052-3004B |
| | User: ACY | | | | | | |
| | Agency or orga | anization name: DRM | IS | | | | |
| - | HOURLY EQUIPM | ENT COST | | | | | |
| | Basic Machin | e: Cat D8T - 8SU | | | Horsepower: | 310 | |
| | Ripper Attachmer | t: 3-Shank Ripper | | - | Shift Basis: | 1 per da | ay |
| | | | | _ | Data Source: | (CRG |) |
| 1 | Cost Breakdown: | | | | | | |
| | | | | | Utilization % | | |
| | Own | ership Cost/Hour: | | \$241.38 | NA | | |
| | Ope | rating Cost/Hour: | | \$143.92 | 100 | | |
| | Ripper Own | ership Cost/Hour: | | \$14.11 | <u> </u> | | |
| | Cipper Ope | erator Cost/Hour. | | \$7.43 | NA | | |
| | Op Tota | l Unit Cost/Hour: | | \$448.16 | | | |
| | 1000 | | | \$110.10 | | | |
| | Total | Fleet Cost/Hour: | \$896. | 32 | | | |
| - | MATERIAL QUAN | <u>FITIES</u> | Select | ted estimating | method: Area | | |
| : | Alternate Methods: | | | | | | |
| Seismic: | NA | Bank V | Volume: 1 | NA | BCY | NA | |
| Area: | 1.72 ac | cres Rip De | pth (ft): 2 | 2.00 | Volume: 5, | 550 | BCY or CCY |
| | Sourc | e of estimated quantity: | Exhibit I | & Rec Plan | | | |
| | HOURLY PRODUC | TION | | | | | |
| ÷ | Colomia | | | | | | |
| ! | <u>Seismic:</u> | Seismic Velocit | · . | NΔ | feet/seco | nd | |
| | | Seisine veiden | | 1171 | | na | |
| : | <u>Area:</u> | | | 0.54 | 6 / | | |
| | | Average Ripping Dept | :h: | 2.56 | feet/pass | | |
| | | Average Ripping with | | 110 | fact/page | | |
| | | $\Delta versae Rinning Lengt$ | h. | 7.08 | feet/pass | | |
| | | Average Ripping Lengt Average Dozer Spee | h: d: | 7.08 100.00 88.00 | feet/pass feet/pass feet/minu | ite | |
| | | Average Ripping Lengt Average Dozer Spee Average Maneuver Tim | :h: ed: ne: | 7.08 100.00 88.00 0.25 | feet/pass feet/pass feet/minu minutes/ | ite bass | |
| | | Average Ripping Lengt Average Dozer Spee Average Maneuver Tim Production per unit are | h: ed: he: ea: | 7.08 100.00 88.00 0.25 0.703 | feet/pass feet/pass feet/minu minutes/j acres/hou | ite pass ir | |
| | Job Condition Correction | Average Ripping Lengt Average Dozer Spee Average Maneuver Tim Production per unit are <u>n Factors</u> | h: d: he: ea: | 7.08 100.00 88.00 0.25 0.703 | feet/pass feet/pass feet/minu minutes/j acres/hou | ite pass ir | |
| | Job Condition Correction Unadjuste | Average Ripping Lengt Average Dozer Spee Average Maneuver Tim Production per unit are <u>n Factors</u> d Hourly Unit Productio | h: d: e: ea: n: | 7.08 100.00 88.00 0.25 0.703 | feet/pass feet/pass feet/minu minutes/j acres/hou | ite pass ir | |
| | Job Condition Correction Unadjuste | Average Ripping Lengt Average Dozer Spee Average Maneuver Tim Production per unit are <u>n Factors</u> d Hourly Unit Productio Site Altitud | h: d: ee: ea: n: | 7.08 100.00 88.00 0.25 0.703 0.703 5.380 | feet/pass feet/pass feet/minu minutes/j acres/hou Acres/hr feet | ite pass ir | |
| | Job Condition Correction Unadjuste | Average Ripping Lengt Average Dozer Spee Average Maneuver Tim Production per unit are <u>n Factors</u> d Hourly Unit Productio Site Altitud Altitude Ad | h: d: ee: pa: n: le: di: | 7.08 100.00 88.00 0.25 0.703 0.703 5,380 1.00 | feet/pass feet/pass feet/minu minutes/j acres/hou Acres/hr feet (CAT HI | ite pass ir 3) | |
| | Job Condition Correction Unadjuste | Average Ripping Lengt Average Dozer Spee Average Maneuver Tim Production per unit are <u>n Factors</u> d Hourly Unit Productio Site Altitud Altitude Ac Job Efficienc | h: d: ee: pa: n: le: j: | 7.08 100.00 88.00 0.25 0.703 0.703 5,380 1.00 0.83 | feet/pass feet/pass feet/minu minutes/j acres/hou Acres/hr feet (CAT HI (1 shift/d | nte pass ir 3) ay) | |
| | Job Condition Correction Unadjuste | Average Ripping Lengt Average Dozer Spee Average Maneuver Tim Production per unit are <u>n Factors</u> d Hourly Unit Productio Site Altitude Altitude Ad Job Efficienc Net Correctio | h: d: ee: pa: n: le: j: n: | 7.08 100.00 88.00 0.25 0.703 5,380 1.00 0.83 0.83 | feet/pass feet/pass feet/minu minutes/j acres/hou Acres/hr feet (CAT HI (1 shift/d multiplie | ite pass ir 3) ay) r | |
| ; | Job Condition Correction Unadjuste | Average Ripping Lengt Average Dozer Spee Average Maneuver Tim Production per unit are <u>n Factors</u> d Hourly Unit Productio Site Altitude Altitude Ad Job Efficienc Net Correctio | h: d: ee: pa: pa: le: dj: n: oduction: | 7.08 100.00 88.00 0.25 0.703 0.703 5,380 1.00 0.83 0.83 0.58 | feet/pass feet/pass feet/minu minutes/j acres/hou Acres/hr feet (CAT HI (1 shift/d multiplie Acres/hr | ite pass ir 3) ay) r | |
| | Job Condition Correction Unadjuste A | Average Ripping Lengt Average Dozer Spee Average Maneuver Tim Production per unit are <u>n Factors</u> d Hourly Unit Productio Site Altitude Altitude Ad Job Efficienc Net Correctio Adjusted Hourly Unit Pr | h: d: ee: pa: n: le: dj: y: n: oduction: | 7.08 100.00 88.00 0.25 0.703 0.703 5,380 1.00 0.83 0.83 0.58 1.17 | feet/pass feet/pass feet/minu minutes/j acres/hou Acres/hr feet (CAT HI (1 shift/d multiplie Acres/hr Acres/hr | ite pass ir 3) ay) r | |
| | Job Condition Correction Unadjuste A JOB TIME AND CO | Average Ripping Lengt Average Dozer Spee Average Maneuver Tim Production per unit are <u>n Factors</u> d Hourly Unit Productio Site Altitude Altitude Ad Job Efficienc Net Correctio Adjusted Hourly Unit Pr Adjusted Hourly Fleet Pr | h: d: ee: n: le: tj: y: n: oduction: | 7.08 100.00 88.00 0.25 0.703 5,380 1.00 0.83 0.58 1.17 | feet/pass feet/pass feet/minu minutes/j acres/hou Acres/hr feet (CAT HI (1 shift/d multiplie Acres/hr Acres/hr | ite pass ir 3) ay) r | |
| | Job Condition Correction Unadjuste A JOB TIME AND CO Fleet size: | Average Ripping Lengt Average Dozer Spee Average Maneuver Tim Production per unit are <u>n Factors</u> d Hourly Unit Productio Site Altitude Altitude Ad Job Efficienc Net Correctio Adjusted Hourly Unit Pr Adjusted Hourly Fleet Pr 2000 Grader(s) | h: d: e: pa: n: dj: dj: y: n: oduction: | 7.08 100.00 88.00 0.25 0.703 0.703 5,380 1.00 0.83 0.83 0.58 1.17 Total job time | feet/pass feet/pass feet/minu minutes/j acres/hou Acres/hr feet (CAT HI (1 shift/d multiplie Acres/hr Acres/hr 2 Acres/hr 3 Acres/hr | ute pass ir 3) ay) r .47 | Hours |

| Task description: | Phase 1 | - Topsoil Replac | ement | | | |
|------------------------|--|-------------------|---------------------------|---------------|--------------------------------------|------------------|
| Site: Rifle Gravel Pit | #1 | Permit Actie | on: New App | | Permit/Job#: <u>M</u> | 2021052 |
| PROJECT IDEN | TIFICATION | [| | | | |
| Task #: 40011 | <u>B</u> 2023 | State: Colora | ado | Ab | breviation: <u>No</u> Filename: M | one 052-4001B |
| User: ACY | | | | | | 10012 |
| Agency or | organization nar | ne: DRMS | | | | |
| HOURLY EQUI | PMENT COST | <u>r</u> | | Shift bas | is: <u>1 per day</u> | |
| n | | m. Translar Cot | Equipment Descri | ption | | |
| I | Truck Loader Tea | -Loader: CA | 730 T 980H | | | |
| Supp | ort Equipment -L | Load Area: Cat | D8T - 8SU | | | |
| | -Di | ump Area: Cat | D8T - 8SU | | | |
| Road M | aintenance – Mot | or Grader: CA | T 16M ter Tanker 3 500 | Gal | | |
| | - ** 2 | iter fruek. wa | ter Tanker, 5,500 | Gai. | | |
| Cost Breakdown: | Truck/Loa | ader Team | Support l | Equipment | Maintenar | nce Equipment |
| | Truck | Loader | Load Area | Dump Area | Motor Grader | Water Truck |
| %Utilization-machine: | 100 | 100 | 30 | 30 | 50 | 50 |
| Ownership cost/hour: | \$108.06 | \$61.69 | \$241.38 | \$241.38 | \$212.21 | \$16.65 |
| Operating cost/hour: | \$71.88 | \$58.92 | \$43.18 | \$43.18 | \$62.44 | \$18.80 |
| %Utilization-riper: | NA | 0 | 100 | NA | NA | NA |
| Ripper own. cost/hour: | NA | \$0.00 | \$14.11 | \$0.00 | \$0.00 | \$0.00 |
| Ripper op. cost/hour: | NA | \$0.00 | \$7.45 | \$0.00 | \$0.00 | \$0.00 |
| Operator cost/hour: | \$32.54 | \$40.71 | \$41.30 | \$41.30 | \$28.56 | \$21.12 |
| Unit Subtotals: | \$212.48 | \$161.32 | \$333.31 | \$325.86 | \$303.21 | \$56.57 |
| Number of Units: | 3 | 1 | 1 | 1 | 1 | 1 |
| Group Subtotals: | Work: | \$798.76 | Support: | \$659.17 | Maint: | \$359.78 |
| Total work team cos | st/hour: <u>\$1,817.</u> | 71 | | | | |
| MATERIAL QU | ANTITIES | | | | | |
| Initial volume | : 2,960 | CCY | Swell | factor: 1.215 | | |
| Loose volume | :3,590 | 6 LCY | | | | |
| So | urce of estimated | volume: Exhi | bit L & Rec Plan | | | |
| Source | of estimated swe | ell factor: Cat H | Handbook | | | |
| | To Material Purch | 50.00 |) | | | |
| | | <u> </u> | <u> </u> | | | |
| HOURLY PRO | DUCTION | | | | | |
| Truck Capacity: | | | | | | |
| Truck Payload (wei | <u>ght) Basis:</u> | | _ | | | |
| Material v | weight: <u>1,600</u> | .:1 | Pounds/LCY | | | |
| Desci Rated Pa | $\frac{100011}{1000} = \frac{10000}{1000}$ |)11 | Pounds | | | |
| Payload Ca | pacity: 38.75 | | LCY | | | |

| Truck Bed (volume) Basis: | | | | | | |
|--|-----------------------------------|--------------------------|----------------------------|--------------------------|-------------|--------|
| Struck Volume: | 17.10 L | .CY | | | | |
| Heaped Volume: | 22.10 L | .CY | | | | |
| Average Volume: | 19.60 L | .CY | | | | |
| Adjusted Volume: | 22.10 L | .CY | | | | |
| | | | | | | |
| Final | Fruck Volume H | Based on Number of | Loader Passes: | 15.75 | LCY | |
| Loading Tool Capacity | | | - | ~ ~ ~ ~ | | |
| | 7 500 | | Buck | ket Size Class: <u>N</u> | A | _ |
| Rated Capacity: | 7.500 | LCY (heaped) | 1 1 (1000) | 11000 1 0 50 | | - |
| Bucket Fill Factor: | 1.050 | Moist loam or sa | indy clay (100%) | - 110%) 1.050 | | - |
| Adjusted Capacity: | 7.875 | LCY | | | | |
| Job Condition Corrections: | | Sit | e Altitude (ft.): <u>'</u> | 5 <u>380</u> feet | | |
| | Truck | Loader | Source | | | |
| Altitude Adj: | 1.000 | 1.000 | (CAT HE | 3) | | |
| Job Efficiency: | 0.830 | 0.830 | (CAT HE | 3) | | |
| Net Correction: | 0.830 | 0.830 | | | | |
| Londing Tool Cycle Times | Number | of Loading Tool Dee | an Dogwingd to | Fill Truck: | 2 | 00000 |
| Every ators and Front Shovel | inumber (| or Loading 1001 Pas | ses required to | | F | asses |
| Excavators and Front Shovers | <u>s.</u> | | | | | |
| Machine Cycle Time vs Selected Value w | . Job Condition vithin this Basic | Rating: NA Rating: NA | | | | |
| Track Loaders – N | Material Descrip | otion: | | | | |
| Cycle Time Elements (min.): | - | | | | | |
| Load: NA | Ma | neuver: NA | | Dump: 0.10 |) | |
| Wheel and Track Loaders - | Unadjusted Bas | ic Loader Cycle Tim | ne (load, dump, r | naneuver): 0 | 0.550 minu | ites |
| Cycle Time Factors | 5 | 2 | | Factor (min) | Source | |
| Material: | Mixed materia | 1002 | | | (Cat HB) | _ |
| Stockpile: | Dumped by tru | r 0.02 | | 0.020 | (Cat HB) | _ |
| Truck Ownership: | Common own | arshin of trucks and i | orders 0.04 | 0.020 | (Cat HB) | _ |
| Operation: | Constant opera | tion 0.04 | 10aucis -0.04 | -0.040 | (Cat HB) | _ |
| Dump Target: | Nominal target | t 0 00 | | 0.000 | (Cat HB) | - |
| Dump Target. | i tommar target | Net Cycle Tim | e Adjustment | -0.040 | (Cat HD) | _ |
| | | Adjusted Loade | r Cycle Time: | 0.040 | _ minutes | |
| | | Net Load Ti | me per Truck: | 0.610 | minutes | |
| | | | - r | | | |
| Truck Cycle Time: | | | | | | |
| Truck Exchange Time: | 0.60 | Minutes | Adjusted | for site altitude: | 0.600 | Minute |
| Truck Load Time: | 0.610 | Minutes | Adjusted | for site altitude: | 0.610 | Minute |
| ck Maneuver and Dump Time: | 1.00 | Minutes | Adjusted | for site altitude: | 1.000 | Minute |
| Truck Travel (Haul & Return) maintained 3.0 | Time: | Road Condition: <u>F</u> | irm, smooth, rol | ling, dirt/lt. surface | d, watered, | |

| Haul Rou | ite: | | | | | | | |
|------------------|--------------|----------|-----------------|----------------|--------------------|-------------------|-------------------------|----------|
| Seg # | Haul (Ft) | Distance | Grade (%) | Roll. Res (%) | Total Res (%) | Velocity (fpm) | Travel Time (min) | |
| 1 | 1150. | 00 | 0.00 | 3.00 | 3.00 | 2183 | 0.790 | |
| | | | | | Haul Time: | 0.790 | minutes | |
| Return R | oute: | | | | - | | | |
| Seg # | Haul | Distance | Grade (%) | Roll. Res | Total Res | Velocity | Travel | |
| | (Ft) | | | (%) | (%) | (fpm) | Time (min) | |
| 1 | 1150. | 00 | 0.00 | 3.00 | 3.00 | 2936 | 0.546 | |
| | | | | Total Tru | Return Time: | 0.546 | minute | es S |
| | | | | Total IIu | ck Cycle Tille. | 3.540 | IIIIIuu | -8 |
| Loading To | ol unit | | | | | | | |
| Prod | uction | 780.99 | LCY/Hour | | Adjusted for j | ob efficiency: | 648.22 | LCY/Hour |
| Truck Unit Prod | uction | | | | | | | |
| | | 266.50 | LCY/Hour | | Adjusted for j | ob efficiency: | 221.19 | LCY/Hour |
| Optimal No. of T | rucks: | 3 | Truck(s) | | Selected Num | ber of Trucks: | 3 | Truck(s) |
| | | | Adjuste | d hourly truc | k team production | on: 663. | .58 LCY | //Hour |
| | | | Adjusted sing | le truck/loade | er team production | on: 648. | .22 LCY | //Hour |
| | | | Adjusted multip | le truck/loade | er team production | on: 648 | .22 LCY | /Hour |
| JOB TI | ME AN | ND COST | | | | | | |
| Fleet | size: | 1 | Team(s) | r | Fotal job time: | 5.55 | He | ours |
| Unit | cost: | \$2.804 | /LCY | | Total job cost: | \$10,08 | 85 | |

| | Filase 2 | - ropson keptac | | | | |
|-------------------------------|------------------------------------|-------------------|-------------------|---------------|---------------------------|-----------------------------|
| Site: Rifle Gravel Pit | #1 | Permit Action | on: New App | | Permit/Job#: <u>M</u> | 2021052 |
| PROJECT IDE | NTIFICATION | ſ | | | | |
| Teck #: 4002 | D | Stata: Colore | ada | 4 h | browintion. No | no |
| Date: $\frac{7/19}{7}$ | 2023 | County: Garfie | ado | AD | Filename: MO | ne 52-4002B |
| User: ACY | | | | | | 02 10022 |
| Agency o | r organization nar | ne: DRMS | | | | |
| HOURLY EQU | IPMENT COST | Г | | Shift bas | is: 1 per day | |
| | | _ | Equipment Descri | ption | | |
| | Truck Loader Tea | m -Truck: Cat | 730 | F | | |
| | | -Loader: CA | Т 980Н | | | |
| Supj | port Equipment -L | Load Area: Cat | D8T - 8SU | | | |
| Road N | Iaintenance – Mot | or Grader: CA | T 16M | | | |
| | -Wa | ter Truck: Wat | ter Tanker, 3,500 | Gal. | | |
| <i>a</i> . . | - | | ~ . | | | |
| <u>Cost Breakdown</u> : | Truck/Loa | ader Team | Support I | Equipment | Maintenan Motor Grader | ce Equipment Water Truck |
| | THER | Loader | Load Area | Dump Alca | | |
| %Utilization-machine: | 100 | 100 | 30 | 30 | 50 | 50 |
| Ownership cost/hour: | \$108.06 | \$61.69 | \$241.38 | \$241.38 | \$212.21 | \$16.65 |
| Operating cost/hour: | \$71.88 | \$58.92 | \$43.18 | \$43.18 | \$62.44 | \$18.80 |
| Ripper own_cost/hour: | NA NA | \$0.00 | \$14.11 | \$0.00 | \$0.00 | NA \$0.00 |
| Ripper own. cost/hour: | NA | \$0.00 | \$7.45 | \$0.00 | \$0.00 | \$0.00 |
| Operator cost/hour: | \$32.54 | \$40.71 | \$41.30 | \$41.30 | \$28.56 | \$21.12 |
| Unit Subtotals: | \$212.48 | \$161.32 | \$333.31 | \$325.86 | \$303.21 | \$56.57 |
| Number of Units: | 3 | 1 | 1 | 1 | 1 | 1 |
| Group Subtotals: | Work: | \$798.76 | Support: | \$659.17 | Maint: | \$359.78 |
| Total work team or | st/hour \$1 817 | 71 | | | L | |
| | st/110u1. <u>\$1,01/.</u> | /1 | | | | |
| MATERIAL QU | JANTITIES | | | | | |
| Initial volume | · 1 540 | CCY | Swell | factor: 1.215 | | |
| Loose volume | 2: <u>1,5 10</u> 2: 1,87 | LCY | , Swell | <u> </u> | | |
| Sci | ource of estimated | volume: Exhil | hit L & Rec Plan | | | |
| Source | e of estimated swe | ell factor: Cat H | Handbook | | | |
| | Material Purch | ase Cost: \$0.00 | 0 | | | |
| | То | otal Cost: \$0.00 |) | | | |
| HOUDI V PDO | DUCTION | | | | | |
| | | | | | | |
| Truck Capacity: | ight) Decisy | | | | | |
| Material | weight: 1.600 | | Pounds/LCY | | | |
| Desc | ription: Top So | oil | | | | |
| Rated P | ayload: 62,000 | | Pounds | | | |
| Payload Ca | pacity: 38.75 | | LCY | | | |

| · · · · · · · · · · · · · · · · · · · | | | | | | |
|---|--|---|--|--|--|--------------------------------------|
| Struck Volume: | 17.10 LO | CY | | | | |
| Heaped Volume: | 22.10 LO | CY | | | | |
| Average Volume: | 19.60 LO | CY | | | | |
| Adjusted Volume: | 22.10 LO | CY | | | | |
| | | | | | | |
| Final | Truck Volume B | ased on Number of | Loader Passes: | 15.75 | LCY | |
| Loading Tool Canacity | | | | 10110 | | |
| Loading 1001 Capacity | | | D 1 | | • | |
| | | | Buck | tet Size Class: N | A | - |
| Rated Capacity: | 7.500 | LCY (heaped) | 1 1 (1000) | 11000 | | |
| Bucket Fill Factor: | 1.050 | Moist loam or sa | andy clay (100%) | - 110%) 1.050 | | |
| Adjusted Capacity: | 7.875 | | | | | |
| Job Condition Corrections: | _ | Sit | e Altitude (ft.): <u>5</u> | <u>380</u> feet | | |
| | Truck | Loader | Source | | | |
| Altitude Adj: | 1.000 | 1.000 | (CAT HB |) | | |
| Job Efficiency: | 0.830 | 0.830 | (CAT HB |) | | |
| | | | | | | |
| Net Correction: | 0.830 | 0.830 | | | | |
| | | | | | _ | |
| Loading Tool Cycle Time: | Number of | t Loading Tool Pas | ses Required to I | fill Truck: | <u>2</u> p | asses |
| Excavators and Front Shovel | <u>s:</u> | | | | | |
| Malia Cal Time | | | | | | |
| Selected Value v | vithin this Basic F | Rating: NA | | | | |
| Track Loaders – | Material Descript | ion: | | | | |
| Cycle Time Elements (min.): | | | | | | |
| Load: NA | Mar | euver: NA | | Dump: 0.100 |) | |
| | _ | | | | · | |
| Wheel and Track Loaders - | Unadjusted Basic | c Loader Cycle Tin | ne (load, dump, n | naneuver): 0. | .550 minu | tes |
| Cycle Time Factors | 0 | • | | Factor (min) | Source | |
| Cycle Time Pactors Material: | Mixed material | 0.02 | | | (Cat HB) | |
| Stocknile: | Dumped by true | 0.02 | | 1111211 | | = |
| Stockphe. | | vk 0.02 | | 0.020 | (Cat HB) | - |
| Truck Ownership: | Common owner | k 0.02 ship of trucks and | loaders -0.04 | 0.020 | (Cat HB) (Cat HB) | - |
| Truck Ownership: | Common owner Constant operat | ek 0.02 ship of trucks and i ion -0.04 | loaders -0.04 | 0.020 | (Cat HB) (Cat HB) (Cat HB) | - - - |
| Truck Ownership: Operation: Dump Target: | Common owner Constant operat | sk 0.02 ship of trucks and ion -0.04 0.00 | loaders -0.04 | 0.020 -0.040 -0.040 0.000 | (Cat HB) (Cat HB) (Cat HB) (Cat HB) | - - - |
| Truck Ownership: Operation: Dump Target: | Common owner Constant operat Nominal target | sk 0.02 ship of trucks and ion -0.04 0.00 Net Cycle Tim | loaders -0.04 | 0.020 -0.040 -0.040 0.000 -0.040 | (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes | - - - - |
| Truck Ownership: Operation: Dump Target: | Common owner Constant operat Nominal target | k 0.02 ship of trucks and ion -0.04 0.00 Net Cycle Tim Adjusted Loade | e Adjustment: | 0.020 -0.040 -0.040 0.000 -0.040 0.510 | (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes | - |
| Truck Ownership: Operation: Dump Target: | Common owner Constant operat Nominal target | k 0.02 ship of trucks and ion -0.04 0.00 Net Cycle Tim Adjusted Loade Net Load Ti | loaders -0.04 e Adjustment: r Cycle Time: me per Truck: | 0.020 -0.040 -0.040 0.000 -0.040 0.510 0.610 | (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes | - |
| Truck Ownership: Operation: Dump Target: | Common owner Constant operat Nominal target | k 0.02 ship of trucks and ion -0.04 0.00 Net Cycle Tim Adjusted Loade Net Load Ti | e Adjustment: r Cycle Time: me per Truck: | 0.020 -0.040 -0.040 0.000 -0.040 0.510 0.610 | (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes | - |
| Truck Ownership: Operation: Dump Target: Truck Cycle Time: | Common owner Constant operat Nominal target | sk 0.02 rship of trucks and ion -0.04 0.00 Net Cycle Tim Adjusted Loade Net Load Ti | e Adjustment: r Cycle Time: me per Truck: | 0.020 -0.040 -0.040 0.000 -0.040 0.510 0.610 | (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes | - |
| Truck Ownership: Operation: Dump Target: <u>Truck Cycle Time:</u> Truck Exchange Time: | Common owner Constant operat Nominal target | k 0.02 <u>ship of trucks and</u> <u>ion -0.04</u> 0.00 Net Cycle Tim Adjusted Loade Net Load Ti Minutes | loaders -0.04 e Adjustment: r Cycle Time: me per Truck: | 0.020 0.020 -0.040 -0.040 0.000 -0.040 0.510 0.610 for site altitude: | (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes 0.600 | - - - - Minute |
| Truck Ownership: Operation: Dump Target: <u>Truck Cycle Time:</u> Truck Exchange Time: Truck Load Time: | Common owner Constant operat Nominal target | sk 0.02 rship of trucks and ion -0.04 0.00 Net Cycle Tim Adjusted Loade Net Load Ti Minutes Minutes | loaders -0.04 e Adjustment: r Cycle Time: me per Truck: Adjusted Adjusted | 0.020 -0.040 -0.040 0.000 -0.040 0.510 0.610 for site altitude: for site altitude: | (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes 0.600 0.610 | - - - - Minute Minute |
| Truck Ownership: Operation: Dump Target: <u>Truck Cycle Time:</u> Truck Exchange Time: Truck Load Time: k Maneuver and Dump Time: | Common owner Constant operat Nominal target 0.60 0.610 | sk 0.02 ship of trucks and ion -0.04 0.00 Net Cycle Tim Adjusted Loade Net Load Ti Minutes Minutes Minutes | e Adjustment: r Cycle Time: me per Truck: Adjusted Adjusted | 0.020 -0.040 -0.040 0.000 -0.040 0.510 0.610 for site altitude: for site altitude: | (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes 0.600 0.610 | Minute Minute |
| Truck Ownership: Operation: Dump Target: <u>Truck Cycle Time:</u> Truck Exchange Time: Truck Load Time: k Maneuver and Dump Time: | Common owner Constant operat Nominal target 0.60 0.610 | sk 0.02 rship of trucks and ion -0.04 0.00 Net Cycle Tim Adjusted Loade Net Load Ti Minutes Minutes Minutes Minutes | loaders -0.04 e Adjustment: r Cycle Time: me per Truck: Adjusted Adjusted Adjusted | 0.020 0.040 -0.040 0.000 -0.040 0.510 0.610 for site altitude: for site altitude: | (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes 0.600 0.610 1.000 | Minute Minute |

| Haul | Route: | | | | | | | |
|--------------|------------|----------|-----------------|----------------|--------------------|----------------|---------------|----------|
| Seg # | Haul | Distance | Grade (%) | Roll. Res | Total Res | Velocity | Travel | |
| | (Ft) | | | (%) | (%) | (fpm) | (min) | |
| 1 | 1150. | .00 | 0.00 | 3.00 | 3.00 | 2183 | 0.790 | |
| | | | | | Haul Time: | 0.790 | minutes | |
| Retur | n Route: | | | | | | | |
| Seg # | Haul | Distance | Grade (%) | Roll. Res | Total Res | Velocity | Travel | |
| | (Ft) | | | (%) | (%) | (fpm) | Time (min) | |
| 1 | 1150. | .00 | 0.00 | 3.00 | 3.00 | 2936 | 0.546 | |
| | | | | | Return Time: | 0.546 | minute | s |
| | | | | Total Tru | ck Cycle Time: | 3.546 | minute | S |
| Loading | Tool unit | | | | | | | |
| F | roduction | 780.99 | LCY/Hour | | Adjusted for j | ob efficiency: | 648.22 | LCY/Hour |
| Truck Unit F | roduction | | | | | | | |
| | | 266.50 | LCY/Hour | | Adjusted for j | ob efficiency: | 221.19 | LCY/Hour |
| Optimal No. | of Trucks: | 3 | Truck(s) | | Selected Num | ber of Trucks: | 3 | Truck(s) |
| | | | Adjuste | d hourly truc | k team production | on: 663 | .58 LCY | //Hour |
| | | | Adjusted sing | le truck/loade | er team production | on: 648 | .22 LCY | /Hour |
| | | | Adjusted multip | le truck/loade | er team production | on: 648 | .22 LCY | /Hour |
| JOB | TIME AN | ND COST | | | | | | |
| F | leet size: | 1 | Team(s) | | Total job time: | 2.89 | Ho | ours |
| τ | Jnit cost: | \$2.804 | /LCY | | Total job cost: | \$5,24 | 17 | |

| Task description: | Phase 3 | - Topsoil Replac | cement | | | |
|-----------------------------------|--|--------------------------------|-------------------|----------------------|-------------------------------|------------------|
| Site: Rifle Gravel Pit | #1 | Permit Acti | on: New App | | Permit/Job#: <u>N</u> | 12021052 |
| PROJECT IDEN | TIFICATION | | | | | |
| Task #: $4003E$ Date: $7/19/2$ | <u>3</u> 2023 | State: Color County: Garfie | ado eld | Ab | breviation: No Filename: M | one 052-4003B |
| User: <u>ACY</u> | • .• | | | | | |
| Agency or | organization nan | ne: DRMS | | | | |
| HOURLY EQUI | PMENT COST | <u>[</u> | | Shift bas | is: <u>1 per day</u> | |
| т | mult London Too | m Trucki Cot | Equipment Descri | ption | | |
| 1 | Tuck Loader Tea | -Loader: CA | Т 980Н | | | |
| Supp | ort Equipment -L | load Area: Cat | D8T - 8SU | | | |
| DeedM | -Du | imp Area: Cat | D8T - 8SU | | | |
| Koad M | aintenance –Mot | ter Truck: Wa | ter Tanker, 3.500 | Gal. | | |
| | | | | | | |
| Cost Breakdown: | Truck/Loa | ader Team | Support I | Equipment | Maintena | nce Equipment |
| | Truck | Loader | Load Area | Dump Area | Motor Grader | Water Truck |
| %Utilization-machine: | 100 | 100 | 30 | 30 | 50 | 50 |
| Ownership cost/hour: | \$108.06 | \$61.69 | \$241.38 | \$241.38 | \$212.21 | \$16.65 |
| Operating cost/hour: | \$71.88 | \$58.92 | \$43.18 | \$43.18 | \$62.44 | \$18.80 |
| %Utilization-riper: | NA | 0 | 100 | NA | NA | NA |
| Ripper own. cost/hour: | NA | \$0.00 | \$14.11 | \$0.00 | \$0.00 | \$0.00 |
| Ripper op. cost/hour: | NA | \$0.00 | \$7.45 | \$0.00 | \$0.00 | \$0.00 |
| Operator cost/hour: | \$32.54 | \$40.71 | \$41.30 | \$41.30 | \$28.56 | \$21.12 |
| Unit Subtotals: | \$212.48 | \$161.32 | \$333.31 | \$325.86 | \$303.21 | \$56.57 |
| Number of Units: | 3 | 4700 7 C | 1 | <u>ا</u> | | <u><u></u></u> |
| Group Subtotals: | Work: | \$798.76 | Support: | \$659.17 | Maint: | \$359.78 |
| Total work team cos | st/hour: <u>\$1,817.</u> | 71 | | | | |
| | | | | | | |
| MATERIAL QU | <u>ANTITIES</u> | | | | | |
| Initial volume: | 3,589 | CCY | Swell | factor: <u>1.215</u> | | |
| Loose volume: | 4,36 | | | | | |
| So | urce of estimated | volume: Exhi | bit L & Rec Plan | | | |
| Source | of estimated swe | ell factor: Cat I | Handbook | | | |
| | To | otal Cost: $\frac{$0.0}{$0.0}$ | 0 | | | |
| | | <u>.</u> | | | | |
| HOURLY PRO | DUCTION | | | | | |
| Truck Canacity: | | | | | | |
| Truck Payload (weig | ght) Basis: | | | | | |
| Material w | veight: <u>1,600</u> | •1 | Pounds/LCY | | | |
| Descr. Deted De | $\frac{1}{2} \text{ (ption: } \frac{1}{62} \text{ (ption)} $ | 011 | Pounda | | | |
| Rateu Pa Devload Car | $\frac{02,000}{28,000}$ | | | | | |

| Struck Volume: | | | | | | |
|---|--|---|--|--|--|-----------------------------------|
| II | 17.10 LO | CY | | | | |
| neaped volume: | 22.10 LO | CY | | | | |
| Average Volume: | 19.60 LO | CY | | | | |
| Adjusted Volume: | 22.10 LO | CY | | | | |
| | | | | | | |
| Final | Truck Volume B | ased on Number of | Loader Passes: | 15.75 | LCY | |
| Loading Tool Capacity | | | | | | |
| | | | Buck | tet Size Class: N | JA | |
| Rated Capacity: | 7.500 | LCY (heaped) | | | | _ |
| Bucket Fill Factor: | 1.050 | Moist loam or s | andy clay (100% | - 110%) 1.050 | | |
| Adjusted Capacity: | 7.875 | LCY | | , | | |
| Job Condition Corrections: | | Si | te Altitude (ft.): 5 | 5380 feet | | |
| | Truck | Loader | Source | | | |
| Altitude Adj: | 1.000 | 1.000 | (CAT HB |) | | |
| Job Efficiency: | 0.830 | 0.830 | (CAT HB |) | | |
| Net Correction: | 0.830 | 0 830 | | | | |
| | 0.030 | 0.030 | | | | |
| Loading Tool Cycle Time: | Number o | f Loading Tool Pas | sses Required to I | Fill Truck: | 2 p | asses |
| Excavators and Front Shove | ls: | | | | | |
| Machina Cuala Tima y | . Job Condition I | Dating NA | | | | |
| Selected Value v | within this Basic l | Rating: NA | | | | |
| Track Loaders – | Material Descript | tion: | | | | |
| | | | | | | |
| Cycle Time Elements (min.): | | | | | | |
| Cycle Time Elements (min.): Load: NA | Mar | neuver: NA | | Dump: 0.10 | 0 | |
| Cycle Time Elements (min.): Load: NA | Mar | neuver: NA | | Dump: 0.10 | 0 | |
| Cycle Time Elements (min.): Load: <u>NA</u> Wheel and Track Loaders - | MarUnadjusted Basic | neuver: <u>NA</u> c Loader Cycle Tir | ne (load, dump, n | Dump: 0.100 | 0 minu | tes |
| Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors | Unadjusted Basic | neuver: <u>NA</u> c Loader Cycle Tir | ne (load, dump, n | Dump: 0.100 naneuver): 0 Factor (min.) | 0).550 minu Source | tes |
| Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: | Unadjusted Basio | neuver: NA c Loader Cycle Tir | ne (load, dump, n | Dump: 0.100 naneuver): 0 Factor (min.) 0.020 | 0 0.550 minu Source (Cat HB) | tes |
| Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: | Mar Unadjusted Basid Mixed material Dumped by true | neuver: NA c Loader Cycle Tir 0.02 ck 0.02 | ne (load, dump, n | Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.020 | 0 | .tes |
| Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: | Mar Unadjusted Basic Mixed material Dumped by true Common owne | neuver: <u>NA</u> c Loader Cycle Tir 0.02 ck 0.02 rship of trucks and | ne (load, dump, n | Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.020 -0.040 | 0 .550 minu Source (Cat HB) (Cat HB) (Cat HB) | tes - - - |
| Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: | Mar Unadjusted Basic Mixed material Dumped by true Common owner Constant operat | neuver: NA c Loader Cycle Tir 0.02 ck 0.02 rship of trucks and tion -0.04 | ne (load, dump, n | Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.020 -0.040 -0.040 | 0 .550 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) | |
| Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: | Mar Unadjusted Basic Mixed material Dumped by true Common owner Constant operat Nominal target | neuver: NA c Loader Cycle Tir 0.02 ck 0.02 rship of trucks and cion -0.04 0.00 | ne (load, dump, n | Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.020 -0.040 -0.040 0.000 | 0 .550 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) | tes - - - - - |
| Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: | Mar Unadjusted Basid Mixed material Dumped by true Common owne Constant operat Nominal target | neuver: NA c Loader Cycle Tir 0.02 ck 0.02 rship of trucks and tion -0.04 0.00 Net Cycle Tim | ne (load, dump, n loaders -0.04 | Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.020 -0.040 -0.040 0.000 -0.040 | 0 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes | tes |
| Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: | Mar Unadjusted Basid Mixed material Dumped by true Common owner Constant operat Nominal target | neuver: NA c Loader Cycle Tir 0.02 ck 0.02 rship of trucks and tion -0.04 0.00 Net Cycle Tim Adjusted Loado | ne (load, dump, n loaders -0.04 ne Adjustment: er Cycle Time: | Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.020 -0.040 -0.040 0.000 -0.040 0.000 | 0 .550 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes | tes - - - - |
| Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: | Mar Unadjusted Basid Mixed material Dumped by true Common owner Constant operat Nominal target | neuver: NA c Loader Cycle Tir 0.02 ck 0.02 rship of trucks and tion -0.04 0.00 Net Cycle Tim Adjusted Load Net Load T | ne (load, dump, n loaders -0.04 ne Adjustment: er Cycle Time: | Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.020 -0.040 -0.040 0.000 -0.040 0.510 0.610 | 0 .550 minu Source (Cat HB) (Cat HB) | tes |
| Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time: | Mar Unadjusted Basid Mixed material Dumped by true Common owner Constant operat Nominal target | neuver: NA c Loader Cycle Tir 0.02 ck 0.02 rship of trucks and tion -0.04 0.00 Net Cycle Tin Adjusted Loade Net Load T | ne (load, dump, n loaders -0.04 ne Adjustment: er Cycle Time: | Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.020 -0.040 -0.040 0.000 -0.040 0.510 0.610 | 0 .550 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes | tes - - - - |
| Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time: | Mar Unadjusted Basid Mixed material Dumped by true Common owne Constant operat Nominal target | neuver: NA c Loader Cycle Tir 0.02 ck 0.02 rship of trucks and cion -0.04 0.00 Net Cycle Tin Adjusted Load Net Load T Minutes | ne (load, dump, n loaders -0.04 ne Adjustment: er Cycle Time: ime per Truck: | Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.020 -0.040 0.000 -0.040 0.000 -0.040 0.510 0.610 for site altitude: | 0 0.550 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes 0.600 | tes - - - - - |
| Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time: Truck Load Time: | Mar Unadjusted Basid Mixed material Dumped by true Common owner Constant operat Nominal target | neuver: NA c Loader Cycle Tir 0.02 ck 0.02 rship of trucks and tion -0.04 0.00 Net Cycle Tin Adjusted Loade Net Load T Minutes Minutes | ne (load, dump, n loaders -0.04 ne Adjustment: er Cycle Time: ime per Truck: Adjusted Adjusted | Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.020 -0.040 0.000 -0.040 0.000 -0.040 0.510 0.610 for site altitude: for site altitude: | 0 .550 minu (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) 0.600 0.600 0.610 | tes |
| Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time: Truck Load Time: % Maneuver and Dump Time: | Mar Unadjusted Basid Mixed material Dumped by true Common owner Constant operat Nominal target | neuver: NA c Loader Cycle Tir 0.02 ck 0.02 rship of trucks and tion -0.04 0.00 Net Cycle Tim Adjusted Loade Net Load T Minutes Minutes Minutes | ne (load, dump, n loaders -0.04 ne Adjustment: er Cycle Time: ime per Truck: Adjusted Adjusted Adjusted | Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.020 0.020 -0.040 0.000 -0.040 0.000 -0.040 0.510 0.610 0.610 for site altitude: for site altitude: for site altitude: | 0 0.550 minu (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) 0.600 0.600 0.610 1.000 | tes Minute Minute |
| Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time: Truck Load Time: % Maneuver and Dump Time: | Mar Unadjusted Basid Mixed material Dumped by true Common owner Constant operat Nominal target | neuver: NA c Loader Cycle Tir 0.02 ck 0.02 rship of trucks and tion -0.04 0.00 Net Cycle Tin Adjusted Loade Net Load T Minutes Minutes Minutes | ne (load, dump, n loaders -0.04 ne Adjustment: er Cycle Time: ime per Truck: Adjusted Adjusted Adjusted | Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.020 0.020 -0.040 0.000 -0.040 0.000 -0.040 0.0610 for site altitude: for site altitude: for site altitude: for site altitude: | 0 .550 minu (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) 0.600 0.600 0.610 1.000 | tes Minute Minute |
| Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time: Truck Load Time: & Maneuver and Dump Time: Truck Travel (Haul & Poture | Mar Unadjusted Basid Mixed material Dumped by true Common owner Constant operat Nominal target | neuver: NA c Loader Cycle Tir 0.02 ck 0.02 rship of trucks and tion -0.04 0.00 Net Cycle Tin Adjusted Loado Net Load T Minutes Minutes Minutes Minutes | ne (load, dump, n loaders -0.04 ne Adjustment: er Cycle Time: ime per Truck: Adjusted Adjusted Adjusted | Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.020 0.040 -0.040 0.000 -0.040 0.000 -0.040 0.010 for site altitude: for site altitude: for site altitude: | 0 .550 minu (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) 0.600 0.600 0.610 1.000 d watered | tes Minute Minute Minute |

| Haul Rou | te: | | | | | | | |
|-------------------|----------------|----------|-----------------|------------------|--------------------|-------------------|-------------------------|----------|
| Seg # | Haul I (Ft) | Distance | Grade (%) | Roll. Res (%) | Total Res (%) | Velocity (fpm) | Travel Time (min) | |
| 1 | 1150. | 00 | 0.00 | 3.00 | 3.00 | 2183 | 0.790 | |
| | | | | | Haul Time: | 0.790 | minutes | |
| Return Ro | oute: | | | | - | | | |
| Seg # | Haul | Distance | Grade (%) | Roll. Res | Total Res | Velocity | Travel | |
| | (Ft) | | | (%) | (%) | (fpm) | Time (min) | |
| 1 | 1150. | 00 | 0.00 | 3.00 | 3.00 | 2936 | 0.546 | |
| | | | | Total Tru | Return Time: | 0.546 | minute | S |
| | | | | Total IIu | ck Cycle Tille. | 5.540 | | 3 |
| Loading Too | ol unit | | | | | | | |
| Produ | iction | 780.99 | LCY/Hour | | Adjusted for j | ob efficiency: | 648.22 | LCY/Hour |
| Truck Unit Produ | iction | 266.50 | LCY/Hour | | Adjusted for j | ob efficiency: | 221.19 | LCY/Hour |
| Optimal No. of Tr | ucks: | 3 | Truck(s) | | Selected Num | ber of Trucks: | 3 | Truck(s) |
| | | | Adjuste | d hourly truc | k team production | on: 663. | .58 LCY | /Hour |
| | | | Adjusted sing | le truck/loade | er team production | on: 648. | 22 LCY | //Hour |
| | | | Adjusted multip | le truck/loade | er team production | on: 648. | LCY | /Hour |
| JOB TIN | ME AN | D COST | | | | | | |
| Fleet | size: | 1 | Team(s) | - | Fotal job time: | 6.73 | Но | ours |
| Unit | cost: _ | \$2.804 | /LCY | | Total job cost: | \$12,22 | 28 | |

| | | D in the | | | | 2021052 |
|-------------------------------|---------------------------------|-------------------------|--------------------|----------------------|-----------------------|--------------|
| Site: Rifle Gravel Pit | #1 | Permit Actio | on: New App | | Permit/Job#: <u>M</u> | 2021052 |
| PROJECT IDEN | TIFICATION | | | | | |
| Task #: 4004E | 3 | State: Colora | ado | Ab | breviation: No | ne |
| Date: 7/19/2 | 023 0 | County: Garfie | ld | | Filename: M0 | 052-4004B |
| User: ACY | | | | | | |
| Agency or | organization nam | e: DRMS | | | | |
| HOURI V FOUI | PMENT COST | , | | Shift bas | vis: 1 per dev | |
| HOURLI EQUI | | - | Equipment Deseri | stion | sis. <u>1 per day</u> | |
| Т | ruck Loader Tea | n -Truck: Cat | 730 | puon | | |
| _ | | -Loader: CA | Т 980Н | | | |
| Supp | ort Equipment -Lo | oad Area: Cat | D8T - 8SU | | | |
| Pood M | -Du | mp Area: Cat | D8T - 8SU T 16M | | | |
| Koau Ma | -Wat | er Truck: Wat | ter Tanker, 3,500 | Gal. | | |
| | | | , - , * | | | |
| Cost Breakdown: | Truck/Loa | der Team | Support l | Equipment | Maintenan | ce Equipment |
| | Truck | Loader | Load Area | Dump Area | Motor Grader | Water Truck |
| %Utilization-machine: | 100 | 100 | 30 | 30 | 50 | 5 |
| Ownership cost/hour: | \$108.06 | \$61.69 | \$241.38 | \$241.38 | \$212.21 | \$16.6 |
| Operating cost/hour: | \$71.88 | \$58.92 | \$43.18 | \$43.18 | \$62.44 | \$18.8 |
| %Utilization-riper: | NA | 0 | 100 | NA | NA | NA |
| Ripper own. cost/hour: | NA | \$0.00 | \$14.11 | \$0.00 | \$0.00 | \$0.0 |
| Ripper op. cost/hour: | NA | \$0.00 | \$7.45 | \$0.00 | \$0.00 | \$0.0 |
| Operator cost/hour: | \$32.54 | \$40.71 | \$41.30 | \$41.30 | \$28.56 | \$21.1 |
| Unit Subtotals: | \$212.48 | \$161.32 | \$333.31 | \$325.86 | \$303.21 | \$56.5 |
| Number of Units: | 3 Wester | 1 ¢709.76 | l Second a sta | ¢(50.17 | l Mainte | ¢250.79 |
| Group Subtotals: | Work: | \$798.76 | Support: | \$659.17 | Maint: | \$359.78 |
| Total work team cos | t/hour: <u>\$1,817.7</u> | 1 | | | | |
| MATERIAL OU | | | | | | |
| <u>MATERIAL QU</u> | ANIIIES | | | | | |
| Initial volume: | 1,371 | CCY | Swell | factor: <u>1.215</u> | | |
| Loose volume: | 1,000 | | | | | |
| Soi | urce of estimated | volume: Exhil | bit L & Rec Plan | | | |
| Source | Material Purcha | ll factor: <u>Cat F</u> | handbook | | | |
| | То | tal Cost: $$0.00$ |) | | | |
| | | | | | | |
| HOURLY PRO | DUCTION | | | | | |
| Truck Capacity: | | | | | | |
| Truck Payload (weig | ght) Basis: | | | | | |
| Material w | veight: 1,600 | 1 | Pounds/LCY | | | |
| Descr | puon: Top So | 11 | | | | |
| Rated Do | $\frac{10000}{62000}$ | | Pounds | | | |

| Struck Volume: | 17.10 | LCY | | | | |
|--|---|--|--|---|--|---|
| Heaped Volume: | 22.10 | LCY | | | | |
| Average Volume: | 19.60 | LCY | | | | |
| Adjusted Volume: | 22.10 | LCY | | | | |
| | | | | | | |
| Final ' | Truck Volume | Based on Number of | Loader Passes: | 15.75 | LCY | |
| Loading Tool Capacity | | | Decel | hat Size Classe N | | |
| | 7 500 | | Buci | ket Size Class: | A | _ |
| Rated Capacity: | /.500 | LCY (heaped) | | 1100() 1.050 | | - |
| Adjusted Capacity: | 7.875 | LCY | andy clay (100%) | - 110%) 1.050 | | - |
| | | | | | | |
| Job Condition Corrections: | • | Sit | e Altitude (ft.): <u></u> | 5 <u>380</u> feet | | |
| | Truck | Loader | Source | | | |
| Altitude Adj: | 1.000 | 1.000 | (CAT HB | <u>B)</u> | | |
| Job Efficiency: | 0.830 | 0.830 | (CAT HE | 3) | | |
| Net Correction: | 0.830 | 0.830 | | | | |
| | NT 1 | | | | 2 | |
| Loading Tool Cycle Time: | Number | r of Loading Tool Pas | ses Required to | Fill Truck: | P | asses |
| Excavators and Front Shovel | <u>s:</u> | | | | | |
| Machine Cycle Time vs | Job Condition | n Rating: <u>NA</u> | | | | |
| Treak Loaders | Motorial Decor | intion | | | | |
| Cycle Time Elements (min): | Material Desci | iption. | | | | |
| Luci NA | N | | | D | , | |
| Load: NA | - IVI | laneuver: NA | | Dump: 0.100 |) | |
| Wheel and Track Loaders - | Unadjusted Ba | sic Loader Cycle Tin | ne (load, dump, r | maneuver): 0 | .550 minu | ites |
| Cycle Time Factors | | | | Factor (min.) | Source | |
| Material: | Mixed materi | al 0.02 | | 0.020 | (Cat HB) | |
| Stockpile: | Dumped by tr | ruck 0.02 | | 0.020 | (Cat HB) | - |
| Truck Ownership: | Common ow | | | | | |
| 0 | | nership of trucks and | loaders -0.04 | -0.040 | (Cat HB) | _ |
| Operation: | Constant open | nership of trucks and ration -0.04 | loaders -0.04 | -0.040 -0.040 | (Cat HB) (Cat HB) | _ |
| Dump Target: | Constant oper Nominal targe | nership of trucks and ration -0.04 et 0.00 | loaders -0.04 | -0.040 -0.040 0.000 | (Cat HB) (Cat HB) (Cat HB) | - |
| Dump Target: | Constant open Nominal targe | nership of trucks and ration -0.04 et 0.00 Net Cycle Tim | loaders -0.04 e Adjustment: | -0.040 -0.040 0.000 -0.040 | (Cat HB) (Cat HB) (Cat HB) minutes | |
| Dump Target: | Constant ope. Nominal targ | nership of trucks and ration -0.04 et 0.00 Net Cycle Tim Adjusted Loade | e Adjustment: | -0.040 -0.040 0.000 -0.040 0.510 | (Cat HB) (Cat HB) (Cat HB) minutes minutes | - |
| Dump Target: | Constant ope Nominal targ | nership of trucks and ration -0.04 et 0.00 Net Cycle Tim Adjusted Loade Net Load Ti | e Adjustment: er Cycle Time: me per Truck: | -0.040 -0.040 0.000 -0.040 0.510 0.610 | (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes | - |
| Dump Target: Truck Cycle Time: | Constant ope Nominal targ | nership of trucks and ration -0.04 et 0.00 Net Cycle Tim Adjusted Loade Net Load Ti | e Adjustment: er Cycle Time: me per Truck: | -0.040 -0.040 0.000 -0.040 0.510 0.610 | (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes | - |
| Dump Target: <u>Truck Cycle Time:</u> Truck Exchange Time: | Constant ope Nominal targ 0.60 | nership of trucks and ration -0.04 et 0.00 Net Cycle Tim Adjusted Loade Net Load Ti Minutes | e Adjustment: er Cycle Time: me per Truck: | -0.040 -0.040 0.000 -0.040 0.510 0.610 for site altitude: | (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes 0.600 | - - - Minute |
| Dump Target: <u>Truck Cycle Time:</u> Truck Exchange Time: Truck Load Time: | Constant ope Nominal targ 0.60 0.610 | nership of trucks and ration -0.04 et 0.00 Net Cycle Tim Adjusted Loade Net Load Ti Minutes Minutes | e Adjustment: er Cycle Time: me per Truck: Adjusted Adjusted | -0.040 -0.040 0.000 -0.040 0.510 0.610 for site altitude: | (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes 0.600 0.610 | - - - - Minute - Minute |
| Difference of the second secon | Constant ope Nominal targ 0.60 0.610 1.00 | nership of trucks and ration -0.04 et 0.00 Net Cycle Tim Adjusted Loade Net Load Ti Minutes Minutes Minutes Minutes | e Adjustment: er Cycle Time: me per Truck: Adjusted Adjusted Adjusted | -0.040 -0.040 0.000 -0.040 0.510 0.610 for site altitude: for site altitude: | (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes 0.600 0.610 1.000 | - - - Minutes - Minutes |
| Dump Target: <u>Truck Cycle Time:</u> Truck Exchange Time: Truck Load Time: x Maneuver and Dump Time: | Constant ope Nominal targ 0.60 0.610 1.00 | nership of trucks and ration -0.04 et 0.00 Net Cycle Tim Adjusted Loade Net Load Ti Minutes Minutes Minutes | e Adjustment: er Cycle Time: me per Truck: Adjusted Adjusted Adjusted | -0.040 -0.040 0.000 -0.040 0.510 0.610 for site altitude: for site altitude: | (Cat HB) (Cat HB) (Cat HB) minutes minutes 0.600 0.610 1.000 | Minute Minute Minute |

| H | Haul Route | e: | | | | | | | |
|-----------|------------|------------|---------------|-----------------|----------------|--------------------|----------------|-----------------|----------|
| S | Seg # | Haul I | Distance | Grade (%) | Roll. Res | Total Res | Velocity | Travel | |
| | | (Ft) | | | (%) | (%) | (fpm) | (min) | |
| 1 | | 1150.0 |)0 | 0.00 | 3.00 | 3.00 | 2183 | 0.790 | |
| | | | | | | Haul Time: | 0.790 | minutes | |
| R | Return Rou | ite: | | | | | | | |
| S | Seg # | Haul I | Distance | Grade (%) | Roll. Res | Total Res | Velocity | Travel | |
| | | (Ft) | | | (%) | (%) | (fpm) | (min) | |
| 1 | | 1150.0 |)0 | 0.00 | 3.00 | 3.00 | 2936 | 0.546 | |
| | | | | | | Return Time: | 0.546 | minute | s |
| | | | | | Total Tru | ck Cycle Time: | 3.546 | minute | S |
| Loa | ding Tool | unit | | | | | | | |
| | Produc | tion | 780.99 | LCY/Hour | | Adjusted for j | ob efficiency: | 648.22 | LCY/Hour |
| Truck U | nit Produc | ction | | | | | | | |
| | | - | 266.50 | LCY/Hour | | Adjusted for j | ob efficiency: | 221.19 | LCY/Hour |
| Optimal 1 | No. of Tru | cks: | 3 | Truck(s) | | Selected Num | ber of Trucks: | 3 | Truck(s) |
| | | | | Adjuste | d hourly truc | k team production | on: 663. | .58 LCY | /Hour |
| | | | | Adjusted sing | le truck/loade | er team production | on: 648. | .22 LCY | /Hour |
| | | | | Adjusted multip | le truck/loade | er team production | on: 648. | . <u>22</u> LCY | /Hour |
| <u>]</u> | IOB TIM | IE AN | D COST | | | | | | |
| | Fleet si | ize: | 1 | Team(s) | r | Fotal job time: | 2.57 | He | ours |
| | Unita | t . | #2 004 | | | | | | |

Page 1 of 2

BULLDOZER WORK

| Task description: | Phase 1 - Grade Transporte | d Topsoil | | |
|--|---|---------------|---------------|------------|
| : Rifle Gravel Pit #1 | Permit Action: | New App | Permit/Job#: | M2021052 |
| PROJECT IDENTIFI | CATION | | | |
| Task #: 4101B | State: Colorado | | Abbreviation: | None |
| Date: 7/19/2023 | County: Garfield | | Filename: | M052-4101B |
| User: ACY | | | | |
| Agency or organ | ization name: DRMS | | | |
| HOURLY EQUIPME | NT COST | | | |
| Basic Machine: Cat | D8T - 8SU | | | |
| Horsepower: 310 | | | | |
| Blade Type: Sem | ni-Universal | | | |
| Attachment: NA | | | | |
| Shift Basis: <u>1 pe</u> | er day | | | |
| Data Source: (CR | <u>(G)</u> | | | |
| Cost Breakdown: | | | | |
| | | Utilization % | | |
| Ownership Cost/Hour: | \$241.38 | NA | | |
| Operating Cost/Hour: | \$143.92 | 100 | | |
| Ripper own. Cost/Hour: | \$0.00 | NA | | |
| Ripper op. Cost/Hour: | \$0.00 | 0 | | |
| Operator Cost/Hour | \$41.30 | NA | | |
| operator costribui. | | | | |
| Total unit Cost/Hour: | \$426.60 | | | |
| Total unit Cost/Hour: | \$426.60 \$853.20 | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: | \$426.60 \$853.20 | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT | \$426.60 \$853.20 ITIES | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT | \$426.60 \$853.20 ITIES | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,596 Swell factor: 1000 | \$426.60 \$853.20 ITIES | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,596 Swell factor: 1.000 Loose volume: 3596 | \$426.60 \$853.20 ITIES 5 6 6 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,596 Swell factor: 1.000 Loose volume: 3,596 | \$426.60 \$853.20 ITIES 5 5 6 6 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,596 Swell factor: 1.000 Loose volume: 3,596 Source of estimated volum | \$426.60 \$853.20 ITIES 5 5 6 6 6 7 7 7 8 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 8 7 8 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,596 Swell factor: 1.000 Loose volume: 3,596 Source of estimated volum Source of estimated swell | \$426.60 \$853.20 ITIES 5 5 5 5 5 5 5 5 5 5 5 5 5 | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,596 Swell factor: 1.000 Loose volume: 3,596 Source of estimated volun Source of estimated swell HOURLY PRODUCT | \$426.60 \$853.20 ITIES 5 5 5 5 5 5 5 5 5 5 5 5 5 | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,596 Swell factor: 1.000 Loose volume: 3,596 Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: | \$426.60 \$853.20 ITIES 5 5 5 5 5 5 5 5 5 5 5 5 5 | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,596 Swell factor: 1.000 Loose volume: 3,596 Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc | \$426.60 \$853.20 ITIES 5 5 5 5 5 5 5 5 5 5 5 5 5 | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,596 Swell factor: 1.000 Loose volume: 3,596 Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency desc | \$426.60 \$853.20 ITIES 5 5 6 6 7 6 10 10 10 75 feet 1,017.1 LCY/hr cription: Loose stockpile 1.2 | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,596 Swell factor: 1.000 Loose volume: 3,596 Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency desc | \$426.60 \$853.20 ITIES 5 5 6 7 6 1 6 1 7 5 1 7 5 1 7 5 1 7 5 1 7 5 1 7 5 1 7 5 1 7 5 1 7 5 1 7 5 1 7 5 1 7 5 1 7 5 1 7 5 1 7 5 1 7 5 1 7 5 1 7 5 1 7 1 7 5 1 7 1 7 5 1 7 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,596 Swell factor: 1.000 Loose volume: 3,596 Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency desc Average push gradient: | \$426.60 \$853.20 ITIES 5 5 6 6 1 5 5 5 5 5 5 5 5 5 5 5 5 5 | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,596 Swell factor: 1.000 Loose volume: 3,596 Source of estimated volum 3,596 Source of estimated volum 3,596 Source of estimated volum 3,596 MATERIAL QUANT 1.000 Loose volume: 3,596 Source of estimated volum 3,596 Source of estimated volum Source of estimated volum Source of estimated swell 400 HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency desc Average push gradient: Average site altitude: | \$426.60 \$853.20 ITIES 5 5 5 6 75 feet 1,017.1 LCY/hr cription: 0 % 5,380 feet | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,596 Swell factor: 1.000 Loose volume: 3,596 Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency desc Average push gradient: Average site altitude: Material weight: | \$426.60 \$853.20 ITIES 5 5 6 10 5 ICY ne: Transported Volume factor: Cat Handbook TON TON TON TON TON TON Cat Handbook TON Cat Handbook Cat Handbook | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,596 Swell factor: 1.000 Loose volume: 3,596 Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency desc Average site altitude: Material weight: Weight description: | \$426.60 \$853.20 ITIES 5 5 6 7 6 1 6 1 7 7 7 7 7 7 7 7 7 7 7 7 7 | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,596 Swell factor: 1.000 Loose volume: 3,596 Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency desc Average site altitude: Material weight: Weight description: Job Condition Correction | \$426.60 \$853.20 ITIES 5 5 6 6 7 6 1 6 1,017.1 LCY/hr cription: | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,596 Swell factor: 1.000 Loose volume: 3,596 Source of estimated volum 3,596 Material sconsistence: Unadjusted hourly produc Materials consistency desc Average push gradient: Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator S | \$426.60 \$853.20 ITIES 5 5 5 5 5 5 5 5 | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,596 Swell factor: 1.000 Loose volume: 3,596 Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency desc Average site altitude: Material weight: Weight description: Job Condition Correction Operator S Material consiste | \$426.60 \$853.20 ITIES 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 6 7 7 7 7 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 8 8 8 8 8 8 8 8 8 8 8 8 | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,596 Swell factor: 1.000 Loose volume: 3,596 Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency desc Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator S Material consiste Dozing met | \$426.60 \$853.20 ITIES 5 5 6 6 10 5 5 6 7 6 7 7 7 7 7 7 7 7 7 7 7 7 7 | | | |

| Job efficiency: | 0.830 | (1 SHIFT/DAY) |
|-------------------------------|---------------|---------------|
| Spoil pile: | 0.800 | (FND-RF) |
| Push gradient: | 1.000 | (CAT HB) |
| Altitude: | 1.000 | (CAT HB) |
| Material Weight: | 1.438 | (CAT HB) |
| Blade type: | 1.000 | (PAT) |
| Net correction: | 0.8593 | |
| Adjusted unit production: 87 | 73.99 LCY/hr | |
| Adjusted fleet production: 17 | 747.98 LCY/hr | |

| Fleet size: | 2 Dozer(s) |
|-------------|-------------|
| Unit cost: | \$0.488/LCY |
| | |

| Total job time: | 2.06 Hours |
|-----------------|-------------------|
| Total job cost: | \$1,755 |

Page 1 of 2

BULLDOZER WORK

| | Thase 2 - Grade Transported | 1 Topson | | |
|---|--|-------------------------------------|----------------------------|--------------------|
| Rifle Gravel Pit #1 | Permit Action: | New App | Permit/Job#: | M2021052 |
| PROJECT IDENTIFI | CATION | | | |
| Task #: 4102B Date: 7/19/2023 User: ACY | State: Colorado County: Garfield | | Abbreviation: Filename: | None M052-4102B |
| Agency or organ | ization name: DRMS | | | |
| HOURLY EQUIPME | NT COST | | | |
| Basic Machine: <u>Cat</u> Horsepower: 310 | D8T - 8SU | | | |
| Blade Type: Sem | ni-Universal | | | |
| Attachment: NA | 1 | | | |
| Shift Basis: <u>1 pe</u> Data Source: (CR | er day G) | | | |
| <u>Cost Breakdown</u> : | | | | |
| | ¢241.20 | <u>Utilization %</u> | | |
| Ownership Cost/Hour: | \$241.38 | NA 100 | | |
| Ripper own Cost/Hour | \$143.92 \$0.00 | 100 N A | | |
| Ripper on. Cost/Hour | <u>\$0.00</u> | 0 | | |
| Operator Cost/Hour: | \$41.30 | NA | | |
| | φ120.00 | | | |
| Total Fleet Cost/Hour: MATERIAL QUANT | \$853.20 ITIES | | | |
| MATERIAL QUANT Initial Volume: 1,871 Swell factor: 1.000 Loose volume: 1,871 | \$853.20 <u>ITIES</u> <u> </u> | | | |
| Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,871 Swell factor: 1.000 Loose volume: 1,871 Source of estimated volum Source of estimated swell | \$853.20 ITIES L L L L L L L L L L L L L | | | |
| Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,871 Swell factor: 1.000 Loose volume: 1,871 Source of estimated volum Source of estimated swell HOURLY PRODUCT | \$853.20 ITIES L L L LCY ne: Transported Volume factor: Cat Handbook TON | | | |
| Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,871 Swell factor: 1.000 Loose volume: 1,871 Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product | \$853.20 ITIES L L L L L L L L L L L L L | | | |
| Total Fleet Cost/Hour: MATERIAL QUANT: Initial Volume: 1,871 Swell factor: 1.000 Loose volume: 1,871 Source of estimated volun Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency desc | \$853.20 ITIES L L L L L L L L L L L L L | | | |
| Total Fleet Cost/Hour: MATERIAL QUANT: Initial Volume: 1,871 Swell factor: 1.000 Loose volume: 1,871 Source of estimated volun Source of estimated volun Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency desc Average push gradient: Average site altitude: | \$853.20 ITIES L L L LCY ne: Transported Volume factor: Cat Handbook TON TON TON Ton Ton Ton Ton Ton Ton Ton Ton | | | |
| Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,871 Swell factor: 1.000 Loose volume: 1,871 Source of estimated volun Source of estimated volun Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency desc Average site altitude: Material weight: | \$853.20 ITIES I I I I I I I I I I I I I | | | |
| Total Fleet Cost/Hour: MATERIAL QUANT: Initial Volume: 1,871 Swell factor: 1.000 Loose volume: 1,871 Source of estimated volun Source of estimated volun Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency desc Average site altitude: Material weight: Weight description: | \$853.20 ITIES I I I I I I I I I I I I I | | | |
| Total Fleet Cost/Hour: MATERIAL QUANT: Initial Volume: 1,871 Swell factor: 1.000 Loose volume: 1,871 Source of estimated volun Source of estimated volun Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency desc Average site altitude: Material weight: Weight description: Job Condition Correction | \$853.20 ITIES I D LCY ne: Transported Volume factor: Cat Handbook TON TON TON TON 0 % 5,380 feet 1,600 lbs/LCY Top Soil Factor | | | |
| Total Fleet Cost/Hour: MATERIAL QUANT: Initial Volume: 1,871 Swell factor: 1,000 Loose volume: 1,871 Source of estimated volun Source of estimated volun Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency desc Average site altitude: Material weight: Weight description: Job Condition Correction | \$853.20 ITIES L LCY ne: Transported Volume factor: Cat Handbook TON TON TON TON Ton 1,017.1 LCY/hr cription: Loose stockpile 1.2 0 % 5,380 feet 1,600 lbs/LCY Top Soil Factor Skill: 0.750 | | | |
| Total Fleet Cost/Hour: MATERIAL QUANT: Initial Volume: 1,871 Swell factor: 1.000 Loose volume: 1,871 Source of estimated volun Source of estimated volun Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency desc Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator S Material consiste | \$853.20 ITIES I ILCY ne: Transported Volume factor: Cat Handbook TON $\frac{75 \text{ feet}}{1,017.1 \text{ LCY/hr}}$ cription: Loose stockpile 1.2 0 % 5,380 feet 1,600 lbs/LCY Top Soil Factor Skill: 0.750 ency: 1.200 1.000 | <u>Source</u> (AVG.) (CAT HB) | | |

| Job efficiency: | 0.830 | (1 SHIFT/DAY) |
|-------------------------------|--------------|---------------|
| Spoil pile: | 0.800 | (FND-RF) |
| Push gradient: | 1.000 | (CAT HB) |
| Altitude: | 1.000 | (CAT HB) |
| Material Weight: | 1.438 | (CAT HB) |
| Blade type: | 1.000 | (PAT) |
| Net correction: | 0.8593 | |
| Adjusted unit production: 87 | /3.99 LCY/hr | |
| Adjusted fleet production: 17 | 47.98 LCY/hr | |

| Fleet size: | 2 Dozer(s) |
|-------------|-------------|
| Unit cost: | \$0.488/LCY |
| | |

| Total job time: | 1.07 Hours |
|-----------------|-------------------|
| Total job cost: | \$913 |

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BULLDOZER WORK

| rask description: | Thase 5 - Grade Transporte | u ropson | | |
|---|---|---|---------------|------------|
| Rifle Gravel Pit #1 | Permit Action: | New App | Permit/Job#: | M2021052 |
| PROJECT IDENTIF | ICATION | | | |
| Task #: 4103B | State: Colorado | | Abbreviation: | None |
| Date: 7/19/2023 | County: Garfield | | Filename: | M052-4103B |
| User: ACY | | | | |
| Agency or organ | nization name: DRMS | | | |
| HOURLY EQUIPME | ENT COST | | | |
| Basic Machine:Cat | D8T - 8SU | | | |
| Horsepower: 310 |) | | | |
| Blade Type: Ser | ni-Universal | | | |
| Attachment: NA | | | | |
| Data Source: (CF | PG) | | | |
| Data Source. (CF | (0) | | | |
| Cost Breakdown: | | . | | |
| Ownership Cast/II | ¢041.00 | Utilization % | | |
| Ownership Cost/Hour: | \$241.38 | NA 100 | | |
| Ripper own Cost/Hour: | <u></u> | NA | | |
| Ripper on Cost/Hour | \$0.00 | 0 | | |
| Operator Cost/Herry | \$41.30 | NA | | |
| ODEIAIOF COSI/HOUT | | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: | \$426.60 \$853.20 | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT | \$426.60 \$853.20 TTIES | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,36 | \$426.60 \$853.20 TTIES 1 | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,36 Swell factor: 1.00 | \$426.60 \$853.20 TTIES 1 0 | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,36 Swell factor: 1.00 Loose volume: 4,36 | \$426.60 \$853.20 TTIES 1 0 1 LCY | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,36 Swell factor: 1.00 Loose volume: 4,36 Source of estimated volu | \$426.60 \$853.20 TTIES 1 0 1 LCY me: Transported Volume | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,36 Swell factor: 1.00 Loose volume: 4,36 Source of estimated volu Source of estimated swell | \$426.60 \$853.20 TTIES 1 0 1 LCY me: Transported Volume I factor: Cat Handbook | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,36 Swell factor: 1.00 Loose volume: 4,36 Source of estimated volu Source of estimated swell | \$426.60 \$853.20 TTIES 1 0 1 LCY me: Transported Volume I factor: Cat Handbook | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,36 Swell factor: 1.00 Loose volume: 4,36 Source of estimated volu Source of estimated swell HOURLY PRODUCT | \$426.60 \$853.20 TTIES 1 0 1 LCY me: Transported Volume I factor: Cat Handbook CION | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,36 Swell factor: 1.00 Loose volume: 4,36 Source of estimated volu Source of estimated swell HOURLY PRODUCT Augusta puck distance | \$426.60 \$426.60 \$853.20 TTIES 1 0 1 LCY me: Transported Volume I factor: Cat Handbook TION 75 fact | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,36 Swell factor: 1.00 Loose volume: 4,36 Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc | \$426.60 \$853.20 TTIES 1 0 1 LCY me: Transported Volume I factor: Cat Handbook Cat Handbook Construction: 1017 11 CV/br | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,36 Swell factor: 1.00 Loose volume: 4,36 Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product | \$426.60 \$853.20 TTIES 1 0 1 LCY me: Transported Volume 1 factor: Cat Handbook Cat Handbook Citon 75 feet ction: 1,017.1 LCY/hr | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,36 Swell factor: 1.00 Loose volume: 4,36 Source of estimated volur Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency dest | \$426.60 \$853.20 TTIES 1 0 1 LCY me: Transported Volume 1 factor: Cat Handbook FION ction: 1,017.1 LCY/hr ecription: Loose stockpile 1.2 | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,36 Swell factor: 1.00 Loose volume: 4,36 Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: | \$426.60 \$853.20 TTIES 1 0 1 LCY me: Transported Volume 1 factor: Cat Handbook TION To feet ction: 1,017.1 LCY/hr scription: 0 % | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,36 Swell factor: 1.00 Loose volume: 4,36 Source of estimated volu 50 Source of estimated swell 4,36 HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: | \$426.60 \$853.20 IIIES 1 0 1 LCY me: Transported Volume I factor: Cat Handbook CION Ction: 75 feet 1,017.1 LCY/hr ecription: Loose stockpile 1.2 0 % 5,380 feet | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,36 Swell factor: 1.00 Loose volume: 4,36 Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average site altitude: Material weight: | \$426.60 \$853.20 TTIES 1 0 1 LCY me: Transported Volume 1 factor: Cat Handbook FION ction: 1,017.1 LCY/hr accription: Loose stockpile 1.2 0 % 5,380 feet 1,600 lbs/LCY | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,36 Swell factor: 1.00 Loose volume: 4,36 Source of estimated volu Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average site altitude: Material weight: Weight description: | \$426.60 \$853.20 IIIES 1 0 1 LCY ne: Transported Volume I factor: Cat Handbook CION ction: 75 feet 1,017.1 LCY/hr scription: Loose stockpile 1.2 0% 5,380 feet 1,600 lbs/LCY Top Soil | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,36 Swell factor: 1.00 Loose volume: 4,36 Source of estimated volu Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction | \$426.60 \$853.20 IIIES 1 0 1 LCY me: Transported Volume I factor: Cat Handbook CION ction: 75 feet 1,017.1 LCY/hr ccription: Loose stockpile 1.2 0 % 5,380 feet 1,600 lbs/LCY Top Soil Factor Factor | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,36 Swell factor: 1.00 Loose volume: 4,36 Source of estimated volu Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction | \$426.60 \$853.20 TTIES 1 0 1 LCY me: Transported Volume 1 factor: Cat Handbook FION ction: 1,017.1 LCY/hr acription: Loose stockpile 1.2 0 % 5,380 feet 1,600 lbs/LCY Top Soil Factor Skill: 0.750 | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,36 Swell factor: 1.00 Loose volume: 4,36 Source of estimated volum 500 Source of estimated volum 4,36 MOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency dest Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator of the formation of the formatio | \$426.60 \$853.20 TTIES 1 0 1 LCY me: Transported Volume 1 factor: Cat Handbook Transported Volume 1 factor: Cat Handbook Transported Volume Cat Handbook Top Soil Top Soil Factor Skill: 0.750 ency: 1.200 | <u>Source</u> (AVG.) (CAT HB) | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,36 Swell factor: 1.00 Loose volume: 4,36 Source of estimated volu 50 Source of estimated volu 50 Source of estimated swell 100 HOURLY PRODUCT 4,36 Average push distance: 100 Unadjusted hourly product 100 Materials consistency dest 100 Average push gradient: 100 Average site altitude: 100 Material weight: 100 Weight description: 100 Job Condition Correction 100 Operator 3 100 Material consistency 100 | \$426.60 \$853.20 TTIES 1 0 1 LCY me: Transported Volume 1 factor: Cat Handbook Transported Volume Cat Handbook Cat Handbook Colspan="2">Cat Handbook Cat Handbook | <u>Source</u> (AVG.) (CAT HB) (GEN.) | | |

Task # 4103B

| Job efficiency: | 0.830 | (1 SHIFT/DAY) |
|-------------------------------|---------------|---------------|
| Spoil pile: | 0.800 | (FND-RF) |
| Push gradient: | 1.000 | (CAT HB) |
| Altitude: | 1.000 | (CAT HB) |
| Material Weight: | 1.438 | (CAT HB) |
| Blade type: | 1.000 | (PAT) |
| Net correction: | 0.8593 | |
| Adjusted unit production: 87 | 73.99 LCY/hr | |
| Adjusted fleet production: 17 | 747.98 LCY/hr | |

| Fleet size: | 2 Dozer(s) |
|-------------|-------------|
| Unit cost: | \$0.488/LCY |
| | |

| Total job time: | 2.49 Hours |
|-----------------|-------------------|
| Total job cost: | \$2,129 |

Page 1 of 2

BULLDOZER WORK

| Task description: | Misc Grade Transported | Topsoil | | |
|--|--|-------------------------------------|---------------|------------|
| Rifle Gravel Pit #1 | Permit Action: | New App | Permit/Job#: | M2021052 |
| PROJECT IDENTIFI | CATION | | | |
| Task #: 4104B | State: Colorado | | Abbreviation: | None |
| Date: 7/19/2023 | County: Garfield | | Filename: | M052-4104B |
| User: ACY | | | - | |
| Agency or organ | ization name: DRMS | | | |
| HOURLY EQUIPME | NT COST | | | |
| Basic Machine: Cat | D8T - 8SU | | | |
| Horsepower: 310 | | | | |
| Blade Type: Sem | ni-Universal | | | |
| Attachment: NA | | | | |
| Shift Basis: <u>1 pe</u> | er day | | | |
| Data Source: (CR | .G) | | | |
| Cost Breakdown: | | | | |
| | | Utilization % | | |
| Ownership Cost/Hour: | \$241.38 | NA | | |
| Operating Cost/Hour: | \$143.92 | 100 | | |
| Ripper own. Cost/Hour: | \$0.00 | NA | | |
| Ripper op. Cost/Hour: | \$0.00 | 0 | | |
| Operator Cost/Hour: | \$41.30 | NA | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: | \$426.60 \$853.20 | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT | \$426.60 \$853.20 ITIES | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume:1,666 | \$426.60 \$853.20 <u>5</u> | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,666 Swell factor: 1.000 | \$426.60 \$853.20 <u>ITIES</u> <u>6</u>) | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,666 Swell factor: 1.000 Loose volume: 1,666 | \$426.60 \$853.20 ITIES 5 5 6 6 1 5 1 1 5 | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,666 Swell factor: 1.000 Loose volume: 1,666 Source of estimated volum | \$426.60 \$853.20 ITIES 5 5 6 6 7 6 7 7 8 7 8 8 7 8 8 8 7 8 8 8 7 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,666 Swell factor: 1.000 Loose volume: 1,666 Source of estimated volum Source of estimated swell | \$426.60 \$853.20 ITIES 5 5 6 6 6 7 6 1 6 1 7 7 8 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,666 Swell factor: 1.000 Loose volume: 1,666 Source of estimated volun Source of estimated swell HOURLY PRODUCT | \$426.60 \$853.20 ITIES 5 5 6 CCY ne: Transported Volume factor: Cat Handbook | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,666 Swell factor: 1.000 Loose volume: 1,666 Source of estimated volun Source of estimated swell HOURLY PRODUCT Announce of bit for the first set of the first set | \$426.60 \$853.20 ITIES 5 5 5 6 6 7 6 1 6 1 7 5 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,666 Swell factor: 1.000 Loose volume: 1,666 Source of estimated volun 1,666 Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produced in | \$426.60 \$853.20 ITIES 5 5 5 5 5 5 5 5 5 5 5 5 5 | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,666 Swell factor: 1.000 Loose volume: 1,666 Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product | \$426.60 \$853.20 ITIES 5 5 6 75 feet tion: 75 feet 1,017.1 LCY/hr | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,666 Swell factor: 1.000 Loose volume: 1,666 Source of estimated volun Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency desc | \$426.60 \$853.20 ITIES 5 5 6 75 1,017.1 LCY/hr cription: Loose stockpile 1.2 | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,666 Swell factor: 1.000 Loose volume: 1,666 Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency desc Average push gradient: Average push gradient: | \$426.60 \$853.20 ITIES 5 5 5 6 6 7 6 10 10 10 10 75 feet 1,017.1 LCY/hr cription: Loose stockpile 1.2 0 % 5 380 foot | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,666 Swell factor: 1,000 Loose volume: 1,666 Source of estimated volum Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency desc Average push gradient: Average site altitude: | \$426.60 \$853.20 ITIES 5 5 6 1 6 1 5 5 6 7 7 7 7 7 7 7 7 7 7 7 7 7 | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,666 Swell factor: 1000 Loose volume: 1,660 Source of estimated volun Source of estimated volun Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency desc Average push gradient: Average site altitude: Material weight: | \$426.60 \$853.20 ITIES 5 5 6 10 5 10 5 10 5 10 10 10 10 10 10 10 10 10 10 | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,666 Swell factor: 1.000 Loose volume: 1,666 Source of estimated volum Source of estimated volum Source of estimated volum MATERIAL QUANT Initial Volume: 1,666 Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency desc Average push gradient: Average site altitude: Material weight: Weight description: | \$426.60 \$853.20 ITIES 5 5 6 10 5 10 5 10 5 10 10 10 10 10 10 10 10 10 10 | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,666 Swell factor: 1,000 Loose volume: 1,660 Source of estimated volum Source of estimated volum Average push distance: Materials consistency desc Average site altitude: Material weight: Weight description: Source of estimated volum Source of estimated v | \$426.60 \$853.20 ITIES 5 5 6 7 6 7 7 7 7 7 7 7 7 7 7 100 7 100 100 100 100 100 100 100 100 100 100 1000 | | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,666 Swell factor: 1.000 Loose volume: 1,666 Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency desc Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator S | \$426.60 $$853.20$ ITIES 5 5 6 75 factor: 75 feet tion: 1,017.1 LCY/hr cription: Loose stockpile 1.2 0 % 5,380 feet 1,600 lbs/LCY Top Soil Factor 5kill: 0.750 new: 1.200 | <u>Source</u> (AVG.) | | |
| Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,666 Swell factor: 1.000 Loose volume: 1,666 Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency desc Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator S Material consiste | \$426.60 $$853.20$ ITIES 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 6 1,017.1 LCY/hr cription: 1,017.1 LCY/hr cription: Loose stockpile 1.2 0 % 5,380 feet 1,600 lbs/LCY Top Soil Factor Skill: 0.750 ency: 1.200 hod: 1.000 | <u>Source</u> (AVG.) (CAT HB) | | |

Task # 4104B

| Job efficiency: | 0.830 | (1 SHIFT/DAY) |
|-------------------------------|---------------|---------------|
| Spoil pile: | 0.800 | (FND-RF) |
| Push gradient: | 1.000 | (CAT HB) |
| Altitude: | 1.000 | (CAT HB) |
| Material Weight: | 1.438 | (CAT HB) |
| Blade type: | 1.000 | (PAT) |
| Net correction: | 0.8593 | |
| Adjusted unit production: 87 | 73.99 LCY/hr | |
| Adjusted fleet production: 17 | 747.98 LCY/hr | |

| Fleet size: | 2 Dozer(s) |
|-------------|-------------|
| Unit cost: | \$0.488/LCY |
| | |

| Total job time: | 0.95 Hours |
|-----------------|-------------------|
| Total job cost: | \$813 |

REVEGETATION WORK

| Task descri | ption: | Phase 1 - Reveg | | | |
|------------------|--------------------|-------------------------------------|---------|----------------------------|---------------------|
| ite: Rifle Gr | avel Pit #1 | Permit Action: | New App | Permit/Jol | o#: <u>M2021052</u> |
| PROJECT | <u>IDENTIFIC</u> | CATION | | | |
| Task #: Date: | 5001B 7/19/2023 | State: Colorado County: Garfield | | Abbreviation: Filename: | None M052-5001B |
| | ACV | | | | |

FERTILIZING

Materials

| Description | Units / Acre | Unit | Cost / Unit | Cost /Acre |
|-------------|-----------------|------|-------------------------------|------------|
| | | | \$ | \$ |
| | | | Total Fertilizer Motorials | |
| | | | Cost/Acre | \$0.00 |

Application

| Description | Cost /Acre |
|--|------------|
| | \$ |
| Total Fertilizer Application Cost/Acre | \$0.00 |

TILLING

| Description | Cost /Acre |
|--|------------|
| Disc harrowing, 6" deep (MEANS 32 91 13.23 6100) | \$112.82 |
| | |
| Total Tilling Cost/Acre | \$112.82 |

SEEDING

| Seed Mix | Rate – PLS LBS / Acre | Seeds per SQ. FT | Cost /Acre |
|----------------------------------|--------------------------------|------------------------|------------|
| Meadow Brome - Paddock | 7.20 | 6.61 | \$28.62 |
| Orchardgrass - Potomac | 2.70 | 33.47 | \$11.52 |
| Intermediate Wheatgrass - Tegmar | 2.70 | 5.76 | \$8.10 |
| Rabbitbrush, Rubber | 0.05 | 0.74 | \$3.21 |
| Western Wheatgrass - Barton | 2.70 | 6.82 | \$18.90 |
| Timothy - Climax | 2.70 | 77.48 | \$4.32 |
| Totals Seed Mix | 18.05 | 130.89 | \$74.67 |

Application

| Description | | Cost /Acre |
|----------------------------------|----------------------------------|------------|
| Drill Seeding (DRMS Survey Cost) | | \$232.00 |
| | | |
| | Total Seed Application Cost/Acre | \$232.00 |

MULCHING and MISCELLANEOUS

Materials

| | Units / | | | |
|---|---------|------|-------------|------------|
| Description | Acre | Unit | Cost / Unit | Cost /Acre |
| Hay, delivered {MEANS 31 25 14.16 1200} | 1.50 | TON | \$429.79 | \$644.68 |
| Herbicide - 2,4D @ 1.0 pt/ac | 1.00 | ACRE | \$4.01 | \$4.01 |
| | | | | |
| Total Mulch Materials Cost/Acre | | | | \$648.69 |

Application

| Description | | Cost /Acre |
|--|-----------------------------------|------------|
| Crimping, with tractor {DMG survey data} | | \$74.46 |
| Power mulcher (MEANS 32 91 13.16 0350) | | \$147.67 |
| Weed spray, truck, non-aquatic areas, ann. [DMG] | | \$22.81 |
| | | |
| | Total Mulch Application Cost/Acre | \$244.94 |

NURSERY STOCK PLANTING

| Common Name | No / Acre | Type and Size | Planting Cost | Fertilizer Pellet Cost | Cost /Acre |
|-------------|--------------|---------------|------------------|---------------------------|------------|
| | | | | | \$ |
| | | | | | |
| | | Totals | Nursery Stoc | ek Cost / Acre | \$0.00 |

| | No. of Acres: | 3.67 | Cost /Acre: | \$1,313.12 |
|---------------------|------------------|----------------|--------------|------------|
| Estimate | ed Failure Rate: | 30% | Cost /Acre*: | \$1,313.12 |
| *Selected Replanti | ng Work Items: | TILLING,SEEDIN | G,MULCHING | |
| Initial Job Cost: | \$4.819.15 | | | |
| Reseeding Job Cost: | \$1,445.75 | | | |
| Total Job Cost: | \$6,265 | | | |
| Job Hours: | 5.00 | | | |

REVEGETATION WORK

| Task description: | | Phase 2 - Reveg | | | |
|--|---------------|-------------------------------|---------|----------------------------|---------------------|
| te: Rifle Gravel P | 9it #1 | Permit Action: | New App | Permit/Job | o#: <u>M2021052</u> |
| PROJECT IDE | NTIFIC | ATION | | | |
| Task #: 500 Date: $7/1$ User: AC |)2B 9/2023 | State:ColoradoCounty:Garfield | | Abbreviation: Filename: | None M052-5002B |

FERTILIZING

Materials

| Description | Units / Acre | Unit | Cost / Unit | Cost /Acre |
|-------------|-----------------|------|------------------------|------------|
| | | | \$ | \$ |
| | | | Total Fertilizer | |
| | | | Materials Cost/Acre | \$0.00 |

Application

| Description | Cost /Acre |
|--|------------|
| | \$ |
| Total Fertilizer Application Cost/Acre | \$0.00 |

TILLING

| Description | Cost /Acre |
|--|------------|
| Disc harrowing, 6" deep (MEANS 32 91 13.23 6100) | \$112.82 |
| | |
| Total Tilling Cost/Acre | \$112.82 |

SEEDING

| Seed Mix | Rate – PLS LBS / Acre | Seeds per SQ. FT | Cost /Acre |
|----------------------------------|--------------------------------|------------------------|------------|
| Meadow Brome - Paddock | 7.20 | 6.61 | \$28.62 |
| Orchardgrass - Potomac | 2.70 | 33.47 | \$11.52 |
| Intermediate Wheatgrass - Tegmar | 2.70 | 5.76 | \$8.10 |
| Rabbitbrush, Rubber | 0.05 | 0.74 | \$3.21 |
| Western Wheatgrass - Barton | 2.70 | 6.82 | \$18.90 |
| Timothy - Climax | 2.70 | 77.48 | \$4.32 |
| Totals Seed Mix | 18.05 | 130.89 | \$74.67 |

Application

| Description | | Cost /Acre |
|----------------------------------|----------------------------------|------------|
| Drill Seeding (DRMS Survey Cost) | | \$232.00 |
| | | |
| | Total Seed Application Cost/Acre | \$232.00 |

MULCHING and MISCELLANEOUS

Materials

| | Units / | | | |
|---|---------|------|-------------|------------|
| Description | Acre | Unit | Cost / Unit | Cost /Acre |
| Hay, delivered {MEANS 31 25 14.16 1200} | 1.50 | TON | \$429.79 | \$644.68 |
| Herbicide - 2,4D @ 1.0 pt/ac | 1.00 | ACRE | \$4.01 | \$4.01 |
| | | | | |
| Total Mulch Materials Cost/Acre | | | | \$648.69 |

Application

| Description | | Cost /Acre |
|--|-----------------------------------|------------|
| Crimping, with tractor {DMG survey data} | | \$74.46 |
| Power mulcher (MEANS 32 91 13.16 0350) | | \$147.67 |
| Weed spray, truck, non-aquatic areas, ann. [DMG] | | \$22.81 |
| | | |
| | Total Mulch Application Cost/Acre | \$244.94 |

NURSERY STOCK PLANTING

| Common Name | No / Acre | Type and Size | Planting Cost | Fertilizer Pellet Cost | Cost /Acre |
|-------------|--------------|---------------|------------------|---------------------------|------------|
| | | | | | \$ |
| | | | | | |
| | | Totals | Nursery Stoc | ek Cost / Acre | \$0.00 |

| | No. of Acres: | 1.91 | Cost /Acre: | \$1,313.12 |
|---------------------|------------------|----------------|--------------|------------|
| Estimate | ed Failure Rate: | 30% | Cost /Acre*: | \$1,313.12 |
| *Selected Replanti | ng Work Items: | TILLING,SEEDIN | G,MULCHING | |
| Initial Job Cost: | \$2.508.06 | | | |
| Reseeding Job Cost: | \$752.42 | | | |
| Total Job Cost: | \$3,260 | | | |
| Job Hours: | 2.50 | | | |

REVEGETATION WORK

| Task description: Phase | | Phase 3 - Reveg | 3 - Reveg | | | |
|----------------------------|--------------------|-------------------------------|-----------|----------------------------|---------------------|--|
| ite: _ Rifle Gravel Pit #1 | | Permit Action: | New App | Permit/Jol | o#: <u>M2021052</u> | |
| PROJECT | IDENTIFIC | CATION | | | | |
| Task #: Date: | 5003B 7/19/2023 | State:ColoradoCounty:Garfield | | Abbreviation: Filename: | None M052-5003B | |

FERTILIZING

Materials

| Description | Units / Acre | Unit | Cost / Unit | Cost /Acre |
|-------------|-----------------|------|-------------------------------|------------|
| | | | \$ | \$ |
| | | | Total Fertilizer Motorials | |
| | | | Cost/Acre | \$0.00 |

Application

| Description | Cost /Acre |
|--------------------------------------|------------|
| | \$ |
| Total Fertilizer Application Cost/Ac | re sa aa |

TILLING

| Description | Cost /Acre |
|--|------------|
| Disc harrowing, 6" deep (MEANS 32 91 13.23 6100) | \$112.82 |
| | |
| Total Tilling Cost/Acre | \$112.82 |

SEEDING

| Seed Mix | Rate – PLS LBS / Acre | Seeds per SQ. FT | Cost /Acre |
|----------------------------------|--------------------------------|------------------------|------------|
| Meadow Brome - Paddock | 7.20 | 6.61 | \$28.62 |
| Orchardgrass - Potomac | 2.70 | 33.47 | \$11.52 |
| Intermediate Wheatgrass - Tegmar | 2.70 | 5.76 | \$8.10 |
| Rabbitbrush, Rubber | 0.05 | 0.74 | \$3.21 |
| Western Wheatgrass - Barton | 2.70 | 6.82 | \$18.90 |
| Timothy - Climax | 2.70 | 77.48 | \$4.32 |
| Totals Seed Mix | 18.05 | 130.89 | \$74.67 |

Application

| Description | | Cost /Acre |
|----------------------------------|----------------------------------|------------|
| Drill Seeding (DRMS Survey Cost) | | \$232.00 |
| | | |
| | Total Seed Application Cost/Acre | \$232.00 |

MULCHING and MISCELLANEOUS

Materials

| Description | Units / Acre | Unit | Cost / Unit | Cost /Acre |
|---|-----------------|------|-------------|------------|
| Hay, delivered {MEANS 31 25 14.16 1200} | 1.50 | TON | \$429.79 | \$644.68 |
| Herbicide - 2,4D @ 1.0 pt/ac | 1.00 | ACRE | \$4.01 | \$4.01 |
| | | | | |
| Total Mulch Materials Cost/Acre | | | | \$648.69 |

Application

| Description | | Cost /Acre |
|--|-----------------------------------|------------|
| Crimping, with tractor {DMG survey data} | | \$74.46 |
| Power mulcher (MEANS 32 91 13.16 0350) | | \$147.67 |
| Weed spray, truck, non-aquatic areas, ann. [DMG] | | \$22.81 |
| | | |
| | Total Mulch Application Cost/Acre | \$244.94 |

NURSERY STOCK PLANTING

| Common Name | No / Acre | Type and Size | Planting Cost | Fertilizer Pellet Cost | Cost /Acre |
|-------------|--------------|---------------|------------------|---------------------------|------------|
| | | | | | \$ |
| | | | | | |
| | | Totals | Nursery Stoc | ek Cost / Acre | \$0.00 |

| | No. of Acres: | 4.45 | Cost /Acre: | \$1,313.12 |
|---------------------|------------------|----------------|--------------|------------|
| Estimate | ed Failure Rate: | 30% | Cost /Acre*: | \$1,313.12 |
| *Selected Replanti | ng Work Items: | TILLING,SEEDIN | G,MULCHING | |
| Initial Job Cost: | \$5,843.38 | | | |
| Reseeding Job Cost: | \$1,753.02 | | | |
| Total Job Cost: | \$7,596 | | | |
| Job Hours: | 6.00 | | | |

REVEGETATION WORK

| Task description: Misc | | Misc Reveg | | | |
|------------------------|------------------|--|---------|-------------------|---------------------|
| ite: Rifle G | avel Pit #1 | Permit Action: | New App | Permit/Jol | o#: <u>M2021052</u> |
| PROJECT | <u>IDENTIFIC</u> | CATION | | | |
| Task #: | 5004B | State: <u>Colorado</u> County: Garfield | | Abbreviation: | None M052-5004B |
| Date: | 1/1/2025 | estantj. Sumera | | | |

FERTILIZING

Materials

| Description | Units / Acre | Unit | Cost / Unit | Cost /Acre |
|-------------|-----------------|------|-------------------------------|------------|
| | | | \$ | \$ |
| | | | Total Fertilizer Motorials | |
| | | | Cost/Acre | \$0.00 |

Application

| Description | Cost /Acre |
|--------------------------------------|------------|
| | \$ |
| Total Fertilizer Application Cost/Ac | re sa aa |

TILLING

| Description | Cost /Acre |
|--|------------|
| Disc harrowing, 6" deep (MEANS 32 91 13.23 6100) | \$112.82 |
| | |
| Total Tilling Cost/Acre | \$112.82 |

SEEDING

| Seed Mix | Rate – PLS LBS / Acre | Seeds per SQ. FT | Cost /Acre |
|----------------------------------|--------------------------------|------------------------|------------|
| Meadow Brome - Paddock | 7.20 | 6.61 | \$28.62 |
| Orchardgrass - Potomac | 2.70 | 33.47 | \$11.52 |
| Intermediate Wheatgrass - Tegmar | 2.70 | 5.76 | \$8.10 |
| Rabbitbrush, Rubber | 0.05 | 0.74 | \$3.21 |
| Western Wheatgrass - Barton | 2.70 | 6.82 | \$18.90 |
| Timothy - Climax | 2.70 | 77.48 | \$4.32 |
| Totals Seed Mix | 18.05 | 130.89 | \$74.67 |

Application

| Description | | Cost /Acre |
|----------------------------------|--------------------------------|------------|
| Drill Seeding (DRMS Survey Cost) | | \$232.00 |
| | | |
| To | tal Seed Application Cost/Acre | \$232.00 |

MULCHING and MISCELLANEOUS

Materials

| | Units / | | | |
|---|---------|------|-------------|------------|
| Description | Acre | Unit | Cost / Unit | Cost /Acre |
| Hay, delivered {MEANS 31 25 14.16 1200} | 1.50 | TON | \$429.79 | \$644.68 |
| Herbicide - 2,4D @ 1.0 pt/ac | 1.00 | ACRE | \$4.01 | \$4.01 |
| | | | | |
| Total Mulch Materials Cost/Acre | | | | \$648.69 |

Application

| Description | | Cost /Acre |
|--|-----------------------------------|------------|
| Crimping, with tractor {DMG survey data} | | \$74.46 |
| Power mulcher (MEANS 32 91 13.16 0350) | | \$147.67 |
| Weed spray, truck, non-aquatic areas, ann. [DMG] | | \$22.81 |
| | | |
| | Total Mulch Application Cost/Acre | \$244.94 |

NURSERY STOCK PLANTING

| Common Name | No / Acre | Type and Size | Planting Cost | Fertilizer Pellet Cost | Cost /Acre |
|-------------|--------------|---------------|------------------|---------------------------|------------|
| | | | | | \$ |
| | | | | | |
| | | Totals | Nursery Stoc | ek Cost / Acre | \$0.00 |

| Estimat. | No. of Acres: | 1.72 | Cost /Acre: | \$1,313.12 |
|---------------------|------------------|----------------|--------------|------------|
| Estimate | ed Fallure Kate: | 30% | Cost /Acre*: | \$1,313.12 |
| *Selected Replanti | ng Work Items: | TILLING,SEEDIN | G,MULCHING | |
| Initial Job Cost: | \$2,258.57 | | | |
| Reseeding Job Cost: | \$677.57 | | | |
| Total Job Cost: | \$2,936 | | | |
| Job Hours: | 2.50 | | | |

REVEGETATION WORK

| Г | Fask descrip | otion: | Phase 4 - Failure Seeding of | Berms 30% | | |
|------------|---------------------------|--------------------------|-------------------------------|-----------|----------------------------|-------------------|
| Site: | Rifle Gra | vel Pit #1 | Permit Action: | New App | Permit/Job | o#: M2021052 |
| <u>P</u>] | <u>ROJECT</u> | <u>IDENTIFIC</u> | CATION | | | |
| | Task #: Date: User: | 5005 7/19/2023 ACY | State:ColoradoCounty:Garfield | | Abbreviation: Filename: | None M052-5005 |
| | Age | ency or organi | zation name: DRMS | | | |

FERTILIZING

Materials

| Description | Units / Acre | Unit | Cost / Unit | Cost /Acre |
|-------------|-----------------|------|------------------------|------------|
| | | | \$ | \$ |
| | | | Total Fertilizer | |
| | | | Materials Cost/Acre | \$0.00 |

Application

| Description | Cost /Acre |
|--|------------|
| | \$ |
| Total Fertilizer Application Cost/Acre | \$0.00 |

TILLING

| Description | Cost /Acre |
|--|------------|
| Disc harrowing, 6" deep (MEANS 32 91 13.23 6100) | \$112.82 |
| | |
| Total Tilling Cost/Acre | \$112.82 |

SEEDING

| Seed Mix | Rate – PLS LBS / Acre | Seeds per SQ. FT | Cost /Acre |
|----------------------------------|--------------------------------|------------------------|------------|
| Meadow Brome - Paddock | 7.20 | 6.61 | \$28.62 |
| Orchardgrass - Potomac | 2.70 | 33.47 | \$11.52 |
| Intermediate Wheatgrass - Tegmar | 2.70 | 5.76 | \$8.10 |
| Rabbitbrush, Rubber | 0.05 | 0.74 | \$3.21 |
| Western Wheatgrass - Barton | 2.70 | 6.82 | \$18.90 |
| Timothy - Climax | 2.70 | 77.48 | \$4.32 |
| Totals Seed Mix | 18.05 | 130.89 | \$74.67 |

Application

| Description | | Cost /Acre |
|----------------------------------|----------------------------------|------------|
| Drill Seeding (DRMS Survey Cost) | | \$232.00 |
| | | |
| | Total Seed Application Cost/Acre | \$232.00 |

MULCHING and MISCELLANEOUS

Materials

| Description | Units / Acre | Unit | Cost / Unit | Cost /Acre |
|---|-----------------|------|-------------|------------|
| Hay, delivered {MEANS 31 25 14.16 1200} | 1.50 | TON | \$429.79 | \$644.68 |
| Herbicide - 2,4D @ 1.0 pt/ac | 1.00 | ACRE | \$4.01 | \$4.01 |
| Total Mulch Materials Cost/Acre | | | | \$648.69 |

Application

| Description | | Cost /Acre |
|--|-----------------------------------|------------|
| Crimping, with tractor {DMG survey data} | | \$74.46 |
| Power mulcher (MEANS 32 91 13.16 0350) | | \$147.67 |
| Weed spray, truck, non-aquatic areas, ann. [DMG] | | \$22.81 |
| | | |
| | Total Mulch Application Cost/Acre | \$244.94 |

NURSERY STOCK PLANTING

| Common Name | No / Acre | Type and Size | Planting Cost | Fertilizer Pellet Cost | Cost /Acre |
|-------------|--------------|---------------|------------------|---------------------------|------------|
| | | | | | \$ |
| | | | | | |
| | | Totals 1 | Nursery Stoc | k Cost / Acre | \$0.00 |

| | res: 0.86 | Cost /Acre: | \$1,313.12 |
|---|-----------------|--------------|--------------|
| Estimated Failure R | ate: 0% | Cost /Acre*: | \$0.00 |
| *Selected Replanting Work Iter | ms: NONE | | |
| Initial Job Cost: \$1,129.28 | | | |
| Reseeding Job Cost: \$0.00 | | | |
| Total Job Cost: \$1,129 | | | |
| Job Hours: 1.00 | | | |
| *Selected Replanting Work Ite: Initial Job Cost: Reseeding Job Cost: Total Job Cost: Job Hours: 1.00 | ms: <u>NONE</u> | | <u>40.00</u> |

EQUIPMENT MOBILIZATION/DEMOBILIZATION

| Task descrip | otion: Ini | tial Mobilization | | | | | |
|---|----------------------|-------------------|-------------|------------|------------------------------|-----------------------|------------|
| : Rifle Gra | vel Pit #1 | Permit | Action: New | Арр | | Permit/Job#: <u>M</u> | 2021052 |
| PROJECT | IDENTIFICATI | <u>ION</u> | | | | | |
| Task #: | 9001 | State: Co | olorado | | Abbro | eviation: None | |
| Date: User: | 7/19/2023 ACY | County: <u>Ga</u> | arfield | | F: | ilename: M052 | -9001 |
| Age | ency or organization | n name: DRMS | | | | | |
| EQUIPME | NT TRANSPOR | T RIG COST | | | | | |
| | | | | | Shift ba | usis: 1 per da | у |
| | | | | | Cost Data Sou | rce: CRG Da | ta |
| - | Truck Tractor Desc | cription: GENE | RIC ON-HIGH | WAY TR | UCK TRACTO | OR, 6X4, DIESEL | POWERED, |
| | T | | ENEDIC FOLD | 400 HI | P (2ND HALF, | $\frac{2006}{2000}$ | IDMENIT |
| | Truck Trailer Desc | ripuon: G | ENERIC FULL | TRAILER | OSENECK, DE 2 (25T 50T A) | ND 100T) | IPMENI |
| | | | | I IQ IILLI | (251, 501, 70 | (D 1001) | |
| Cost Breakdo | wn: | | | | | | |
| Available F | Rig Capacities | 0-25 Tons | 26-50 Tons | 51 | + Tons | | |
| Owne | ership Cost/Hour: | \$20.26 | \$36.04 | \$ | 547.05 | | |
| Oper | rating Cost/Hour: | \$39.51 | \$76.08 | \$ | 582.85 | | |
| Ope | erator Cost/Hour: | \$22.52 | \$22.52 | \$ | \$22.52 | | |
| Н | lelper Cost/Hour: | \$0.00 | \$23.53 | \$ | \$23.53 | | |
| Total | Unit Cost/Hour: | \$82.29 | \$158.17 | \$ | 175.95 | | |
| NON ROAI | DABLE EQUIP | MENT: | | | | | |
| Machine | Weight/ | Owner ship | Haul R1g | Fleet | Haul Trip | Return I rip | DOI Permit |
| Description | Unit | Cost/hr/ unit | Cost/hr/uni | Size | Cost/hr/ | Cost/nr/ neet | Cost/ neet |
| | (TONS) | | t | | fleet | | |
| Cat 730 | 25.19 | \$108.06 | \$82.29 | 3 | \$571.05 | \$246.87 | \$750.00 |
| CAT 980H | 33.12 | \$61.69 | \$158.17 | 1 | \$219.86 | \$158.17 | \$250.00 |
| Cat D8T - 8S | SU 53.08 | \$255.49 | \$175.95 | 2 | \$862.88 | \$351.90 | \$250.00 |
| CAT 16M | 28.73 | \$212.21 | \$158.17 | 1 | \$370.38 | \$158.17 | \$250.00 |
| Drill/Broadca Seeder with Tractor | ast 25.00 | \$6.73 | \$82.29 | 1 | \$89.02 | \$82.29 | \$250.00 |
| Power Mulch (Bowie I D-9 | ner 6.00 | \$25.94 | \$82.29 | 1 | \$108.23 | \$82.29 | \$250.00 |

Subtotals: \$2,221.42 \$1,079.69 \$2,000.00

ROADABLE EQUIPMENT:

| Machine Description | Total Cost/hr/ | Fleet Size | Haul Trip | Return Trip |
|--------------------------------|----------------|------------|----------------|----------------|
| | unit | | Cost/hr/ fleet | Cost/hr/ fleet |
| Water Tanker, 3,500 Gal. | \$75.37 | 1 | \$75.37 | \$75.37 |
| Flatbed Truck, 4x2, 30K GVW | \$63.90 | 1 | \$63.90 | \$63.90 |
| Light Duty Pickup, 4x4, 3/4 T. | \$71.19 | 2 | \$142.38 | \$142.38 |
| | | Subtotals: | \$281.65 | \$281.65 |

Subtotals: \$281.65

EQUIPMENT HAUL DISTANCE and Time

| Nearest Major City or Town within project area region: | RIFLE | |
|--|------------|-------|
| Total one-way travel distance: | 7.00 | miles |
| Average Travel Speed: | 45.00 | mph |
| Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig: | \$9,469.85 | |
| Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig: | \$87.62 | |

Transportation Cycle Time:

| | Non- | |
|-------------------------|-----------|-----------|
| | Roadable | Roadable |
| | Equipment | Equipment |
| Haul Time (Hours): | 0.16 | 0.16 |
| Return Time (Hours): | 0.16 | 0.16 |
| Loading Time (Hours): | 0.50 | NA |
| Unloading Time (Hours): | 0.50 | NA |
| Subtotals: | 1.31 | 0.31 |

JOB TIME AND COST

Total job time: **2.62** Hours

Total job cost: \$9,557

EQUIPMENT MOBILIZATION/DEMOBILIZATION

| Task description: | Sec | ondary Mobilizat | tion | | | | |
|---|-----------------|------------------|------------------|---------------------|-----------------------------|-------------------------------------|----------------|
| Rifle Gravel I | Pit #1 | Permit | Action: New | Арр |] | Permit/Job#: | M2021052 |
| PROJECT IDE | NTIFICATI | ON | | | | | |
| Task #: 900 |)2 | State: Co | olorado | | Abbre | viation: No | one |
| Date: 7/1 User: AC | 9/2023 CY | County: Ga | arfield | | Fi | lename: M | 052-9002 |
| Agency | or organization | n name: DRMS | | | | | |
| EQUIPMENT 1 | FRANSPOR | T RIG COST | | | | | |
| | | | | C | Shift ba Cost Data Sour | sis: <u>1 pe</u> rce: <u>CRG</u> | r day Data |
| Trucl | c Tractor Desc | ription: GENE | RIC ON-HIGH | WAY TRU 400 HP | CK TRACTO (2ND HALF, | OR, 6X4, DIE 2006) | SEL POWERED, |
| Truc | k Trailer Desc | ription: G | ENERIC FOLD | NG GOO FRAILER (| SENECK, DF (25T, 50T, AN | OP DECK E | QUIPMENT |
| Cost Breakdown: | | | | | | | |
| Available Rig C | apacities | 0-25 Tons | 26-50 Tons | 51+ | Tons | | |
| Ownership | o Cost/Hour: | \$20.26 | \$36.04 | \$4 | 7.05 | | |
| Operating | g Cost/Hour: | \$39.51 | \$76.08 | \$8 | 2.85 | | |
| Operator | r Cost/Hour: | \$22.52 | \$22.52 | \$2 | 2.52 | | |
| Helpe | r Cost/Hour: | \$0.00 | \$23.53 | \$2 | 3.53 | | |
| Total Uni | t Cost/Hour: | \$82.29 | \$158.17 | \$17 | 75.95 | | |
| NON ROADAB | LE EQUIPN | MENT: | | | | | |
| Machine | Weight/ | Owner ship | Haul Rig | Fleet | Haul Trip | Return Trip | DOT Permit |
| Description | Unit (TONS) | Cost/hr/ unit | Cost/hr/uni t | Size | Cost/hr/ fleet | Cost/hr/ fle | et Cost/ fleet |
| Drill/Broadcast Seeder with Tractor | 25.00 | \$6.73 | \$82.29 | 1 | \$89.02 | \$82.29 | \$250.00 |
| Power Mulcher (Bowie LD-90) | 6.00 | \$25.94 | \$82.29 | 1 | \$108.23 | \$82.29 | \$250.00 |
| | | | | | | | |

ROADABLE EQUIPMENT:

| Machine Description | Total Cost/hr/ unit | Fleet Size | Haul Trip Cost/hr/ fleet | Return Trip Cost/hr/ fleet |
|--------------------------------|------------------------|------------|-----------------------------|-------------------------------|
| Water Tanker, 3,500 Gal. | \$75.37 | 1 | \$75.37 | \$75.37 |
| Flatbed Truck, 4x2, 30K GVW | \$63.90 | 1 | \$63.90 | \$63.90 |
| Light Duty Pickup, 4x4, 3/4 T. | \$71.19 | 2 | \$142.38 | \$142.38 |
| | | Subtotals: | \$281.65 | \$281.65 |

EQUIPMENT HAUL DISTANCE and Time

| | RIFLE | Nearest Major City or Town within project area region: |
|-------|------------|--|
| miles | 7.00 | Total one-way travel distance: |
| mph | 45.00 | Average Travel Speed: |
| | \$1,507.07 | Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig: |
| | \$87.62 | Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig: |
| | | one round urp, no naur rig. |

Transportation Cycle Time:

| | Non- | |
|-------------------------|-----------|-----------|
| | Roadable | Roadable |
| | Equipment | Equipment |
| Haul Time (Hours): | 0.16 | 0.16 |
| Return Time (Hours): | 0.16 | 0.16 |
| Loading Time (Hours): | 0.50 | NA |
| Unloading Time (Hours): | 0.50 | NA |
| Subtotals: | 1.31 | 0.31 |

JOB TIME AND COST

Total job time: 2.62 Hours

Total job cost: \$1,595

Upon Completeion of Mining by Phase

Stripped Not Yet Mined (New App)

| Form | Task # | Phase | Task | | \$ | AC | CY | | Form | Task # | Phase | Task | | \$ | AC | СҮ | | |
|---------------|--------|----------------|-------------------------------|---------|---------|------|-----|-----|--------|-----------|--------------------|---------------------------------------|----------------|-------------|-----------|--------|-----|----------------------------------|
| User Provided | 1000A | Phase 3 | Slope verification set-up fee | | \$2,500 | | | | | | | | | | | | | 1000s Slope verification |
| User Provided | 1001A | Mining Phase 1 | Slope verification | | \$3,750 | | | | Truck | 2001B | Mining Phase 1 | Backfill w overburden | 30" | | 3.67 | 14,802 | CCY | 2000s Overburden |
| Ripper | 3001A | Mining Phase 1 | Decompact Slopes | | | 0.3 | | | Dozer | 2101B | Mining Phase 1 | Grade Transported Overburden | | | | 16,504 | LCY | 3000s Decompaction |
| Loader | 4001A | Mining Phase 1 | Topsoil Replacement | 6" | | 0.3 | 275 | CCY | Ripper | 3001B | Mining Phase 1 | Decompact Soil | | | 3.67 | | | 4000's topsoil |
| Dozer | 4101A | Mining Phase 1 | Grade Transported Topsoil | | | | 334 | LCY | Truck | 4001B | Mining Phase 1 | Topsoil Replacement | 6" | | 3.67 | 2,960 | CCY | 5000's Reveg |
| Reveg | 5001A | Mining Phase 1 | Reveg | Wetland | | 0.3 | | | Dozer | 4101B | Mining Phase 1 | Grade Transported Topsoil | | | | 3,596 | LCY | 9000's Mob |
| | | | | | | | | | Reveg | 5001B | Mining Phase 1 | Reveg | Upland | | 3.67 | | | |
| | | | | | | | | | | | | | | | | | | |
| User Provided | 1002A | Mining Phase 2 | Slope verification | | \$3,750 | | | | Truck | 2002B | Mining Phase 2 | Backfill w overburden | 30" | | 1.91 | 7,703 | CCY | 3 x Truck ** If any Truck tasks |
| Ripper | 3002A | Mining Phase 2 | Decompact Slopes | | | 0.18 | | | Dozer | 2102B | Mining Phase 2 | Grade Transported Overburden | | | | 8,589 | LCY | 1 X loader |
| Loader | 4002A | Mining Phase 2 | Topsoil Replacement | 6" | | 0.18 | 129 | CCY | Ripper | 3002B | Mining Phase 2 | Decompact Soil | | | 1.91 | | | 2 x Dozer |
| Dozer | 4102A | Mining Phase 1 | Grade Transported Topsoil | | | | 157 | LCY | Truck | 4002B | Mining Phase 2 | Topsoil Replacement | 6" | | 1.19 | 1,540 | CCY | 16m ** If any Truck tasks |
| Reveg | 5002A | Mining Phase 2 | Reveg | Wetland | | 0.18 | | | Dozer | 4102B | Mining Phase 2 | Grade Transported Topsoil | | | | 1,871 | LCY | 2500 water ** If any Truck tasks |
| | | | | | | | | | Reveg | 5002B | Mining Phase 2 | Reveg | Upland | | 1.91 | | | Tractor |
| | | | | | | | | | | | | | | | | | | Power Mulcher |
| User Provided | 1003A | Mining Phase 3 | Slope verification | | \$3,750 | | | | Truck | 2003B | Mining Phase 3 | Backfill w overburden | 30" | | 4.45 | 17,948 | CCY | Flatbeed |
| Ripper | 3003A | Mining Phase 3 | Decompact Slopes | | | 0.22 | | | Dozer | 2103B | Mining Phase 3 | Grade Transported Overburden | | | | 20,012 | LCY | 2x Crew truck |
| Loader | 4003A | Mining Phase 3 | Topsoil Replacement | 6" | | 0.22 | 162 | ССҮ | Ripper | 3003B | Mining Phase 3 | Decompact Soil | | | 4.45 | | | |
| Dozer | 4103A | Mining Phase 1 | Grade Transported Topsoil | | | | 197 | LCY | Truck | 4003B | Mining Phase 3 | Topsoil Replacement | 6" | | 4.45 | 3,589 | CCY | |
| Reveg | 5003A | Mining Phase 3 | Reveg | Wetland | | 0.22 | | | Dozer | 4103B | Mining Phase 3 | Grade Transported Topsoil | | | | 4,361 | LCY | |
| | | | | | | | | | Reveg | 5003B | Mining Phase 3 | Reveg | Upland | | 4.45 | | | |
| | | | | | | | | | | | | | | | | | | |
| | | Phase 3 Total | Decompact Slopes | | | 0.7 | | | Truck | 2004B | Misc** | Backfill w overburden | 30" | | 1.72 | 6,857 | CCY | |
| | | Phase 3 Total | Topsoil Greenbelt | 6" | | 0.7 | 566 | CCY | Dozer | 2104B | Misc** | Grade Transported Overburden | | | | 7,646 | LCY | |
| | | Phase 3 Total | Reveg green belt | Wetland | | 0.7 | | | Ripper | 3004A | Misc** | Decompact Soil | | | 1.72 | | | |
| | | | | | | | | | Truck | 4004B | Misc** | Topsoil Replacement | 6" | | 1.72 | 1,371 | CCY | |
| | | | | | | | | | Dozer | 4104B | Misc** | Grade Transported Topsoil | | | | 1,666 | LCY | |
| | | | | | | | | | Reveg | 5004B | Misc** | Reveg | Upland | | 1.72 | | | |
| Form | Task # | Phase | Task | | \$/ | AC | CY | | • | **11.8 ac | stripped, mining p | hases 1-3 only accounts for 10.03 ac, | use 0.57 extra | per phase i | remaining | | | |

| Form | Task # | Phase | Task | | Ş | AC | CY | |
|---------------|--------|-----------|----------------------------------|--------|---------|-------|-----|-----|
| Ripper | 3004A | Phase 4** | Decompact Soil | | | 0.7 | | |
| Loader | 4004A | Phase 4** | Topsoil btwn berm | 6" | | 0.7 | 566 | CCY |
| Dozer | 4104A | Phase 4** | Grade Transported Topsoil | | | | 676 | LCY |
| Reveg | 5004A | Phase 4** | Reveg btwn berm | Upland | | 0.7 | | |
| User Provided | 1004A | Phase 4 | Slope verification-Final | | \$3,750 | | | |
| Reveg | 5005 | Phase 4 | Berm seeding Failure 30% of 2.87 | Upland | | 0.861 | | |
| | 9001 | | Initial Mobilization | | | | | |
| | 9002 | | Secondary Mobilization | | | | | |

| Form | Task # Phase | Task | | \$ AC | СҮ | |
|-------|--------------|----------------------------------|--------|----------|----|--|
| Reveg | 5005 Phase 4 | Berm seeding Failure 30% of 2.87 | Upland | 0.861 | | |
| | 9001 | Initial Mobilization | | | | |
| | 9002 | Secondary Mobilization | | | | |

** 0.7 total Between Berm Area, use 0.23 per phase