

7.0 **COST ESTIMATE**

This cost estimate represents an engineering estimate for the work based on conditions and drill logs presented by Genwal Coal Company. This estimate should not be considered as a definitive fixed price bid.

The estimate is prepared in first quarter, 1990, U.S. Dollars. It is based on contractor's performance and includes; mobilization, contractor's plant setup, 3000 linear feet of development, demobilization, overhead and fee plus a contingency for extra work.

7.1 **Estimated Cost**

| | |
|-------------------------------|--------------------|
| 1. Mobilization | \$55,000 |
| 2. Plant Setup | 228,200 |
| 3. Entries-Inclined Section | 537,000 |
| 4. Entries-Horizontal Section | 803,800 |
| 5. Entries-Divide Section | 471,800 |
| 6. Plant Take Down | 22,400 |
| 7. Demobilization | 41,100 |
| 8. Contingency | <u>323,900</u> |
| TOTAL | \$2,483,200 |

Total Estimated Project Cost - use \$2,483,000

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
AREA: ENTRIES
ITEM
SUBJECT: PROJECT COST SUMMARY

EST. BY: LEA
CHECK BY: *108 H*
Date: 01/22/90

DESCRIPTION: Summary of all items: ENTRIES

| ESTIMATE ITEM | TOTAL COST |
|-----------------------------|-------------|
| LABOR | \$765,805 |
| DIRECT CHARGE EQUIPMENT | \$82,415 |
| CONTRACTOR EQUIPMENT RENTAL | \$204,602 |
| OUTSIDE RENTAL EQUIPMENT | \$33,672 |
| SUBCONTRACTS | |
| PERMANENT MATERIAL | \$44,743 |
| DIRECT SUPPLIES | \$709,165 |
| SITE INDIRECTS | \$37,335 |
| SUBTOTAL | \$1,877,738 |
| MARGIN | \$281,661 |
| CONTINGENCY | \$323,910 |
| TOTAL PROJECT COST | \$2,483,309 |

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 CODE NO: 256
 AREA: MOBILIZE/DEMOBILIZE
 SUBJECT: SUMMARY

EST. BY: SRO
 CHECKER: WEH
 DATE: 01/20/90
 FILE: MOBDEMOB

DESCRIPTION:

MOBILIZE OWNED AND RENTAL EQUIPMENT 750 MILES TO JOBSITE.
 MOBILIZE STAFF TO JOBSITE - 750 MILES AVG.
 DEMOBILIZE EQUIPMENT & STAFF 750 MILES TO ORIGIN.

QUANTITY: 1 LUMP SUM

| ESTIMATE ITEM | MOBILIZE | DEMOBILIZE |
|-----------------------------|-------------|-------------|
| LABOR | \$8,504.70 | \$8,504.70 |
| DIRECT CHARGE EQUIPMENT | | |
| CONTRACTOR RENTAL EQUIPMENT | \$17,475.00 | \$5,825.00 |
| OUTSIDE RENTAL EQUIPMENT | \$7,660.00 | \$6,660.00 |
| SUBCONTRACTS | | |
| PERMANENT MATERIAL | | |
| DIRECT SUPPLIES | \$14,212.50 | \$14,762.50 |
| SITE INDIRECTS | | |
| SUBTOTAL: | \$47,852.20 | \$35,752.20 |
| MARGIN: 15 % | \$7,177.83 | \$5,362.83 |
| TOTAL: | \$55,030.03 | \$41,115.03 |
| USE: | \$55,000 | \$41,100 |

REDPATH ENGINEERING INC.

| | |
|-----------------------------|----------------|
| PROJECT: GENWAL COAL | EST BY: SRO |
| CODE NO: 256 | CHECKER: WEA |
| AREA: MOBILIZE/DEMobilize | DATE: 01/20/90 |
| SUBJECT: DRIFT MOBILIZATION | |

| | MOBILIZATION | DEMobilIZATION |
|----------------------------------|--------------|----------------|
| LABOR: ZERO BONUS | | |
| LOAD AT SHOP / RETURN TO SHOP | \$2,481.52 | \$2,481.52 |
| UNLOAD AT JOB / RELOAD FOR DEMOB | \$4,540.50 | \$4,540.50 |
| TRAVEL SALARIES (W/O SUBS) | \$1,482.68 | \$1,482.68 |
| TOTAL: | \$8,504.70 | \$8,504.70 |

DIRECT SUPPLIES

| | | |
|-------------------|-------------|-------------|
| FREIGHT & DUNNAGE | \$13,350.00 | \$13,900.00 |
| STAFF SUBSIST | \$300.00 | \$300.00 |
| STAFF MILEAGE | \$562.50 | \$562.50 |
| TOTAL: | \$14,212.50 | \$14,762.50 |

OUTSIDE RENTAL

| | | |
|--|------------|------------|
| UNLOAD / LOAD: JOBSITE | \$3,280.00 | \$3,280.00 |
| LOAD / UNLOAD: CONTRACTOR'S SHOP | \$2,880.00 | \$2,880.00 |
| EQUPT: TWO WEEKS TRANSIT RENT: \$2,000 | | |
| ALLOCATE 75% TO MOBILIZATION: | \$1,500.00 | \$500.00 |
| TOTAL: | \$7,660.00 | \$6,660.00 |

COMPANY RENTAL

| | | |
|---|-------------|------------|
| EQUPT: TWO WEEKS TRANSIT RENT: \$23,300 | | |
| ALLOCATE 75% TO MOBILIZATION: | \$17,475.00 | \$5,825.00 |

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 CODE NO: 256
 AREA: MOBILIZE/DEMobilize
 SUBJECT: MOBILIZATION EQUIPMENT

EST BY: SRO
 CHECKER: WCH
 DATE: 01/20/90

| MOBILIZE/DEMobilize ITEMS | QT | LOAD | MOBILIZE FROM | DEMobilize TO | LOAD |
|-------------------------------|----|------|---------------|---------------|------|
| 650 CFM COMPRESSORS - ELEC. | 3 | 1.00 | SHOP | SHOP | 1.00 |
| DRY/OFFICE TRAILER (3RD PTY) | 1 | 1.00 | SALT LAKE | SALT LAKE | 1.00 |
| U/G OFFICE/SHOP UNITS | 2 | 0.50 | SHOP | LOCAL | 0.50 |
| WELDER | 1 | 0.25 | SHOP | SHOP | 0.25 |
| FAN, 50 HP - ELEC | 3 | 0.50 | SHOP | SHOP | 0.50 |
| MAGAZINES | 2 | 0.50 | VENDOR | LOCAL | 0.50 |
| TANK - WATER | 1 | 0.50 | VENDOR | LOCAL | 0.50 |
| TANKS - FUEL | 2 | 0.50 | VENDOR | LOCAL | 0.50 |
| CONTAINER: 8X20: DRILLS, FANS | 1 | 0.50 | SHOP | SHOP | 0.50 |
| CONTAINER: 8X20: TOOLS, PUMPS | 1 | 0.50 | SHOP | SHOP | 0.50 |
| 5 CY SCOOP | 3 | 3.00 | SHOP | SHOP | 3.00 |
| JUMBO - 2 BOOM | 1 | 1.00 | SHOP | SHOP | 1.00 |
| BOSS BUGGY | 1 | 1.00 | SHOP | SHOP | 1.00 |
| SERVICE TRAILERS | 2 | 1.00 | SHOP | SHOP | 1.00 |
| PICKUPS - U/G DIESEL | 2 | 1.00 | SHOP | SHOP | 1.00 |
| PICKUPS - SURF | 2 | 1.00 | SHOP | SHOP | 1.00 |
| POWER CENTER/PANELS/ETC | 1 | 1.00 | SALT LAKE | SALT LAKE | 1.00 |

| MOBILIZATION LOADS: | FROM | NO. | RATE | TOTAL |
|----------------------------|---------------------|-------------------|---------|-----------------|
| | CONTRACTOR SHOP | 11 | \$1,100 | \$12,100 |
| | SALT LAKE CITY | 2 | \$250 | \$500 |
| | LOCAL | 2 | | |
| | SUBTOTAL: | 15 | | \$12,600 |
| | ADD DUNNAGE: | \$50 /LOAD | | \$750 |
| TOTAL MOBILIZATION: | | | | \$13,350 |

| DEMobilIZATION LOADS: | TO | NO. | RATE | TOTAL |
|------------------------------|---------------------|-------------------|---------|-----------------|
| | CONTRACTOR SHOP | 11 | \$1,150 | \$12,650 |
| | SALT LAKE CITY | 2 | \$250 | \$500 |
| | LOCAL | 2 | | |
| | SUBTOTAL: | 15 | | \$13,150 |
| | ADD DUNNAGE: | \$50 /LOAD | | \$750 |
| TOTAL DEMobilIZATION: | | | | \$13,900 |

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 CODE NO: 256
 AREA: MOBILIZE/DEMOBILIZE
 SUBJECT: MOBILIZE PERSONNEL

EST BY: SRO
 CHECKER: WEA
 DATE: 01/20/90

MOBILIZE PERSONNEL: STAFF

ASSUME: 750 MILES IN 750 MILES OUT
 PAY: 2 DAYS IN/ 2 DAYS OUT

PERSONNEL SALARY:
CLASSIFICATION

| CLASSIFICATION | SALARY | SUBSIST | TOTAL |
|------------------|----------|---------|---------------|
| PROJECT SUP'T | \$264.42 | \$50.00 | \$314.42 |
| MECH SUP'T | \$255.77 | \$50.00 | \$305.77 |
| PROJECT ENGINEER | \$221.15 | \$50.00 | \$271.15 |
| TOTAL/DAY: | | | \$891.34 /DAY |
| | | | X 2 DAYS = |
| | | | \$1,782.68 |

MILEAGE:

| | | | | |
|-------------|--------------|---|---------|------------|
| 750 MILES X | \$0.25 /MILE | X | 3 MEN = | \$563 /IN |
| 750 MILES X | \$0.25 /MILE | X | 3 MEN = | \$563 /OUT |

UNLOAD EQUIPMENT - SITE / RELOAD FOR DEMOBILIZATION:

15 LOADS @ 3 LOADS/DAY = 5 DAYS

LABOR:

| | | | | |
|----------------|----------|---------------|---|---------------------|
| SUPERINTENDENT | \$264.42 | | | |
| 3 LABORERS @ | \$214.56 | | | |
| | | \$908.10 /DAY | X | 5 DAYS = \$4,540.50 |

3RD PARTY CRANE:

32 HRS @ \$90.00 = \$2,880 + 400 MOB = \$3,280.00

CONTRACTOR'S YARD - LOAD & UNLOAD: 3.00 LOADS/DAY

LABOR:

2 MECH @ \$169.24 EACH AND 2 LABORERS \$140.95 = \$620.38

CRANE RENTAL:

\$90.00 HR X 8 HRS/DAY = \$720.00

DUNNAGE:

W/FREIGHT

| | | |
|---------------|--------------------------|------------|
| LABOR TOTAL: | 4 DAY MOB (11 LOADS): | \$2,481.52 |
| | 4 DAYS DEMOB (11 LOADS): | \$2,481.52 |
| RENTAL TOTAL: | 4 DAYS MOB | \$2,880.00 |
| | 4 DAYS DEMOB | \$2,880.00 |

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: PLANT SET UP/ TAKE DOWN
 SUBJECT: COST SUMMARY

EST. BY: LEA
 CHECKER: *WEH*
 DATE: 01/22/90

DESCRIPTION: SET UP AND TAKE DOWN CONTRACTOR'S SURFACE AND UNDERGROUND FACILITIES

QUANTITY: 1 LUMP SUM

| ESTIMATE ITEM | SET UP | TAKE DOWN |
|-----------------------------|-----------|-----------|
| LABOR | \$41,614 | \$9,791 |
| DIRECT CHARGE EQUIPMENT | \$82,415 | |
| CONTRACTOR RENTAL EQUIPMENT | \$28,182 | \$6,631 |
| OUTSIDE RENTAL EQUIPMENT | \$5,462 | \$1,697 |
| SUBCONTRACTS | | |
| PERMANENT MATERIAL | | |
| DIRECT SUPPLIES | \$34,963 | |
| SITE INDIRECTS | \$5,803 | \$1,366 |
| SUBTOTAL: | \$198,440 | \$19,485 |
| MARGIN: 15.0% | \$29,766 | \$2,923 |
| TOTAL: | \$228,206 | \$22,408 |
| USE: | \$228,200 | \$22,400 |

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: PLANT SET UP/ TAKE DOWN
 SUBJECT: DURATION

EST BY: LEA
 CHECKER: WEH
 DATE: 01/22/90

SURFACE PLANT

| ITEM | SET UP M.S. | TAKE DOWN M.S. |
|-------------------------|----------------|-------------------|
| OFFICE/DRY TRAILER | 2.0 | 1.0 |
| SHOP CONTAINERS | 1.5 | 0.5 |
| MAGAZINES/BERMS | 2.0 | 1.0 |
| FUEL TANK | 1.5 | 1.0 |
| SURF ELECT WORK | 4.0 | 2.0 |
| U/G PLANT | | |
| MOVE PLANT FROM PORTAL | 8.0 | 8.0 |
| ROCKBOLTING | 8.0 | |
| SHOP WALLS/DOORS | 8.0 | |
| FIREPROOFING | 6.0 | |
| COMPRESSOR WALLS/DOORS | 8.0 | |
| SETUP OFFICE/LUNCHROOM | 4.0 | 2.0 |
| SETUP COMPRESSORS | 6.0 | 3.0 |
| U/G MAGAZINE | 1.0 | 0.5 |
| PORTAJOHNS | | |
| FLOOR SLABS | 15.0 | |
| VENT FANS AND SUPPORTS | 6.0 | 2.0 |
| ELECTRICAL LOAD CENTER | 20.0 | 5.0 |
| CABLE RUNS/PANEL BOARDS | W/ LOAD CENTER | |
| TOTAL | 101.0 | 26.0 |
| NO. MEN/DAY: | 6 | 6 |
| DURATION: DAYS | 17 | 4 |

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: PLANT SET UP/ TAKE DOWN
 SUBJECT: LABOR

EST BY: LEA
 CHECKER: WEH
 DATE: 01/22/90

| CLASSIFICATION | COST PER MANSHIFT | - - MANSHIFTS PER DAY - - | | | TOTAL COST/DAY |
|-----------------------|----------------------|---------------------------|----|----------|-------------------|
| | | AM | PM | GY TOTAL | |
| - STAFF - | | | | | |
| PROJECT MANAGER | \$337.42 | | | | |
| PROJECT ENGINEER | \$247.55 | 1 | | 1 | \$247.55 |
| ADMIN. MANAGER | \$198.08 | | | | |
| PROJECT SUP'T | \$317.22 | 1 | | 1 | \$317.22 |
| SURVEYOR | \$247.55 | | | | |
| CLERK | \$144.23 | 1 | | 1 | \$144.23 |
| MASTER MECHANIC | \$282.17 | 1 | | 1 | \$282.17 |
| ELECT. SUP'T | \$266.52 | | | | |
| SUBTOTAL: | | 4 | | 4 | \$991.18 |
| - DIRECT - | | | | | |
| LEAD MINER | \$304.60 | 1 | | 1 | \$304.60 |
| MINER | \$291.17 | | | | |
| U/G MECHANIC | \$240.78 | | | | |
| ELECTRICIAN | \$254.21 | 2 | | 2 | \$508.42 |
| LABORER | \$214.56 | 3 | | 3 | \$643.68 |
| DRYMAN | \$201.14 | | | | |
| SUBTOTAL: | | 6 | | 6 | \$1,456.70 |
| TOTAL PER DAY: | | 10 | | 10 | \$2,447.87 |
| TOTAL COST SET UP: | | | | | \$41,614 |
| TOTAL COST TAKE DOWN: | | | | | \$9,791 |

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: PLANT SET UP/ TAKE DOWN
 SUBJECT: EQUIPMENT

EST BY: LEA
 CHECKER: WEH
 DATE: 01/22/90

DIRECT CHARGE EQUIPMENT

| DESCRIPTION | QTY | UNIT COST | TOTAL COST |
|---------------------|-------|-----------|------------|
| SHOP EQUIP | 1 LOT | \$10,000 | \$10,000 |
| SHOP BIN/PARTITIONS | 1 LOT | \$500 | \$500 |
| SAFETY EQUIP | 1 LOT | \$10,000 | \$10,000 |
| ENGR EQUIP | 1 LOT | \$3,500 | \$3,500 |
| SURF ELECTRICS | 1 LOT | \$2,500 | \$2,500 |
| SURF PIPING | 1 LOT | \$2,000 | \$2,000 |
| MINER LAMPS | 30 EA | \$125 | \$3,750 |
| CHARGER | 1 EA | \$1,500 | \$1,500 |
| ELECT CABLES ETC. | 1 LOT | \$12,000 | \$12,000 |
| UTILITY TRAILER | 2 EA | \$4,500 | \$9,000 |
| OFFICE/ LUNCH UNITS | 2 EA | \$1,500 | \$3,000 |
| BLAST SWITCH | 1 EA | \$2,000 | \$2,000 |
| ROOF JACK | 8 EA | \$250 | \$2,000 |
| BRATTICE MAT'L | 1 LOT | \$1,000 | \$1,000 |
| U/G TRUCKS (USED) | 2 EA | \$7,500 | \$15,000 |
| SUBTOTAL | | | \$77,750 |
| TAX | 6.00% | | \$4,665 |
| TOTAL COST | | | \$82,415 |

OUTSIDE RENTAL EQUIPMENT

| DESCRIPTION | QTY | UNIT COST | SET UP TOTAL | TAKE DOWN TOTAL |
|--------------------------|-------|--------------|--------------|-----------------|
| 600 KVA MINE LOAD CENTER | 1 | \$3,360 /MO. | \$1,878 | \$442 |
| OFFICE/DRY TRAILER | 1 | \$600 /MO. | \$335 | \$79 |
| CRANE (24 HRS/12 HRS) | 1 | \$90 /HR | \$2,160 | \$1,080 |
| BACKHOE (12 HRS) | 1 | \$65 /HR | \$780 | |
| SUBTOTAL | | | \$5,153 | \$1,601 |
| TAX | 6.00% | | \$309 | \$96 |
| TOTAL COST | | | \$5,462 | \$1,697 |

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: PLANT SET UP/ TAKE DOWN
 SUBJECT: CONTRACTOR RENTAL EQUIPMENT

EST. BY: LEA
 CHECKER: WSH
 DATE: 01/22/90

| ITEM DESCRIPTION | QTY | UNIT | UNIT COST | TOTAL COST | MONTHLY RENT 5.00% |
|--------------------|------|------|-----------|------------|--------------------|
| 5 CY SCOOP | 3.00 | EA | \$175,000 | \$525,000 | \$26,250 |
| 2 BOOM JUMBO | 1.00 | EA | \$200,000 | \$200,000 | \$10,000 |
| 650 CFM COMPRESSOR | 3.00 | EA | \$30,000 | \$90,000 | \$4,500 |
| BOSS BUGGY | 1.00 | EA | \$25,000 | \$25,000 | \$1,250 |
| 50 HP FAN | 3.00 | EA | \$10,000 | \$30,000 | \$1,500 |
| AIR FAN | 1.00 | EA | \$4,000 | \$4,000 | \$200 |
| WELDER | 1.00 | EA | \$3,000 | \$3,000 | \$150 |
| CONTAINER | 2.00 | EA | \$3,000 | \$6,000 | \$300 |
| STOPER | 4.00 | EA | \$3,000 | \$12,000 | \$600 |
| JACKLEG | 4.00 | EA | \$3,500 | \$14,000 | \$700 |
| PNEUMATIC PUMPS | 4.00 | EA | \$2,500 | \$10,000 | \$500 |
| STEAM CLEANER | 1.00 | EA | \$2,500 | \$2,500 | \$125 |
| PICKUP TRUCKS | 2.00 | EA | \$15,000 | \$30,000 | \$1,500 |

| | | | | | |
|-----------------------|-----------------|--|--|--|------------|
| SUBTOTAL: | | | | | \$47,575 |
| SALES TAX: | 6% | | | | \$2,855 |
| TOTAL COST: | | | | | \$50,430 |
| COST/DAY: | 30.42 DAY/MONTH | | | | \$1,657.77 |
| SET UP TOTAL COST: | | | | | \$28,182 |
| TAKE DOWN TOTAL COST: | | | | | \$6,631 |

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: PLANT SET UP/ TAKE DOWN
 SUBJECT: DIRECT SUPPLIES

EST. BY: LEA
 CHECKER: WEH
 DATE: 01/22/90

| BLASTING | QTY | UNIT | UNIT COST | WASTE % | TOTAL COST |
|----------|-------|-------|-----------|---------|------------|
| CAPS | | EA/LF | \$1.30 | | |
| POWDER | LB/CY | LB/LF | \$0.87 | | |
| CORD | | LF | \$0.09 | | |
| STEMMING | | EA | \$0.15 | | |
| MISC. | 15 % | | | | |

SUBTOTAL BLASTING:

DRILLING

| | | | | | |
|---------|---------|----|--------|--|-------|
| JACKLEG | 1000.00 | DF | \$0.58 | | \$580 |
| JUMBO | | DF | \$0.70 | | |

SUBTOTAL DRILLING:

\$580

MATERIALS

| | | | | | |
|-----------------------|------|-----|---------|--|---------|
| AIR & WATER PIPE | 1 | LOT | \$2,000 | | \$2,000 |
| TRAILER BLOCKING | 1 | LOT | \$200 | | \$200 |
| FAN SUPPORTS | 3 | EA | \$100 | | \$300 |
| FORMING SUPPLIES | 1 | LOT | \$400 | | \$400 |
| CURE/FINISH SUPPLIES | 1 | LOT | \$200 | | \$200 |
| REBAR | 2000 | LB | \$0.35 | | \$700 |
| ANCHOR BOLTS | 22 | EA | \$5.00 | | \$110 |
| ROCKBOLTS | 200 | EA | \$6.52 | | \$1,304 |
| FIREPROOFING MAT'L | 1 | LOT | \$5,000 | | \$5,000 |
| SHOP ROOM WALLS/DOORS | 1 | LOT | \$4,000 | | \$4,000 |
| COMP ROOM WALLS/DOORS | 1 | LOT | \$4,000 | | \$4,000 |
| FLOOR SLAB CONCRETE | 45 | CY | \$60 | | \$2,700 |

SUBTOTAL MATERIALS:

\$20,914

| | | |
|----------------|-----|----------|
| SUBTOTAL SHEET | 6 : | \$21,494 |
| SUBTOTAL SHEET | 7 : | \$11,490 |

| | | |
|---------------|----|----------|
| SUBTOTAL ALL: | | \$32,984 |
| SALES TAX: | 6% | \$1,979 |

TOTAL COST: \$34,963

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: PLANT SET UP/ TAKE DOWN
 SUBJECT: DIRECT SUPPLIES

EST. BY: LEA
 CHECKER: WEH
 DATE: 01/22/90

| EQUIPMENT OPERATING COSTS | QTY | COST/HR | HR/DAY | DAYS | COST |
|------------------------------|-----|---------|--------|------|---------|
| 5.0 CY SCOOP | 2 | \$32.00 | 6 | 21 | \$8,064 |
| 650 CFM COMP. OPR COST | | \$2.00 | | | |
| 2 BOOM PNEU. JUMBO | | \$4.28 | | | |
| ELECT. PUMPS | | \$4.00 | | | |
| FORD TRACTOR (BOSS BUGGY) | 1 | \$3.19 | 6 | 21 | \$402 |
| PNEUMATIC PUMP | | \$3.00 | | | |
| 50 HP ELECT FAN | | \$0.50 | | | |
| AUX. FAN | 1 | \$0.50 | 8 | 21 | \$84 |
| U/G PICKUPS | 2 | \$2.50 | 4 | 21 | \$420 |

 SUBTOTAL EQUIPMENT OPERATING COSTS: \$8,970

SMALL TOOLS:
 \$12.00 /MS X 10 MEN/ 21 DAYS = \$2,520

 SUBTOTAL SHEET 7 : \$11,490

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: PLANT SET UP/ TAKE DOWN
 SUBJECT: SITE INDIRECTS

EST. BY: LEA
 CHECKER: ~~WET~~
 DATE: 01/22/90

| SITE INDIRECTS | | | | DAILY COST |
|---------------------|---------------|-------------------|-----------|---------------|
| MSHA CITATIONS | | | | \$20 |
| MINER TRAINING | 1 DAY @ | \$7,892 /DURATION | 100 | \$79 |
| SAFETY SUPPLIES | | | | \$15 |
| OPR PICKUPS | \$0.25 /MI X | 100 MI X | 2 | \$50 |
| OFFICE/DRY SUPPLIES | | | | \$10 |
| SUSTAINING FREIGHT | \$800 / | 30.42 DAY | | \$26 |
| TELEPHONE | | | | \$30 |
| AIR FARE | \$600 /TRIP X | 1 TRIP / | 30.42 DAY | \$20 |
| GEN SUP'T SUBSIST. | \$500 | / | 30.42 DAY | \$16 |
| SHOP SUPPLIES | | | | \$30 |
| PORTA JOHN | | | | \$30 |
| DRINK WATER/ICE | | | | \$15 |

| | | | | |
|----------------------|--|--|--|---------|
| TOTAL/DAY | | | | \$341 |
| TOTAL COST SET UP | | | | \$5,803 |
| TOTAL COST TAKE DOWN | | | | \$1,366 |

REDPATH ENGINEERING INC.

| | |
|-------------------------------|---------------------|
| PROJECT: GENWAL COAL | EST. BY: LEA |
| AREA: 256 | CHECKER: <i>WEH</i> |
| ITEM: ENTRIES-INCLINE SECTION | DATE: 01/22/90 |
| SUBJECT: COST SUMMARY | |

DESCRIPTION: EXCAVATE THE INCLINED SECTION OF THE ENTRIES

CROSS SECTION: 8'H X 18'W
 GRADE: +15%
 GROUND SUPPORT: 5' RESIN BOLTS W/ MATS AT 4' O.C. USE 5 BOLTS/ROW
 DRILLING: 2 BOOM JUMBO
 MUCKING: 5 CY SCOOPS
 FOOTAGE/HEADING: 270 LF
 NO. HEADINGS: 3 EA

QUANTITY: 810 LF

| ESTIMATE ITEM | UNIT COST | TOTAL COST |
|-----------------------------|-----------|------------|
| LABOR | \$265.68 | \$215,205 |
| DIRECT CHARGE EQUIPMENT | | |
| CONTRACTOR RENTAL EQUIPMENT | \$55.81 | \$45,204 |
| OUTSIDE RENTAL EQUIPMENT | \$4.65 | \$3,763 |
| SUBCONTRACTS | | |
| PERMANENT MATERIAL | \$14.91 | \$12,081 |
| DIRECT SUPPLIES | \$223.98 | \$181,423 |
| SITE INDIRECTS | \$11.49 | \$9,309 |
| ----- | | |
| SUBTOTAL: | \$576.52 | \$466,985 |
| MARGIN: | 15.0% | \$70,048 |
| | | ----- |
| SUBTOTAL: | | \$537,033 |
| CONTINGENCY: | | |
| | | ----- |
| TOTAL: | | \$537,033 |
| USE: | | \$537,000 |
| TOTAL UNIT COST: | | \$663 /FT |

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: ENTRIES-INCLINE SECTION
 SUBJECT: GENERAL INFORMATION

EST BY: LEA
 CHECKER: WEH
 DATE: 01/22/90

| | | | |
|------------------|---------------|-------------|------------|
| NO. HOLES/ROUND: | 68 | LOAD TIME: | 4 MIN/HOLE |
| DF/HOLE: | 11.5 | NO. MEN: | 4 |
| DRILL FOOTAGE: | 782 | BLAST: | 20 MIN |
| BREAK/ROUND: | 11.0 | SCOOP CAP.: | 4.75 LCY |
| DF/LF ADVANCE: | 71.09 | TRAVEL: | 750 LF |
| DRILL RATE: | 3 DF/MIN | RATE: | 3.5 MPH |
| NO. BOOMS: | 2 | RETURN: | 4 MPH |
| NEAT VOL.: | 88 LCY/ROUND | LOAD: | 2.5 MIN |
| O.B.: | 15 % | DUMP: | 1.5 MIN |
| MUCK VOL.: | 101 LCY/ROUND | NO. STRAPS: | 3 EA |
| R.B. TYPE: | SPLIT SET | LAP FACTOR: | 16.67 % |
| R.B. LENGTH: | 5 FT | STRAPS/LF: | 3.50 EA |
| NO. BOLTS/ROW: | 5 BOLTS | 2ND TRAVEL: | 3000 LF |
| BOLT SPACING: | 4 FT | RATE: | 4.5 MPH |
| NO. BOLTS/FT: | 1.25 BOLTS/FT | RETURN: | 5 MPH |
| NO. SCOOP: | 2 | LOAD: | 1 MIN |
| | | DUMP: | 2.5 MIN |

MUCK OUT

| | | INITIAL | SECONDARY | |
|--------|--------|-------------------------|-----------|-------|
| CYCLE: | TRAVEL | DIST / RATE / (60/5280) | 2.44 | 7.58 |
| | RETURN | DIST / RATE / (60/5280) | 2.13 | 6.82 |
| | LOAD | | 2.50 | 1.00 |
| | DUMP | | 1.50 | 2.50 |
| | TOTAL: | | 8.57 MIN. | 17.89 |

| | | |
|----------------|--------------------------------------|------|
| MUCK TIME: | MUCK VOL. / CAPACITY X CYCLE TIME = | 91 |
| DRILL TIME: | DF/ROUND / DRILL RATE / NO. DRILLS = | 130 |
| TIME/DAY: | HR/SH | 7 |
| | SH/DAY | 3 |
| | MIN/HR | 50 |
| | MIN/DAY | 1050 |
| 2ND MUCK TIME: | MUCK VOL. / CAPACITY X CYCLE TIME = | 191 |

CRITICAL ROCKBOLTS

| | | |
|----------------------------------|------------------------------------|-----------------|
| ASSUME | 100 % OF ROCKBOLT ON CRITICAL PATH | |
| USE MATS OVER 100% OF BOLTS. USE | 2 MEN | |
| TOTAL BOLTS/RND: | BOLTS/LF X LF/RND | 13.75 BOLTS/RND |
| TIME: | 120 BF/MS | |
| DURATION: | | 2.3 HR/RND |
| USE: | 2.3 X 60 | 138 MIN/RND |

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: ENTRIES-INCLINE SECTION
 SUBJECT: PERFORMANCE

EST BY: LEA
 CHECKER: WEH
 DATE: 01/22/90

| EXCAVATION CYCLE | DRILL AND BLAST | MUCK OUT | GROUND SUPPORT |
|--------------------------|-----------------|----------|----------------|
| MOVE & SET UP | 30 | | |
| DRILL | 130 | | |
| MOVE BETWEEN HOLES | 17 | | |
| MOVE OUT | 20 | | |
| LOAD/BLAST | 88 | | |
| BLOW SMOKE | 5 | | |
| MUCK OUT TO BAY | | 91 | |
| CLEAN UP | | 10 | |
| INSTALL UTIL & VENT LINE | | | 20 |
| SCALING | | | 20 |
| INSTALL ROCKBOLTS | | | 138 |
| MUCK TO FINAL | | 191 | |
| TOTAL: | 290 | 292 | 178 |

EXC. PROGRESS RATE: 39.61 LF/DAY

DERATE PROGRESS FOR MUCKING DELAYS AND MISC. DELAYS TO
 75.00% OF CYCLE RATE

USE: 29.71 LF/DAY

DURATION: 27 DAYS

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: ENTRIES-INCLINE SECTION
 SUBJECT: LABOR

EST BY: LEA
 CHECKER: WEH
 DATE: 01/22/90

| CLASSIFICATION | COST PER MANSHIFT | -- MANSHIFTS PER DAY -- | | | | TOTAL COST/DAY |
|--------------------|----------------------|-------------------------|----|----|-------|-------------------|
| | | AM | PM | GY | TOTAL | |
| - STAFF - | | | | | | |
| PROJECT MANAGER | \$337.42 | | | | | |
| PROJECT ENGINEER | \$247.55 | 1 | | | 1 | \$247.55 |
| ADMIN. MANAGER | \$198.08 | | | | | |
| PROJECT SUP'T | \$317.22 | 1 | | | 1 | \$317.22 |
| SURVEYOR | \$247.55 | | | | | |
| CLERK | \$144.23 | 1 | | | 1 | \$144.23 |
| MASTER MECHANIC | \$282.17 | 1 | | | 1 | \$282.17 |
| ELECT. SUP'T | \$266.52 | | | | | |
| SUBTOTAL: | | 4 | | | 4 | \$991.18 |
| - DIRECT - | | | | | | |
| LEAD MINER | \$304.60 | 1 | 1 | 1 | 3 | \$913.79 |
| MINER | \$291.17 | 5 | 5 | 5 | 15 | \$4,367.58 |
| U/G MECHANIC | \$240.78 | 2 | 2 | 1 | 5 | \$1,203.92 |
| ELECTRICIAN | \$254.21 | | | | | |
| LABORER | \$214.56 | 1 | | | 1 | \$214.56 |
| DRYMAN | \$201.14 | 1 | | | 1 | \$201.14 |
| SUBTOTAL: | | 10 | 8 | 7 | 25 | \$6,901.00 |
| TOTAL PER DAY: | | 14 | 8 | 7 | 29 | \$7,892.17 |
| TOTAL COST PER LF: | | | | | | \$265.68 |

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: ENTRIES-INCLINE SECTION
 SUBJECT: EQUIPMENT

EST BY: LEA
 CHECKER: WGH
 DATE: 01/22/90

CONTRACTOR RENTAL EQUIPMENT

| DESCRIPTION | QTY | UNIT COST | TOTAL COST | MONTHLY RENTAL 5.00% |
|--------------------|-----|-----------|------------|----------------------|
| 5 CY SCOOPS | 3 | \$175,000 | \$525,000 | \$26,250 |
| 2 BOOM JUMBO | 1 | \$200,000 | \$200,000 | \$10,000 |
| 650 CFM COMPRESSOR | 3 | \$30,000 | \$90,000 | \$4,500 |
| BOSS BUGGY | 1 | \$25,000 | \$25,000 | \$1,250 |
| 50 HP FAN | 3 | \$10,000 | \$30,000 | \$1,500 |
| AIR FAN | 1 | \$4,000 | \$4,000 | \$200 |
| WELDER | 1 | \$3,000 | \$3,000 | \$150 |
| CONTAINER | 2 | \$3,000 | \$6,000 | \$300 |
| STOPERS | 4 | \$3,000 | \$12,000 | \$600 |
| JACKLEGS | 4 | \$3,500 | \$14,000 | \$700 |
| PNEUMATIC PUMPS | 4 | \$2,500 | \$10,000 | \$500 |
| STEAM CLEANER | 1 | \$2,500 | \$2,500 | \$125 |
| PICKUPS | 2 | \$15,000 | \$30,000 | \$1,500 |

| | | | | |
|-------------------|-----------------|--|--|------------|
| SUBTOTAL | | | | \$47,575 |
| TAX | 6.00% | | | \$2,855 |
| TOTAL RENT/MONTH: | | | | \$50,430 |
| TOTAL COST/DAY: | 30.42 DAY/MONTH | | | \$1,657.77 |
| TOTAL COST/LF: | | | | \$55.81 |

OUTSIDE RENTAL EQUIPMENT

| DESCRIPTION | QTY | UNIT COST | TOTAL COST |
|--------------------|-----------------|--------------|------------|
| OFFICE/DRY TRAILER | 1 | \$600 /MO. | \$600 |
| U/G LOAD CENTER | 1 | \$3,360 /MO. | \$3,360 |
| SUBTOTAL | | | \$3,960 |
| TAX | 6.00% | | \$238 |
| TOTAL/MONTH | | | \$4,198 |
| COST/DAY: | 30.42 DAY/MONTH | | \$137.99 |
| COST/LF: | | | \$4.65 |

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: ENTRIES-INCLINE SECTION
 SUBJECT: PERMANENT MATERIAL

EST. BY: LEA
 CHECKER: WEH
 DATE: 01/22/90

| ITEM DESCRIPTION | QTY | UNIT /LF | UNIT PRICE | WASTE & FIT'S (%) | TOTAL COST PER LF |
|----------------------|------|----------|------------|-------------------|-------------------|
| 1/4" MESSENGER CABLE | | LF | \$0.25 | 3.0 | |
| SHOTCRETE | | CY | \$77.49 | 20.0 | |
| 2" SCH 40 PIPE | | LF | \$1.58 | 10.0 | |
| 4" THINWALL PIPE | | LF | \$2.98 | 10.0 | |
| 6" THINWALL PIPE | | LF | \$4.11 | 10.0 | |
| 2" VIC COUPLING | | EA | \$5.30 | 10.0 | |
| 4" VIC COUPLING | | EA | \$10.11 | 10.0 | |
| 6" VIC COUPLING | | EA | \$18.10 | 10.0 | |
| 5' RESIN ROCKBOLT | 1.25 | EA | \$6.52 | 5.0 | \$8.56 |
| MESH | | SF | \$0.28 | 20.0 | |
| TIMBER | | MFBM | \$340.00 | 10.0 | |
| STRAPS | 3.50 | LF | \$1.50 | 5.0 | \$5.51 |
| GRAVEL | | CY | \$6.50 | | |
| UTILITY HANGERS | | EA | \$3.00 | 10.0 | |

| | | | | | |
|--------------------|----|--|--|--|---------|
| SUBTOTAL: | | | | | \$14.07 |
| SALES TAX: | 6% | | | | \$0.84 |
| TOTAL COST PER LF: | | | | | \$14.91 |

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: ENTRIES-INCLINE SECTION
 SUBJECT: DIRECT SUPPLIES

EST. BY: LEA
 CHECKER: WEA
 DATE: 01/22/90

| BLASTING | | UNIT QTY /LF | UNIT COST | WASTE % | TOTAL COST PER LF |
|--------------------|---------|-----------------|--------------|------------|----------------------|
| ANFO | LB/CY | LB/LF | \$0.19 | | |
| CAPS | | 6.1 EA/LF | \$1.30 | | \$7.92 |
| POWDER | 6 LB/CY | 32.0 LB/LF | \$0.87 | | \$27.84 |
| CORD | | 80.0 LF | \$0.09 | | \$7.20 |
| STEMMING | | 12.4 | \$0.15 | | \$1.85 |
| MISC. | 15 % | | | | \$6.72 |
| SUBTOTAL BLASTING: | | | | | \$51.53 |

| DRILLING | | | | | |
|--------------------|--|----------|--------|--|---------|
| JACKLEG | | 6.25 DF | \$0.58 | | \$3.63 |
| JUMBO | | 71.09 DF | \$0.70 | | \$49.76 |
| SUBTOTAL DRILLING: | | | | | \$53.39 |

| UTILITIES | | | | | |
|---------------------|--|---------|---------|------|---------|
| AIR PIPE - 6" | | 1.00 LF | \$8.00 | 5.0 | \$8.40 |
| WATER PIPE - 4" | | 1.00 LF | \$4.75 | 5.0 | \$4.99 |
| 6" COUPLING | | 0.05 EA | \$18.10 | 10.0 | \$1.00 |
| 4" COUPLING | | 0.05 EA | \$10.11 | 10.0 | \$0.56 |
| HANGERS | | 0.05 EA | \$3.00 | 10.0 | \$0.17 |
| PHONE LINE | | 1.00 FT | \$1.00 | 10.0 | \$1.10 |
| 36" VENT DUCT | | 1.00 FT | \$15.00 | 20.0 | \$18.00 |
| SUBTOTAL UTILITIES: | | | | | \$34.20 |

| | | |
|--------------------|-----|----------|
| SUBTOTAL SHEET | 7 : | \$139.13 |
| SUBTOTAL SHEET | 8 : | \$72.17 |
| SUBTOTAL ALL: | | \$211.30 |
| SALES TAX: | 6% | \$12.68 |
| TOTAL COST PER LF: | | \$223.98 |

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: ENTRIES-INCLINE SECTION
 SUBJECT: DIRECT SUPPLIES

EST. BY: LEA
 CHECKER: WGH
 DATE: 01/22/90

| EQUIPMENT OPERATING COSTS | QTY | COST/HR | HR/DAY | LF/DAY | COST/LF |
|------------------------------|-----|---------|--------|--------|---------|
| 5.0 CY SCOOP | 2 | \$32.00 | 20 | 29.71 | \$43.09 |
| 650 CFM COMP. OPR COST | 2 | \$2.00 | 24 | 29.71 | \$3.23 |
| 2 BOOM PNEU. JUMBO | 1 | \$4.28 | 4 | 29.71 | \$0.58 |
| ELECT. PUMPS | | \$4.00 | | 29.71 | |
| FORD TRACTOR (BOSS BUGGY) | 1 | \$3.19 | 12 | 29.71 | \$1.29 |
| PNEUMATIC PUMP | 3 | \$3.00 | 12 | 29.71 | \$3.64 |
| 50 HP ELECT FAN | 3 | \$0.50 | 24 | 29.71 | \$1.21 |
| AUX. FAN | 1 | \$0.50 | 24 | 29.71 | \$0.40 |
| U/G PICKUPS | 2 | \$2.50 | 12 | 29.71 | \$2.02 |

SUBTOTAL EQUIPMENT OPERATING COSTS: \$55.46

SMALL TOOLS:
 \$12.00 /MS X 29 MEN/ 29.71 LF/DAY = \$11.72

ROCK DUST: \$5.00

SUBTOTAL SHEET 8 : \$72.17

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: ENTRIES-INCLINE SECTION
 SUBJECT: SITE INDIRECTS

EST. BY: LEA
 CHECKER: WGH
 DATE: 01/22/90

| SITE INDIRECTS | | | | DAILY COST |
|---------------------|---------------|-----------|-----------|------------|
| MSHA CITATIONS | | | | \$20 |
| MINER TRAINING | 1 DAY X | \$7,892 / | 100 | \$79 |
| SAFETY SUPPLIES | | | | \$15 |
| OPR PICKUPS | \$0.25 /MI X | 100 MI X | 2 | \$50 |
| OFFICE/DRY SUPPLIES | | | | \$10 |
| SUSTAINING FREIGHT | \$800 / | | 30.42 DAY | \$26 |
| TELEPHONE | | | | \$30 |
| AIR FARE | \$600 /TRIP X | 1 TRIP / | 30.42 DAY | \$20 |
| GEN SUP'T SUBSIST. | \$500 | / | 30.42 DAY | \$16 |
| SHOP SUPPLIES | | | | \$30 |
| PORTA JOHN | | | | \$30 |
| DRINK WATER/ICE | | | | \$15 |

TOTAL/DAY \$341
 TOTAL/ LF: \$11.49

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: ENTRIES-HORIZONTAL SECTION
 SUBJECT: COST SUMMARY

EST. BY: LEA
 CHECKER: WEH
 DATE: 01/22/90

DESCRIPTION: EXCAVATE THE HORIZONTAL SECTION OF THE ENTRIES AND
 THE CROSS CUT DRIFT
 CROSS SECTION: 8'H X 18'W
 GRADE: HORIZONTAL
 GROUND SUPPORT: 5' RESIN BOLTS W/ MATS AT 4' O.C. USE 5 BOLTS/ROW
 DRILLING: 2 BOOM JUMBO
 MUCKING: 5 CY SCOOPS
 FOOTAGE/HEADING: DRIFT: 420 LF CROSS CUT 60.0 LF
 NO. HEADINGS: 3 EA 2 EA

QUANTITY: 1,380 LF

| ESTIMATE ITEM | UNIT COST | TOTAL COST |
|-----------------------------|-----------|------------|
| LABOR | \$220.18 | \$303,843 |
| DIRECT CHARGE EQUIPMENT | | |
| CONTRACTOR RENTAL EQUIPMENT | \$46.25 | \$63,823 |
| OUTSIDE RENTAL EQUIPMENT | \$3.85 | \$5,312 |
| SUBCONTRACTS | | |
| PERMANENT MATERIAL | \$14.91 | \$20,582 |
| DIRECT SUPPLIES | \$211.78 | \$292,260 |
| SITE INDIRECTS | \$9.52 | \$13,143 |
| SUBTOTAL: | \$506.50 | \$698,963 |
| MARGIN: 15.0% | | \$104,844 |
| SUBTOTAL: | | \$803,807 |
| CONTINGENCY: | | |
| TOTAL: | | \$803,807 |
| USE: | | \$803,800 |
| TOTAL UNIT COST: | | \$582 /FT |

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: ENTRIES-HORIZONTAL SECTION
 SUBJECT: GENERAL INFORMATION

EST BY: LEA
 CHECKER: WEH
 DATE: 01/22/90

| | | | |
|------------------|---------------|-------------|------------|
| NO. HOLES/ROUND: | 68 | LOAD TIME: | 4 MIN/HOLE |
| DF/HOLE: | 11.5 | NO. MEN: | 4 |
| DRILL FOOTAGE: | 782 | BLAST: | 20 MIN |
| BREAK/ROUND: | 11.0 | SCOOP CAP.: | 4.75 LCY |
| DF/LF ADVANCE: | 71.09 | TRAVEL: | 750 LF |
| DRILL RATE: | 3 DF/MIN | RATE: | 3.5 MPH |
| NO. BOOMS: | 2 | RETURN: | 4 MPH |
| NEAT VOL.: | 88 LCY/ROUND | LOAD: | 1 MIN |
| O.B.: | 15 % | DUMP: | 1.5 MIN |
| MUCK VOL.: | 101 LCY/ROUND | NO. STRAPS: | 3 EA |
| R.B. TYPE: | SPLIT SET | LAP FACTOR: | 16.67 % |
| R.B. LENGTH: | 5 FT | STRAPS/LF: | 3.50 EA |
| NO. BOLTS/ROW: | 5 BOLTS | 2ND TRAVEL: | 3250 LF |
| BOLT SPACING: | 4 FT | RATE: | 4.5 MPH |
| NO. BOLTS/FT: | 1.25 BOLTS/FT | RETURN: | 5 MPH |
| NO. SCOOP: | 2 | LOAD: | 1 MIN |
| | | DUMP: | 2.5 MIN |

| MUCK OUT | | INITIAL | SECONDARY | |
|----------|--------|-------------------------|-----------|-------|
| CYCLE: | TRAVEL | DIST / RATE / (60/5280) | 2.44 | 8.21 |
| | RETURN | DIST / RATE / (60/5280) | 2.13 | 7.39 |
| | LOAD | | 1.00 | 1.00 |
| | DUMP | | 1.50 | 2.50 |
| TOTAL: | | | 7.07 MIN. | 19.09 |

| | | |
|----------------|--------------------------------------|------|
| MUCK TIME: | MUCK VOL. / CAPACITY X CYCLE TIME = | 75 |
| DRILL TIME: | DF/ROUND / DRILL RATE / NO. DRILLS = | 130 |
| TIME/DAY: | HR/SH | 7 |
| | SH/DAY | 3 |
| | MIN/HR | 50 |
| | MIN/DAY | 1050 |
| 2ND MUCK TIME: | MUCK VOL. / CAPACITY X CYCLE TIME = | 203 |

CRITICAL ROCKBOLTS

| | | |
|----------------------------------|------------------------------------|-----------------|
| ASSUME | 100 % OF ROCKBOLT ON CRITICAL PATH | |
| USE MATS OVER 100% OF BOLTS. USE | 2 MEN | |
| TOTAL BOLTS/RND: | BOLTS/LF X LF/RND | 13.75 BOLTS/RND |
| TIME: | 120 BF/MS | |
| DURATION: | | 2.3 HR/RND |
| USE: | 2.3 X 60 | 138 MIN/RND |

REDPATH ENGINEERING INC.

| | |
|----------------------------------|----------------|
| PROJECT: GENWAL COAL | EST BY: LEA |
| AREA: 256 | CHECKER: WGH |
| ITEM: ENTRIES-HORIZONTAL SECTION | DATE: 01/22/90 |
| SUBJECT: PERFORMANCE | |

| EXCAVATION CYCLE | DRILL AND BLAST | MUCK OUT | GROUND SUPPORT |
|--------------------------|--------------------|-------------|-------------------|
| MOVE & SET UP | 30 | | |
| DRILL | 130 | | |
| MOVE BETWEEN HOLES | 17 | | |
| MOVE OUT | 20 | | |
| LOAD/BLAST | 88 | | |
| BLOW SMOKE | 5 | | |
| MUCK OUT TO BAY | | 75 | |
| CLEAN UP | | 10 | |
| INSTALL UTIL & VENT LINE | | | 20 |
| SCALING | | | 20 |
| INSTALL ROCKBOLTS | | | 138 |
| MUCK TO FINAL | | 203 | |
| TOTAL: | 290 | 288 | 178 |

EXC. PROGRESS RATE: 39.83 LF/DAY

DERATE PROGRESS FOR DELAYS TO 90.00% OF CYCLE RATE

USE: 35.84 LF/DAY

DURATION: 38 DAYS

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: ENTRIES-HORIZONTAL SECTION
 SUBJECT: LABOR

EST BY: LEA
 CHECKER: WGH
 DATE: 01/22/90

| CLASSIFICATION | COST PER MANSHIFT | - - MANSHIFTS PER DAY - - | | | | TOTAL COST/DAY |
|--------------------|----------------------|---------------------------|----|----|-------|-------------------|
| | | AM | PM | GY | TOTAL | |
| - STAFF - | | | | | | |
| PROJECT MANAGER | \$337.42 | | | | | |
| PROJECT ENGINEER | \$247.55 | 1 | | | 1 | \$247.55 |
| ADMIN. MANAGER | \$198.08 | | | | | |
| PROJECT SUP'T | \$317.22 | 1 | | | 1 | \$317.22 |
| SURVEYOR | \$247.55 | | | | | |
| CLERK | \$144.23 | 1 | | | 1 | \$144.23 |
| MASTER MECHANIC | \$282.17 | 1 | | | 1 | \$282.17 |
| ELECT. SUP'T | \$266.52 | | | | | |
| SUBTOTAL: | | 4 | | | 4 | \$991.18 |
| - DIRECT - | | | | | | |
| LEAD MINER | \$304.60 | 1 | 1 | 1 | 3 | \$913.79 |
| MINER | \$291.17 | 5 | 5 | 5 | 15 | \$4,367.58 |
| U/G MECHANIC | \$240.78 | 2 | 2 | 1 | 5 | \$1,203.92 |
| ELECTRICIAN | \$254.21 | | | | | |
| LABORER | \$214.56 | 1 | | | 1 | \$214.56 |
| DRYMAN | \$201.14 | 1 | | | 1 | \$201.14 |
| SUBTOTAL: | | 10 | 8 | 7 | 25 | \$6,901.00 |
| TOTAL PER DAY: | | 14 | 8 | 7 | 29 | \$7,892.17 |
| TOTAL COST PER LF: | | | | | | \$220.18 |

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: ENTRIES-HORIZONTAL SECTION
 SUBJECT: EQUIPMENT

EST BY: LEA
 CHECKER: WEH
 DATE: 01/22/90

CONTRACTOR RENTAL EQUIPMENT

| DESCRIPTION | QTY | UNIT COST | TOTAL COST | MONTHLY RENTAL 5.00% |
|--------------------|-----|-----------|------------|----------------------|
| 5 CY SCOOPS | 3 | \$175,000 | \$525,000 | \$26,250 |
| 2 BOOM JUMBO | 1 | \$200,000 | \$200,000 | \$10,000 |
| 650 CFM COMPRESSOR | 3 | \$30,000 | \$90,000 | \$4,500 |
| BOSS BUGGY | 1 | \$25,000 | \$25,000 | \$1,250 |
| 50 HP FAN | 3 | \$10,000 | \$30,000 | \$1,500 |
| AIR FAN | 1 | \$4,000 | \$4,000 | \$200 |
| WELDER | 1 | \$3,000 | \$3,000 | \$150 |
| CONTAINER | 2 | \$3,000 | \$6,000 | \$300 |
| STOPERS | 4 | \$3,000 | \$12,000 | \$600 |
| JACKLEGS | 4 | \$3,500 | \$14,000 | \$700 |
| PNEUMATIC PUMP | 4 | \$2,500 | \$10,000 | \$500 |
| STEAM CLEANER | 1 | \$2,500 | \$2,500 | \$125 |
| PICKUPS | 2 | \$15,000 | \$30,000 | \$1,500 |

SUBTOTAL \$47,575
 TAX 6.00% \$2,855
 TOTAL RENT/MONTH: \$50,430
 TOTAL COST/DAY: 30.42 DAY/MONTH \$1,657.77
 TOTAL COST/LF: \$46.25

OUTSIDE RENTAL EQUIPMENT

| DESCRIPTION | QTY | UNIT COST | TOTAL COST |
|--------------------|-----|--------------|------------|
| OFFICE/DRY TRAILER | 1 | \$600 /MO. | \$600 |
| U/G LOAD CENTER | 1 | \$3,360 /MO. | \$3,360 |

SUBTOTAL \$3,960
 TAX 6.00% \$238
 TOTAL/MONTH \$4,198
 COST/DAY: 30.42 DAY/MONTH \$137.99
 COST/LF: \$3.85

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: ENTRIES-HORIZONTAL SECTION
 SUBJECT: PERMANENT MATERIAL

EST. BY: LEA
 CHECKER: WEH
 DATE: 01/22/90

| ITEM DESCRIPTION | UNIT QTY /LF | UNIT PRICE | WASTE & FIT'S (%) | TOTAL COST PER LF |
|----------------------|--------------|------------|-------------------|-------------------|
| 1/4" MESSENGER CABLE | LF | \$0.25 | 3.0 | |
| SHOTCRETE | CY | \$77.49 | 20.0 | |
| 2" SCH 40 PIPE | LF | \$1.58 | 10.0 | |
| 4" THINWALL PIPE | LF | \$2.98 | 10.0 | |
| 6" THINWALL PIPE | LF | \$4.11 | 10.0 | |
| 2" VIC COUPLING | EA | \$5.30 | 10.0 | |
| 4" VIC COUPLING | EA | \$10.11 | 10.0 | |
| 6" VIC COUPLING | EA | \$18.10 | 10.0 | |
| 5' RESIN ROCKBOLT | 1.25 EA | \$6.52 | 5.0 | \$8.56 |
| MESH | SF | \$0.28 | 20.0 | |
| TIMBER | MFBM | \$340.00 | 10.0 | |
| STRAPS | 3.50 LF | \$1.50 | 5.0 | \$5.51 |
| GRAVEL | CY | \$6.50 | | |
| UTILITY HANGERS | EA | \$3.00 | 10.0 | |

| | | |
|--------------------|----|---------|
| SUBTOTAL: | | \$14.07 |
| SALES TAX: | 6% | \$0.84 |
| TOTAL COST PER LF: | | \$14.91 |

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: ENTRIES-HORIZONTAL SECTION
 SUBJECT: DIRECT SUPPLIES

EST. BY: LEA
 CHECKER: WEH
 DATE: 01/22/90

| BLASTING | QTY | UNIT /LF | UNIT COST | WASTE % | TOTAL COST PER LF |
|---------------------|-----|-----------|------------|---------|-------------------|
| ANFO | | LB/CY | LB/LF | \$0.19 | |
| CAPS | | 6.1 EA/LF | \$1.30 | | \$7.92 |
| POWDER | 6 | LB/CY | 32.0 LB/LF | \$0.87 | \$27.84 |
| CORD | | 80.0 LF | \$0.09 | | \$7.20 |
| STEMMING | | 12.4 EA | \$0.15 | | \$1.85 |
| MISC. | 15 | % | | | \$6.72 |
| SUBTOTAL BLASTING: | | | | | \$51.53 |
| DRILLING | | | | | |
| JACKLEG | | 6.25 DF | \$0.58 | | \$3.63 |
| JUMBO | | 71.09 DF | \$0.70 | | \$49.76 |
| SUBTOTAL DRILLING: | | | | | \$53.39 |
| UTILITIES | | | | | |
| AIR PIPE - 6" | | 1.00 LF | \$8.00 | 5.0 | \$8.40 |
| WATER PIPE - 4" | | 1.00 LF | \$4.75 | 5.0 | \$4.99 |
| 6" COUPLING | | 0.05 EA | \$18.10 | 10.0 | \$1.00 |
| 4" COUPLING | | 0.05 EA | \$10.11 | 10.0 | \$0.56 |
| HANGERS | | 0.05 EA | \$3.00 | 10.0 | \$0.17 |
| PHONE LINE | | 1.00 FT | \$1.00 | 10.0 | \$1.10 |
| 36" VENT DUCT | | 1.00 FT | \$15.00 | 20.0 | \$18.00 |
| SUBTOTAL UTILITIES: | | | | | \$34.20 |
| SUBTOTAL SHEET 7 : | | | | | \$139.13 |
| SUBTOTAL SHEET 8 : | | | | | \$60.67 |
| SUBTOTAL ALL: | | | | | \$199.80 |
| SALES TAX: 6% | | | | | \$11.99 |
| TOTAL COST PER LF: | | | | | \$211.78 |

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: ENTRIES-HORIZONTAL SECTION
 SUBJECT: DIRECT SUPPLIES

EST. BY: LEA
 CHECKER: *weh*
 DATE: 01/22/90

| EQUIPMENT OPERATING COSTS | QTY | COST/HR | HR/DAY | LF/DAY | COST/LF |
|------------------------------|-----|---------|--------|--------|---------|
| 5.0 CY SCOOP | 2 | \$32.00 | 20 | 35.84 | \$35.71 |
| 650 CFM COMP. OPR COST | 2 | \$2.00 | 24 | 35.84 | \$2.68 |
| 2 BOOM PNEU. JUMBO | 1 | \$4.28 | 4 | 35.84 | \$0.48 |
| ELECT. PUMPS | | \$4.00 | | 35.84 | |
| FORD TRACTOR (BOSS BUGGY) | 1 | \$3.19 | 12 | 35.84 | \$1.07 |
| PNEUMATIC PUMP | 3 | \$3.00 | 12 | 35.84 | \$3.01 |
| 50 HP ELECT FAN | 3 | \$0.50 | 24 | 35.84 | \$1.00 |
| AUX. FAN | 1 | \$0.50 | 24 | 35.84 | \$0.33 |
| U/G PICKUPS | 2 | \$2.50 | 12 | 35.84 | \$1.67 |

SUBTOTAL EQUIPMENT OPERATING COSTS: \$45.96

SMALL TOOLS:
 \$12.00 /MS X 29 MEN/ 35.84 LF/DAY = \$9.71

ROCK DUST: \$5.00

SUBTOTAL SHEET 8 : \$60.67

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: ENTRIES-HORIZONTAL SECTION
 SUBJECT: SITE INDIRECTS

EST. BY: LEA
 CHECKER: *work*
 DATE: 01/22/90

| SITE INDIRECTS | | | | DAILY COST |
|---------------------|---------------|-----------|-----------|------------|
| MSHA CITATIONS | | | | \$20 |
| MINER TRAINING | 1 DAY X | \$7,892 / | 100 | \$79 |
| SAFETY SUPPLIES | | | | \$15 |
| OPR PICKUPS | \$0.25 /MI X | 100 MI X | 2 | \$50 |
| OFFICE/DRY SUPPLIES | | | | \$10 |
| SUSTAINING FREIGHT | \$800 / | 30.42 DAY | | \$26 |
| TELEPHONE | | | | \$30 |
| AIR FARE | \$600 /TRIP X | 1 TRIP / | 30.42 DAY | \$20 |
| GEN SUP'T SUBSIST. | \$500 / | | 30.42 DAY | \$16 |
| SHOP SUPPLIES | | | | \$30 |
| PORTA JOHN | | | | \$30 |
| DRINK WATER/ICE | | | | \$15 |

TOTAL/DAY \$341

TOTAL/ LF: \$9.52

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: ENTRIES-DECLINE SECTION
 SUBJECT: COST SUMMARY

EST. BY: LEA
 CHECKER: ~~WPH~~
 DATE: 01/22/90

DESCRIPTION: EXCAVATE THE INCLINED SECTION OF THE ENTRIES

CROSS SECTION: 8'H X 18'W
 GRADE: -15%
 GROUND SUPPORT: 5' RESIN BOLTS W/ MATS AT 4' O.C. USE 5 BOLTS/ROW
 DRILLING: 2 BOOM JUMBO
 MUCKING: 5 CY SCOOPS
 FOOTAGE/HEADING: 270 LF
 NO. HEADINGS: 3 EA

QUANTITY: 810 LF

| ESTIMATE ITEM | UNIT COST | TOTAL COST |
|-----------------------------|-----------|--------------------|
| LABOR | \$220.18 | \$178,343 |
| DIRECT CHARGE EQUIPMENT | | |
| CONTRACTOR RENTAL EQUIPMENT | \$46.25 | \$37,461 |
| OUTSIDE RENTAL EQUIPMENT | \$3.85 | \$3,118 |
| SUBCONTRACTS | | |
| PERMANENT MATERIAL | \$14.91 | \$12,081 |
| DIRECT SUPPLIES | \$211.78 | \$171,544 |
| SITE INDIRECTS | \$9.52 | \$7,714 |
| SUBTOTAL: | | \$506.50 \$410,261 |
| MARGIN: | 15.0% | \$61,539 |
| SUBTOTAL: | | \$471,800 |
| CONTINGENCY: | | |
| TOTAL: | | \$471,800 |
| USE: | | \$471,800 |
| TOTAL UNIT COST: | | \$582 /FT |

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: ENTRIES-DECLINE SECTION
 SUBJECT: GENERAL INFORMATION

EST BY: LEA
 CHECKER: WEM
 DATE: 01/22/90

| | | | |
|------------------|---------------|-------------|------------|
| NO. HOLES/ROUND: | 68 | LOAD TIME: | 4 MIN/HOLE |
| DF/HOLE: | 11.5 | NO. MEN: | 4 |
| DRILL FOOTAGE: | 782 | BLAST: | 20 MIN |
| BREAK/ROUND: | 11.0 | SCOOP CAP.: | 4.75 LCY |
| DF/LF ADVANCE: | 71.09 | TRAVEL: | 750 LF |
| DRILL RATE: | 3 DF/MIN | RATE: | 3.5 MPH |
| NO. BOOMS: | 2 | RETURN: | 4 MPH |
| NEAT VOL.: | 88 LCY/ROUND | LOAD: | 1 MIN |
| O.B.: | 15 % | DUMP: | 1.5 MIN |
| MUCK VOL.: | 101 LCY/ROUND | NO. STRAPS: | 3 EA |
| R.B. TYPE: | RESIN | LAP FACTOR: | 16.67 % |
| R.B. LENGTH: | 5 FT | STRAPS/LF: | 3.50 EA |
| NO. BOLTS/ROW: | 5 BOLTS | 2ND TRAVEL: | 3250 LF |
| BOLT SPACING: | 4 FT | RATE: | 4.5 MPH |
| NO. BOLTS/FT: | 1.25 BOLTS/FT | RETURN: | 5 MPH |
| NO. SCOOP: | 2 | LOAD: | 1 MIN |
| | | DUMP: | 2.5 MIN |

| MUCK OUT | | INITIAL | SECONDARY | |
|----------|--------|-------------------------|-----------|-------|
| CYCLE: | TRAVEL | DIST / RATE / (60/5280) | 2.44 | 8.21 |
| | RETURN | DIST / RATE / (60/5280) | 2.13 | 7.39 |
| | LOAD | | 1.00 | 1.00 |
| | DUMP | | 1.50 | 2.50 |
| TOTAL: | | | 7.07 MIN. | 19.09 |

| | | |
|----------------|--------------------------------------|------|
| MUCK TIME: | MUCK VOL. / CAPACITY X CYCLE TIME = | 75 |
| DRILL TIME: | DF/ROUND / DRILL RATE / NO. DRILLS = | 130 |
| TIME/DAY: | HR/SH | 7 |
| | SH/DAY | 3 |
| | MIN/HR | 50 |
| | MIN/DAY | 1050 |
| 2ND MUCK TIME: | MUCK VOL. / CAPACITY X CYCLE TIME = | 203 |

CRITICAL ROCKBOLTS

ASSUME 100 % OF ROCKBOLT ON CRITICAL PATH
 USE MATS OVER 100% OF BOLTS. USE 2 MEN
 TOTAL BOLTS/RND: BOLTS/LF X LF/RND 13.75 BOLTS/RND
 TIME: 120 BF/MS
 DURATION: 2.3 HR/RND
 USE: 2.3 X 60 138 MIN/RND

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: ENTRIES-DECLINE SECTION
 SUBJECT: PERFORMANCE

EST BY: LEA
 CHECKER: ~~10914~~
 DATE: 01/22/90

| EXCAVATION CYCLE | DRILL AND BLAST | MUCK OUT | GROUND SUPPORT |
|--------------------------|-----------------|----------|----------------|
| MOVE & SET UP | 30 | | |
| DRILL | 130 | | |
| MOVE BETWEEN HOLES | 17 | | |
| MOVE OUT | 20 | | |
| LOAD/BLAST | 88 | | |
| BLOW SMOKE | 5 | | |
| MUCK OUT TO BAY | | 75 | |
| CLEAN UP | | 10 | |
| INSTALL UTIL & VENT LINE | | | 20 |
| SCALING | | | 20 |
| INSTALL ROCKBOLTS | | | 138 |
| MUCK TO FINAL | | 203 | |
| TOTAL: | 290 | 288 | 178 |

EXC. PROGRESS RATE: 39.83 LF/DAY

DERATE PROGRESS FOR DELAYS TO 90.00% OF CYCLE RATE

USE: 35.84 LF/DAY

DURATION: 23 DAYS

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: ENTRIES-DECLINE SECTION
 SUBJECT: LABOR

EST BY: LEA
 CHECKER: ~~WBA~~
 DATE: 01/22/90

| CLASSIFICATION | COST PER MANSHIFT | -- MANSHIFTS PER DAY -- | | | | TOTAL COST/DAY |
|--------------------|----------------------|-------------------------|----|----|-------|-------------------|
| | | AM | PM | GY | TOTAL | |
| - STAFF - | | | | | | |
| PROJECT MANAGER | \$337.42 | | | | | |
| PROJECT ENGINEER | \$247.55 | 1 | | | 1 | \$247.55 |
| ADMIN. MANAGER | \$198.08 | | | | | |
| PROJECT SUP'T | \$317.22 | 1 | | | 1 | \$317.22 |
| SURVEYOR | \$247.55 | | | | | |
| CLERK | \$144.23 | 1 | | | 1 | \$144.23 |
| MASTER MECHANIC | \$282.17 | 1 | | | 1 | \$282.17 |
| ELECT. SUP'T | \$266.52 | | | | | |
| SUBTOTAL: | | 4 | | | 4 | \$991.18 |
| - DIRECT - | | | | | | |
| LEAD MINER | \$304.60 | 1 | 1 | 1 | 3 | \$913.79 |
| MINER | \$291.17 | 5 | 5 | 5 | 15 | \$4,367.58 |
| U/G MECHANIC | \$240.78 | 2 | 2 | 1 | 5 | \$1,203.92 |
| ELECTRICIAN | \$254.21 | | | | | |
| LABORER | \$214.56 | 1 | | | 1 | \$214.56 |
| DRYMAN | \$201.14 | 1 | | | 1 | \$201.14 |
| SUBTOTAL: | | 10 | 8 | 7 | 25 | \$6,901.00 |
| TOTAL PER DAY: | | 14 | 8 | 7 | 29 | \$7,892.17 |
| TOTAL COST PER LF: | | | | | | \$220.18 |

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: ENTRIES-DECLINE SECTION
 SUBJECT: EQUIPMENT

EST BY: LEA
 CHECKER: ~~10/84~~
 DATE: 01/22/90

CONTRACTOR RENTAL EQUIPMENT

| DESCRIPTION | QTY | UNIT COST | TOTAL COST | MONTHLY RENTAL 5.00% |
|--------------------|-----|-----------|------------|----------------------|
| 5 CY SCOOPS | 3 | \$175,000 | \$525,000 | \$26,250 |
| 2 BOOM JUMBO | 1 | \$200,000 | \$200,000 | \$10,000 |
| 650 CFM COMPRESSOR | 3 | \$30,000 | \$90,000 | \$4,500 |
| BOSS BUGGY | 1 | \$25,000 | \$25,000 | \$1,250 |
| 50 HP FAN | 3 | \$10,000 | \$30,000 | \$1,500 |
| AIR FAN | 1 | \$4,000 | \$4,000 | \$200 |
| WELDER | 1 | \$3,000 | \$3,000 | \$150 |
| CONTAINER | 2 | \$3,000 | \$6,000 | \$300 |
| STOPERS | 4 | \$3,000 | \$12,000 | \$600 |
| JACKLEGS | 4 | \$3,500 | \$14,000 | \$700 |
| PNEUMATIC PUMPS | 4 | \$2,500 | \$10,000 | \$500 |
| STEAM CLEANER | 1 | \$2,500 | \$2,500 | \$125 |
| PICKUPS | 2 | \$15,000 | \$30,000 | \$1,500 |

SUBTOTAL \$47,575
 TAX 6.00% \$2,855

TOTAL RENT/MONTH: \$50,430

TOTAL COST/DAY: 30.42 DAY/MONTH \$1,657.77

TOTAL COST/LF: \$46.25

OUTSIDE RENTAL EQUIPMENT

| DESCRIPTION | QTY | UNIT COST | TOTAL COST |
|--------------------|-----|--------------|------------|
| OFFICE/DRY TRAILER | 1 | \$600 /MO. | \$600 |
| U/G LOAD CENTER | 1 | \$3,360 /MO. | \$3,360 |

SUBTOTAL \$3,960
 TAX 6.00% \$238

TOTAL/MONTH \$4,198

COST/DAY: 30.42 DAY/MONTH \$137.99

COST/LF: \$3.85

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: ENTRIES-DECLINE SECTION
 SUBJECT: PERMANENT MATERIAL

EST. BY: LEA
 CHECKER: WGA
 DATE: 01/22/90

| ITEM DESCRIPTION | UNIT QTY /LF | UNIT PRICE | WASTE & FIT'S (%) | TOTAL COST PER LF |
|----------------------|--------------|------------|-------------------|-------------------|
| 1/4" MESSENGER CABLE | LF | \$0.25 | 3.0 | |
| SHOTCRETE | CY | \$77.49 | 20.0 | |
| 2" SCH 40 PIPE | LF | \$1.58 | 10.0 | |
| 4" THINWALL PIPE | LF | \$2.98 | 10.0 | |
| 6" THINWALL PIPE | LF | \$4.11 | 10.0 | |
| 2" VIC COUPLING | EA | \$5.30 | 10.0 | |
| 4" VIC COUPLING | EA | \$10.11 | 10.0 | |
| 6" VIC COUPLING | EA | \$18.10 | 10.0 | |
| 5' RESIN ROCKBOLT | 1.25 EA | \$6.52 | 5.0 | \$8.56 |
| MESH | SF | \$0.28 | 20.0 | |
| TIMBER | MFBM | \$340.00 | 10.0 | |
| STRAPS | 3.50 LF | \$1.50 | 5.0 | \$5.51 |
| GRAVEL | CY | \$6.50 | | |
| UTILITY HANGERS | EA | \$3.00 | 10.0 | |

| | | |
|--------------------|----|---------|
| SUBTOTAL: | | \$14.07 |
| SALES TAX: | 6% | \$0.84 |
| TOTAL COST PER LF: | | \$14.91 |

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: ENTRIES-DECLINE SECTION
 SUBJECT: DIRECT SUPPLIES

EST. BY: LEA
 CHECKER: WGR
 DATE: 01/22/90

| BLASTING | | UNIT QTY /LF | UNIT COST | WASTE % | TOTAL COST PER LF |
|--------------------|---------|-----------------|--------------|------------|----------------------|
| ANFO | LB/CY | LB/LF | \$0.19 | | |
| CAPS | | 6.1 EA/LF | \$1.30 | | \$7.92 |
| POWDER | 6 LB/CY | 32.0 LB/LF | \$0.87 | | \$27.84 |
| CORD | | 80.0 LF | \$0.09 | | \$7.20 |
| STEMMING | | 12.4 | \$0.15 | | \$1.85 |
| MISC. | 15 % | | | | \$6.72 |
| SUBTOTAL BLASTING: | | | | | \$51.53 |

DRILLING

| | | | | | |
|--------------------|--|----------|--------|--|---------|
| JACKLEG | | 6.25 DF | \$0.58 | | \$3.63 |
| JUMBO | | 71.09 DF | \$0.70 | | \$49.76 |
| SUBTOTAL DRILLING: | | | | | \$53.39 |

UTILITIES

| | | | | | |
|---------------------|--|---------|---------|------|---------|
| AIR PIPE - 6" | | 1.00 LF | \$8.00 | 5.0 | \$8.40 |
| WATER PIPE - 4" | | 1.00 LF | \$4.75 | 5.0 | \$4.99 |
| 6" COUPLING | | 0.05 EA | \$18.10 | 10.0 | \$1.00 |
| 4" COUPLING | | 0.05 EA | \$10.11 | 10.0 | \$0.56 |
| HANGERS | | 0.05 EA | \$3.00 | 10.0 | \$0.17 |
| PHONE LINE | | 1.00 FT | \$1.00 | 10.0 | \$1.10 |
| 36" VENT DUCT | | 1.00 FT | \$15.00 | 20.0 | \$18.00 |
| SUBTOTAL UTILITIES: | | | | | \$34.20 |

| | | |
|--------------------|-----|----------|
| SUBTOTAL SHEET | 7 : | \$139.13 |
| SUBTOTAL SHEET | 8 : | \$60.67 |
| SUBTOTAL ALL: | | \$199.80 |
| SALES TAX: | 6% | \$11.99 |
| TOTAL COST PER LF: | | \$211.78 |

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: ENTRIES-DECLINE SECTION
 SUBJECT: DIRECT SUPPLIES

EST. BY: LEA
 CHECKER: WEH
 DATE: 01/22/90

| EQUIPMENT OPERATING COSTS | QTY | COST/HR | HR/DAY | LF/DAY | COST/LF |
|------------------------------|-----|---------|--------|--------|---------|
| 5.0 CY SCOOP | 2 | \$32.00 | 20 | 35.84 | \$35.71 |
| 650 CFM COMP. OPR COST | 2 | \$2.00 | 24 | 35.84 | \$2.68 |
| 2 BOOM PNEU. JUMBO | 1 | \$4.28 | 4 | 35.84 | \$0.48 |
| ELECT. PUMPS | | \$4.00 | | 35.84 | |
| FORD TRACTOR (BOSS BUGGY) | 1 | \$3.19 | 12 | 35.84 | \$1.07 |
| PNEUMATIC PUMP | 3 | \$3.00 | 12 | 35.84 | \$3.01 |
| 50 HP ELECT FAN | 3 | \$0.50 | 24 | 35.84 | \$1.00 |
| AUX. FAN | 1 | \$0.50 | 24 | 35.84 | \$0.33 |
| U/G PICKUPS | 2 | \$2.50 | 12 | 35.84 | \$1.67 |

SUBTOTAL EQUIPMENT OPERATING COSTS: \$45.96

SMALL TOOLS:
 \$12.00 /MS X 29 MEN/ 35.84 LF/DAY = \$9.71

ROCK DUST: \$5.00

SUBTOTAL SHEET 8 : \$60.67

REDPATH ENGINEERING INC.

PROJECT: GENWAL COAL
 AREA: 256
 ITEM: ENTRIES-DECLINE SECTION
 SUBJECT: SITE INDIRECTS

EST. BY: LEA
 CHECKER: *wah*
 DATE: 01/22/90

| SITE INDIRECTS | | | | DAILY COST |
|---------------------|---------------|-----------|-----------|------------|
| MSHA CITATIONS | | | | \$20 |
| MINER TRAINING | 1 DAY X | \$7,892 / | 100 | \$79 |
| SAFETY SUPPLIES | | | | \$15 |
| OPR PICKUPS | \$0.25 /MI X | 100 MI X | 2 | \$50 |
| OFFICE/DRY SUPPLIES | | | | \$10 |
| SUSTAINING FREIGHT | \$800 / | 30.42 DAY | | \$26 |
| TELEPHONE | | | | \$30 |
| AIR FARE | \$600 /TRIP X | 1 TRIP / | 30.42 DAY | \$20 |
| GEN SUP'T SUBSIST. | \$500 | / | 30.42 DAY | \$16 |
| SHOP SUPPLIES | | | | \$30 |
| PORTA JOHN | | | | \$30 |
| DRINK WATER/ICE | | | | \$15 |

TOTAL/DAY

\$341

TOTAL/ LF:

\$9.52