



energy fuels nuclear, inc.

40-8681

2764 compass drive • suite 101
grand junction, colorado 81506

(303) 243-1968
fax (303) 243-1973

June 23, 1995

Mr. Joseph J. Holonich, Branch Chief
United States Nuclear Regulatory Commission
2 White Flint North, Mail Stop 7J9
11545 Rockville Pike
Rockville, MD 20852

**re: White Mesa Mill, Banding Utah, License SUA-1358
Transmittal of Revised Reclamation Costs
for the Purpose of Determining Surety Levels**

Dear Mr. Holonich:

This letter transmits two copies of support for the revised reclamation estimate as promised in Harold Roberts' May 15, 1995 letter to you. The revisions are the result of internal discussions and conversations with your staff concerning the original May 15, 1995 estimate.

Energy Fuels Nuclear ("EFN") has addressed the concerns and made necessary changes in the estimate. The estimate has increased slightly because of review of equipment, labor and material costs. As a result of this review, EFN now estimates the reclamation and decommissioning cost for the White Mesa facility to be \$11,138,029

Should you or your staff have any questions concerning these revisions, I can be reached at (970)243-1968.

Sincerely,

Richard A. Van Horn
General Manager-Plateau Operations

Enclosures

cc/enc: D. K. Sparling, EFNI, White Mesa
H. R. Roberts, EFNI, Denver
C. O. Sealy, Umetco, Grand Junction

9506290450 950623
PDR ADOCK 04008681
C PDR

NK05/1

**WHITE MESA MILL, BLANDING, UTAH
USNRC LICENSE SUA-1358**

REVISED RECLAMATION AND DECOMMISSIONING ESTIMATE

Prepared by

Energy Fuels Nuclear, Inc.
June 23, 1995

INTRODUCTION

Energy Fuels Nuclear, Inc. ("EFN") owns and operates the White Mesa Mill ("Mill"), located six miles south of Blanding, Utah. The Mill operates under license No. SUA-1358 from the United States Nuclear Regulatory Commission ("NRC") and is expected to resume operations on August 1, 1995. On May 15, 1995, EFN submitted an update of estimated reclamation costs to the NRC Staff in Washington for the purposes of surety review. Discussions with NRC Staff during the last month have identified several areas of concern with that estimate and this document has been prepared to address those concerns.

SUMMARY

The May 15, 1995 estimate of reclamation and decommissioning costs was \$10,645,267. After review of the costs and addressing questions posed by the NRC Staff, the estimate has been increased to \$11,138,029. All costs are in 1995 dollars.

Two main areas of concern were voiced by NRC Staff during several telephone conversations during the last month: 1) the cost of fuel for the mobile equipment, and 2) the cost of the required rock armor. In addition to these, the cost of operator labor has been adjusted based on rates published by the U. S. Department of Energy. These three items, plus other minor changes, are the reason for the net increase in the estimate. Basic assumptions that were used in this estimate are included in Table II.

Following are comments which address the major points as discussed with NRC Staff over the last month.

Mill decommissioning. NRC Staff questioned the amount of labor that EFN has used in the estimate as being low. EFN has reviewed this estimate and believes that the over 35,000 man-hours used in this estimate is sufficient to tear down the structures of the mill and that the \$1,400,000 in total direct costs is more than adequate to complete the job. Recent contract demolition at uranium mills in the area suggest that we may be able to do it more efficiently and at a lower cost with a contract demolition specialist, but this has not been taken into account in this estimate.

Labor Costs. As the NRC Staff is aware, EFN tried unsuccessfully to obtain the disposal contract for the DOE's Monticello Tailings Project, located some 26 miles north of the Mill at Monticello, Utah. The DOE is proceeding with on-site disposal and has issued a Request for Proposal on certain aspects of the job, including earthwork. Along with this request was included a Department of Labor ruling on prevailing labor rates in the region. Of interest to this estimate were the rates for heavy equipment operators. These lower rates have been incorporated in this analysis for the equipment operators, resulting in a savings of approximately seven dollars per hour. The rates for other personnel, including the "mechanics" used in mill demolition, remained as before.

Equipment Costs. Equipment rental and operating costs were estimated as before using the quote from Butler Machinery for the fleet envisioned for this project. NRC Staff questioned the lack of fuel related costs in the estimate, and, upon review, EFN found them to be missing. A quote was obtained from Weese Petroleum, our current fuel supplier, for off-road diesel, and this was added to the equipment costs using Cat Handbook fuel consumption rates for the various pieces of equipment. The results of this calculation can be seen in the equipment section.

Rock Costs. NRC Staff noted that the rock costs used in some of the calculations seemed to be off by an order of magnitude, resulting in a low estimate for rock armor. Upon review, EFN found this to be true, and as requested by the NRC, calculated a cost for rock protection from the bottom up. The estimate of \$12.77 per yard (at the quarry), shown in the section "Rock Cost Calculations", was used for all types and sizes of rock.

WHITE MESA MILL
Surety Update Summary
Revision of 6/23/95

Description	Factor	Amount
Mill Decommissioning		1,396,899
Cell 2		1,626,366
Cell 3		2,046,542
Cell 4A		296,291
Cell 1		1,615,484
Miscellaneous (w/o LTC)		1,354,504
 Subtotal Direct Costs		 8,336,086
 Profit Allowance	10.00%	 833,609
Contingency	15.00%	1,250,413
Licensing & Bonding	2.00%	166,722
Long Term Care Fund		551,200
 Total Surety Requirement		 11,138,029

Amounts are in 1995 dollars

06/23/95

TABLE II BASIC ASSUMPTIONS

Tailings Cover will consist of an engineered built-up cover, placed to allow for maximum compaction, radon attenuation, and erosion resistance. It will be placed as follows:

- Nominal 4 foot random fill layer will be required for bridging over tailings
- Two feet of clay material will be used for the radon barrier
- Two feet of random fill paced over the clay
- Top cover for the cells will consist of 2" of d_{50} 0.5 rock compressed in for armor, i.e., "Desert Paving"

Cell 2

- Most of the first lift of random fill is already in place on this cell, with only a small slimes area left open at the present.
- Any remaining volume in the slimes area will be utilized for debris disposal

Cell 3

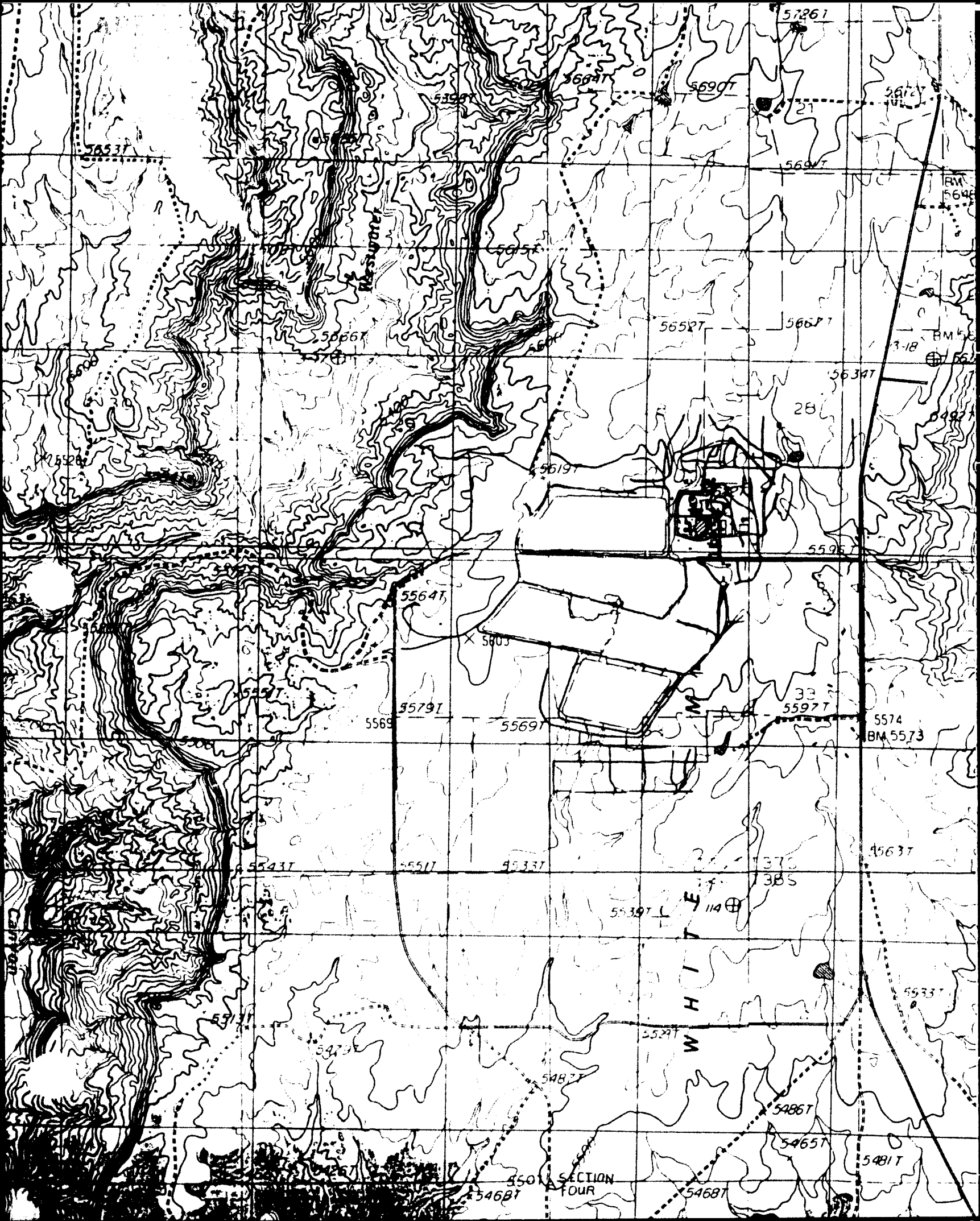
- Approximately one-third of the surface area of Cell 3 has been covered with a partial first random fill lift.
- Mill run will occur prior to decommissioning
- Materials from Decommissioning, Cell 1 work, and cell 4A work will be adequate to fill the cell to freeboard.

Cell 4A

- Solutions will be removed to Cell 3
- Liner and any crystals will be removed and placed in Cell 3
- Any contaminated soils will be removed and placed in Cell 3
- Remaining dike and bottom materials will be utilized as stockpiles for clay and random fill. Costs associated with these materials and activities are included in the cover costs for the other cells.

Mill Decommissioning

- Mill will be torn down and decommissioned using conventional methods.
- There is no credit assumed for the salvage of equipment



55537

57261

56847

56907

56727

55667

55527

56627

BM 5648

56347

28

56197

55927

55647

X 5803

55697

55691

33

5574

BM 5573

55527

55791

55977

55437

55517

55337

370

385

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W
H
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55637

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54877

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SECTION FOUR

54687

54687

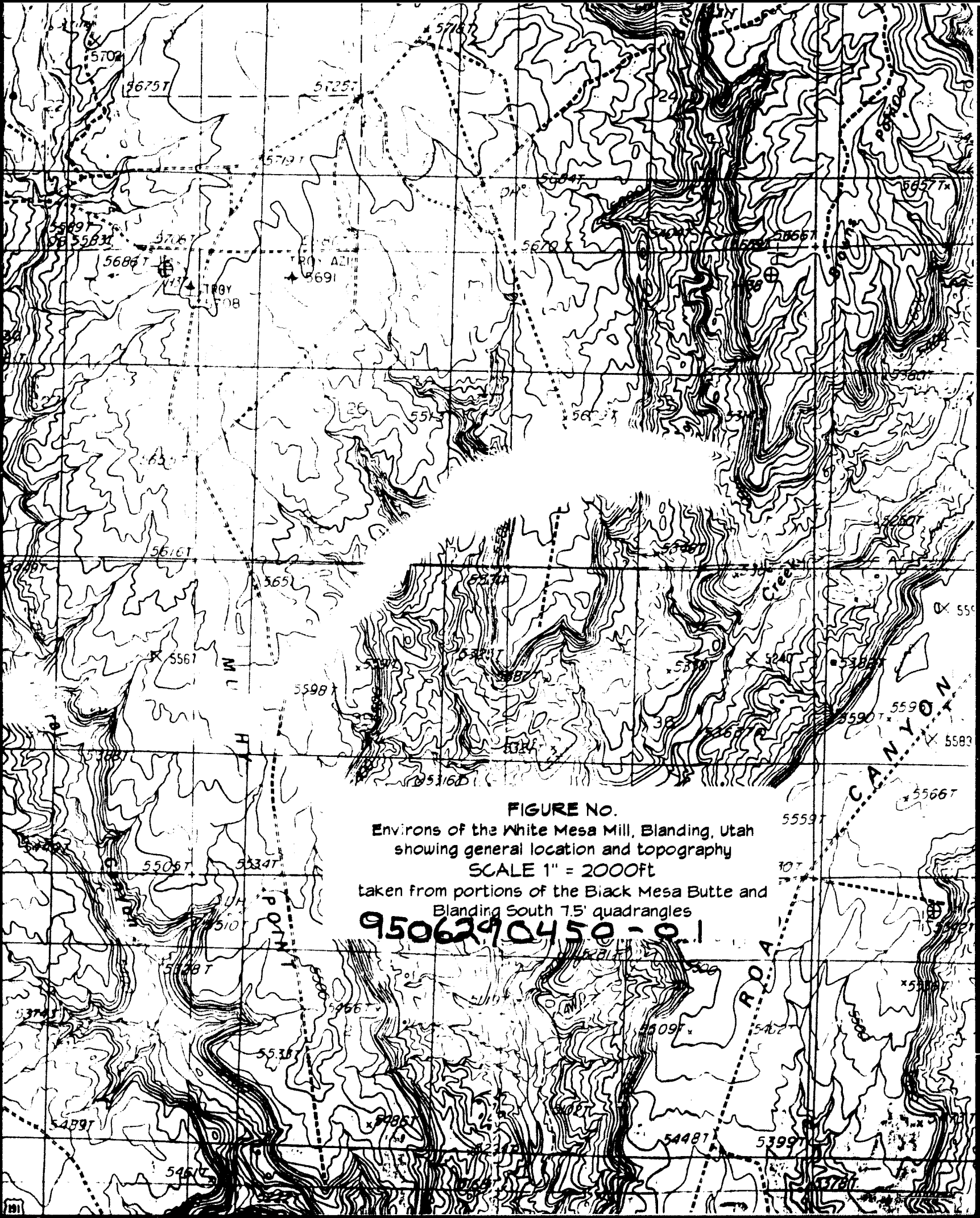
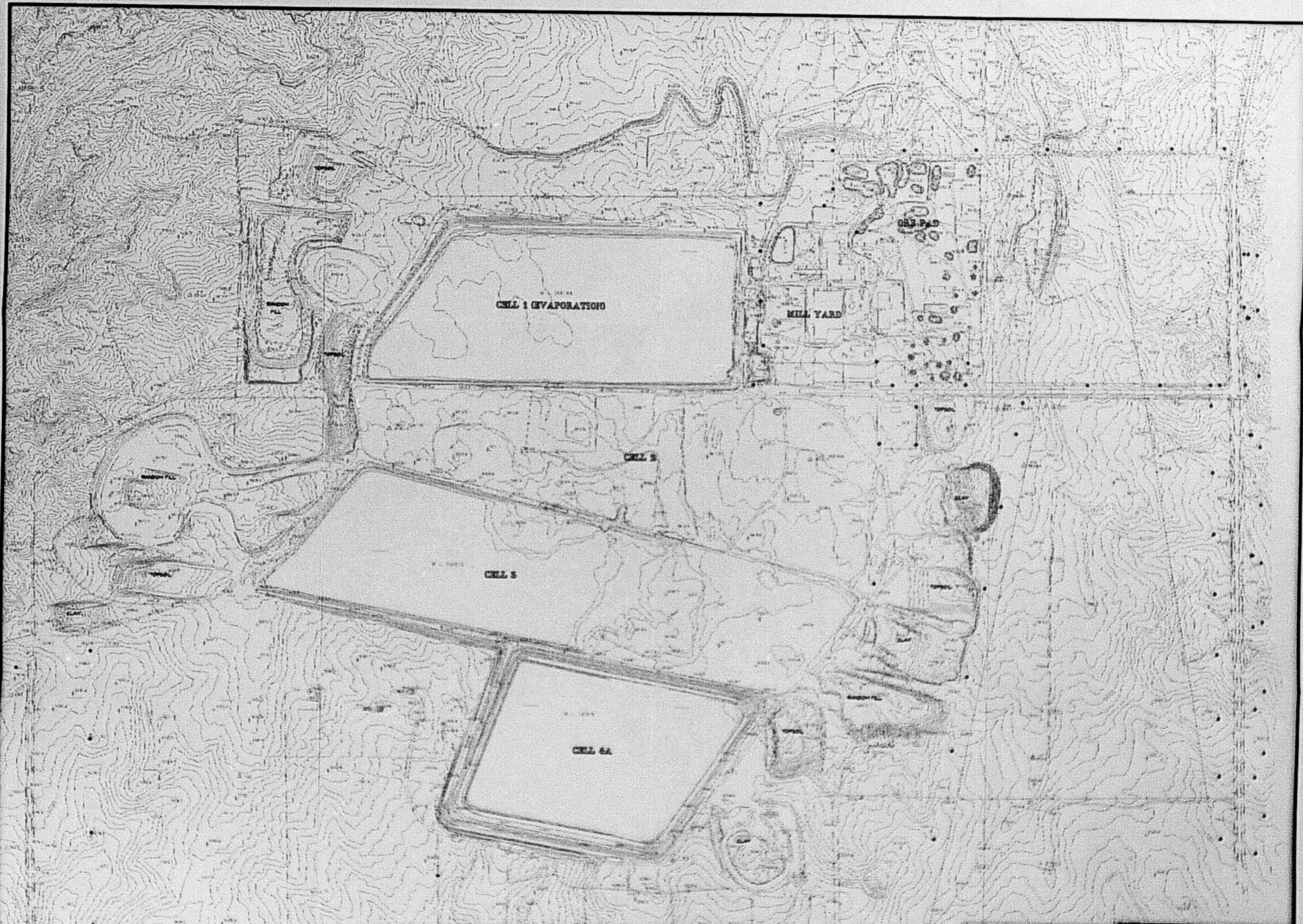


FIGURE NO.
Enviorns of the White Mesa Mill, Blanding, Utah
showing general location and topography
SCALE 1" = 2000ft
taken from portions of the Black Mesa Butte and
Blanding South 7.5' quadrangles

9506290450-0.1



Prepared by Civil Engineering
 from Aerial Photography dated 5-23-66
 This Map Complies with National Map Accuracy Standards
 CONTOUR INTERVAL: 5 FEET
 SCALE: 1" = 500 FEET
ANITEC
APERTURE
CARD

DATE	02/20/66

ENERGY FIELDS NUCLEAR, INC.
 Colorado Fuel & Iron Operations
 2740 Lawrence Street, Denver, Colorado 80202
FIGURE NO. 2
WHITE MESA MILL
SPECIAL LAYOUT SHOWING ACCESS
AND MATERIAL STOCK PILES
 DESIGN: BARR DRAWN: R. A. VAN ARMAN
 CHECKED BY: DATE: JAN 28, 1966
 APP: SCALE: 1" = 500 FEET

9506290450-02

White Mesa Mill Reclamation Estimate

6/23/95

ID	Name	Total Cost	Year 1				Year 2				Year 3							
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
1	1 TOTAL RECLAMATION & DECOM	\$0,007,275																
2	1.1 MILL DECOMMISSIONING	\$1,596,004																
3	1.1.1 Mill Building Demolition	\$233,141																
4	1.1.2 Preleach Tank Demolition	\$49,401																
5	1.1.3 Ore Feed Demolition	\$80,750																
6	1.1.4 SX Building Demolition	\$165,993																
7	1.1.5 CCD Circuit Removal	\$139,030																
8	1.1.6 Sample Plant Removal	\$39,737																
9	1.1.7 Boiler Demolition	\$91,124																
10	1.1.8 Acid Tank & Supply Line Removal	\$46,469																
11	1.1.9 Vanadium Oxidation Circuit Removal	\$57,076																
12	1.1.10 P.L.T. Clarifier, & Claricone Removal	\$69,890																
13	1.1.11 Haulage of Debris to Cell 3	\$125,900																
14	1.1.12 Mill Yard Decontamination	\$135,154																
15	1.1.13 Ore Storage Pad Decontamination	\$59,071																
16	1.1.14 Acid Storage Area Decontamination	\$39,472																
17	1.1.15 Equipment Storage Area	\$10,011																
18	1.1.16 Revegetate Mill Yard & Ore Pad	\$44,240																
19	1.2 RECLAMATION OF CELL 2	\$1,626,966																
20	1.2.1 Obtain Permit for Section 16	\$10,000																
21	1.2.2 Place Remainder of Bridging Lift	\$03,740																

White Mesa Mill Reclamation Estimate

6/29/95

ID	Name	Total Cost	Year 1				Year 2				Year 3							
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3					
22	1.2.3 Place Lower Random Fill (12")	\$153,484																
23	1.2.4 Clay Layer	\$563,516																
24	1.2.5 Upper Random Fill	\$249,137																
25	1.2.6 Dike Slope Reduction	\$64,019																
26	1.2.7 Desert Pavement of Top	\$304,485																
27	1.2.8 Rock Armor on 5:1 slopes	\$133,885																
28	1.2.9 Quality Control	\$65,100																
29	1.3 RECLAMATION OF CELL 3	\$2,046,542																
30	1.3.1 Dewatering of Cell 3	\$20,000																
31	1.3.2 Lower Random Fill	\$335,452																
32	1.3.3 Lower Random Fill (12")	\$154,550																
33	1.3.4 Clay Layer	\$580,445																
34	1.3.5 Upper Random Fill	\$237,658																
35	1.3.6 Dike Slope Reduction (South)	\$85,358																
36	1.3.7 Dike Slope Reduction (West)	\$7,329																
37	1.3.8 Desert Pavement of Top	\$310,098																
38	1.3.9 Riprap and Bedding Material	\$228,479																
39	1.3.10 Quality Control	\$87,172																
40	1.4 RECLAMATION OF CELL 1	\$1,615,484																
41	1.4.1 Construct Wheelwash	\$50,000																
42	1.4.2 Wheelwash Operation	\$65,776																

White Mesa Mill Reclamation Estimate
6/23/95

ID	Name	Total Cost	Year 1				Year 2				Year 3		
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
43	1.4.3 Crystal Removal	\$532,181											
44	1.4.4 PVC Soil Cover Removal	\$423,839											
45	1.4.5 Liner and Soil Removal	\$140,952											
46	1.4.6 Contaminated Materials Removal	\$282,230											
47	1.4.7 Construct Channels	\$1,076											
48	1.4.8 Rock Protection	\$45,898											
49	1.4.9 Quality Control	\$73,532											
50	1.5 CELL 4A WORK	\$296,241											
51	1.5.1 Dewatering	\$5,000											
52	1.5.2 Construct Wheel Wash	\$20,000											
53	1.5.3 Wheel Wash Operation	\$6,909											
54	1.5.4 Remove Fencing	\$1,936											
55	1.5.5 Remove Liner to Cell 3	\$87,581											
56	1.5.6 Remove Clay Layer	\$154,714											
57	1.5.7 Quality Control	\$20,150											
58	1.6 MISCELLANEOUS ITEMS	\$1,905,704											
59	1.6.1 Long Term Care Fund Allowance	\$551,200											
60	1.6.2 Butler Machinery Mobilization	\$131,000											
61	1.6.3 Managerial Support	\$1,223,504											
62	1.6.3.1 Manager/Engineer	\$280,731											
63	1.6.3.2 Radiation Safety Officer	\$175,457											

White Mesa Mill Reclamation Estimate
6/23/95

ID	Name	Total Cost	Year 1				Year 2				Year 3							
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
64	1.6.3.3 Secretary	\$70,183																
65	1.6.3.4 Clerk	\$58,486																
66	1.6.3.5 Environmental Technician	\$98,577																
67	1.6.3.6 Maintenance Foreman	\$55,000																
68	1.6.3.7 Chemist	\$45,000																
69	1.6.3.8 Security	\$110,596																
70	1.6.3.9 Safety Engineer	\$40,000																
71	1.6.3.10 Misc Materials and Supplies	\$182,475																
72	1.6.3.11 Health Physics Costs (Mill Decc	\$112,000																

MILL DECOMMISSIONING

A) REMOVAL OF CONTAMINATED MATERIAL FROM CRE PAD

• ASSUME -

• 18" WILL HAVE TO BE REMOVED.

$$\begin{aligned} \text{• PAID} &= [500 \times 1500] + [450 \times 600] = 1,020,000 \text{ ft}^2 \\ &= 23.4 \text{ ACRES.} \end{aligned}$$

$$\therefore \text{VOLUME} = [1,020,000 \text{ ft}^2 \times 1.5 \text{ ft}] \div 27 = 41,310 \text{ yd}^3$$

say

$$\boxed{41,300 \text{ yd}^3}$$

B) REMOVAL OF CONTAMINATED SOILS FROM MILL YARD

ASSUME -

• 18" WILL HAVE TO BE REMOVED

$$\text{• AREA} = [1100 \times 850] + [650 \times 300] = 1,130,000 \text{ ft}^2$$

$$\text{VOLUME} = [1,130,000 \text{ ft}^2 \times 1.5 \text{ ft}] \div 27 = 62,778 \text{ yd}^3$$

say

$$\boxed{62,800 \text{ yd}^3}$$

C) REMOVAL OF CONTAMINATED SOILS FROM ACID STORAGE AREA

ASSUME -

• 18" WILL HAVE TO BE REMOVED

$$\text{• AREA} = 400 \times 300 = 120,000 \text{ ft}^2$$

$$\therefore \text{VOLUME} = [120,000 \times 1.5] \div 27 = 6,667 \text{ yd}^3$$

say

$$\boxed{6,700 \text{ yd}^3}$$

MILL DECOR (Cont)

D. REMOVAL OF CONTAMINATED SOILS FROM 'NORTH FORTY' STORAGE AREA

ASSUMED

6" WILL HAVE TO BE REMOVED.

AREA IS 950' x 500' = 475,000 ft²

∴ VOLUME = [475,000 ft² x 0.5 ft] ÷ 27 = 8796 yd³

SO 8,800 yd³.

E)	<u>DESCRIPTION</u>	<u>QTY</u>	<u>NOMINAL 637 EFF.</u>	<u>MULT</u>	<u>RESULTING EFFICIENCY</u>	<u>637 Hrs</u>	<u>FLTHRS</u>
	OZE PAD	41,300	256	.75	192	215	54
	MILL YARD	62,800	256	.50	128	490	123
	ACID STORAGE	6,700	256	.50	128	52	13
	STORAGE AREA	8,800	256	.50	128	69	17

MILL DECOMMISSIONING

F) ASSUME ORIGINAL 1988 JIBCO MAINTENANCE WAS REALISTIC @ 35,360 hrs
 IF JOB WERE TO TAKE 6 MONTHS, THE CREW SIZE IS

$$\frac{35,360 \text{ hrs}}{1} \times \frac{5 \text{ JIB}}{26 \text{ wks}} \times \frac{\text{man-wk}}{4 \text{ chr}} = \boxed{34 \text{ men}}$$

<u>WORK DESCRIPTION</u>	<u>% ASSIGNMENT</u>	<u>HOURS</u>
MILL BUILDING	23	8133
PRE LEACH	5	1768
COARSE ORE	9	3182
EX	18	6365
CLD	15	5304
SAMPLE PLANT	4	1415
ACID TANK	5	1768
PL THICKENER	7	2475
BOILER	9	3182
VANADIUM OXIDATION	3	1768
	<u>100</u>	<u>35,360</u>

G) TOOL ALLOWANCE FOR SMALL TOOLS WILL BE BASED ON
 \$5⁰⁰ / HOUR WORKED = INCLUDED.

- SAFETY GEAR
- BOTTLED GASES
- HAND TOOLS
- WELDERS / TORCHES.

PROJECT WHITE NESS DECOM. Date Calc by Sheet 4 of 5

MILL DECOM

H) REVEGETATION OF MILL YARD, ORE PAD, STORAGE AREA ETC

	<u>AREA</u>
ORE PAD.	1,020,000
MILL YARD	1,130,000
ACID STORAGE	120,000
STORAGE AREAS	<u>475,000</u>
	2,745,000

$$2,745,000 \div 43560 \text{ ft}^2/\text{A} = 63 \text{ ACRES.}$$

TOPSOIL NECESSARY =

= 6" THICK

$$2,745,000 \text{ ft}^2 \times \frac{6}{12} \text{ ft} = 1,372,500 \text{ ft}^3$$

$$= 50,833 \text{ yd}^3$$

So 50,850 yd³

EQUIPMENT REQUIREMENTS —

= ASSUME 63% EFFICIENCY OF 256 PCY / HOUR

$$\text{So } 50,850 \text{ yd}^3 \times \frac{1 \text{ Hour}}{256 \text{ PCY}} = 199 \text{ hrs}$$

So 200 hrs

MILL DESIGN (CONT)

I) Assume 1988 CRANE USAGE CORRECT

2 65 ton cranes / 4 months = 1384 hrs
 1 30 ton crane - 4 months 692 hrs.

65 ton cranes cost [LESS OPERATOR] \$8000/month

8000 ÷ 172 hours/month = \$46.24 / hour.

300 ton crane costs [LESS OPERATOR] \$5500 / month

5500 ÷ 172 hr/mo = 31.79
 so, \$40.00/hr

WORK	65 ton		30 ton	
	%	HRS	%	HRS
MILL BUILDING	40	554	10	69
PRE LEACH	5	69	7	48
COARSE ORE	-	-	10	69
SX	10	138	10	69
CCD	5	69	20	138
SAMPLE PLANT	-	-	15	104
ACID TANK	-	-	10	69
PL THICKENER	10	138	5	35
BOILER	15	208	5	35
VANADIUM OXIDATION	15	208	8	55

VOLUME CALCULATIONS FOR CELL 1

A CRYSTAL VOLUME -

CELL AREA IS 53 ACRES
 AVERAGE CRYSTAL DEPTH IS 2 FT

$$\begin{aligned} \therefore 53 \Delta \times 43,560 \text{ ft}^2/\Delta \times 2 \text{ ft thick} &= 4,617,360 \text{ ft}^3 \\ &= 171,013 \text{ yd}^3 \\ &\text{SOIL} \quad \boxed{171,000 \text{ yd}^3} \end{aligned}$$

B SOIL COVER OVER PVC LINER

CELL AREA IS 53 ACRES,
 AVERAGE SOIL DEPTH IS 18"

$$\begin{aligned} \therefore 53 \Delta \times 43,560 \text{ ft}^2/\Delta \times 1.5 &= 3,463,020 \\ &= 128,260 \text{ yd}^3 \\ &\text{SOIL} \quad \boxed{128,250 \text{ yd}^3} \end{aligned}$$

C PVC LINER

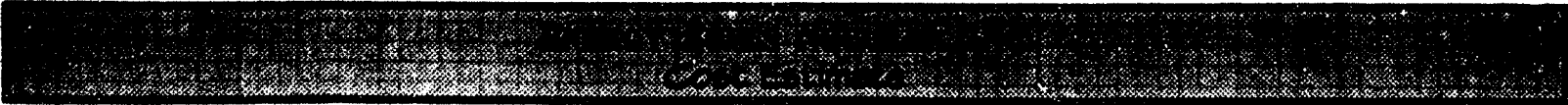
ASSUME LINER + ASSOCIATED MATERIAL
 EVIDS IS 6" THICK

$$\begin{aligned} \therefore 53 \Delta \times 43,560 \text{ ft}^2/\Delta \times 0.5 \text{ ft thick} &= 1,154,340 \text{ ft}^3 \\ &= 42,753 \text{ yd}^3 \\ &\text{SOIL} \quad \boxed{42,750 \text{ yd}^3} \end{aligned}$$

D CONTAMINATED MATERIAL UNDER LINER

ASSUME AVERAGE OF 1 FOOT OVER CELL

$$\begin{aligned} 53 \Delta \times 43,560 \text{ ft}^2/\Delta \times 1.0 \text{ FEET THICK} &= 2,308,680 \text{ ft}^3 \\ &= 85,307 \text{ yd}^3 \\ &\text{SOIL} \quad \boxed{85,500 \text{ yd}^3} \end{aligned}$$



PROJECT..... Date..... Calc by..... Sheet 2 of 3

VOLUME CALCULATIONS FOR CELL 1

E TOTAL VOLUME OF MATERIAL MOVED TO CELL 3

CRYSTALS	171,000
SOIL COVER	128,250
PVC LINER	42,750
CONTAMINATED MATERIAL	85,500

427,500 yd³

CELL 1 EFFICIENCY CALCULATIONS.

PER TOLL GIEBEL'S 2/93 CALCULATIONS, TCS HOUR LIMITS ARE RATED AT 50 BCF/HOUR FOR THE JAIL BETWEEN CELL 1 & CELL 4A. WHILE ALL CELL 1 MATERIALS ARE NOW SCHEDULED FOR CELL 3, WE WILL USE THESE FIGURES IN VIEW OF A MORE QUOTE CALCULATION. THIS WILL RESULT IN A CONSERVATIVE ESTIMATE.

ASSUME THAT ONE JCB AND ONE CAS WILL SUPPORT EFFORTS.

1-11-95

DESCRIPTION	TCS	JCB	CAS	QTY	TCS HRS	FLEET HRS
CONCRETE REMOVAL	4	1	1	171,000	2849	725
SOIL COVER	4	1	1	128,250	2174	544
PVC COVER	4	1	1	42,750	724	181
UNIDENTIFIED MATERIALS	4	1	-	85,500	1449	362
TOTAL FLEET HOURS						1812

ASSUME WHEEL WASH ENVELOPE 3 = WORKS TOTAL FLEET HOURS.

$3 \times 1812 = \underline{5436 \text{ hrs}}$

VOLUME CALCULATION FOR CELL 2

1) RANDOM FILL ALREADY PLACED

$$\begin{aligned} \text{FROM CAD, AREA OF CELL 2} &= 3,028,052 \text{ ft}^2 \\ &= 69.5 \text{ Acres} \\ \text{est.} &\boxed{70 \text{ Acres}} \end{aligned}$$

$$\begin{aligned} \text{AREA OF RANDOM FILL PLACED} &= 2,480,796 \text{ ft}^2 \\ &= 63.8 \text{ Acres} \end{aligned}$$

ASSUME FILL THICKNESS MINIMUM OF 3 FT

$$\begin{aligned} \therefore \text{VOLUME PLACED: } 2,480,796 \times 3 &= 7,442,388 \text{ ft}^3 \\ &= 275,644 \text{ yd}^3 \\ \text{est.} &\boxed{275,500 \text{ yd}^3} \end{aligned}$$

2) 1ST LIFT OF RANDOM FILL LEFT TO PLACE

$$\begin{aligned} 3,028,052 - 2,480,796 &= 547,256 \text{ ft}^2 \\ \therefore 3 \text{ feet Thick} \times 547,256 \text{ ft}^2 &= 1,641,768 \text{ ft}^3 \\ &= 60,806 \text{ yd}^3 \\ \text{est.} &\boxed{60,800 \text{ yd}^3} \end{aligned}$$

3) BALANCE OF LOWER RANDOM FILL LIFT (12") [COVER ONLY]

$$\begin{aligned} 1 \text{ ft} \times 70 \Delta \times 43,560 \text{ ft}^2/\Delta &= 3,049,200 \text{ ft}^3 \\ &= 112,933 \text{ yd}^3 \\ \text{est.} &\boxed{112,950 \text{ yd}^3} \end{aligned}$$

4) CLAY LAYER (2 ft thick)

$$2 \text{ ft} \times 70 \Delta = 43,560 \text{ ft}^2/\Delta$$

$$= 6,098,400 \text{ ft}^3$$

$$= 225,866 \text{ yd}^3$$

$$\text{say } \boxed{225,900 \text{ yd}^3}$$

5) UPPER RANDOM FILL LAYER (2 FEET) [OVER UNIT]

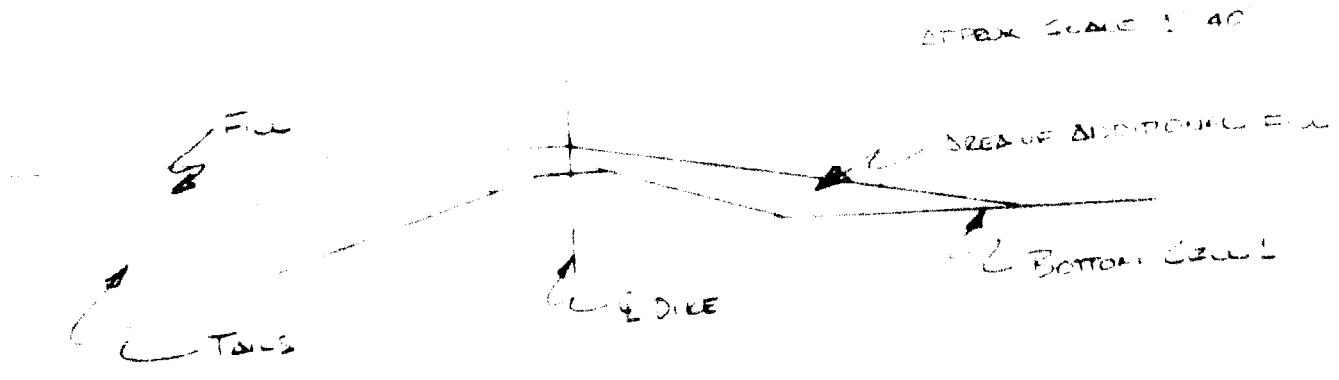
$$2 \text{ ft} \times 70 \Delta = 43,560 \text{ ft}^2/\Delta$$

$$= 6,098,400 \text{ ft}^3$$

$$= 225,866 \text{ yd}^3$$

$$\text{say } \boxed{225,900 \text{ yd}^3}$$

6) RANDOM FILL NECESSARY FOR NORTHERN DICE [CELL] & WESTERN DICE TO BRING SLOPE FROM 3:1 TO 5:1



$$\text{AREA} = \left[\frac{32 \times 17}{2} \right] - \left[\frac{40 \times 17}{2} \right] = 425 \text{ ft}^2$$

GIVEN THAT NORTHERN DICE IS 3400 FEET LONG & THAT WESTERN DICE IS 500 FEET LONG

$$[3400 + 500] \times 425 \text{ ft}^2$$

$$= 1,657,500 \text{ ft}^3$$

$$= 61,383 \text{ yd}^3$$

$$\text{say } \boxed{61,400 \text{ yd}^3}$$

4) CLAY LAYER (2 ft thick)

$$2 \text{ ft} \times 70 \Delta \times 43,560 \text{ ft}^2/\Delta = 6,098,400 \text{ ft}^3$$

$$= 225,866 \text{ yd}^3$$

say 225,900 yd³

5) UPPER ZONDM FILL LAYER (2 FEET) [OVER ONLY]

$$2 \text{ ft} \times 70 \Delta \times 43,560 \text{ ft}^2/\Delta = 6,098,400 \text{ ft}^3$$

$$= 225,866 \text{ yd}^3$$

say 225,900 yd³

6) ZONDM FILL NECESSARY FOR NORTHERN DIKE [CELL 1] & WESTERN DIKE TO BRING SLOPE FROM 3:1 TO 5:1



$$\text{AREA} = \left[\frac{20 \times 17}{2} \right] - \left[\frac{40 \times 17}{2} \right] = 425 \text{ ft}^2$$

GIVEN THAT NORTHERN BOUNDARY IS 3400 FEET LONG & THAT WESTERN DICE IS 500 FEET ...

$$[3400 + 500] \times 425 \text{ ft}^2 = 1,657,500 \text{ ft}^2$$

$$= 61,387 \text{ yd}^3$$

say 61,400 yd³

7) ROCK ARMOR [ASSUMING DEBERT PAVEMENT]

$D_{50} = 0.5$ [ASSUME MINIMUM THICKNESS PRACTICAL: 2"]

∴ THICKNESS OF ROCK TO BE PRESSED INTO TOP OF FILL

$$\begin{aligned}
 70\Delta &= 43,560 \text{ ft}^2/\Delta \times \frac{1}{6} = 508,200 \text{ ft}^2 \\
 &= 18,822 \text{ yd}^3 \\
 \text{say } & \boxed{18,850 \text{ yd}^3}
 \end{aligned}$$

8) ROCK ARMOR ON SIDE SLOPES

$$\begin{aligned}
 [3,400 + 500] \times 95 \text{ SLOPE DIST} \times \frac{1}{6} &= 61,750 \text{ ft}^2 \\
 &= 2,257 \text{ yd}^3 \\
 \text{say } & \boxed{2,300 \text{ yd}^3}
 \end{aligned}$$

9) ROCK ARMOR ON SIDE SLOPES ASSUMING $D_{50} = 4"$ RIPRAP

Ⓢ $D_{50} = 4"$ PLACED THICKNESS OF $3 \times \text{dia} = 12"$

$$\begin{aligned}
 \therefore [3,400 + 500] \times 95 \text{ SLOPE DIST} \times \frac{9}{12} &= 239,200 \text{ ft}^2 \\
 &= 8,859 \text{ yd}^3 \\
 &= \boxed{8,950 \text{ yd}^3}
 \end{aligned}$$

10) ASSUME THAT 1/2 OF DIST HAS TO BE COVERED FOR ROCK

Ⓢ $\frac{1}{2} \times 95 \text{ ft}$ (delivered to site)

CELL 2 WORK.

As per T. Greig's Calc of 3193, MATERIAL HANDLING WILL BE ESTIMATED BY USING 3 REPRESENTATIVE ROUTE MODELS AND ASSIGNING % TO THEM

<u>ROUTE</u>	<u>% OF TOTAL</u>
1	24%
2	36%
3	40%

EFFICIENCIES AS CALCULATED BY CATERPILLAR FPC

<u>637D SCRAPER</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>WEIGHTED AUG.</u>	<u>PER EACH SCRAPER</u>
CLAY	348	432	534	453	227
FLTER	537	398	598	511	256
RANDOM	537	398	598	511	256
VEGETATIVE	548	382	495	467	234

Therefore

<u>DESCRIPTION</u>	<u>QTY</u>	<u>EFF</u>	<u>SCRAPER HOURS</u>	<u>FLEET HOURS</u>
BENCHING LIFT	60,800	256	238	60 *
12" LOWER RF	112,950	256	442	111 *
CLAY LAYER	225,900	227	996	249
UPPER RANDOM FILL	225,900	256	882	221
DIKE SLOPE REDUCTION	61,400	256	240	60
DESERT FILLMENT	18,850	256	74	19
ROCK DRUM (1690)	6850	59	150	38

* Because of irregularities in the working surface & potential for settling after the placement of the bedding lift these values need to be increased by 30% to account for over-bid.

VOLUME CALCULATIONS FOR CELL 3

1) RANDOM FILL ALREADY PLACED

$$\begin{aligned} \text{FROM CAD, AREA OF CELL 3} &= 2,060,386 \text{ ft}^2 \\ &= 70.25 \text{ Acres} \\ \text{CAD} &\rightarrow \boxed{70 \text{ Acres}} \end{aligned}$$

$$\begin{aligned} \text{AREA OF RANDOM FILL PLACED} &= 851,820 \text{ ft}^2 \\ &= 18.30 \text{ Acres} \end{aligned}$$

ASSUME FILL THICKNESS MANUAL = 3 ft

$$\begin{aligned} \therefore \text{VOLUME PLACED} &= 851,820 \times 3 = 2,555,460 \text{ ft}^3 \\ &= 94,647 \text{ yd}^3 \\ \text{SO} &\rightarrow \boxed{94,650 \text{ yd}^3} \end{aligned}$$

2) 12" LIFT OF RANDOM FILL LEFT TO PLACE

$$\begin{aligned} 3,060,386 - 851,820 &= 2,208,566 \text{ ft}^2 \\ \therefore 3\text{-ft thick} \times 2,208,566 \text{ ft}^2 &= 6,625,698 \text{ ft}^3 \\ &= 245,396 \text{ yd}^3 \\ \text{SO} &\rightarrow \boxed{245,400 \text{ yd}^3} \end{aligned}$$

3) BALANCE OF RANDOM FILL TO PLACE (12" COMPACTED)

$$\begin{aligned} (1 \text{ ft} \times 700 \times 43.560 \text{ ft}^2/\text{A}) &= 3,049,200 \text{ ft}^3 \\ &= 112,933 \text{ yd}^3 \\ \text{SO} &\rightarrow \boxed{112,950 \text{ yd}^3} \end{aligned}$$

CELL 3 VOLUME CALC

4) CLAY LAYER (2 FT THICK)

$$2 \text{ ft} \times 70 \Delta = 43,560 \text{ ft}^2/\Delta = 6,098,400 \text{ ft}^3$$

$$= 225,866 \text{ yd}^3$$

(see item #11)

say 225,900 yd³

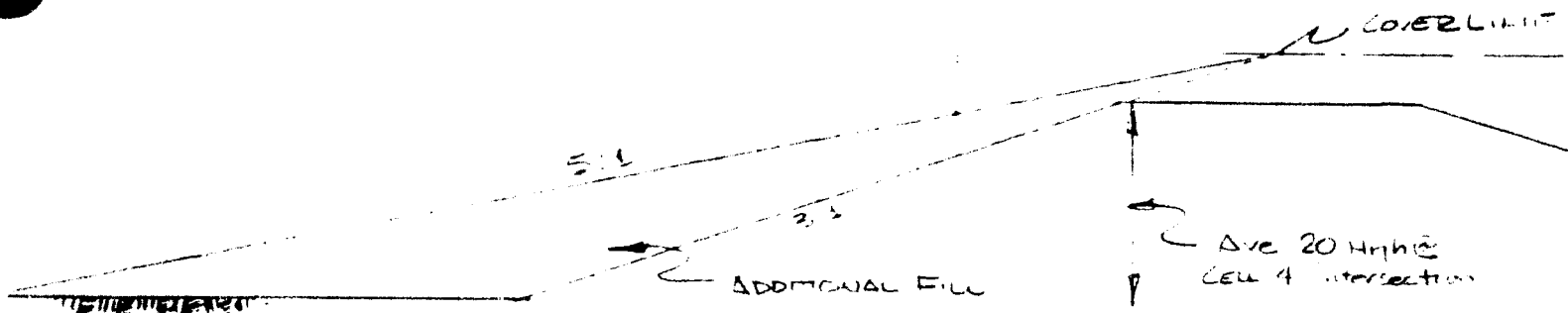
5) UPPER BANKS FILL [COVER ONLY]

$$2 \text{ ft} \times 70 \Delta = 43,560 \text{ ft}^2/\Delta = 6,098,400 \text{ ft}^3$$

$$= 225,866 \text{ yd}^3$$

say 225,900 yd³

6) SOUTHERN DIKE - SLOPE REDUCTION FROM 3:1 TO 5:1



$$\Delta \text{BED} = \left[\frac{25 \times 25}{2} \right] - \left[\frac{75 \times 25}{2} \right] = 625 \text{ ft}^2$$

GIVEN THAT THE SOUTHERN DIKE IS 3500'

$$\text{VOLUME} = 625 \times 3500 = 2,187,500 \text{ ft}^3$$

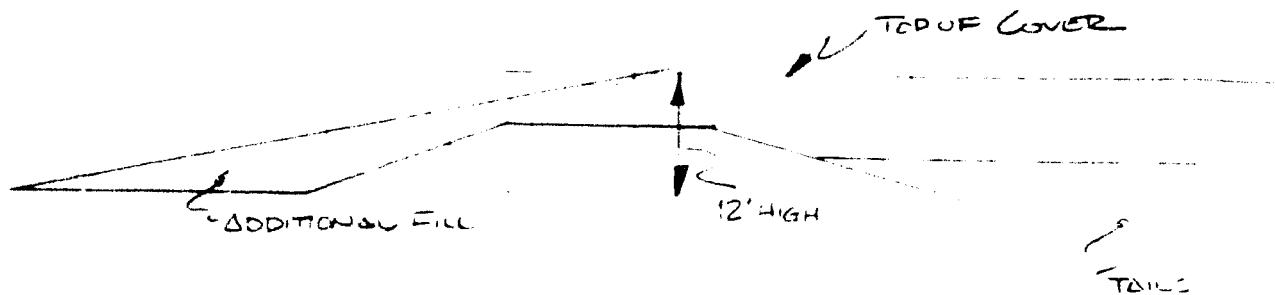
$$= 81,018 \text{ yd}^3$$

say 81,000 yd³

PROJECT WHITE MESA BEEL Date 5/3/95 Calc by Z Ven Horn Sheet 3 of 5

CELL 3 VOLUME CALCS

7) WEST DIKE SLOPE REDUCTION TO 5:1



$$\left[\frac{60 \times 12}{2} \right] - \left[\frac{32 \times 12}{2} \right] = 168 \text{ ft}^2$$

GIVEN THAT THE WESTERN DIKE IS 1100 FT LONG

$$\text{VOLUME} = 168 \text{ ft}^2 \times 1100 \text{ ft} =$$

$$184,800 \text{ ft}^3$$

$$= 6,844 \text{ yd}^3$$

$$\text{SAY } \boxed{6,850 \text{ yd}^3}$$

8) ROCK ARMOR FOR TOP - ASSUMING DESERT PAVEMENT

$D_{50} = 0.5$ ASSUME MINIMUM PRACTICAL THICKNESS 2"

$$70 \Delta = 43,560 \text{ ft}^2 / \Delta \times \frac{1}{6} =$$

$$7,260,000 \text{ ft}^3$$

$$= 18,822 \text{ yd}^3$$

SAY

$$= \boxed{18,850 \text{ yd}^3}$$

9) ROCK ARMOR ON SIDE SLOPE

$$\left[130 \text{ ft} \times 5 \times 3500 \text{ ft} \right] + \left[62 \text{ ft} \times 5 \times 1100 \right] = 523,200 \text{ ft}^3$$

$$523,200 \text{ ft}^3 \times \frac{1}{6} = 87,200 \text{ ft}^3$$

$$= 3,229 \text{ yd}^3$$

SAY

$$= \boxed{3,250 \text{ yd}^3}$$

10) ROCK ARMOR FOR SIDE SLOPES ASSUMING D₅₀ = 4" S.S. Z-DRAP

$$[130' \text{ SLOPE DIST} \times 3500 \text{ FT}] + [62' \text{ SLOPE DIST} \times 1100 \text{ FT}] = 523,200 \text{ FT}^2$$

@ D₅₀ = 4" PLACED THICKNESS = 2 x 1/2 8"

$$\therefore 523,200 \times \frac{8}{12} = 348,800 \text{ FT}^3$$

$$= 12,918 \text{ YD}^3$$

say 12,950 yd³

11) ASSUME THAT 2 OF CURT REQUIREMENTS ARE IMPORTED FROM JACO
COST Delivered to stockpile = \$250/c

CELL 3 EQUIPMENT REQUIREMENTS

PER TOM GRIEGL'S CALCS OF 3/93

<u>ROUTE</u>	<u>% OF TOTAL</u>
1	39
2	33
3	28

EFFICIENCIES. AS CALCULATED BY CATERPILLAR'S FPC PROGRAM
 PRODUCTION RATES ASSUME 2-637D IN TANDEM

	<u>1</u>	<u>2</u>	<u>3</u>	<u>WEIGHTED AVERAGE</u>	<u>PER EACH SCREEDER</u>
CLAY	348	432	534	428	214
FILTER	537	398	598	508	254
RANDOM	537	398	598	508	254
VEGETATIVE	548	382	495	476	239

Therefore

<u>DESCRIPTION</u>	<u>QTY</u>	<u>EFF</u>	<u>SCREEDER HRS</u>	<u>FLEET HRS</u>	
BRIDGING LIFT	245,400	254	966	242	*
12" RF (LOWER)	112,950	254	445	112	*
CLAY	225,900	214	1056	264	
UPPER R.F	225,900	254	890	223	
DIKE SLOPE (SOUTH)	81,000	254	320	80	
DIKE SLOPE (WEST)	6,850	254	27	7	
DESERT PAVEMENT	18,850	254	75	19	
ROCK ARMOR (SLOPE)	12,950				

* BECAUSE OF IRREGULARITIES IN SURFACE OF TAIL, & POTENTIAL FOR
 SETTLING AFTER PAVEMENT OF BRIDGING LIFT, THESE VALUES NEED
 TO BE INCREASED BY 30% TO ACCOUNT FOR OVERBUILDS.

PROJECT WHITE MESA REEL Date 5/8/95 Calc by R Ven Yem sheet 1 of 2

CELL 4A WORK

FOR CONSERVATION, ASSUME SAME EFFICIENCIES AS FOR CELL 1

- ANT CRYSTALS WILL BE PICKED UP WITH LINER
- WHEEL WASH WILL BE REQUIRED
- AVERAGE 1 FOOT UNDER LINER WILL GO TO CELL 3.
- ALL DIKE MATERIAL IS OCCUPATIONAL DUES & IS USED FOR CELL 3 COVER THEREFORE, NO COST PLUMBS AGAINST IT BECAUSE
- AREA OF LINER = 40 ACRES

D) QUANTITY OF LINER & ASSOCIATED MATERIAL

$$40 \Delta * \frac{42,500 \text{ ft}^2}{\Delta} * \frac{6}{12} = 871,200 \text{ ft}^2$$

$$= 32,367 \text{ yd}^2$$

32,300 yd²

E) QUANTITY OF COMPACTED MATERIALS

$$40 \Delta * \frac{42,500}{\Delta} * 1 = 1,742,400 \text{ ft}^3$$

$$= 64,333 \text{ yd}^3$$

64,350 yd³



PROJECT WHITE MEA RCL Date 5/8/95 Calc by Z. Van Horn Sheet 2 of 2

CELL 4 WORK

<u>DESCRIPTION</u>	<u>QTY</u>	<u>EFF</u>	<u>769Hrs</u>	<u>FLAT Hrs</u>
REMOVE LINER TO CELL 3	32,300	59	546	137
REMOVE CLAY	64,550	59	1094	274

White Mesa Reclamation Resource Summary
6/24/95

ID	Name	Max. Units	Std. Rate	Cost	Work
1	637 scraper	4	\$140/h	\$1,180,255	8460h
2	D8N Dozer w/ripper	2	\$67/h	\$261,896	3899h
3	D7 Dozer	2	\$57/h	\$195,427	3410h
4	825 Compactor	1	\$66/h	\$119,691	1824h
5	651 Waterwagon	1	\$72/h	\$242,592	3360h
6	14G Motorgrader	2	\$48/h	\$160,120	3354h
7	980C Loader	1	\$65/h	\$0	0h
8	5000 gal water truck	1	\$40/h	\$28,993	734h
9	Highway Trucks (12yd)	1	\$32/h	\$0	0h
10	Operators	22	\$12/h	\$600,450	49624h
11	Permits and Licences	1	\$0/h	\$10,000	0h
12	Seeding per Acre	100	\$0/h	\$0	0h
13	Dewatering Costs	50	\$0/h	\$25,000	20200h
14	Quality control contractor	2	\$62/h	\$245,954	3967h
15	769 Haul Truck	4	\$59/h	\$665,979	11225h
16	988 Loader	2	\$96/h	\$297,950	3115h
17	Type "D" Rock	100	\$0/h	\$2,01,128	33h
18	Wheelwash costs	10	\$0/h	\$70,000	410h
19	245 Excavator	1	\$103/h	\$186,274	1812h
20	DP Rock per 100 yds	100	\$0/h	\$594,444	3365h
21	Long Term Care Fund	100	\$0/h	\$551,200	0h
22	Mechanics	25	\$19/h	\$680,680	35360h
23	Small Tools	100	\$0/h	\$176,790	781.45h
24	65 Ton Crane	2	\$46/h	\$64,010	1384h
25	30 Ton Crane	1	\$40/h	\$27,640	691h
26	Mobilization per 10k dollars	20	\$0/h	\$131,000	0h
27	Manager/Engineer	1	\$150,000/y	\$280,731	4866h
28	Radiation Safety Officer	1	\$93,750/y	\$175,457	4866h
29	Secretary	1	\$37,500/y	\$70,183	4866h
30	Clerk	1	\$31,250/y	\$58,486	4866h
31	Engineer	1	\$93,750/y	\$0	0h
32	Environmental Technician	1	\$50,000/y	\$93,577	4866h
33	Maintenance Foreman	1	\$68,750/y	\$55,000	2080h
34	Security Personnel	3	\$25,000/y	\$110,596	11502h
35	Safety Engineer	1	\$50,000/y	\$40,000	2080h
36	Chemist	1	\$56,250/y	\$45,000	2080h
37	Misc Supplies	1	\$1,875/w	\$182,475	4866h
38	Butler Maintenance Cost	100	\$10/h	\$381,300	38130h
39	Additional Clay per 10k yds	100	\$0/h	\$565,000	2983.2h
40	Health Physics Program Costs	100	\$3,000/w	\$112,000	1700h

White Mesa Mill Reclamation Plan

6/23/95

ID	Name	Total Cost	Vari.	Actual						
1	TOTAL RECLAMATION & DECOM	\$0,887,275	*****	\$0						
2	MILL DECOMMISSIONING	\$1,396,889	*****	\$0						
3	Mill Building Demolition	\$233,141	*****	\$0						
ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
10	Operators	2	623h	Oh	6/2/95	7/27/95	\$7,538	\$0	\$0	\$1,538
22	Mechanics	25	8133h	Oh	6/2/95	7/31/95	\$156,560	\$0	\$0	\$156,560
23	Small tools	40	66	Oh	6/2/95	6/2/95	\$40,660	\$0	\$0	\$40,660
24	65 Ton Crane	1	554h	Oh	6/2/95	9/7/95	\$25,623	\$0	\$0	\$25,623
25	30 Ton Crane	1	69h	Oh	6/2/95	6/15/95	\$2,760	\$0	\$0	\$2,760
4	Preleach Tank Demolition							\$49,401	*****	\$0
ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
10	Operators	2	117h	Oh	1/23/95	2/2/95	\$1,416	\$0	\$0	\$1,416
22	Mechanics	25	1768h	Oh	1/23/95	2/3/95	\$34,034	\$0	\$0	\$34,034
23	Small tools	8	84	Oh	1/23/95	1/23/95	\$8,840	\$0	\$0	\$8,840
24	65 Ton Crane	1	69h	Oh	1/23/95	2/3/95	\$3,191	\$0	\$0	\$3,191
25	30 Ton Crane	1	48h	Oh	1/23/95	1/31/95	\$1,920	\$0	\$0	\$1,920
5	Ore Feed Demolition							\$80,758	*****	\$0
ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
10	Operators	1	69h	Oh	2/3/95	2/16/95	\$835	\$0	\$0	\$835
22	Mechanics	25	3182h	Oh	2/3/95	2/27/95	\$61,254	\$0	\$0	\$61,254
23	Small tools	15	91	Oh	2/3/95	2/3/95	\$15,910	\$0	\$0	\$15,910
25	30 Ton Crane	1	69h	Oh	2/3/95	2/16/95	\$2,760	\$0	\$0	\$2,760
6	SX Building Demolition							\$165,993	*****	\$0
ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
10	Operators	2	207h	Oh	3/23/95	4/11/95	\$2,505	\$0	\$0	\$2,505
22	Mechanics	25	6365h	Oh	3/23/95	5/8/95	\$122,526	\$0	\$0	\$122,526
23	Small tools	31	82	Oh	3/23/95	3/23/95	\$31,820	\$0	\$0	\$31,820
24	65 Ton Crane	1	138h	Oh	3/23/95	4/17/95	\$6,383	\$0	\$0	\$6,383
25	30 Ton Crane	1	69h	Oh	3/23/95	4/4/95	\$2,760	\$0	\$0	\$2,760
7	GCD Circuit Removal							\$139,838	*****	\$0
ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
10	Operators	2	207h	Oh	7/31/95	8/17/95	\$2,505	\$0	\$0	\$2,505
22	Mechanics	25	5304h	Oh	7/31/95	9/5/95	\$102,102	\$0	\$0	\$102,102
23	Small tools	26	52	Oh	7/31/95	7/31/95	\$26,520	\$0	\$0	\$26,520
24	65 Ton Crane	1	69h	Oh	7/31/95	8/10/95	\$3,191	\$0	\$0	\$3,191
25	30 Ton Crane	1	138h	Oh	7/31/95	8/23/95	\$5,520	\$0	\$0	\$5,520
8	Sample Plant Removal							\$39,737	*****	\$0
ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
10	Operators	1	104h	Oh	5/24/95	6/12/95	\$1,258	\$0	\$0	\$1,258
22	Mechanics	25	1415h	Oh	5/24/95	6/2/95	\$27,239	\$0	\$0	\$27,239
23	Small tools	7	08	Oh	5/24/95	5/24/95	\$7,080	\$0	\$0	\$7,080

White Mesa Mill Reclamation Plan
6/23/95

ID	Name	Total Cost	Varf.	Actual			
Sample Plant Removal - continued							
25	30 Ton Crane		6/12/95	\$4,160	\$0	\$0	\$4,160
9	Boiler Demolition	\$91,124	*****	\$0			
10	Operators		1/23/95	\$2,940	\$0	\$0	\$2,940
22	Mechanics		1/23/95	\$61,354	\$0	\$0	\$61,354
23	Small tools		1/2/95	\$15,910	\$0	\$0	\$15,910
24	65 Ton Crane		2/6/95	\$9,620	\$0	\$0	\$9,620
25	30 Ton Crane		1/6/95	\$1,400	\$0	\$0	\$1,400
10	Acid Tank & Supply Line Removal	\$46,469	*****	\$0			
10	Operators		3/10/95	\$835	\$0	\$0	\$835
22	Mechanics		3/10/95	\$34,034	\$0	\$0	\$34,034
23	Small tools		2/27/95	\$8,840	\$0	\$0	\$8,840
25	30 Ton Crane		3/10/95	\$2,760	\$0	\$0	\$2,760
11	Vanadium Oxidation Circuit Removal	\$57,876	*****	\$0			
10	Operators		4/3/95	\$3,182	\$0	\$0	\$3,182
22	Mechanics		3/23/95	\$34,034	\$0	\$0	\$34,034
23	Small tools		3/27/95	\$8,840	\$0	\$0	\$8,840
24	65 Ton Crane		4/17/95	\$9,620	\$0	\$0	\$9,620
25	30 Ton Crane		3/21/95	\$2,200	\$0	\$0	\$2,200
12	PLT, Clarifier, & Claricone Removal	\$69,890	*****	\$0			
10	Operators		5/22/95	\$2,093	\$0	\$0	\$2,093
22	Mechanics		5/24/95	\$47,644	\$0	\$0	\$47,644
23	Small tools		5/8/95	\$12,370	\$0	\$0	\$12,370
24	65 Ton Crane		5/31/95	\$6,383	\$0	\$0	\$6,383
25	30 Ton Crane		5/12/95	\$1,400	\$0	\$0	\$1,400
13	Haulage of Debris to Cell 3	\$125,900	*****	\$0			
10	Operators		10/19/95	\$16,819	\$0	\$0	\$16,819
15	764 Haul Truck		10/17/95	\$61,703	\$0	\$0	\$61,703
16	988 Loader		11/1/95	\$33,478	\$0	\$0	\$33,478
38	Butler Maintenance Cost		9/26/95	\$13,900	\$0	\$0	\$13,900
14	Mill Yard Decontamination	\$135,154	*****	\$0			
1	637 scraper		11/23/95	\$68,360	\$0	\$0	\$68,360
2	DBN Dozer w/ripper		11/23/95	\$8,262	\$0	\$0	\$8,262
3	DT Dozer		11/23/95	\$7,049	\$0	\$0	\$7,049

White Mesa Mill Reclamation Plan

6/22/95

ID	Name	Total Cost	Var'l	Actual						
Mill Yard Decontamination continued										
5	651 Waterwagon	1	123h	Oh	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
6	146 Motorgrader	1	123h	Oh	11/1/95	11/23/95	\$8,881	\$0	\$0	\$8,881
10	Operators	9	1150h	Oh	11/1/95	11/23/95	\$5,872	\$0	\$0	\$5,872
16	988 Loader	1	123h	Oh	11/1/95	11/23/95	\$13,915	\$0	\$0	\$13,915
38	Butler Maintenance Cost	10	1105h	Oh	11/1/95	11/21/95	\$11,765	\$0	\$0	\$11,765
							\$11,050	\$0	\$0	\$11,050

15 Ore Storage Pad Decontamination										
ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
\$59,077										
1	637 scraper	4	215h	Oh	9/11/95	9/11/95	\$29,995	\$0	\$0	\$29,995
2	DBN Dozer w/ripper	1	54h	Oh	9/11/95	9/11/95	\$3,627	\$0	\$0	\$3,627
3	DT Dozer	1	54h	Oh	9/11/95	9/11/95	\$3,095	\$0	\$0	\$3,095
5	651 Waterwagon	1	54h	Oh	9/11/95	9/11/95	\$3,899	\$0	\$0	\$3,899
6	146 Motorgrader	1	54h	Oh	9/11/95	9/11/95	\$2,578	\$0	\$0	\$2,578
10	Operators	9	485h	Oh	9/11/95	9/11/95	\$5,869	\$0	\$0	\$5,869
16	988 Loader	1	54h	Oh	9/11/95	9/11/95	\$5,165	\$0	\$0	\$5,165
38	Butler Maintenance Cost	10	485h	Oh	9/11/95	9/11/95	\$4,850	\$0	\$0	\$4,850

16 Acid Storage Area Decontamination										
ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
\$39,472										
1	637 scraper	4	208h	Oh	9/13/95	9/22/95	\$29,018	\$0	\$0	\$29,018
2	DBN Dozer w/ripper	1	13h	Oh	9/13/95	9/15/95	\$873	\$0	\$0	\$873
3	DT Dozer	1	13h	Oh	9/13/95	9/15/95	\$745	\$0	\$0	\$745
5	651 Waterwagon	1	13h	Oh	9/13/95	9/15/95	\$989	\$0	\$0	\$989
6	146 Motorgrader	1	13h	Oh	9/13/95	9/15/95	\$621	\$0	\$0	\$621
10	Operators	9	273h	Oh	9/13/95	9/19/95	\$3,303	\$0	\$0	\$3,303
16	988 Loader	1	13h	Oh	9/13/95	9/15/95	\$1,243	\$0	\$0	\$1,243
38	Butler Maintenance Cost	10	273h	Oh	9/13/95	9/19/95	\$2,730	\$0	\$0	\$2,730

17 Equipment Storage Area										
ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
\$18,811										
1	637 scraper	4	69h	Oh	9/11/95	9/13/95	\$9,626	\$0	\$0	\$9,626
2	DBN Dozer w/ripper	1	17h	Oh	9/11/95	9/13/95	\$1,142	\$0	\$0	\$1,142
3	DT Dozer	1	17h	Oh	9/11/95	9/13/95	\$974	\$0	\$0	\$974
5	651 Waterwagon	1	17h	Oh	9/11/95	9/13/95	\$1,227	\$0	\$0	\$1,227
6	146 Motorgrader	1	17h	Oh	9/11/95	9/13/95	\$812	\$0	\$0	\$812
10	Operators	9	154h	Oh	9/11/95	9/13/95	\$1,863	\$0	\$0	\$1,863
16	988 Loader	1	17h	Oh	9/11/95	9/13/95	\$1,626	\$0	\$0	\$1,626
38	Butler Maintenance Cost	10	154h	Oh	9/11/95	9/13/95	\$1,540	\$0	\$0	\$1,540

18 Revegetate Mill Yard & Ore Pad										
ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
\$44,248										
1	637 scraper	4	200h	Oh	11/13/96	11/21/96	\$27,902	\$0	\$0	\$27,902
2	DBN Dozer w/ripper	1	50h	Oh	11/13/96	11/21/96	\$3,359	\$0	\$0	\$3,359
3	DT Dozer	1	50h	Oh	11/13/96	11/21/96	\$2,866	\$0	\$0	\$2,866
6	146 Motorgrader	1	50h	Oh	11/13/96	11/21/96	\$2,387	\$0	\$0	\$2,387
10	Operators	7	350h	Oh	11/13/96	11/21/96	\$4,235	\$0	\$0	\$4,235

White Mesa Mill Reclamation Plan

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ID	Name	Total Cost	Varl.	Actual
19	Revegetate Mill Yard & Ore Pad" continued			
	Resource Name	Units	Work	Delay
	Butler Maintenance Cost	10	350h	Oh
	Scheduled Start	11/13/96	Scheduled Finish	11/20/96
	Cost	\$3,500	Plan Cost	\$0
	Act. Cost	\$0	Rem. Cost	\$3,500

20 RECLAMATION OF CELL 2 \$0
 Obtain Permit for Section 16 \$10,000

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
11	Permits and Licences	10	Oh	Oh	1/1/95	1/1/95	\$10,000	\$0	\$0	\$10,000

21 Place Remainder of Bridging Lift \$82,740

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
1	63T scraper	4	309h	Oh	9/22/95	10/6/95	\$43,109	\$0	\$0	\$43,109
2	DBN Dozer w/ripper	1	78h	Oh	9/22/95	10/6/95	\$5,239	\$0	\$0	\$5,239
3	DT Dozer	1	78h	Oh	9/22/95	10/6/95	\$4,470	\$0	\$0	\$4,470
4	B25 Compactor	1	78h	Oh	9/22/95	10/6/95	\$5,118	\$0	\$0	\$5,118
5	651 Waterwagon	1	78h	Oh	9/22/95	10/6/95	\$5,632	\$0	\$0	\$5,632
6	14G Motorgrader	1	78h	Oh	9/22/95	10/6/95	\$3,724	\$0	\$0	\$3,724
10	Operators	9	699h	Oh	9/22/95	10/6/95	\$8,458	\$0	\$0	\$8,458
3B	Butler Maintenance Cost	10	699h	Oh	9/22/95	10/5/95	\$6,990	\$0	\$0	\$6,990

22 Place Lower Random Fill (12") \$153,484

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
1	63T scraper	4	575h	Oh	10/6/95	11/1/95	\$80,218	\$0	\$0	\$80,218
2	DBN Dozer w/ripper	1	144h	Oh	10/6/95	11/1/95	\$9,672	\$0	\$0	\$9,672
3	DT Dozer	1	144h	Oh	10/6/95	11/1/95	\$8,253	\$0	\$0	\$8,253
4	B25 Compactor	1	144h	Oh	10/6/95	11/1/95	\$9,449	\$0	\$0	\$9,449
5	651 Waterwagon	1	144h	Oh	10/6/95	11/1/95	\$10,397	\$0	\$0	\$10,397
6	14G Motorgrader	1	144h	Oh	10/6/95	11/1/95	\$6,875	\$0	\$0	\$6,875
10	Operators	9	1295h	Oh	10/6/95	11/1/95	\$15,670	\$0	\$0	\$15,670
3B	Butler Maintenance Cost	10	1295h	Oh	10/6/95	10/30/95	\$12,950	\$0	\$0	\$12,950

23 Clay Layer \$563,516

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
1	63T scraper	4	996h	Oh	11/1/95	12/14/95	\$138,952	\$0	\$0	\$138,952
2	DBN Dozer w/ripper	1	249h	Oh	11/1/95	12/14/95	\$16,725	\$0	\$0	\$16,725
3	DT Dozer	1	249h	Oh	11/1/95	12/14/95	\$14,270	\$0	\$0	\$14,270
4	B25 Compactor	1	249h	Oh	11/1/95	12/14/95	\$16,339	\$0	\$0	\$16,339
5	651 Waterwagon	1	249h	Oh	11/1/95	12/14/95	\$17,978	\$0	\$0	\$17,978
6	14G Motorgrader	1	249h	Oh	11/1/95	12/14/95	\$11,887	\$0	\$0	\$11,887
7	980C Loader	1	Oh	Oh	11/1/95	11/1/95	\$0	\$0	\$0	\$0
8	5000 gal water truck	1	249h	Oh	11/1/95	12/14/95	\$9,836	\$0	\$0	\$9,836
9	Highway Trucks (12yd)	10	2490h	Oh	11/1/95	11/1/95	\$0	\$0	\$0	\$0
10	Operators	10	2490h	Oh	11/1/95	12/14/95	\$30,129	\$0	\$0	\$30,129
3B	Butler Maintenance Cost	10	2490h	Oh	11/1/95	12/14/95	\$24,900	\$0	\$0	\$24,900
39	Additional Clay per 10k yds	11.3	Oh	Oh	11/1/95	11/1/95	\$282,500	\$0	\$0	\$282,500

White Mesa Mill Reclamation Plan

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ID	Name	Total Cost	Vari.	Actual	\$0				
24	Upper Random Fill	\$249,137	*****						
1	637 scraper	4	882h	Oh	1/22/96	\$123,048	\$0	\$0	\$123,048
2	DBN Dozer w/ripper	1	221h	Oh	1/22/96	\$14,845	\$0	\$0	\$14,845
3	DT Dozer	1	221h	Oh	1/22/96	\$12,666	\$0	\$0	\$12,666
4	825 Compactor	1	221h	Oh	1/22/96	\$14,502	\$0	\$0	\$14,502
5	651 Waterwagon	1	221h	Oh	1/22/96	\$15,956	\$0	\$0	\$15,956
6	14G Motorgrader	1	221h	Oh	1/22/96	\$10,551	\$0	\$0	\$10,551
8	5000 gal water truck	1	221h	Oh	1/22/96	\$8,730	\$0	\$0	\$8,730
10	Operators	10	2210h	Oh	1/22/96	\$26,741	\$0	\$0	\$26,741
38	Butler Maintenance Cost	10	2210h	Oh	1/22/96	\$22,100	\$0	\$0	\$22,100

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
25	Dike Slope Reduction				\$64,019	*****				
1	637 scraper	4	240h	Oh	9/12/96	9/24/96	\$33,482	\$0	\$0	\$33,482
2	DBN Dozer w/ripper	1	60h	Oh	9/12/96	9/24/96	\$4,030	\$0	\$0	\$4,030
3	DT Dozer	1	60h	Oh	9/12/96	9/24/96	\$3,439	\$0	\$0	\$3,439
4	825 Compactor	1	60h	Oh	9/12/96	9/24/96	\$3,937	\$0	\$0	\$3,937
5	651 Waterwagon	1	60h	Oh	9/12/96	9/24/96	\$4,332	\$0	\$0	\$4,332
6	14G Motorgrader	1	60h	Oh	9/12/96	9/24/96	\$2,864	\$0	\$0	\$2,864
10	Operators	9	540h	Oh	9/12/96	9/24/96	\$6,534	\$0	\$0	\$6,534
38	Butler Maintenance Cost	10	540h	Oh	9/12/96	9/23/96	\$5,400	\$0	\$0	\$5,400

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
26	Desert Pavement of Top				\$304,485	*****				
1	637 scraper	4	74h	Oh	10/9/96	10/11/96	\$10,324	\$0	\$0	\$10,324
2	DBN Dozer w/ripper	1	19h	Oh	10/9/96	10/11/96	\$1,276	\$0	\$0	\$1,276
3	DT Dozer	1	19h	Oh	10/9/96	10/11/96	\$1,089	\$0	\$0	\$1,089
4	825 Compactor	1	19h	Oh	10/9/96	10/11/96	\$1,247	\$0	\$0	\$1,247
5	651 Waterwagon	1	19h	Oh	10/9/96	10/11/96	\$1,372	\$0	\$0	\$1,372
6	14G Motorgrader	1	19h	Oh	10/9/96	10/11/96	\$907	\$0	\$0	\$907
10	Operators	13	664h	Oh	10/9/96	10/11/96	\$8,034	\$0	\$0	\$8,034
15	769 Haul Truck	4	393h	Oh	10/9/96	10/25/96	\$23,317	\$0	\$0	\$23,317
16	988 Loader	1	100h	Oh	10/9/96	10/25/96	\$9,565	\$0	\$0	\$9,565
20	DP Rock per 100 yd3	18.85	1h	Oh	10/9/96	10/9/96	\$240,715	\$0	\$0	\$240,715
38	Butler Maintenance Cost	10	664h	Oh	10/9/96	10/21/96	\$6,640	\$0	\$0	\$6,640

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
27	Rock Armor on 5:1 slopes				\$133,885	*****				
10	Operators	5	234h	Oh	9/24/96	10/2/96	\$2,831	\$0	\$0	\$2,831
15	769 Haul Truck	4	184h	Oh	9/24/96	10/2/96	\$10,917	\$0	\$0	\$10,917
16	988 Loader	1	50h	Oh	9/24/96	10/2/96	\$4,783	\$0	\$0	\$4,783
20	DP Rock per 100 yd3	8.85	3363h	Oh	9/24/96	11/28/96	\$113,015	\$0	\$0	\$113,015
38	Butler Maintenance Cost	10	234h	Oh	9/24/96	9/27/96	\$2,340	\$0	\$0	\$2,340

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
28	Quality Control				\$65,100	*****				
14	Quality control contractor	1	1050h	Oh	10/6/95	4/8/96	\$65,100	\$0	\$0	\$65,100

White Mesa Mill Reclamation Plan
6/23/95

ID	Name	Total Cost	Vari	Actual
29	RECLAMATION OF CELL 3	\$2,046,542	*****	\$0
30	Dewatering of Cell 3	\$20,000	*****	\$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
13	Dewatering Costs	20	20000h	Oh	1/2/95	6/23/95	\$20,000	\$0	\$0	\$20,000

31 Lower Random Fill										
ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
1	637 scraper	4	1256h	Oh	2/5/96	3/29/96	\$175,225	\$0	\$0	\$175,225
2	D8N Dozer w/ripper	1	315h	Oh	2/5/96	3/29/96	\$21,159	\$0	\$0	\$21,159
3	DT Dozer	1	315h	Oh	2/5/96	3/29/96	\$18,053	\$0	\$0	\$18,053
4	825 Compactor	1	315h	Oh	2/5/96	3/29/96	\$20,670	\$0	\$0	\$20,670
5	651 Waterwagon	1	315h	Oh	2/5/96	3/29/96	\$22,743	\$0	\$0	\$22,743
6	14G Motorgrader	1	315h	Oh	2/5/96	3/29/96	\$15,038	\$0	\$0	\$15,038
10	Operators	9	2831h	Oh	2/5/96	3/29/96	\$34,255	\$0	\$0	\$34,255
38	Butler Maintenance Cost	10	2831h	Oh	2/5/96	3/25/96	\$28,310	\$0	\$0	\$28,310

32 Lower Random Fill (12")										
ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
1	637 scraper	4	579h	Oh	4/8/96	5/2/96	\$80,776	\$0	\$0	\$80,776
2	D8N Dozer w/ripper	1	145h	Oh	4/8/96	5/2/96	\$9,740	\$0	\$0	\$9,740
3	DT Dozer	1	145h	Oh	4/8/96	5/2/96	\$8,310	\$0	\$0	\$8,310
4	825 Compactor	1	145h	Oh	4/8/96	5/2/96	\$9,515	\$0	\$0	\$9,515
5	651 Waterwagon	1	145h	Oh	4/8/96	5/2/96	\$10,469	\$0	\$0	\$10,469
6	14G Motorgrader	1	145h	Oh	4/8/96	5/2/96	\$6,922	\$0	\$0	\$6,922
10	Operators	10	1304h	Oh	4/8/96	4/30/96	\$15,778	\$0	\$0	\$15,778
38	Butler Maintenance Cost	10	1304h	Oh	4/8/96	4/30/96	\$13,040	\$0	\$0	\$13,040

33 Clay Layer										
ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
1	637 scraper	4	1056h	Oh	5/2/96	6/18/96	\$147,323	\$0	\$0	\$147,323
2	D8N Dozer w/ripper	1	264h	Oh	5/2/96	6/18/96	\$17,733	\$0	\$0	\$17,733
3	DT Dozer	1	264h	Oh	5/2/96	6/18/96	\$15,130	\$0	\$0	\$15,130
4	825 Compactor	1	264h	Oh	5/2/96	6/18/96	\$17,324	\$0	\$0	\$17,324
5	651 Waterwagon	1	264h	Oh	5/2/96	6/18/96	\$19,061	\$0	\$0	\$19,061
6	14G Motorgrader	1	264h	Oh	5/2/96	6/18/96	\$12,603	\$0	\$0	\$12,603
7	980C Loader	0	Oh	Oh	5/2/96	6/18/96	\$0	\$0	\$0	\$0
8	5000 gal water truck	1	264h	Oh	5/2/96	6/18/96	\$10,428	\$0	\$0	\$10,428
9	Highway Trucks (12yd)	0	Oh	Oh	5/2/96	6/18/96	\$0	\$0	\$0	\$0
10	Operators	10	2640h	Oh	5/2/96	6/18/96	\$31,944	\$0	\$0	\$31,944
38	Butler Maintenance Cost	10	2640h	Oh	5/2/96	6/18/96	\$26,400	\$0	\$0	\$26,400
39	Additional Clay per 10k yds	113	2993.2h	Oh	5/2/96	6/18/96	\$282,500	\$0	\$0	\$282,500

34 Upper Random Fill										
ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
1	637 scraper	4	890h	Oh	6/18/96	7/25/96	\$124,164	\$0	\$0	\$124,164
2	D8N Dozer w/ripper	1	223h	Oh	6/18/96	7/25/96	\$14,979	\$0	\$0	\$14,979
3	DT Dozer	1	223h	Oh	6/18/96	7/25/96	\$12,780	\$0	\$0	\$12,780

White Mesa Mill Reclamation Plan

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Total Cost Vari: Actual

ID Name

Upper Random Fill" continued

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
4	B25 Compactor	1	223h	Oh	6/18/96	7/25/96	\$14,633	\$0	\$0	\$14,633
5	651 Waterwagon	1	223h	Oh	6/18/96	7/25/96	\$16,101	\$0	\$0	\$16,101
6	14G Motorgrader	1	223h	Oh	6/18/96	7/25/96	\$10,646	\$0	\$0	\$10,646
10	Operators	9	200Th	Oh	6/18/96	7/25/96	\$24,285	\$0	\$0	\$24,285
38	Butler Maintenance Cost	10	200Th	Oh	6/18/96	7/23/96	\$20,070	\$0	\$0	\$20,070

35 Dike Slope Reduction (South)

\$85,358 ***** \$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
1	63T scraper	4	320h	Oh	8/6/96	8/20/96	\$44,643	\$0	\$0	\$44,643
2	DBN Dozer w/ripper	1	80h	Oh	8/6/96	8/20/96	\$5,374	\$0	\$0	\$5,374
3	DT Dozer	1	80h	Oh	8/6/96	8/20/96	\$4,585	\$0	\$0	\$4,585
4	B25 Compactor	1	80h	Oh	8/6/96	8/20/96	\$5,250	\$0	\$0	\$5,250
5	651 Waterwagon	1	80h	Oh	8/6/96	8/20/96	\$5,776	\$0	\$0	\$5,776
6	14G Motorgrader	1	80h	Oh	8/6/96	8/20/96	\$3,819	\$0	\$0	\$3,819
10	Operators	9	720h	Oh	8/6/96	8/20/96	\$8,712	\$0	\$0	\$8,712
38	Butler Maintenance Cost	10	720h	Oh	8/6/96	8/19/96	\$7,200	\$0	\$0	\$7,200

36 Dike Slope Reduction (West)

\$1,329 ***** \$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
1	63T scraper	4	27h	Oh	8/20/96	8/21/96	\$3,767	\$0	\$0	\$3,767
2	DBN Dozer w/ripper	1	7h	Oh	8/20/96	8/21/96	\$470	\$0	\$0	\$470
3	DT Dozer	1	7h	Oh	8/20/96	8/21/96	\$401	\$0	\$0	\$401
4	B25 Compactor	1	7h	Oh	8/20/96	8/21/96	\$459	\$0	\$0	\$459
5	651 Waterwagon	1	7h	Oh	8/20/96	8/21/96	\$505	\$0	\$0	\$505
6	14G Motorgrader	1	7h	Oh	8/20/96	8/21/96	\$334	\$0	\$0	\$334
10	Operators	9	63h	Oh	8/20/96	8/21/96	\$762	\$0	\$0	\$762
38	Butler Maintenance Cost	10	63h	Oh	8/20/96	8/21/96	\$630	\$0	\$0	\$630

37 Desert Pavement of Top

\$310,098 ***** \$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
1	63T scraper	4	74h	Oh	9/5/96	9/9/96	\$10,324	\$0	\$0	\$10,324
2	DBN Dozer w/ripper	1	19h	Oh	9/5/96	9/9/96	\$1,276	\$0	\$0	\$1,276
3	DT Dozer	1	19h	Oh	9/5/96	9/9/96	\$1,089	\$0	\$0	\$1,089
4	B25 Compactor	1	19h	Oh	9/5/96	9/9/96	\$1,247	\$0	\$0	\$1,247
5	651 Waterwagon	1	19h	Oh	9/5/96	9/9/96	\$1,372	\$0	\$0	\$1,372
6	14G Motorgrader	1	100h	Oh	9/5/96	9/23/96	\$4,774	\$0	\$0	\$4,774
10	Operators	13	743h	Oh	9/5/96	9/16/96	\$8,990	\$0	\$0	\$8,990
15	769 Haul Truck	4	393h	Oh	9/5/96	9/23/96	\$23,317	\$0	\$0	\$23,317
16	988 Loader	1	100h	Oh	9/5/96	9/23/96	\$9,565	\$0	\$0	\$9,565
20	DP Rock per 100 yds	18.85	1h	Oh	9/5/96	9/5/96	\$240,715	\$0	\$0	\$240,715
38	Butler Maintenance Cost	10	743h	Oh	9/5/96	9/18/96	\$7,430	\$0	\$0	\$7,430

38 Riprap and Bedding Material

\$228,474 ***** \$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
3	DT Dozer	1	135h	Oh	9/23/96	10/16/96	\$7,737	\$0	\$0	\$7,737
5	651 Waterwagon	1	135h	Oh	9/23/96	10/16/96	\$9,747	\$0	\$0	\$9,747

White Mesa Mill Reclamation Plan

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ID	Name	Total Cost	Vari.	Actual						
39 Riprap and Bedding Material - continued										
ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
6	146 Motorgrader	1	135h	Oh	9/23/96	10/16/96	\$6,445	\$0	\$0	\$6,445
10	Operators	8	745h	Oh	9/23/96	10/4/96	\$9,015	\$0	\$0	\$9,015
15	769 Haul Truck	4	270h	Oh	9/23/96	10/4/96	\$16,019	\$0	\$0	\$16,019
16	988 Loader	1	70h	Oh	9/23/96	10/4/96	\$6,696	\$0	\$0	\$6,696
17	Type 'D' Rock	12.95	1h	Oh	9/23/96	9/23/96	\$165,372	\$0	\$0	\$165,372
38	Butler Maintenance Cost	10	745h	Oh	9/23/96	10/4/96	\$7,450	\$0	\$0	\$7,450
Quality Control							\$0			
ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
14	Quality control contractor	0.3	1406h	Oh	1/2/95	3/31/97	\$87,172	\$0	\$0	\$87,172
40 RECLAMATION OF CELL 1										
							\$1,615,484			\$0
41 Construct Wheelwash										
							\$50,000			\$0
ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
18	Wheelwash costs	10	10h	Oh	1/2/95	1/2/95	\$50,000	\$0	\$0	\$50,000
42 Wheelwash Operation										
ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
10	Operators	2	5436h	Oh	1/2/95	4/19/96	\$65,776	\$0	\$0	\$65,776
43 Crystal Removal										
							\$532,181			\$0
ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
2	DBN Dozer w/ripper	1	725h	Oh	9/1/95	1/5/96	\$48,698	\$0	\$0	\$48,698
3	D7 Dozer	1	362h	Oh	9/1/95	11/3/95	\$20,746	\$0	\$0	\$20,746
5	651 Waterwagon	1	362h	Oh	9/1/95	11/3/95	\$26,136	\$0	\$0	\$26,136
6	146 Motorgrader	1	362h	Oh	9/1/95	11/3/95	\$17,282	\$0	\$0	\$17,282
10	Operators	10	6159h	Oh	9/1/95	12/18/95	\$74,524	\$0	\$0	\$74,524
15	769 Haul Truck	4	2898h	Oh	9/1/95	1/5/96	\$171,938	\$0	\$0	\$171,938
16	988 Loader	1	725h	Oh	9/1/95	1/5/96	\$69,346	\$0	\$0	\$69,346
19	245 Excavator	1	725h	Oh	9/1/95	1/5/96	\$74,530	\$0	\$0	\$74,530
38	Butler Maintenance Cost	10	2898h	Oh	9/1/95	10/23/95	\$28,980	\$0	\$0	\$28,980
44 PVC Sill Cover Removal										
							\$423,839			\$0
ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
2	DBN Dozer w/ripper	1	544h	Oh	1/5/96	4/10/96	\$36,540	\$0	\$0	\$36,540
3	D7 Dozer	1	272h	Oh	1/5/96	2/22/96	\$15,588	\$0	\$0	\$15,588
5	651 Waterwagon	1	272h	Oh	1/5/96	2/22/96	\$19,638	\$0	\$0	\$19,638
6	146 Motorgrader	1	272h	Oh	1/5/96	2/22/96	\$12,985	\$0	\$0	\$12,985
10	Operators	10	4622h	Oh	1/5/96	3/27/96	\$55,926	\$0	\$0	\$55,926
15	769 Haul Truck	4	2174h	Oh	1/5/96	4/10/96	\$128,983	\$0	\$0	\$128,983
16	988 Loader	1	544h	Oh	1/5/96	4/10/96	\$52,034	\$0	\$0	\$52,034
19	245 Excavator	1	544h	Oh	1/5/96	4/10/96	\$55,923	\$0	\$0	\$55,923
38	Butler Maintenance Cost	10	4622h	Oh	1/5/96	3/27/96	\$46,220	\$0	\$0	\$46,220

White Mesa Mill Reclamation Plan

6/23/95

ID	Name	Total Cost	Vari.	Actual
45	Liner and Soil Removal	\$0	\$' 40,952	#####
2	DBN Dozer w/ripper	\$12,158		5/13/96
3	DT Dozer	\$5,158		4/25/96
5	651 Motorwagon	\$6,498		4/25/96
6	14G Motorgrader	\$4,297		4/25/96
10	Operators	\$18,598		5/7/96
15	769 Haul Truck	\$42,955		5/13/96
16	988 Loader	\$17,313		5/13/96
19	245 Excavator	\$18,607		5/13/96
38	Butler Maintenance Cost	\$15,370		5/7/96

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
46	Contaminated Materials Removal				\$282,230	#####	\$0			
2	DBN Dozer w/ripper	1	362h	Oh	5/13/96	7/15/96	\$24,316	\$0	\$0	\$24,316
3	DT Dozer	1	181h	Oh	5/13/96	6/12/96	\$10,373	\$0	\$0	\$10,373
5	651 Motorwagon	1	181h	Oh	5/13/96	6/12/96	\$13,068	\$0	\$0	\$13,068
6	14G Motorgrader	1	181h	Oh	5/13/96	6/12/96	\$8,641	\$0	\$0	\$8,641
10	Operators	10	3078h	Oh	5/13/96	7/4/96	\$37,244	\$0	\$0	\$37,244
15	769 Haul Truck	4	1449h	Oh	5/13/96	7/15/96	\$85,969	\$0	\$0	\$85,969
16	988 Loader	1	362h	Oh	5/13/96	7/15/96	\$34,625	\$0	\$0	\$34,625
19	245 Excavator	1	362h	Oh	5/13/96	7/15/96	\$37,214	\$0	\$0	\$37,214
38	Butler Maintenance Cost	10	3078h	Oh	5/13/96	7/4/96	\$30,780	\$0	\$0	\$30,780

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
47	Construct Channels				\$1,076	#####	\$0			
2	DBN Dozer w/ripper	1	6h	Oh	7/15/96	7/16/96	\$403	\$0	\$0	\$403
10	Operators	1	6h	Oh	7/15/96	7/16/96	\$73	\$0	\$0	\$73
38	Butler Maintenance Cost	10	60h	Oh	7/15/96	7/16/96	\$600	\$0	\$0	\$600

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
48	Rock Protection				\$45,898	#####	\$0			
3	DT Dozer	1	15h	Oh	7/16/96	7/18/96	\$860	\$0	\$0	\$860
5	651 Motorwagon	1	15h	Oh	7/16/96	7/18/96	\$1,083	\$0	\$0	\$1,083
6	14G Motorgrader	1	15h	Oh	7/16/96	7/18/96	\$716	\$0	\$0	\$716
10	Operators	6	118h	Oh	7/16/96	7/18/96	\$1,428	\$0	\$0	\$1,428
15	769 Haul Truck	4	58h	Oh	7/16/96	7/18/96	\$3,441	\$0	\$0	\$3,441
16	988 Loader	1	15h	Oh	7/16/96	7/18/96	\$1,435	\$0	\$0	\$1,435
17	Type 'D' Rock	2.8	32h	Oh	7/16/96	7/17/96	\$35,756	\$0	\$0	\$35,756
38	Butler Maintenance Cost	10	118h	Oh	7/16/96	7/17/96	\$1,180	\$0	\$0	\$1,180

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
49	Quality Control				\$73,532	#####	\$0			
14	Quality control contractor	0.4	1186h	Oh	9/1/95	1/31/97	\$73,532	\$0	\$0	\$73,532

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
50	CELL 4A WORK				\$296,291	#####	\$0			

White Mesa Mill Reclamation Plan
6/23/95

ID	Name	Total Cost	Vari	Actual
51	Dewatering	\$5,000	*****	\$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
13	Dewatering Costs	5	200h	Oh	1/2/95	1/6/95	\$5,000	\$0	\$0	\$5,000

52	Construct Wheel Wash	\$20,000	*****	\$0
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ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
18	Wheelwash costs	4	400h	Oh	1/9/95	1/25/95	\$20,000	\$0	\$0	\$20,000

53	Wheel Wash Operation	\$6,909	*****	\$0
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ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
17	Operators	3	571h	Oh	1/25/95	2/28/95	\$6,909	\$0	\$0	\$6,909

54	Remove Fencing	\$1,936	*****	\$0
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ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
10	Operators	4	160h	Oh	1/25/95	2/1/95	\$1,936	\$0	\$0	\$1,936

55	Remove Liner to Cell 3	\$87,581	*****	\$0
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ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
3	D7 Dozer	1	137h	Oh	9/1/95	9/26/95	\$7,851	\$0	\$0	\$7,851
5	651 Waterwagon	1	137h	Oh	9/1/95	9/26/95	\$9,891	\$0	\$0	\$9,891
10	Operators	8	1096h	Oh	9/1/95	9/26/95	\$13,262	\$0	\$0	\$13,262
15	769 Haul Truck	4	548h	Oh	9/1/95	9/26/95	\$32,513	\$0	\$0	\$32,513
16	988 Loader	1	137h	Oh	9/1/95	9/26/95	\$13,104	\$0	\$0	\$13,104
38	Butler Maintenance Cost	10	1096h	Oh	9/1/95	9/20/95	\$10,960	\$0	\$0	\$10,960

56	Remove Clay Layer	\$154,714	*****	\$0
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ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
3	D7 Dozer	1	137h	Oh	9/26/95	10/19/95	\$7,851	\$0	\$0	\$7,851
5	651 Waterwagon	1	137h	Oh	9/26/95	10/19/95	\$9,891	\$0	\$0	\$9,891
6	146 Motorgrader	1	137h	Oh	9/26/95	10/19/95	\$6,540	\$0	\$0	\$6,540
10	Operators	5	1779h	Oh	9/26/95	11/27/95	\$21,526	\$0	\$0	\$21,526
15	769 Haul Truck	4	1094h	Oh	9/26/95	11/13/95	\$64,907	\$0	\$0	\$64,907
16	988 Loader	1	274h	Oh	9/26/95	11/13/95	\$26,208	\$0	\$0	\$26,208
38	Butler Maintenance Cost	10	1779h	Oh	9/26/95	10/26/95	\$17,790	\$0	\$0	\$17,790

57	Quality Control	\$20,150	*****	\$0
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ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
14	Quality control contractor	0.3	325h	Oh	9/1/95	3/8/96	\$20,150	\$0	\$0	\$20,150

58	MISCELLANEOUS ITEMS	\$1,905,704	*****	\$0
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59	Long Term Care Fund Allowance	\$551,200	*****	\$0
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ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
21	Long Term Care Fund	55.12	Oh	Oh	5/1/97	5/1/97	\$551,200	\$0	\$0	\$551,200

White Mesa Mill Reclamation Plan
6/23/95

ID	Name	Total Cost	Vari.	Actual								
60	Butler Machinery Mobilization	\$131,000	*****	*****	\$0							
ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost		
26	Mobilization per 10k dollars	13.1	Oh	Oh	9/1/95	9/1/95	\$131,000	\$0	\$0	\$131,000		
61	Managerial Support	\$1,223,504	*****	*****	\$0							
62	Manager/Engineer	\$280,731	*****	*****	\$0							
ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost		
27	Manager/Engineer	1	4866h	Oh	1/2/95	5/1/97	\$280,731	\$0	\$0	\$280,731		
63	Radiation Safety Officer	\$175,457	*****	*****	\$0							
ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost		
28	Radiation Safety Officer	1	4866h	Oh	1/2/95	5/1/97	\$175,457	\$0	\$0	\$175,457		
64	Secretary	\$70,183	*****	*****	\$0							
ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost		
29	Secretary	1	4866h	Oh	1/2/95	5/1/97	\$70,183	\$0	\$0	\$70,183		
65	Clerk	\$58,486	*****	*****	\$0							
ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost		
30	Clerk	1	4866h	Oh	1/2/95	5/1/97	\$58,486	\$0	\$0	\$58,486		
66	Environmental Technician	\$49,577	*****	*****	\$0							
ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost		
32	Environmental Technician	1	4866h	Oh	1/2/95	5/1/97	\$49,577	\$0	\$0	\$49,577		
67	Maintenance Foreman	\$55,000	*****	*****	\$0							
ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost		
33	Maintenance Foreman	1	2080h	Oh	1/2/95	12/29/95	\$55,000	\$0	\$0	\$55,000		
68	Chemist	\$45,000	*****	*****	\$0							
ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost		
36	Chemist	1	2080h	Oh	1/2/95	12/29/95	\$45,000	\$0	\$0	\$45,000		
69	Security	\$110,596	*****	*****	\$0							
ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost		
34	Security Personnel	3	11502h	Oh	1/2/95	11/1/96	\$110,596	\$0	\$0	\$110,596		
70	Safety Engineer	\$40,000	*****	*****	\$0							
ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost		
35	Safety Engineer	1	2080h	Oh	1/2/95	12/29/95	\$40,000	\$0	\$0	\$40,000		
71	Misc Materials and Supplies	\$182,475	*****	*****	\$0							
ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost		
37	Misc Supplies	1	4866h	Oh	1/2/95	5/1/97	\$182,475	\$0	\$0	\$182,475		

White Mesa Mill Reclamation Plan
6/23/95

ID	Name	Total Cost	Vart	Actual
T2	Health Physics Costs (Mill Decom)	\$112,000	*****	\$0
	Resource Name			
40	Health Physics Program Costs		1/2/95	10/25/95
	Units			
	1			
	Work		1700h	Oh
	Delay			
	Cost			\$112,000
	Plan Cost			\$0
	Act. Cost			\$0
	Rem. Cost			\$112,000
		<u>\$0,007,275</u>		<u>*****</u>
				\$0

ENERGY FUELS NUCLEAR, INC.
Cost Estimate

MINE/PROJECT White Mesa Reclamation Date 6/21/95 Calc by R Van Horn Sheet 1 of 2

RIPRAP PRODUCTION COSTS

Riprap haul from Westwater Creek source:

LENGTH	RR(%)	GRADE(%)	SPEED
100	7.5	0	5
500	5	+6.2	20
2000	3	+6.2	20
3000	3	+6.0	20
500	5	+1.0	20
100	7.5	0	5

ASSUMPTIONS

UNIT WEIGHT

- BCY = 160 pcf x 27 = 4320 lbs/cy
- LCY = 100 pcf x 27 = 2700 lbs/cy

All rock & all gradings will be hauled w/769c trucks from a quarry site on Westwater Creek

FPC production per truck is 48 BCY / hour

Drilling and Blasting costs from '92 MEANS are used

- Daily production = 300 cy/day
- Drill and blast only, rock, open face, over 1500 CY = \$5.90/yd
- \$5.90 x 1.06 = \$6.25 / yd

Additional equipment needed in quarry to process rock

- Vibrating Grizzly Feeder 52" x 17'
- Overhead Vibratory Screen 5' x 16'

Required Quantities

Use	Quantity	EQUIP HOURS	
		TRUCK	LOADER
Cell 1 Channel Armor	2,800	58	15
Cell 2 top armor	18,850	393	100
Cell 2 side armor	8,850	184	50
Cell 3 top armor	18,850	393	100
Cell 3 side armor	12,950	270	70
Total Rock Requirements	62,300		

Total Drill and Blast Cost = 62,300 x \$6.25 = \$389,375

ENERGY FUELS NUCLEAR, INC.
Cost Estimate

MINE/PROJECT White Mesa Reclamation Date 6/21/95 Calc by R Van Horn Sheet 2 of 2

RIPRAP PRODUCTION COSTS
(Continued)

Rock Quantity Necessary = 62,300 yd

62,300 yd / 300 yd per day = 208 days x 8 hours per day = 1664 hours

EQUIPMENT	HOURS	\$/HOUR	AMOUNT
D8N	1,664	67.17	111,771
980C	1,664	64.71	107,677
SINGLE DECK SCREEN PLANT	1,664	46.12	76,744
GRIZZLY FEEDER	1,664	17.63	29,336
SUBTOTAL EQUIPMENT			324,526
OPERATORS	6,656	12.10	80,538
ROCK COSTS (MEANS)	62,300	6.25	389,375
TOTAL ROCK COSTS	62,300	12.77	795,439

ROCK PRODUCTION COSTS = \$12.77 / YARD

*****	*****	*****
*****	*****	*****
****	****	****
****	****	****
*****	****	****
*****	*****	****
****	*****	****
****	****	*****
****	****	*****

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Due to the many variables involved in earthmoving projects and the consequent possibility of inadvertant errors or omissions in preparing reports of this character, neither Caterpillar Inc. nor the dealer can or does represent or warrant, expressly or implicitly, either the accuracy of this report or that the Caterpillar or competitive equipment referred to in the report will in fact achieve the performance indicated on the job to which this report relates.

Cost Summary --> Grand Total
 White Mesa - Riprap Haul 10,000 BCY

Equipment	Qty Model	Cost per Hour (each unit)	Operating Hours	\$ Total	\$ per BCY
Loaders	1 988B	0.00	207	0	0.000
Loader Total:	1		207	0	0.000
Haulers	1 769C	0.00	207	0	0.000
Hauler Total:	1		207	0	0.000
Support Total:	0		0	0	0.000
Grand Total:	2		414	0	0.000

Overall Production and Cost Summary FPC-2a1
 White Mesa - Riprap Haul

Fleet Name	Course Name	Material Qty BCY	BCY per Sched Hr	Sched Hrs Required	\$ Total	\$ per BCY
769	TOTALS ..	10,000	48	207	0	0.000
	GRAND TOTAL..	10,000	48	207	0	0.000

Overall Production and Cost Summary FPC-2a1
 White Mesa - Riprap Haul

Fleet Name	Course Name	Material Qty BCY	BCY per Sched Hr	Sched Hrs Required	\$ Total	\$ per BCY
769	TOTALS ..	10,000	48	207	0	0.000

Overall Production and Cost Summary FPC-2a1
 White Mesa - Riprap Haul

Fleet Name	Course Name	Material Qty BCY	BCY per Sched Hr	Sched Hrs Required	\$ Total	\$ per BCY
769	Riprap	10,000	48	207	0	0.000
769	TOTALS ..	10,000	48	207	0	0.000
GRAND TOTAL..		10,000	48	207	0	0.000

Overall Production and Cost Summary FPC-2a1
 White Mesa - Riprap Haul

Fleet Name	Course Name	Material Qty BCY	BCY per Sched Hr	Sched Hrs Required	\$ Total	\$ per BCY
769	Riprap	10,000	48	207	0	0.000

Overall Production and Cost Summary FPC-2a1
 White Mesa - Riprap Haul

Fleet Name	Course Name	Material Qty BCY	BCY per Sched Hr	Sched Hrs Required	\$ Total	\$ per BCY
769	Riprap	10,000	48	207	0	0.000

Cost Summary --> 769 - TOTAL
 White Mesa - Riprap Haul 10,000 BCY

Equipment	Qty Model	Cost per Hour (each unit)	Operating Hours	\$ Total	\$ per BCY
Loaders	1-988B		207	0	0.000
Haulers	1-769C	0.00	207 0	0 0	0.000 0.000
Total	1		207	0	0.000
Support # 1			0	0	0.000
2			0	0	0.000
3			0	0	0.000
4			0	0	0.000
5			0	0	0.000
6			0	0	0.000
Total	0		0	0	0.000
Fleet Total	2		414	0	0.000

Cost Summary --> 769 - Riprap
 White Mesa - Riprap Haul 10,000 BCY

Equipment	Qty Model	Cost per Hour (each unit)	Operating Hours	\$ Total	\$ per BCY
Loaders	1-988B		207	0	0.000
Haulers	1-769C	0.00	207 0	0 0	0.000 0.000
Total	1		207	0	0.000
Support # 1			0	0	0.000
2			0	0	0.000
3			0	0	0.000
4			0	0	0.000
5			0	0	0.000
6			0	0	0.000
Total	0		0	0	0.000
Fleet Total	2		414	0	0.000

Productivity and Cost --> 769 -Riprap FPC-1c2

	Loader	Hauler1	Hauler2
Qty & Model	1-9888	1-769C	
Loader Fill Factor		90.0%	%
TONS /Pass (2,700 Lbs/LCY)...		10.02	
System Passes per Hauler.....		2.60	
Hauler - Payload, TONS.....		26.05	
- % of Rated Payload..		100.0%	%
Loader Cycle Time, Minutes...		0.60	
First Bucket Dump, Minutes...		0.10	
Hauler Exchange Time, Minutes		0.70	
Hauler Cycle Time			
Load with Exchange.....		2.00	
Haul.....		6.12	
Dump and Maneuver.....		0.50	
Return.....		3.95	
Potential Cycle Time..		12.56	
Wait on Slow Hauler.....			
Wait to Load.....		0.00	
Total Cycle Time.....		12.56	

Potential Production		
	BCY/Hour	Avg MPH
9888	362	
769C	58	11.2

Operating Schedule	
Operating Efficiency	84%
Scheduled Hrs/Year	

Fleet Estimates	
Fleet Availability	100.0%
BCY/Sched Hr	48
Total BCY	10,000
Sched Hrs Req'd	207
Total \$	0
\$ per BCY	0.000
BCY/Year	
Years Required	

HAUL - Travel Time & Speeds
 White Mesa - Riprap Haul

Course Name	Course Desc	Material Qty BCY	Density Lbs per		Initial Speed MPH	HAULER Model
			LCY	BCY		
Riprap	WM - Riprap	10,000	2,700	4,320	0.00	769C 10

HAUL Segment	Distance FEET	Rolling Resist%	Grade %	MPH Limit	Potential Speed	Segment Speed Max	Speed at End	Cumulative Minutes
100		7.50	0.00	5.00	14.76	5.00	5.00	0.24
500		5.00	6.20	20.00	9.80	9.80	9.80	0.85
2,000		3.00	6.20	20.00	12.27	12.27	12.27	2.72
3,000		3.00	6.00	20.00	12.41	12.41	12.41	5.46
500		5.00	1.00	20.00	18.09	17.13	5.00	5.88
100		7.50	0.00	5.00	14.76	5.00	0.00	6.12

RETURN - Travel Time & Speeds
 White Mesa - Riprap Haul

Course Name	Course Desc	Material Qty BCY	Density Lbs per LCY	Density Lbs per BCY	Initial Speed MPH	HAULER Model 769C ID
Riprap	WM - Riprap	10,000	2,700	4,320	0.00	

RETURN Segment	Distance FEET	Rolling Resist%	Grade %	MPH Limit	Potential Speed	Segment Speed Max	Speed at End	Cumulative Minutes
	100	7.50	0.00	5.00	24.27	5.00	5.00	0.23
	500	5.00	-1.00	20.00	41.65	20.00	20.00	0.56
	3,000	3.00	-6.00	20.00	46.66	20.00	20.00	2.27
	2,000	3.00	-6.20	20.00	46.66	20.00	20.00	3.40
	500	5.00	-6.20	20.00	46.66	20.00	5.00	3.71
	100	7.50	0.00	5.00	24.27	5.00	0.00	3.95

ENERGY FUELS NUCLEAR, INC.
Cost Estimate

MINE/PROJECT White Mesa Reclamation Date 6/21/95 Calc by R. Van Horn Sheet of

EQUIPMENT OPERATING COSTS INCLUDING FUEL CONSUMPTION

Based on the Butler Machinery Quote of 5/8/95, EFNI is responsible for:

- Tires
- Ground Engaging Components (GEC)
- Fuel

Based on the length of the project, EFNI would qualify for a 15% discount off of the quoted Butler rates. This analysis assumes that the discount, when taken with no credit for the lower overtime rates, will more than offset the tire and GEC costs. Fuel consumption (shown in gal/hr) has been added at rates quoted in the area for off-road diesel fuels.

	RATE		MTCE EXPENDABLES	FUEL USAGE	FUEL @ \$0.78	TOTAL COST
	MONTHLY	HOURLY				
637E Scraper	21,000	119.32	1.95	24.0	18.24	139.51
D8N Dozer	10,500	59.66	1.05	8.5	6.46	67.17
D7H Dozer	9,000	51.14	0.85	7.0	5.32	57.31
825C Compactor	9,500	53.98	1.00	14.0	10.64	65.62
980 F Loader	10,000	56.82	1.05	9.0	6.84	64.71
988 F Loader	15,000	85.23	1.30	12.0	9.12	95.65
769C Haul Truck	9,000	51.14	1.35	9.0	6.84	59.33
245B Excavator	16,000	90.91	1.25	14.0	10.64	102.80
651 Water Wagon	10,000	56.82	1.70	18.0	13.68	72.20
5000 gal Water Truck	5,500	31.25	0.65	10.0	7.60	39.50
14G Maintainer	7,500	42.61	0.95	5.5	4.18	47.74
16G Maintainer	11,000	62.50	1.10	8.5	6.46	70.06

Fuel consumption is based on the Cat Performance Handbook using medium load factors

WEESE PETROLEUM
BOX 888
DOVE CREEK, COLORADO 81324
970-677-2424

ENERGY FUELS
BID PRICE TO BLANDING, UTAH

45000 GALLONS RED DIESEL

\$.7521 PER GALLON PER TRANSPORT

PRICE IS SUBJECT TO CHANGE WITH INCREASE OR DECREASE OF RACK PRICE.
EFFECTIVE JUNE 22, 1995 TO JUNE 22, 1998.

THANK YOU.

SINCERELY,

Constance L. Weese

CONSTANCE L. WEESE

Butler

CAT

Butler Machinery Co.

1351 Page Drive

PO Box 9559

Fargo, ND 58106

(701) 232-0033

FAX (701) 298-1717

FAX TRANSMISSION NOTE

DATE: May 8, 1995

TO: Mr. Rick Van Horn

FROM: Joel Nikle

NUMBER OF PAGES 5 (INCLUDING THIS PAGE)

IN CASE OF PROBLEM, CALL: Joel (701) 232-0033

) IF CHECKED, PLEASE CONFIRM RECEIPT OF DOCUMENT.

COMMENTS:



Butler Machinery Company • (701) 232-0033 • FAX (701) 298-1717 • 1351 Page Dr. • Box 9559 • Fargo, ND 58108

MAY 8, 1995

ENERGY FUELS NUCLEAR, INC.
ATTN: RICK VAN HORN
2764 COMPOSS DRIVE, SUITE 101
GRAND JUNCTION, CO 81506



DEAR RICK:

THANK YOU FOR THE INVITATION TO QUOTE ENERGY FUELS NUCLEAR, INC. (EFNI) THE EQUIPMENT NEEDED FOR THEIR MINING PROJECT IN BLANDING, UTAH. BUTLER MACHINERY COMPANY (BUTLER) RESPECTFULLY SUBMITS OUR PROPOSAL FOR A MAINTAINED FLEET OF CATERPILLAR MACHINES.

LISTED ON ATTACHMENT A, YOU WILL FIND THE MODELS, QUANTITIES, MONTHLY RENTAL RATES, HOURS ALLOWED PER MONTH, EXCESS HOUR CHARGE, GUARANTEED NUMBER OF MONTHS RATES ARE BASED UPON, TOTAL FREIGHT CHARGES AND THE MAINTENANCE RATE PER HOUR FOR MATERIALS ONLY.

ALL RATES SHOWN ON ATTACHMENT A DO NOT INCLUDE ANY STATE, LOCAL, PROPERTY OR ANY OTHER TAXES THAT MAY BE APPLICABLE.

RATES ARE BASED UPON ELECTRIC HOUR METER READINGS WHICH ARE ATTACHED TO THE DASH OF EACH MACHINE. RATES ARE BASED ON 176 HOURS OF USE EACH MONTH. EXCESS HOUR CHARGES, IF ANY, WILL BE CALCULATED AND INVOICED AT THE END OF THE PROJECT. THERE WOULD BE NO CREDIT ISSUED FOR ANY HOURS UNDER THE ALLOWED DURING THE TERM OF THIS PROPOSAL. IF EFNI ELECTS TO DOUBLE SHIFT MACHINES, THEN BUTLER WOULD INVOICE THOSE HOURS AT THE END OF EACH MONTH. (TO FIGURE THE DOUBLE SHIFT RATES, TAKE THE EXCESS HOUR RATE SHOWN ON ATTACHMENT A TIMES THE NUMBER OF HOURS).

RATES ARE BASED UPON A MINIMUM GUARANTEE OF 3 MONTHS AND A PACKAGE DEAL. IF EFNI WERE TO GUARANTEE A LONGER RENTAL TERM FOR ALL MACHINES LISTED ON ATTACHMENT A, THEN BUTLER WOULD ALLOW THE FOLLOWING ADDITIONAL DISCOUNTS ON THE MONTHLY RENTAL RATES AND EXCESS HOUR CHARGES RETROACTIVE TO DAY ONE: 1. FOR A MINIMUM OF 6 MONTHS RENT, DEDUCT 5%. 2. FOR A MINIMUM OF 9 MONTHS RENT, DEDUCT 10%, OR 3. FOR A MINIMUM OF 12 MONTHS RENT, DEDUCT 15%.

MAINTENANCE:

THE MAINTENANCE RATES PER HOUR LISTED ON ATTACHMENT A INCLUDES THE MATERIAL PART ITEMS ONLY, SUCH AS AIR, OIL, AND FUEL FILTERS, LUBRICANT OILS, GREASE, ANTI-FREEZE, BATTERIES, FAN BELTS, LIGHTS AND MAKE-UP OILS. BUTLER WOULD INVOICE EFNI ACTUAL HOURS USED ON MACHINES AT THE END OF EACH MONTH.

Fargo, 58106 129 S 32nd Ave. S P.O. Box 5559 701 286 3100	Bismarck, 58502 -94 East 181 P.O. Box 757 701 221 9850	Minot, 58702 Highway 2 Bypass E P.O. Box 1058 701 852 2508	Grand Forks, 58208 1201 S. 48th St. P.O. Box 12280 701 775 4009	Rapid City, 57709 190, Cedarwood Ave. P.O. Box 2070 605 342 4850	Sioux Falls, 57101 1-29. East B1 P.O. Box 1307 605 336 3010	Aberdeen, 57401 4950 E. Highway 12 P.O. Box 36 605 225-6240	Sioux City, 51101 315 1st St. (712) 277 1300 Lift Truck Only
--	---	---	--	---	--	--	---

OUR MONTHLY MAINTENANCE CHARGE WOULD BE \$20,750.00, WHICH INCLUDES OUR LABOR, SPECIALIZED LUBE TRUCKS, SUPPORT VEHICLES AND EQUIPMENT, SPECIALIZED TOOLING, SCHEDULED OIL SAMPLING, PARTS TRAILERS AND INVENTORIES, MILEAGE AND TRAVEL EXPENSE. BUTLER WILL PROVIDE TWO (2) FULL-TIME MAINTENANCE TECHNICIANS ON SITE FIFTY (50) HOURS PER WEEK ON A SCHEDULE TO BE DETERMINED, MONDAY THROUGH FRIDAY. EFNI WOULD HAVE TO SCHEDULE THE MACHINES AVAILABLE FOR A TIME FRAME YET TO BE DETERMINED ADEQUATE FOR BUTLER MAINTENANCE PERSONNEL TO PERFORM THE REQUIRED MAINTENANCE. BUTLER WOULD INVOICE EFNI FOR THE MONTHLY MAINTENANCE CHARGE AT THE BEGINNING OF EACH MONTH.

REPAIRS:

BUTLER WOULD BE RESPONSIBLE FOR ALL REPAIRS INCLUDING PARTS AND LABOR ON OUR MACHINES OTHER THAN FAILURES CAUSED BY DAMAGES OR MIS-USE. REPAIRS INCLUDE ITEMS AS MINOR AS STARTERS, ALTERNATORS, WATER PUMPS, HYDRAULIC HOSES, ETC. TO THE MAJOR ITEMS SUCH AS ENGINES, TRANSMISSIONS, DIFFERENTIALS, BRAKES, HYDRAULIC PUMPS AND CYLINDERS, ETC. IF TIME PERMITS AND EFNI REQUESTS BUTLER'S TECHNICIAN TO PERFORM REPAIRS OR MAINTENANCE ON THEIR MACHINES, OUR HOURLY CHARGE WOULD BE \$45.00 PER HOUR PLUS MATERIALS.

FREIGHT:

FREIGHT CHARGES INCLUDE BOTH DELIVERY AND RETURN, ASSEMBLY, AND DISASSEMBLY OF EQUIPMENT.

EFNI'S RESPONSIBILITIES INCLUDE:

OPERATORS. PROVIDE THE OPERATORS AS NEEDED TO OPERATE MACHINES AS STATED IN CATERPILLAR'S OPERATING GUIDE. BUTLER WILL PROVIDE, AT NO EXPENSE TO EFNI, QUALIFIED TRAINING INSTRUCTORS FOR THE PURPOSES OF TRAINING OPERATORS. THIS TRAINING WOULD TAKE PLACE ON THE JOBSITE AT THE INITIAL START UP OF THE JOB AND WOULD INCLUDE CLASSROOM, WALK AROUND, AND IN IRON DEMONSTRATIONS.

FUEL. SUPPLY AND FILL ALL FUEL FOR EQUIPMENT INCLUDING BUTLER'S SERVICE VEHICLES.

DAMAGES. THIS INCLUDES GLASS BREAKAGE, BENT HANDRAILS, STEP LADDERS, FENDERS, ETC. BUTLER'S NORMAL POLICY FOR REPAIRING DAMAGES TO RENTAL MACHINES IS TO REPAIR THEM WHEN THE RENTAL PERIOD IS COMPLETED, HOWEVER, IF THE DAMAGED ITEM IS OF A SAFETY CONCERN, WE WOULD REPAIR THE DAMAGES AS SOON AS POSSIBLE AFTER THEY OCCURRED. AN ITEMIZED LIST OF THE PARTS AND LABOR REQUIRED WOULD BE PROVIDED TO EFNI PRIOR TO STARTING THE REPAIR, AND INVOICED AT CURRENT LIST PRICES PLUS FREIGHT UPON COMPLETION.

UNDERCARRIAGE AND TIRES: EFNI WOULD BE RESPONSIBLE FOR ALL TIRE WEAR INCLUDING TIRE DAMAGES ON THE MACHINES WITH AN ASTERISK LISTED ON ATTACHMENT A. EQUIPMENT WOULD HAVE TO BE RETURNED WITH SAME BRAND AND MODEL TIRES AS WHEN DELIVERED, OR PRORATED ACCORDINGLY BY PERCENTAGE OF TIRE WEAR AND CONDITION AT TERMINATION OF RENTAL PERIOD.

UPON DELIVERY OF MACHINES, A REPRESENTATIVE OF BUTLER, A REPRESENTATIVE OF EFNI AND A REPRESENTATIVE FROM AN INDEPENDENT TIRE DEALER OR MANUFACTURER WOULD JOINTLY VERIFY IN WRITING THE CONDITION, PERCENTAGE OF WEAR, AND TIRE VALUE. UPON TERMINATION OF RENTAL, WE WOULD AGAIN HAVE THE REPRESENTATIVES MENTIONED ABOVE DETERMINE THE CONDITION, PERCENTAGE OF WEAR, AND TIRE VALUES. ANY DIFFERENCES NOTED, WOULD THEN BE CHARGED OR CREDITED TO EFNI INCLUDING BOTH MATERIALS AND LABOR.

UNDERCARRIAGE WEAR ON ALL TRACK TYPE MACHINES WOULD BE BUTLER'S EXPENSE.

GROUND ENGAGING TOOLS:

EFNI WOULD BE RESPONSIBLE FOR ALL PARTS RELATING TO GROUND ENGAGING TOOLS (G.E.T.), I.E. CUTTING EDGES, RIPPER TIPS AND PROTECTORS, BUCKET TIPS AND ADAPTERS, EDGES BETWEEN ADAPTERS, WEAR PLATES ON BOTTOM OF BUCKETS AND ALL MOUNTING HARDWARE. BUTLER WOULD INSTALL THESE ITEMS ON AN AS NEEDED BASIS AT THE CURRENT CATERPILLAR LIST PRICE PLUS FREIGHT AT NO ADDITIONAL LABOR COSTS. ALL MACHINES WOULD BE DELIVERED WITH NEW G.E.T. ITEMS AND ARE TO BE RETURNED WITH NEW.

WE WISH TO THANK EFNI AND YOU FOR GIVING US THE OPPORTUNITY TO PRESENT OUR PROPOSAL AND FOR ALL THE CONSIDERATION WE RECEIVE.

SINCERELY YOURS,

BUTLER MACHINERY COMPANY


JOEL W. NIKLE
RENTAL FLEET MANAGER

JWN/del

cc: OSCAR SWENSON, RENTAL FLEET MARKETING MANAGER

ATTACHMENT A
ENERGY FUELS NUCLEAR, INC.
EQUIPMENT NEEDED FOR JOB IN BLANDING, UTAH
MAY 8, 1995

<u>MODEL</u>	<u>QTY</u>	<u>MONTHLY RENTAL RATE</u>	<u>HOURS ALLOWED PER MONTH</u>	<u>EXCESS HOUR CHARGE</u>	<u>MINIMUM GUARANTEED NUMBER OF MONTHS RATE BASED UPON</u>	<u>TOTAL** FREIGHT CHARGES TO & FROM</u>	<u>MAINTENANCE RATE PER HOUR</u>
*637E	4	\$21,000 EA.	176 EA.	\$66 EA.	3 EA.	\$10,000 EA.	\$1.95
D9N/RIPPER	1	13,000	176	42	3	8,000	1.30
D8N/RIPPER	1	10,500	176	34	3	7,000	1.05
D7H/RIPPER	1	9,000	176	28	3	6,000	.85
D325C	1	9,500	176	30	3	7,000	1.00
D80F	1	10,000	176	32	3	7,000	1.05
D988F	1	15,000	176	48	3	8,000	1.30
D769C	4	9,000 EA.	176 EA.	28 EA.	3 EA.	7,000 EA.	1.35
D45B	1	16,000	176	50	3	12,000	1.25
10,000 GALLON WATER WAGON	1	10,000	176	30	3	8,000	1.70
10,000 GALLON WATER WAGON	1	5,500	176	18	3	3,000	.65
4G/RIPPER	1	7,500	176	24	3	5,000	.95
6G/RIPPER	1	11,000	176	34	3	6,000	1.10

* PLUS TIRE WEAR

* INCLUDES ASSEMBLY AND DISASSEMBLY

LABOR COSTS

Based on the USDOE's Request for Proposal # 1348 for the Monticello Tailings Project (27 miles north of the White Mesa Mill) and the USDOL Davis-Bacon rates within, EFNI is adjusting its labor estimates downward as follows:

- Assume an average operator gets \$11.00 per hour
- No Fringes are included
- Add 10% to account for FICA and Workman's Comp

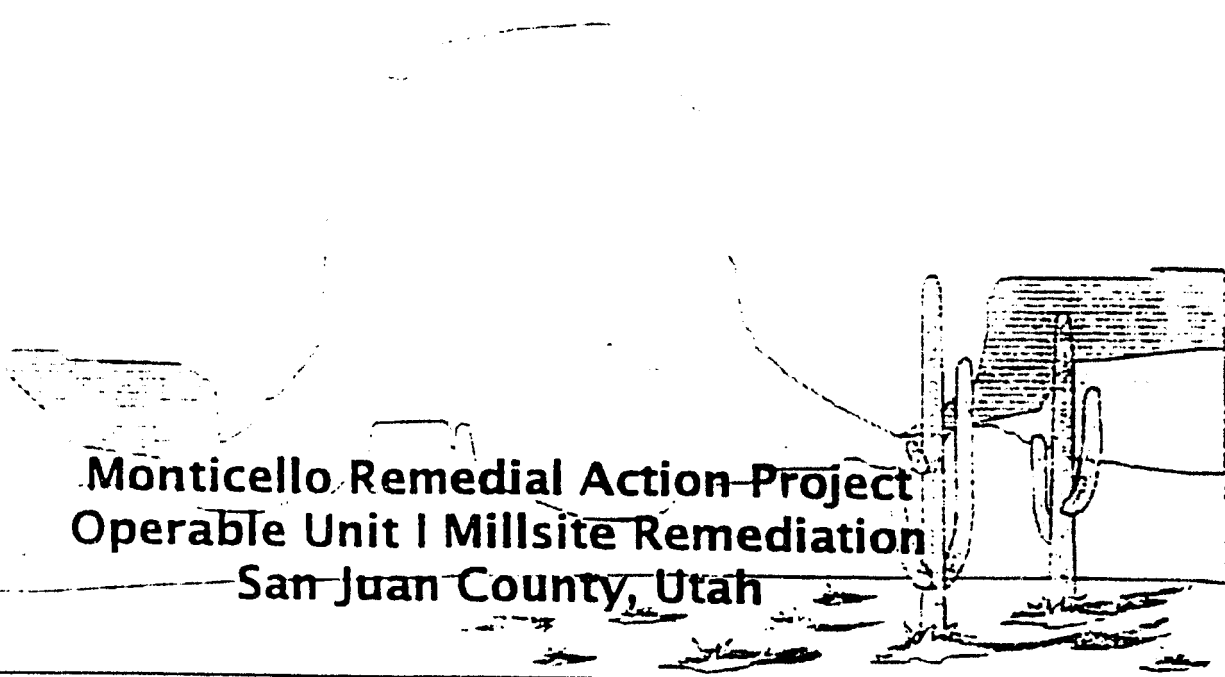
Therefore, Operators will be charged out at 12.10 per hour

Request for Proposal

1348

for

**Rust Geotech
U.S. Department of Energy
Grand Junction Projects Office**



**Monticello Remedial Action Project
Operable Unit I Millsite Remediation
San Juan County, Utah**

May 1995

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- I. COVER LETTER FOR RFP-1348
 - Sample Performance and Payment Bond Forms
- II. EXHIBIT A, STATEMENT OF WORK AND DRAWINGS - IN FOUR PAGES
- III. EXHIBIT B, GENERAL PROPOSAL INSTRUCTIONS - IN SIX PAGES
- IV. EXHIBIT C, BUSINESS PROPOSAL INSTRUCTIONS - IN FOUR PAGES
 - Schedule A DOL Wage Decision UT940009 (3 Pages)
 - Schedule B Notice of Requirements for Affirmative Action (1 Page)
 - Schedule C Unit price/lump sum proposal, Proposal Form Summary (9 Pages)
 - Schedule D Minimum Requirements for Small Business and Small Disadvantaged Business Subcontracting Plan (1 Page)
 - Schedule E Contract Pricing Proposal Cover Letter (Form 1411) (1 Page)
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 - Schedule G Representations and Certifications (GJ-PROC-113) (14 Pages)
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 - Schedule I Terms and Conditions (GJPO-PROC-111) (99 Pages)
- V. EXHIBIT D, TECHNICAL PROPOSAL INSTRUCTIONS - IN FIVE PAGES
- VII. SITE SPECIFIC SPECIFICATIONS - IN THREE-HUNDRED PAGES
 - Engineering Document E02926AB
- VIII. SIGNATURE PAGE WITH SUBCONTRACT SCHEDULE - IN SEVEN PAGES

RUST Rust Geotech Inc.

A WMX Technologies Company
PO Box 14000 - 2537 B¹/₄ Road
Grand Junction, Colorado 81502-5504

Phone 970 248 6000
Fax 970 248 6040

May 22, 1995

COVER LETTER**FOR****REQUEST FOR PROPOSAL RFP-1348**

TO ALL OFFERORS

SUBJECT: Request for Proposal (RFP) #1348 for Construction of an RCRA-Type Repository in Monticello, Utah

Dear Offerors:

Rust Geotech Inc., Operating Contractor for the U.S. Department of Energy (DOE), Grand Junction, Colorado, cordially invites your firm to submit a proposal for the subject construction project.

This solicitation includes the following documents:

- I. Cover Letter and Payment and Performance Bond Forms.
- II. Exhibit A) Statement of Work and Drawings in support of the repository and associated construction, remediation, operation and maintenance.
- III. Exhibit B) General Proposal Instructions: This document contains general administrative information pertaining to the proposal as a whole as well as evaluation criteria.
- IV. Exhibit C) Business Proposal Instructions: This document covers business data such as pricing, terms, period of performance, and includes the following:
 - a. Schedule A DOL Wage Decision UT940009, Dated September 9, 1994.
 - b. Schedule B Notice of Requirements for Affirmative Action.
 - c. Schedule C Unit price/lump sum proposal.
 - d. Schedule D Minimum Requirements for Small Business and Small Disadvantaged Business Subcontracting Plan.

- e. Schedule E Contract Pricing Proposal Cover Letter (Form 1411).
 - f. Schedule F Proposal Bond
 - g. Schedule G Proposal Representations and Certifications (GJ-PROC-113). These are to be executed by an official authorized to bind the offeror and are made a part of this proposal. Return one completed and signed copy with your proposal.
 - h. Schedule H Organizational Conflict of Interest (GJPO-PPM-1333). This is to be executed by an official authorized to bind the offeror and is made a part of this proposal. Return one completed and signed copy with your proposal.
 - i. Schedule I Terms and Conditions (GJ-PROC-111), dated May, 1995. These Terms and Conditions will be included in any subcontract resulting from this solicitation.
- VI. Exhibit D) Technical Proposal Instructions. This document contains a list of technical information and documentation required. Pricing is NOT to be included in this technical proposal.
- VII. Site Specific Specifications: Engineering Document E02926AB.
- VIII. Signature Page with Subcontract Schedule

Performance of the Work by the Subcontractor

The Subcontractor shall perform on the work site, and with its own organization, work equivalent to at least twelve (12) percent of the total amount of work to be performed under the subcontract. This percentage may be reduced by supplemental agreement to this subcontract if, during the performance of the work, the Subcontractor requests a reduction and the Contractor determines it would be in the best interest of the Government to do so.

Pre-Proposal Conference and Site Inspection

A pre-proposal conference and inspection of the work site(s) will be conducted on June 13, 1995, beginning at 9:00 A.M. at the Rust Geotech Office in Monticello, Utah. Answers to questions addressed to the Subcontract Administrator, received no later than June 8, 1995, will be addressed. All questions, including those arising during the site

inspection, shall be submitted in writing to the Subcontract Administrator; a written response will be sent to all prospective offerors.

Schedules

Refer to detailed sections within the Specifications to acquire scheduling data.

The construction schedule shall be as follows:

	<u>Start Date</u>	<u>Completion Date</u>
<u>Estimate</u>	November 1, 1995	June 30, 2000

The Rust in-house estimate for the total solicitation package is between \$25,000,000.00 and \$50,000,000.00. The in-house estimate will not be revealed.

If any of the documentation that you submit for this proposal is considered proprietary to your firm, please so identify. Geotech will take every precaution to ensure the security of the information. See the General Proposal Instructions, Exhibit B, for additional information.

Your response is due no later than close of business, 4:30 P.M. MST, July 19, 1995. Should your firm desire not to offer a proposal, please send notification of your decision. Response should be transmitted as follows:

U.S. Mail:

Rust Geotech Inc.
ATTN: S. H. Johnson
Subcontracts
P.O. Box 14000
Grand Junction, CO 81502-5536

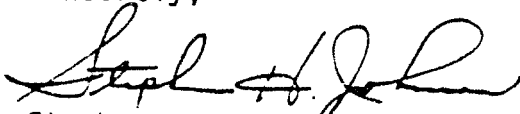
Air or Surface Carriers:

Rust Geotech Inc.
ATTN: S. H. Johnson
Subcontracts
2597 B 3/4 Road
Grand Junction, CO 81503

Labels identifying the RFP, and defined as Technical Proposal and Business Proposal, should be affixed to the outside of the respective proposal packages.

Should any additional information be required, please contact the undersigned at 970/248-6113.

Sincerely,



Stephen H. Johnson
Subcontract Administrator

shj/ib

SCHEDULE A

RFP - 1348

DOL WAGE DECISIONS

General Decision Number UT940009

Superseded General Decision No. UT930009

State: Utah

Construction Type:
HEAVY

County(ies):

BEAVER

IRON

SEVIER

CARBON

JUAB

UINTAH

DAGGETT

KANE

WASHINGTON

EMERY

PIUTE

WAYNE

GARFIELD

SAN JUAN

GRAND

SAN PETE

HEAVY CONSTRUCTION PROJECTS

Modification Number

Publication Date

0

02/11/1994

1

04/01/1994

2

09/09/1994

COUNTY(ies):

BEAVER	IRON	SEVIER
CARBON	JUAB	UINTAH
DAGGETT	KANE	WASHINGTON
EMERY	PIUTE	WAYNE
GARFIELD	SAN JUAN	
GRAND	SAN PETE	

* BOIL0182B 01/01/1994

	Rates	Fringes
BOILERMAKERS	18.48	7.89

CARP0722B 10/01/1993

	Rates	Fringes
MILLWRIGHTS	19.27	2.65

* IRON0027G 07/01/1994

	Rates	Fringes
IRONWORKERS: Structural	17.75	4.46

SUUT2007A 03/01/1988

	Rates	Fringes
CARPENTERS	10.81	
CEMENT MASONS	11.52	
ELECTRICIANS	14.52	2.71
IRONWORKERS: Reinforcing	11.00	
LABORERS (including pipelayers)	7.65	1.60
PIPEFITTERS	12.60	
POWER EQUIPMENT OPERATORS:		
Backhoes	10.00	
Cranes	10.43	
Dozers	13.10	
Graders	12.67	
Loaders	11.26	
Scrapers	10.00	
Trackhoes	10.00	
Tractors	9.42	
TRUCK DRIVERS	9.42	

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after

award only as provided in the labor standards contract clauses
(29 CFR 5.5(a)(1)(v)).

In the listing above, the "SU" designation means that rates listed under that identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

END OF GENERAL DECISION