

0012

PLATEAU MINING COMPANY

A Subsidiary of Getty Mining Company
P.O. Drawer PMC Price, Utah 84501
Telephone (801) 637-2875

File
ACT/007/006

Copy to Wayne

October 14, 1982

JIM
OCT 29 1982

James Smith
D.O.G.M.
4241 State Office Bldg.
Salt Lake City, Utah 84114

Dear Jim,

Attached is a preliminary estimate of all new disturbance in place or anticipated in 1982. In determining the amounts, I used contract dollars of comparable work done this year or the same methodology utilized in the MRP which I also copied to you for your convience.

As you are aware, Seeley Canyon break-out, which is presently bonded for \$85,500.00, has been tentatively changed to Corner Canyon with a disturbance considerably less than originally anticipated in Seeley Canyon. Based on this, I used the approved reclamation computation for the Mud Water fan which is comparable.

I would appreciate your review of the computations and endorsement or recommendation.

Sincerely,

PLATEAU MINING COMPANY

M. A. Coonrod

M. A. Coonrod
Environmental Coordinator

MAC/lm ✓

Attachment

RECEIVED

OCT 27 1982

DIVISION OF
OIL, GAS & MINING

ESTIMATES RELATIVE TO FINAL RECLAMATION OF ALL
PROJECTED NEW DISTURBANCE THROUGH 1983

| | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------------|
| I. New projected coal handling facilities on permit area. (The dis- position of the project is uncertain under present funding - suggest tabeling until we have a definitive answer.) | | |
| II. Top soil stockpile area generated through surplus soil and support disturbance relative to refuse expansion. | | |
| A. Top soil pile - NE corner of permit area - approximately 5 acres of disturbance @8,000/acre - | | \$40,000.00 |
| B. Haul road disturbance to fill area - approximately 2.5 acres to original contour, seeding and planting (cost) | | 20,000.00 |
| C. Clear water diversion ditch - approximately 2½ acres - deep cut - original contour - | | 10,961.00 |
| Seeding and planting - | | <u>20,000.00</u> |
| | | \$90,961.00 |
| III. Corner Canyon Deck - from underground approximately .41 acres | | |
| A. Removal of fan and surface support structures after salvage - | | 700.00 |
| B. Revegetation - | | |
| 1. Scarification | | 1,000.00 |
| 2. Top soil relocation | | 1,800.00 |
| 3. Soil additives | | 100.00 |
| 4. Seeding and Planting | | 200.00 |
| 5. Moisture retention (mulch) | | <u>500.00</u> |
| | | 3,600.00 |
| C. Portals - 6 (filling) | | <u>35,000.00</u> |
| Existing Seeley Canyon Bond | | 38,600.00 |
| which Corner Canyon will replace | | <u>-85,500.00</u> |
| | | 46,900.00 + surplus |

| | |
|---------------------------------------------|-------------------|
| Total of all new disturbance - | \$90,961.00 |
| Balance from abandoned Seeley Canyon Deck - | <u>-46,900.00</u> |
| | \$44,061.00 |

I feel that the present Bond in the amount of \$1,768,000.00 is more than adequate to absorb this small increase based on the amount and degree of success of our past and present reclamation efforts.

TABLE 3-11 (Cont.)

| Area Description | No. of Acres | Concrete and/or Blacktop Removal | Back-filling | Grading | Ripping | Topsoil Spreading | Soil Additives | Seeding and Tree Planting | Moisture Retention | Maintenance and Monitoring | Total |
|----------------------------|--------------|----------------------------------|--------------|---------|---------|-------------------|----------------|---------------------------|--------------------|----------------------------|---------|
| | | | | | | | | | | | |
| General Office Area | | | | | | | | | | | |
| Final Reclamation | 21.05 | | | | 52,600 | | 7,400 | 12,600 | 4,200 | 25,300 | 102,100 |
| Shop | | 5,700 | | | | | | | | | 5,700 |
| Storage Bldgs | | 13,600 | | | | | | | | | 13,600 |
| Warehouse | | 2,300 | | | | | | | | | 2,300 |
| General Offices | | 9,400 | | | | | | | | | 9,400 |
| Security Guard Residence | | 1,000 | | | | | | | | | 1,000 |
| Snow Plow Garage | | 800 | | | | | | | | | 800 |
| Bathhouse | | 2,400 | | | | | | | | | 2,400 |
| Coal Loadout | | 1,400 | | | | | | | | | 1,400 |
| Coal Wash Plant | | 9,700 | | 900 | | | | | | | 10,600 |
| Conveyor & Stacker | | 3,100 | | | | | | | | | 3,100 |
| Substations | | 2,900 | | | | | | | | | 2,900 |
| Wash Plant Water Tank | | 5,000 | 900 | | | | | | | | 5,900 |
| Parking Areas | | 800 | | | | | | | | | 800 |
| Water Storage Tank | | 200 | | | | | | | | | 200 |
| Slack Coal Bin | | | | | | | | | | | |
| Stock Pile Area | | | | | | | | | | | |
| Refuse Pile(s) | | | | | | | | | | | |
| Final Reclamation | 56.70 | | | | | 141,800 | 19,900 | 34,000 | 11,300 | 68,000 | 275,000 |
| Refuse Pile | | | | | | | | | | | |
| Topsoil Stockpile Areas | | | | | | | | | | | |
| Lion Deck Area | | | | | | | | | | | |
| Final Reclamation | 6.86 | | | | 17,200 | | 2,400 | 4,100 | 1,400 | 8,200 | 31,300 |
| Shop Buildings | | 800 | | | | | | | | | 800 |
| Bathhouse & Office | | 30,500 | | | | | | | | | 30,500 |
| Conveyor & Crusher | | 3,300 | | | | | | | | | 3,300 |
| Substation | | 1,800 | | | | | | | | | 1,800 |
| Portals (3) | | | 15,000 | | | | | | | | 15,000 |
| Stopehole | | | 10,700 | | | | | | | | 10,700 |
| Tunnel | | | 5,000 | | | | | | | | 5,000 |
| Lion Deck | | | | 11,700 | | | | | | | 11,700 |

TABLE 3-11 (Cont.)

| Area Description | No. of Acres | Concrete and/or Black Top Removal | Back-filling | Grading | Ripping | Topsoil Spreading | Soil Additives | Seeding and | Moisture Retention | Maintenance and Monitoring | Total |
|-----------------------------------------------|--------------|-----------------------------------|--------------|---------|---------|-------------------|----------------|---------------|--------------------|----------------------------|-----------|
| | | | | | | | | Tree Planting | | | |
| Wadsworth Canyon Breakouts | | | | | | | | | | | |
| Final Reclamation | 0.41 | | | | 1,000 | | 100 | 200 | 500 | 500 | 2,300 |
| Ventilation Fan Substation | | 700 | | | | | | | | | 700 |
| Portals (7) | | 1,300 | | | | | | | | | 1,300 |
| Deck | | | 35,000 | | | | | | | | 35,000 |
| | | | | 700 | | | | | | | 700 |
| Seeley Canyon Breakouts | | | | | | | | | | | |
| Final Reclamation | 2.1 | | | | 5,300 | 5,300 | 700 | 1,300 | 400 | 2,500 | 15,500 |
| Portals (14) | | | 70,000 | | | | | | | | 70,000 |
| Site Drainage Systems | | | | | | | | | | | |
| Final Reclamation | 8.87 | | | | 22,200 | 22,200 | 3,100 | 3,300 | 10,600 | 10,600 | 74,000 |
| Diversions | | | 2,500 | 1,700 | | | | | | | 4,200 |
| Sedimentation Ponds | | | 22,500 | | | | | | | | 22,500 |
| Gentry Mountain Shafts | | | | | | | | | | | |
| Final Reclamation | 0.5 | | | | | 1,300 | 200 | 300 | 600 | 600 | 3,000 |
| Shaft | | | 3,000 | | | | | | | | 3,000 |
| Subtotal (Abandonment Phase) | | 97,200 | 164,600 | 15,000 | 98,300 | 170,600 | 33,800 | 57,800 | 29,000 | 115,700 | 782,000 |
| Total Operation and Abandonment Phases | | 139,800 | 224,600 | 130,200 | 284,900 | 376,800 | 58,200 | 122,500 | 51,200 | 245,100 | 1,633,300 |
| Equipment Removal | | | | | | | | | | | 43,400 |
| Building Removal | | | | | | | | | | | 90,700 |
| Total Reclamation | | | | | | | | | | | 1,767,400 |
| Total Project | | | | | | | | | | | 1,768,000 |

3.6.6 Schedule of Reclamation

The general timetable for completing the major steps in reclamation is:

- o Landfills and solid waste will be regraded and seeded as they are completed.
- o Refuse piles will be covered and seeded as they are completed.
- o Underground mine openings will be closed and sealed as they are abandoned.
- o Surface facilities will be removed as they become unnecessary.
- o The completion of surface reclamation will be in as short a time as possible after operations cease.

3.6.6.1 Detailed Timetable for Completion of Each Major Step in Reclamation

The specific timetable for completing each major step or phase in reclamation is detailed in Table 3-10. In those instances where it is possible but not certain that surface facilities or portals may be completed or become unnecessary during mine operation, the latest date (i.e., 2001) is indicated.

3.6.6.2 Reclamation Monitoring

Plateau Mining Company will use the photogrammetric method for monitoring surface subsidence and changes to vegetation, topography, geology, surface structures, recreational, and land use on the surface over undermined areas. This method is recommended by

TABLE 3-10
Reclamation Timetable

| <u>Year</u> | <u>Area and Facilities</u> | <u>Reclamation Activities</u> | <u>Reclaimed Acres</u> |
|-------------|-----------------------------------------|---------------------------------------------------------|------------------------|
| 1980 | Sediment Ponds (6) | Mulch & reseed dam & other disturbed areas to stabilize | 2.61 |
| 1980 | Topsoil Stockpiles (6) | Mulch & reseed to temporarily stabilize | 1.11 |
| 1980 | Lion Deck Portal Road | Grade, mulch, & reseed cut & filled areas | 20.51 |
| 1980 | Lion Deck | Grade, mulch, & reseed fill | 7.37 |
| 1980 | Rock Tunnel Deck | Grade, mulch, & reseed fill | 1.37 |
| 1980 | Conveyor Route | Grade, mulch, & reseed disturbed areas | 3.05 |
| 1980-81 | Mad Water Canyon Deck | Grade, mulch, & reseed fill | 0.20 |
| 1981 | Vegetation Reference Areas | Establish | N/A |
| 1981 | Exploratory Drill Holes & Road | Grade, mulch, & replant | 50.0 |
| 1981 | Refuse Pile Extension Topsoil Stockpile | Mulch & seed to temporarily stabilize | 0.60 |
| 1981 | Old Tram Road | Rip, grade, mulch & replant | 3.56 |
| 1981 | Sediment Pond | Mulch & seed dam & other disturbed areas | 0.28 |
| 1981 | Sediment Pond Topsoil Stockpile | Mulch & seed to temporarily stabilize | 0.18 |
| 1981-? | Previously Reclaimed Areas | Maintenance, monitoring, & reseed | N/A |
| 1984 | Portal Area No. 1 (see Plate 3-6C) | | 15.84 |
| | Substation | | |
| | Shop | | |
| | Warehouse | Remove facilities & foundations | |

TABLE 3-10 (Cont)

| <u>Year</u> | <u>Area and Facilities</u> | <u>Reclamation Activities</u> | <u>Reclaimed Acres</u> |
|-------------|--------------------------------------|---------------------------------------------------------------------------------------------------------|------------------------|
| | Ventilation Fan | | |
| | Coal Chute & Vicinity | Dismantle, grade, mulch & reseed area | |
| | Portals (6) | Seal & backfill | |
| | Power Line & Poles | Remove, fill holes & reseed | |
| | Roads | | |
| | | Rip, remove blacktop, drag & recontour (see Plate 3-6D) install water bars, mulch, reseed, & replant | |
| | Decks | | |
| 1984 | Portal Area No. 2 | | 0.64 |
| | Ventilation fan | Dismantle & remove foundation | |
| | Substation | Remove facilities & foundations | |
| | Portals | Seal & backfill | |
| | Deck | Rip, drag, & recontour (see Plate 3-6D), grade, install water bars, mulch, reseed, & replant | |
| 2001 | General Office Area (See Plate 3-6B) | | 21.05 |
| | Shop | | |
| | Storage Building | | |
| | Warehouse | | |
| | General Office | Remove buildings & foundations - rip & grade, mulch, reseed, & replant | |
| | Security Guard Residence | | |

TABLE 3-10 (Cont)

| <u>Year</u> | <u>Area and Facilities</u> | <u>Reclamation Activities</u> | <u>Reclaimed Acres</u> |
|----------------------|---------------------------------|-------------------------------------------------------------------------------------------------|------------------------|
| | Snow Plow Garage | | |
| | Bath House | | |
| | Coal LoadOut | | |
| | Coal Wash Plant | | |
| | Conveyor & Stacker | Dismantle facilities & remove foundations or supports - Rip, grade, mulch, reseed, & replant | |
| | Substations | | |
| | Track Scale | | |
| | Rail Spur | | |
| | Parking Area | Rip, grade, mulch, reseed, & replant | |
| | Water Storage Tank | Remove facilities, rip, grade, mulch, reseed, & replant | |
| | Slack Coal Bin | | |
| | Powerline & Poles | Remove & fill holes; reseed | |
| | Stockpile Area | Rip, grade, mulch, reseed, & replant | |
| 2001 or as completed | Present Refuse Pile & Extension | Scarify, spread topsoil, mulch, reseed, & replant | 56.70 |
| 2001 | Lion Deck Area (see Plate 3-6A) | | 6.86 |
| | Shop | | |
| | Storage Buildings | Remove buildings & foundations | |

TABLE 3-10 (Cont)

| <u>Year</u> | <u>Area and Facilities</u> | <u>Reclamation Activities</u> | <u>Reclaimed Acres</u> |
|---------------|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| | Warehouse | | |
| | Bathhouse & Office | | |
| | Conveyor & Crusher | Dismantle, remove supports, scarify, spread topsoil, mulch, & reseed | |
| | Substation | Dismantle & remove foundation | |
| | Powerline & Poles | Remove, fill holes & reseed | |
| | Portals | Seal & backfill | |
| | Stope Hole & Tunnel | Fill | |
| | Lion Deck | Rip, drag, & recontour (except road - see Plate 3-6D) install water bars, mulch, reseed & replant | |
| 2001 | Mad Water Canyon Area | | 0.41 |
| | Ventilation Fan | Dismantle & remove foundations | |
| | Substation | | |
| | Powerline & Poles | Remove, fill holes & reseed | |
| | Portals (7) | Seal & backfill | |
| | Deck | Rip, drag, recontour, install water bars, mulch, & replant | |
| 2001 | Seeley Canyon Breakouts (see Plate 3-6E) | | |
| | Portals (14) | Seal & backfill | 2.1 |
| 2001 | Gentry Mountain Shaft (see Plate 3-6E) | Seal & backfill, remove fan, drag, recontour, mulch, & seed | 0.5 |
| 2006 or Later | Site Drainage Systems | Remove culverts, recontour ditches to develop similar-to-original drainage patterns, install water bars, mulch &/or seed & cover with burlap, replant | 5.0 |

TABLE 3-10 (Cont)

| <u>Year</u> | <u>Area and Facilities</u> | <u>Reclamation Activities</u> | <u>Reclaimed Acres</u> |
|---------------|----------------------------|--------------------------------------------------------------------------|------------------------|
| 2006 or Later | Sedimentation Ponds (7) | Remove overflow pipe, backfill, spread topsoil, mulch, reseed, & replant | 3.87 |
| 2002 to 2008 | Reclaimed Areas | Maintenance, regrading, reseeding, replanting as necessary | N/A |
| 2002 to 2011 | Reclaimed Areas | Success monitoring | N/A |
| 2011 | Reclaimed Areas | Compliance documentation expected | N/A |

USDA, U.S. Forest Service, Manti-LaSal National Forest, as outlined in the Environmental Assessment/Technical Examination 43 CFR35253 Short-Term Coal Lease - Tract U-37045 applied for by Applicant. Initial, low-altitude (1:4800), color aerial photography of the proposed mine area will be digitized and will be of such accuracy that elevations to within 1 ft vertically and horizontally can be attained.

- o Color aerial photography will be required initially to establish baseline data. Subsequent flights will be made annually and will cover the area mined and the area to be mined in the next 18 months (plus the angle of draw) or the entire lease area, as appropriate. A 30% overlap of flightlines and a 65% overlap of photographs will be required. The photography will aid in subsidence monitoring; documenting changes to vegetation, topography, geology, hydrology; monitoring recreational, wildlife, and range use; and monitoring all surface structures and facilities. Prints of the color aerial photography from the initial flight will be furnished by the Forest Service. Annual flights are yet to be arranged.

- o An on-the-ground visual inspection will be made twice yearly of the condition of all surface areas above underground mine workings (plus angle of draw). This survey should attempt to identify and document tension cracks, fissures, structural offsets, and obvious subsidence damage to buildings, roads, powerlines, pipelines, railroads, dams, reservoirs, or other cultural features.

- o A field inspection will be made annually of all faults, jointed areas, and landslides for evidence of renewed movement. These will be documented with photographs, written descriptions, and maps.

- o Continued documentation of seismic events will be maintained throughout the mine life. These data are available from state and federal agencies.

- o All seeded areas will be inspected at the end of each growing season to determine the success of the seeding program for a period of five years. A written report will prescribe any corrective actions to be taken prior to the next growing season.

- o Surface water will be monitored throughout the mining and reclamation operations. Postmining collection will continue until the reclamation effort is determined successful by the regulatory authority.

- o Subsurface water monitoring will be designed at a later date once the drilling program has been completed and sampling stations have been selected. In addition, NPDES discharge permit monitoring will be conducted in accordance with the stipulated permit conditions.

3.6.7 Cost Estimate of Reclamation

Overall cost of reclamation excluding building, concrete, and blacktop removal is estimated as approximately \$8000/reclaimed acre in midyear 1981 dollars. The cost of removing or dismantling many of the structures can be recovered through salvage.

3.6.7.1 Cost Estimate of Each Step of Reclamation

The estimated cost for reclamation including costs for backfilling, grading, replacement of topsoil, seeding and/or planting, irrigation, fertilizing, concrete and/or blacktop removal, maintenance, and monitoring is shown on Table 3.11.

TABLE 3-11
Estimated Reclamation Costs
Midyear 1981 \$

| Area Description | No. of Acres | Concrete and/or Blacktop Removal | Back-filling | Grading | Ripping | Topsoil Spreading | Soil Additives | Seeding and | Moisture Retention | Maintenance | Total |
|-----------------------------|--------------|----------------------------------|--------------|---------|---------|-------------------|----------------|---------------|--------------------|----------------|---------|
| | | | | | | | | Tree Planting | | and Monitoring | |
| Sediment Ponds (7) | | | | | | | | | | | |
| Temporary Stabilization | 3.72 | | | | | | | 2,200 | 700 | 4,400 | 7,300 |
| Disturbed areas | | | | | | | | | | | |
| Topsoil Stockpiles | | | | | | | | | | | |
| Construction Needs | | | | | | | | | | | |
| Lion Deck Road | | | | | | | | | | | |
| Final Reclamation | 20.51 | | | | 9,200 | 51,300 | | 12,300 | 4,100 | 24,600 | 101,500 |
| Rock Tunnel Deck | | | | | | | | | | | |
| Final Reclamation | 1.37 | | | | | 3,400 | | 800 | 300 | 1,600 | 6,100 |
| Fill | | | | | | | | | | | |
| Old Tram Road | | | | | | | | | | | |
| Final Reclamation | 3.56 | | | 6,100 | 8,900 | | 1,200 | 2,100 | 700 | 4,300 | 23,300 |
| Exploratory Drilling | | | | | | | | | | | |
| Final Reclamation | 50.0 | | | 85,000 | 125,000 | 125,000 | 17,500 | 30,000 | 10,000 | 60,000 | 452,500 |
| Roads | | | | | | | | | | | |
| Holes | | | | | | | | | | | |
| Lion Deck | | | | | | | | | | | |
| Final Reclamation | 7.37 | | | | 1,900 | 18,400 | | 4,400 | 1,500 | 8,800 | 35,000 |
| Fills | | | | | | | | | | | |
| Conveyor Route | | | | | | | | | | | |
| Final Reclamation | 3.05 | | | | | 7,600 | | 1,800 | 600 | 3,700 | 13,700 |
| Cuts & Fills | | | | | | | | | | | |
| Temporary | | | | | | | | | | | |
| Stabilization | 1.10 | | | | | | | 700 | 200 | 1,300 | 2,200 |
| Fills | | | | | | | | | | | |

TABLE 3-11 (Cont.)

| Area Description | No. of Acres | Concrete and/or Blacktop Removal | Back-filling | Grading | Ripping | Topsoil Spreading | Soil Additives | Seeding and Tree | Moisture Retention | Maintenance and Monitoring | Total |
|----------------------------|--------------|----------------------------------|--------------|---------|---------|-------------------|----------------|------------------|--------------------|----------------------------|---------|
| | | | | | | | | Planting | | | |
| Mudwater Canyon Deck | | | | | | | | | | | |
| Final Reclamation Fill | 0.20 | | | | | 500 | | 100 | | 200 | 800 |
| Portal Area No. 2 | | | | | | | | | | | |
| Final Reclamation | 0.64 | | | | 2,000 | | 300 | 400 | 800 | 800 | 4,200 |
| Ventilation Fan Substation | | 700 | | | | | | | | | 700 |
| Substation | | 1,300 | | | | | | | | | 1,300 |
| Portals (6) | | | 30,000 | | | | | | | | 30,000 |
| Road | | | | 4,900 | | | | | | | 4,900 |
| Deck | | | | 1,100 | | | | | | | 1,100 |
| Refuse Pile Extension | | | | | | | | | | | |
| Temporary Stabilization | 0.60 | | | | | | | 400 | 200 | 700 | 1,200 |
| Topsoil Stockpile | | | | | | | | | | | |
| Portal Area No. 1 | | | | | | | | | | | |
| Final Reclamation | 15.84 | | | | 39,600 | | 5,500 | 9,500 | 3,200 | 19,000 | 76,800 |
| Substation | | 1,300 | | | | | | | | | 1,300 |
| Shop | | 1,700 | | | | | | | | | 1,700 |
| Warehouse | | 400 | | | | | | | | | 400 |
| Ventilation Fan | | 700 | | | | | | | | | 700 |
| Coal Chute | | 500 | | | | | | | | | 500 |
| Portals (6) | | | 30,000 | | | | | | | | 30,000 |
| Power Lines & Poles | | | | | | | | | | | |
| Roads | | 36,000 | | 12,100 | | | | | | | 48,100 |
| Decks | | | | 6,000 | | | | | | | 6,000 |
| Subtotal (Operation Phase) | | 42,600 | 60,000 | 115,200 | 186,600 | 286,200 | 24,400 | 64,700 | 22,200 | 129,400 | 851,300 |