40-8681

energy fuels nuclear, inc.

2764 compass drive • suite 101
grand junction, colorado 81506

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

May 15, 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 Estimated Reclamation Costs
for the Purpose of Determining Surety Levels

Dear Mr. Holonich:

This letter transmits two copies of support for the new reclamation estimate as discussed in Harold Roberts' May 15, 1995 letter to you. The support consists of Gantt charts, resource cost and usage summaries, quantity calculations, and equipment costs. Two significant changes from the June 1988 plan that have affected the costs are 1)the less costly reclamation of Cell 4A as it has never been used for tailings, and 2)the correction of a calculation error in the original Cell 1 riprap volumes.

As I will be working on Phase Two also, I would appreciate any comments or suggestions that your staff may have concerning this estimate. As always, should you or your staff have any questions, 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

9505250181 950515
PDR ADOCK 04008681
C PDR

NMSS

Umetco Minerals Corporation

P.O. BOX 1029
GRAND JUNCTION, COLORADO 81502
☎ (303) 245-3700

May 13, 1995

Mr. Richard Van Horn
General Manager, Plateau Operations
Energy Fuels Limited
2764 Compass Drive, Suite 101
Grand Junction, CO 818506

Subject: Surety Update for Reclamation of the White Mesa Mill

Dear Mr. Van Horn:

Umetco Minerals Corporation has reviewed your cost estimate (May 15, 1995) for reclamation of the White Mesa Mill and related facilities. This review was conducted because Umetco currently provides the Surety to the U. S. Nuclear Regulatory Commission for reclamation of the White Mesa Mill.

We concur that the costs that you have provided us for reclamation ($10,645,247) is consistent with performing the required work.

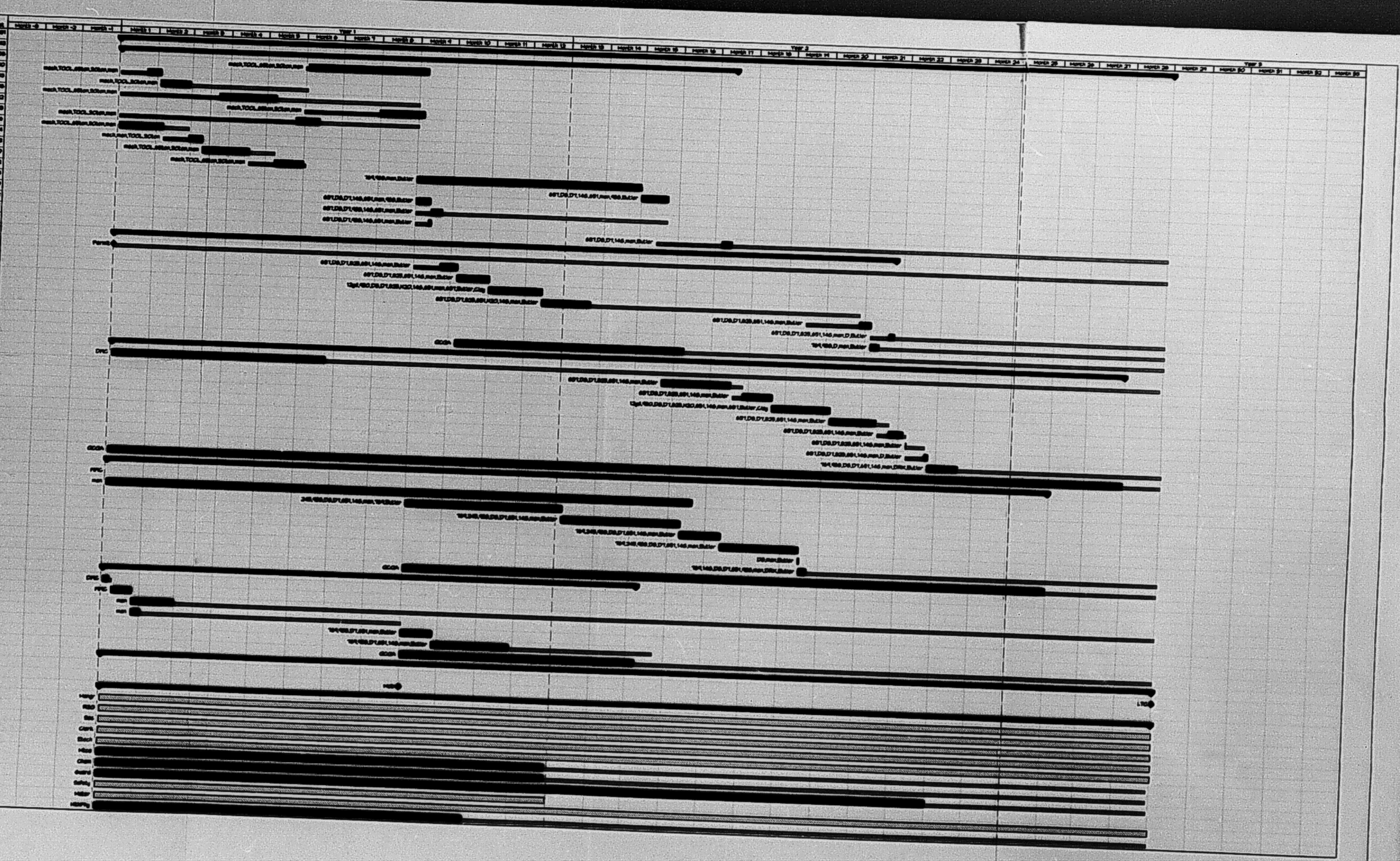
Sincerely,

Curtis O. Sealy

Curtis O. Sealy, P. E.
General Manager

COS/dos

ID	Name	Total Cost
1	1 Uplands, Mill,Acceleration 1 Dispose	[redacted]
2	1.1 Mill, Mill/Demolitions	[redacted]
3	1.1.1 Mill Building Demolition	[redacted]
4	1.1.2 Precipitate Tank Demolition	[redacted]
5	1.1.3 Ore Feed Demolition	[redacted]
6	1.1.4 Sill Building Demolition	[redacted]
7	1.1.5 CCD Circuit Removal	[redacted]
8	1.1.6 Sample Plant Removal	[redacted]
9	1.1.7 Boiler Demolition	[redacted]
10	1.1.8 Acid Tank & Supply Line Removal	[redacted]
11	1.1.9 Vanadium Oxidation Circuit Removal	[redacted]
12	1.1.10 PLT, Clarifier, & Clarifiers Removal	[redacted]
13	1.1.11 Haulage of Debris to Cell 3	[redacted]
14	1.1.12 Mill Yard Decontamination	[redacted]
15	1.1.13 Ore Storage Pad Decontamination	[redacted]
16	1.1.14 Acid Storage Area Decontamination	[redacted]
17	1.1.15 Equipment Storage Area	[redacted]
18	1.1.16 Renegotiate Mill Yard & Ore Pad	[redacted]
19	1.2 Mill,Acceleration GP Cells 2	[redacted]
20	1.2.1 Obtain Permit for Section 16	[redacted]
21	1.2.2 Place Remainder of Bridging Lift	[redacted]
22	1.2.3 Place Lower Random Fill (127)	[redacted]
23	1.2.4 Clay Liner	[redacted]
24	1.2.5 Upper Random Fill	[redacted]
25	1.2.6 Dike Slope Reduction	[redacted]
26	1.2.7 Desert Pavement of Top	[redacted]
27	1.2.8 Rock Armor on Sil slopes	[redacted]
28	1.2.9 Quality Control	[redacted]
29	1.3 Mill,Acceleration GP Cells 3	[redacted]
30	1.3.1 Dismantling of Cell 3	[redacted]
31	1.3.2 Lower Random Fill	[redacted]
32	1.3.3 Lower Random Fill (127)	[redacted]
33	1.3.4 Clay Liner	[redacted]
34	1.3.5 Upper Random Fill	[redacted]
35	1.3.6 Dike Slope Reduction (Sand)	[redacted]
36	1.3.7 Dike Slope Reduction (Rock)	[redacted]
37	1.3.8 Desert Pavement of Top	[redacted]
38	1.3.9 Riprap and Bedding Material	[redacted]
39	1.3.10 Quality Control	[redacted]
40	1.4 Mill,Acceleration GP Cells 1	[redacted]
41	1.4.1 Construct Platform	[redacted]
42	1.4.2 Platform Operation	[redacted]
43	1.4.3 Crystal Removal	[redacted]
44	1.4.4 PVC Soil Cover Removal	[redacted]
45	1.4.5 Liner and Soil Removal	[redacted]
46	1.4.6 Contaminated Materials Removal	[redacted]
47	1.4.7 Construct Capwalls	[redacted]
48	1.4.8 Rock Protection	[redacted]
49	1.4.9 Quality Control	[redacted]
50	1.5 Mill,Acceleration Finish	[redacted]
51	1.5.1 Dismantling	[redacted]
52	1.5.2 Construct Wheel Wash	[redacted]
53	1.5.3 Wheel Wash Operation	[redacted]
54	1.5.4 Remove Fencing	[redacted]
55	1.5.5 Remove Liner to Cell 3	[redacted]
56	1.5.6 Remove Clay Liner	[redacted]
57	1.5.7 Quality Control	[redacted]
58	1.6 Mill,Acceleration Mills	[redacted]
59	1.6.1 Long Term Care Fund Allowance	[redacted]
60	1.6.2 Equip Machinery Mobilization	[redacted]
61	1.6.3 Managerial Support	[redacted]
62	1.6.3.1 Manager/Engineer	[redacted]
63	1.6.3.2 Radiation Safety Officer	[redacted]
64	1.6.3.3 Secretary	[redacted]
65	1.6.3.4 Clerk	[redacted]
66	1.6.3.5 Environmental Technician	[redacted]
67	1.6.3.6 Maintenance Foreman	[redacted]
68	1.6.3.7 Chemist	[redacted]
69	1.6.3.8 Security	[redacted]
70	1.6.3.9 Safety Engineer	[redacted]
71	1.6.3.10 Misc Materials and Supplies	[redacted]
72	1.6.3.11 Health Physics Costs (HS Disc)	[redacted]



AMSTEC APERTURE CARD

9505250181-01

WHITE MESA MILL
Surety Update Summary

Description	Factor	Amount
Mill Decommissioning		1,478,242
Cell 2		1,297,047
Cell 3		1,740,304
Cell 4A		301,387
Cell 1		1,659,416
Miscellaneous		1,905,704
Subtotal Direct Costs		8,382,100
Profit Allowance	10.00%	838,210
Overhead Allowance	15.00%	1,257,315
Licensing & Bonding	2.00%	167,642
Total Surety Requirement		10,645,267

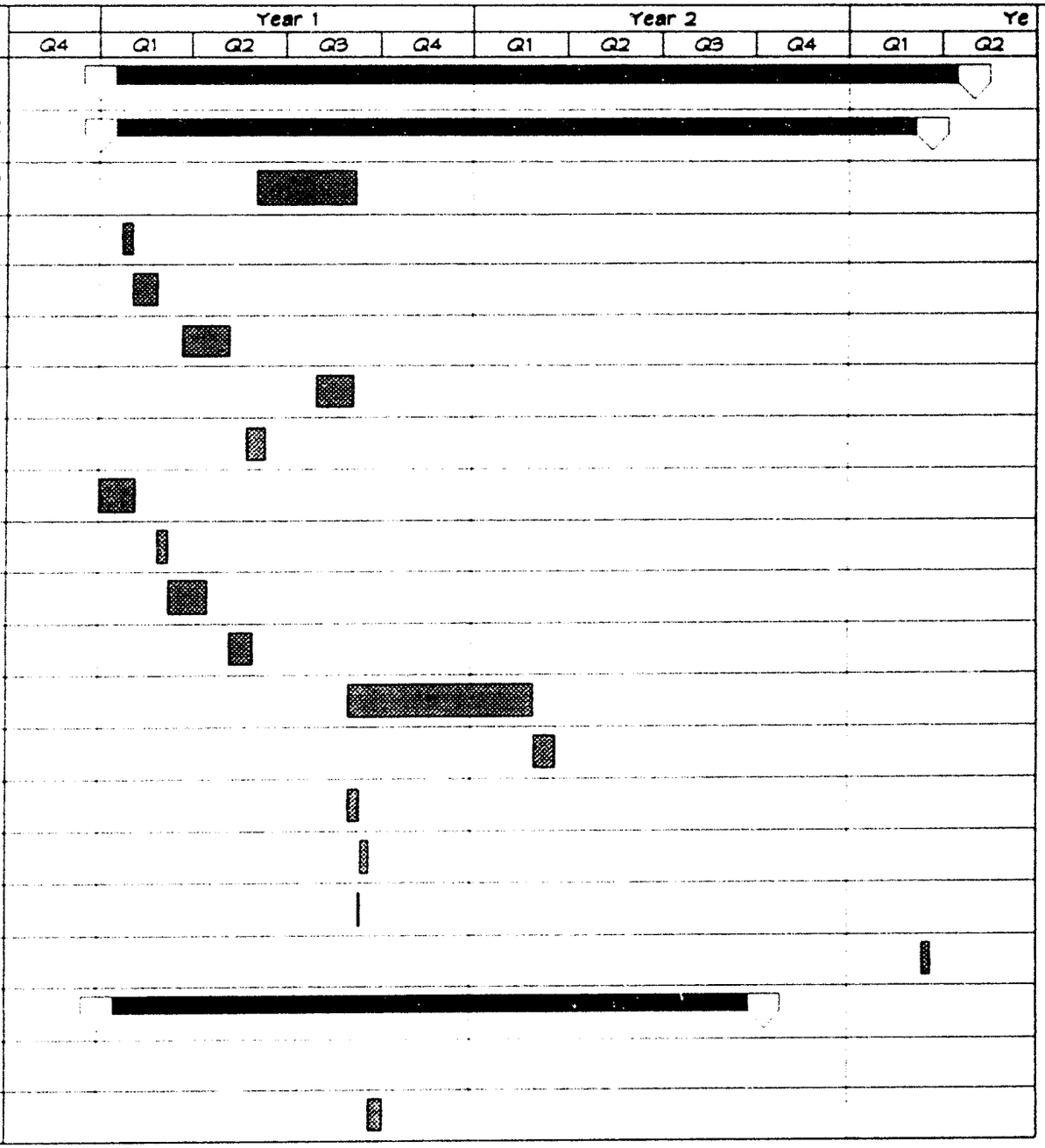
Amounts are in 1995 dollars

05/15/95

White Mesa Mill Reclamation Estimate

5/15/95

ID	Name	Total Cost
1	1 TOTAL RECLAMATION & DECOM	$8,382,101
2	1 1 MILL DECOMMISSIONING	$1,478,242
3	1 1 1 Mill Building Demolition	$237,608
4	1 1 2 Preleach Tank Demolition	$50,240
5	1 1 3 Ore Feed Demolition	$81,253
6	1 1 4 SX Building Demolition	$167,478
7	1 1 5 CCD Circuit Removal	$141,322
8	1 1 6 Sample Plant Removal	$40,483
9	1 1 7 Boiler Demolition	$92,866
10	1 1 8 Acid Tank & Supply Line Removal	$46,964
11	1 1 9 Vanadium Oxidation Circuit Removal	$59,762
12	1 1 10 PLT, Clarifier, & Claricone Removal	$71,130
13	1 1 11 Haulage of Debris to Cell 3	$205,462
14	1 1 12 Mill Yard Decontamination	$129,694
15	1 1 13 Ore Storage Pad Decontamination	$56,540
16	1 1 14 Acid Storage Area Decontamination	$37,132
17	1 1 15 Equipment Storage Area	$17,997
18	1 1 16 Revegetate Mill Yard & Ore Pad	$42,312
19	1 2 RECLAMATION OF CELL 2	$1,297,047
20	1 2 1 Obtain Permit for Section 16	$10,000
21	1 2 2 Place Remainder of Bridging Lift	$78,973



White Mesa Reclamation Resource Summary
5/15/95

ID	Name	Initials	Group	Max Units	Std. Rate	Ovt. Rate	Cost/Use	Accrue At
1	637 scraper	637		4	$121/h	$66/h	$0	Prorated
2	D8N Dozer w/ripper	D8		2	$61/h	$34/h	$0	Prorated
3	D7 Dozer	D7		2	$52/h	$28/h	$0	Prorated
4	825 Compactor	825		1	$55/h	$30/h	$0	Prorated
5	651 Waterwagon	651		1	$59/h	$30/h	$0	Prorated
6	14G Motorgrader	14G		2	$44/h	$24/h	$0	Prorated
7	980C Loader	980		1	$58/h	$32/h	$0	Prorated
8	5000 gal water truck	H2O		1	$32/h	$18/h	$0	Prorated
9	Highway Trucks (12yd)	12yd		1	$32/h	$0/h	$0	Prorated
10	Operators	men		22	$19/h	$0/h	$0	Prorated
11	Permits and Licences	Permit		1	$0/h	$0/h	$1,000	Prorated
12	Seeding per Acre	seed		100	$0/h	$0/h	$650	Prorated
13	Dewatering Costs	DWC		50	$0/h	$0/h	$1,000	Prorated
14	Quality contol contractor	QCQA		2	$62/h	$0/h	$0	Prorated
15	769 Haul Truck	769		4	$52/h	$28/h	$0	Prorated
16	988 Loader	988		2	$87/h	$48/h	$0	Prorated
17	Type "D" Rock	DRK		100	$0/h	$0/h	$13,910	Prorated
18	Wheelwash costs	WWC		10	$0/h	$0/h	$5,000	Prorated
19	245 Excavator	245		1	$92/h	$50/h	$0	Prorated
20	DP Rock per 100 yd3	D		100	$0/h	$0/h	$1,025	Prorated
21	Long Term Care Fund	LTC		100	$0/h	$0/h	$10,000	Prorated
22	Mechanics	mech		25	$19/h	$0/h	$0	Prorated
23	Small tools	TOOL		100	$0/h	$0/h	$1,000	Prorated
24	65 Ton Crane	65ton		2	$46/h	$0/h	$0	Prorated
25	30 Ton Crane	30ton		1	$40/h	$0/h	$0	Prorated
26	Mobilization per 10k dollars	Mob		20	$0/h	$0/h	$10,000	Start
27	Manager/Engineer	Mangr		1	$150,000/y	$0/h	$0	Prorated
28	Radiation Safety Officer	RSO		1	$93,750/y	$0/h	$0	Prorated
29	Secretary	Sec		1	$37,500/y	$0/h	$0	Prorated
30	Clerk	Clerk		1	$31,250/y	$0/h	$0	Prorated
31	Engineer	Eng		1	$93,750/y	$0/h	$0	Prorated
32	Environmental Technician	Etech		1	$50,000/y	$0/h	$0	Prorated
33	Maintneance Foreman	Mtce		1	$68,750/y	$0/h	$0	Prorated
34	Security Personnel	Guard		3	$25,000/y	$0/h	$0	Prorated
35	Safety Engineer	Safety		1	$50,000/y	$0/h	$0	Prorated
36	Chemist	Chem		1	$56,250/y	$0/h	$0	Prorated
37	Misc Supplies	Mater		1	$1,875/w	$0/h	$0	Prorated
38	Butler Maintenance Cost	Butler		100	$10/h	$0/h	$0	Prorated
39	Additional Clay per 10k yds	Clay		100	$0/h	$0/h	$25,000	Prorated
40	Health Physics Program Costs	HlthPhy		100	$3,000/w	$0/h	$10,000	Prorated

White Mesa Mill Reclamation Plan

5/15/95

ID	Name	Total Cost	Var.	Actual
1	TOTAL RECLAMATION & DECOM	$8,382,101	#####	$0
2	MILL DECOMMISSIONING	$1,478,242	#####	$0
3	Mill Building Demolition	$237,608	#####	$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
10	Operators	2	623h	0h	6/2/95	7/27/95	$12,005	$0	$0	$12,005
23	Mechanics	25	8133h	0h	6/2/95	7/31/95	$156,560	$0	$0	$156,560
24	Small tools	40.66	0h	0h	6/2/95	6/2/95	$40,660	$0	$0	$40,660
25	65 Ton Crane	1	554h	0h	6/2/95	9/7/95	$25,623	$0	$0	$25,623
26	30 Ton Crane	1	69h	0h	6/2/95	6/15/95	$2,760	$0	$0	$2,760

ID	Name	Total Cost	Var.	Actual
4	Preleach Tank Demolition	$50,240	#####	$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
10	Operators	2	117h	0h	1/23/95	2/2/95	$2,255	$0	$0	$2,255
23	Mechanics	25	1768h	0h	1/23/95	2/3/95	$34,034	$0	$0	$34,034
24	Small tools	8.84	0h	0h	1/23/95	1/23/95	$8,840	$0	$0	$8,840
25	65 Ton Crane	1	69h	0h	1/23/95	2/3/95	$3,191	$0	$0	$3,191
26	30 Ton Crane	1	48h	0h	1/23/95	1/31/95	$1,920	$0	$0	$1,920

ID	Name	Total Cost	Var.	Actual
5	Ore Feed Demolition	$81,253	#####	$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
10	Operators	1	69h	0h	2/3/95	2/16/95	$1,330	$0	$0	$1,330
23	Mechanics	25	3182h	0h	2/3/95	2/27/95	$61,254	$0	$0	$61,254
24	Small tools	15.91	0h	0h	2/3/95	2/3/95	$15,910	$0	$0	$15,910
26	30 Ton Crane	1	69h	0h	2/3/95	2/16/95	$2,760	$0	$0	$2,760

ID	Name	Total Cost	Var.	Actual
6	SX Building Demolition	$167,478	#####	$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
10	Operators	2	207h	0h	3/23/95	4/11/95	$3,989	$0	$0	$3,989
23	Mechanics	25	6365h	0h	3/23/95	5/8/95	$122,526	$0	$0	$122,526
24	Small tools	31.82	0h	0h	3/23/95	3/23/95	$31,820	$0	$0	$31,820
25	65 Ton Crane	1	138h	0h	3/23/95	4/17/95	$6,383	$0	$0	$6,383
26	30 Ton Crane	1	69h	0h	3/23/95	4/4/95	$2,760	$0	$0	$2,760

ID	Name	Total Cost	Var.	Actual
7	CCD Circuit Removal	$141,322	#####	$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
10	Operators	2	207h	0h	7/31/95	8/17/95	$3,989	$0	$0	$3,989
23	Mechanics	25	5304h	0h	7/31/95	9/5/95	$102,102	$0	$0	$102,102
24	Small tools	26.52	0h	0h	7/31/95	7/31/95	$26,520	$0	$0	$26,520
25	65 Ton Crane	1	69h	0h	7/31/95	8/10/95	$3,191	$0	$0	$3,191
26	30 Ton Crane	1	138h	0h	7/31/95	8/23/95	$5,520	$0	$0	$5,520

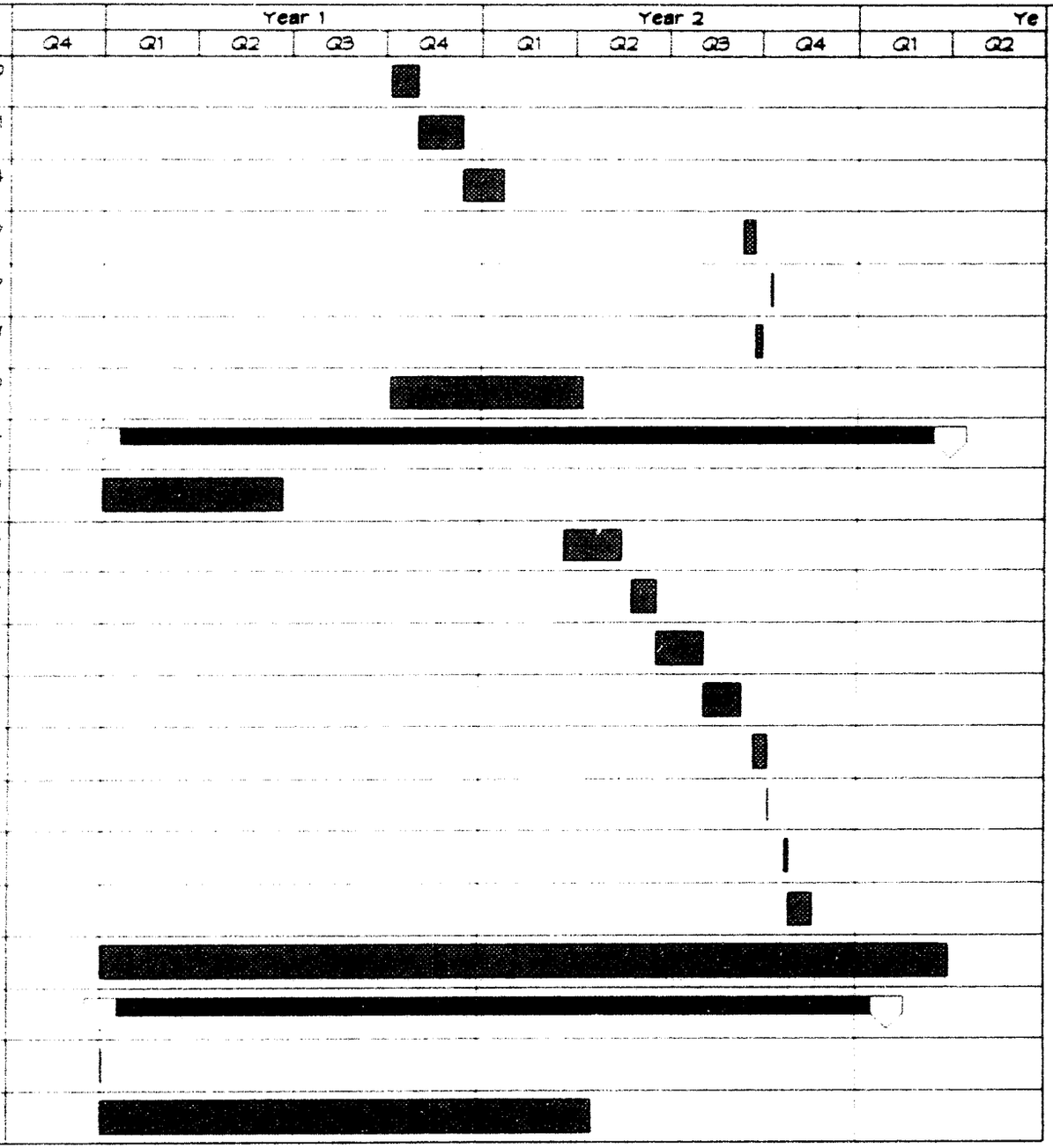
ID	Name	Total Cost	Var.	Actual
8	Sample Plant Removal	$40,483	#####	$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
10	Operators	1	104h	0h	5/24/95	6/12/95	$2,004	$0	$0	$2,004
23	Mechanics	25	1415h	0h	5/24/95	6/2/95	$27,239	$0	$0	$27,239
24	Small tools	7.08	0h	0h	5/24/95	5/24/95	$7,080	$0	$0	$7,080

White Mesa Mill Reclamation Estimate

5/15/95

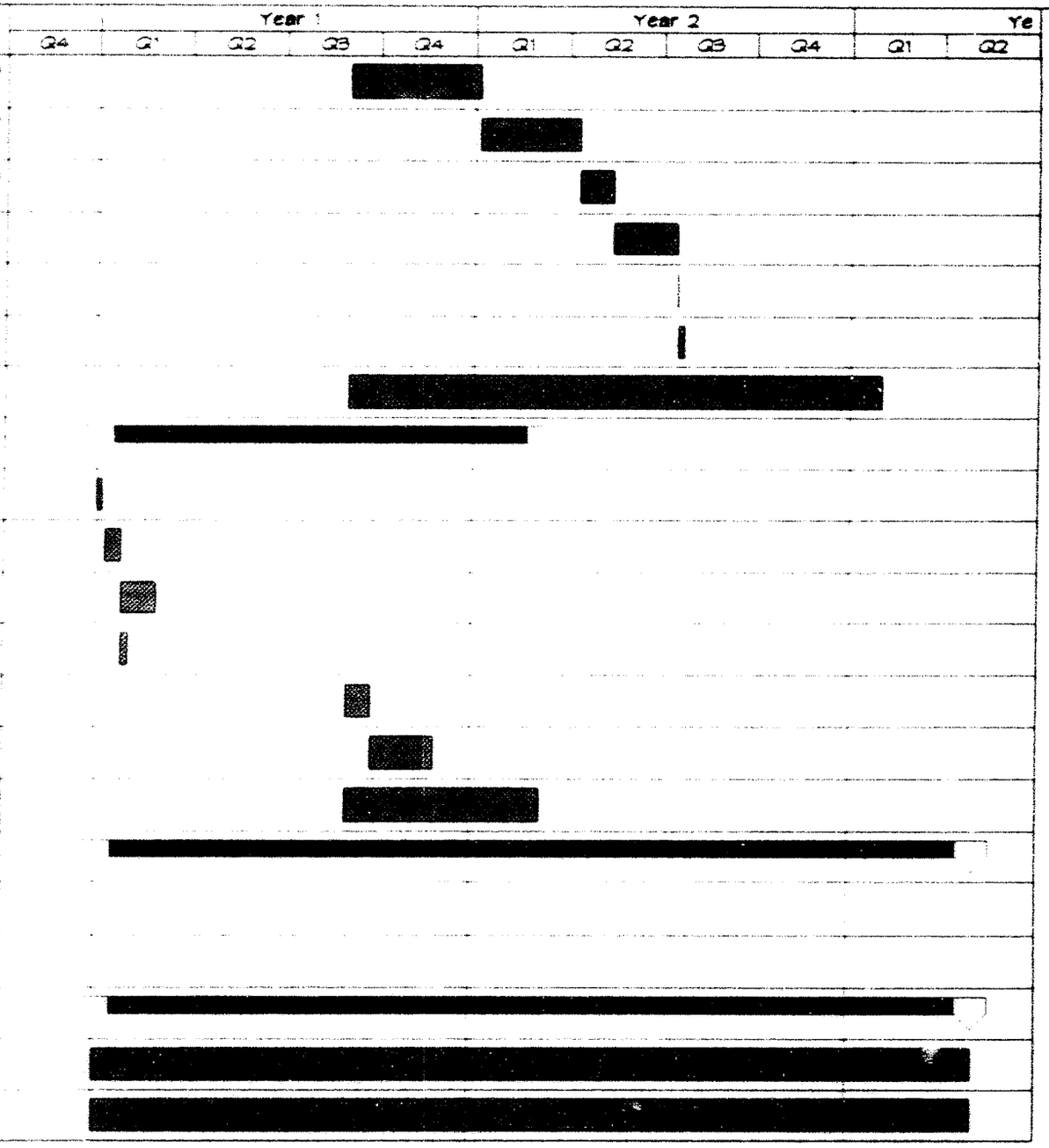
ID	Name	Total Cost
22	1 2 3 Place Lower Random Fill (12")	$146,480
23	1 2 4 Clay Layer	$551,281
24	1 2 5 Upper Random Fill	$238,314
25	1 2 6 Dike Slope Reduction	$61,096
26	1 2 7 Desert Pavement of Top	$38,426
27	1 2 8 Rock Armor on 5:1 slopes	$107,377
28	1 2 9 Quality Control	$65,100
29	**1 3 RECLAMATION OF CELL 3**	**$1,740,304**
30	1 3 1 Dewatering of Cell 3	$20,000
31	1 3 2 Lower Random Fill	$320,153
32	1 3 3 Lower Random Fill (12")	$147,499
33	1 3 4 Clay Layer	$567,472
34	1 3 5 Upper Random Fill	$226,832
35	1 3 6 Dike Slope Reduction (South)	$81,462
36	1 3 7 Dike Slope Reduction (West)	$7,007
37	1 3 8 Desert Pavement of Top	$38,426
38	1 3 9 Riprap and Bedding Material	$244,283
39	1 3 10 Quality Control	$87,172
40	**1 4 RECLAMATION OF CELL 1**	**$1,659,416**
41	1 4 1 Construct Wheelwash	$50,000
42	1 4 2 Wheelwash Operation	$104,752



White Mesa Mill Reclamation Estimate

5/15/95

ID	Name	Total Cost
43	1.4.3 Crystal Removal	$529,118
44	1.4.4 PVC Soil Cover Removal	$421,540
45	1.4.5 Liner and Soil Removal	$140,188
46	1.4.6 Contaminated Materials Removal	$280,701
47	1.4.7 Construct Channels	$1,080
48	1.4.8 Rock Protection	$58,506
49	1.4.9 Quality Control	$73,532
50	**1.5 CELL 4A WORK**	**$301,387**
51	1.5.1 Dewatering	$5,000
52	1.5.2 Construct Wheel Wash	$20,000
53	1.5.3 Wheel Wash Operation	$11,003
54	1.5.4 Remove Fencing	$3,083
55	1.5.5 Remove Liner to Cell 3	$87,839
56	1.5.6 Remove Clay Layer	$154,312
57	1.5.7 Quality Control	$20,150
58	**1.6 MISCELLANEOUS ITEMS**	**$1,905,104**
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

5/15/95

ID	Name	Total Cost	Q4	Year 1 Q1	Year 1 Q2	Year 1 Q3	Year 1 Q4	Year 2 Q1	Year 2 Q2	Year 2 Q3	Year 2 Q4	Ye Q1	Ye Q2
64	6.3.3 Secretary	$70,153											
65	6.3.4 Clerk	$58,486											
66	6.3.5 Environmental Technician	$43,577											
67	6.3.6 Maintenance Foreman	$55,000											
68	6.3.7 Chemist	$45,000											
69	6.3.8 Security	$110,596											
70	6.3.9 Safety Engineer	$40,000											
71	6.3.10 Misc Materials and Supplies	$182,475											
72	6.3.11 Health Physics Costs (Mill Decl	$112,000											

White Mesa Mill Reclamation Plan

5/15/95

ID	Name	Total Cost	Var.	Actual

"Sample Plant Removal" continued

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
26	30 Ton Crane	1	104h	0h	5/24/95	6/12/95	$4,160	$0	$0	$4,160

9 Boiler Demolition $92,866 $0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
10	Operators	2	243h	0h	1/2/95	1/23/95	$4,683	$0	$0	$4,683
23	Mechanics	25	3182h	0h	1/2/95	1/23/95	$61,254	$0	$0	$61,254
24	Small tools	15.91	0h	0h	1/2/95	1/2/95	$15,910	$0	$0	$15,910
25	65 Ton Crane	1	208h	0h	1/2/95	2/6/95	$9,620	$0	$0	$9,620
26	30 Ton Crane	1	35h	0h	1/2/95	1/6/95	$1,400	$0	$0	$1,400

10 Acid Tank & Supply Line Removal $46,964 $0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
10	Operators	1	64h	0h	2/27/95	3/10/95	$1,330	$0	$0	$1,330
23	Mechanics	25	1768h	0h	2/27/95	3/10/95	$34,034	$0	$0	$34,034
24	Small tools	8.84	0h	0h	2/27/95	2/27/95	$8,840	$0	$0	$8,840
26	30 Ton Crane	1	64h	0h	2/27/95	3/10/95	$2,760	$0	$0	$2,760

11 Vanadium Oxidation Circuit Removal $59,762 $0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
10	Operators	2	269h	0h	3/10/95	4/3/95	$5,068	$0	$0	$5,068
23	Mechanics	25	1768h	0h	3/10/95	3/23/95	$34,034	$0	$0	$34,034
24	Small tools	8.84	781.45h	0h	3/10/95	3/27/95	$8,840	$0	$0	$8,840
25	65 Ton Crane	1	208h	0h	3/10/95	4/17/95	$9,620	$0	$0	$9,620
26	30 Ton Crane	1	55h	0h	3/10/95	3/21/95	$2,200	$0	$0	$2,200

12 PLT Clarifier & Claricone Removal $71,130 $0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
10	Operators	2	178h	0h	5/8/95	5/22/95	$3,334	$0	$0	$3,334
23	Mechanics	25	2475h	0h	5/8/95	5/24/95	$47,644	$0	$0	$47,644
24	Small tools	12.37	0h	0h	5/8/95	5/8/95	$12,370	$0	$0	$12,370
25	65 Ton Crane	1	138h	0h	5/8/95	5/31/95	$6,383	$0	$0	$6,383
26	30 Ton Crane	1	35h	0h	5/8/95	5/12/95	$1,400	$0	$0	$1,400

13 Haulage of Debris to Cell 3 $205,462 $0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
10	Operators	3	2080h	0h	9/1/95	1/1/96	$40,082	$0	$0	$40,082
15	769 Haul Truck	1	1040h	0h	9/1/95	2/29/96	$54,590	$0	$0	$54,590
16	988 Loader	1	1040h	0h	9/1/95	2/29/96	$89,991	$0	$0	$89,991
39	Butler Maintenance Cost	10	2080h	0h	9/1/95	10/6/95	$20,800	$0	$0	$20,800

14 Mill Yard Decontamination $129,694 $0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
1	637 scraper	4	440h	0h	3/1/96	3/22/96	$59,422	$0	$0	$59,422
2	D8N Dozer w/ripper	1	123h	0h	3/1/96	3/22/96	$7,467	$0	$0	$7,467

White Mesa Mill Reclamation Plan

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ID	Name	Total Cost	Var.	Actual

Mill Yard Decontamination continued

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
3	D7 Dozer	1	123h	0h	3/1/96	3/22/96	$6,395	$0	$0	$6,395
5	651 Waterwagon	1	123h	0h	3/1/96	3/22/96	$7,198	$0	$0	$7,198
6	14G Motorgrader	1	123h	0h	3/1/96	3/22/96	$5,358	$0	$0	$5,358
10	Operators	9	1150h	0h	3/1/96	3/22/96	$22,161	$0	$0	$22,161
16	988 Loader	1	123h	0h	3/1/96	3/22/96	$10,643	$0	$0	$10,643
99	Butler Maintenance Cost	10	1105h	0h	3/1/96	3/20/96	$11,050	$0	$0	$11,050

15 Ore Storage Pad Decontamination $56,540 $0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
1	637 Scraper	4	215h	0h	9/1/95	9/11/95	$26,073	$0	$0	$26,073
2	D8N Dozer w/ripper	1	54h	0h	9/1/95	9/11/95	$3,278	$0	$0	$3,278
3	D7 Dozer	1	54h	0h	9/1/95	9/11/95	$2,807	$0	$0	$2,807
5	651 Waterwagon	1	54h	0h	9/1/95	9/11/95	$3,160	$0	$0	$3,160
6	14G Motorgrader	1	54h	0h	9/1/95	9/11/95	$2,352	$0	$0	$2,352
10	Operators	8	485h	0h	9/1/95	9/12/95	$9,346	$0	$0	$9,346
16	988 Loader	1	54h	0h	9/1/95	9/11/95	$4,673	$0	$0	$4,673
99	Butler Maintenance Cost	10	485h	0h	9/1/95	9/11/95	$4,850	$0	$0	$4,850

16 Acid Storage Area Decontamination $37,132 $0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
1	637 Scraper	4	208h	0h	9/13/95	9/22/95	$25,224	$0	$0	$25,224
2	D8N Dozer w/ripper	1	13h	0h	9/13/95	9/15/95	$789	$0	$0	$789
3	D7 Dozer	1	13h	0h	9/13/95	9/15/95	$676	$0	$0	$676
5	651 Waterwagon	1	13h	0h	9/13/95	9/15/95	$761	$0	$0	$761
6	14G Motorgrader	1	13h	0h	9/13/95	9/15/95	$566	$0	$0	$566
10	Operators	9	273h	0h	9/13/95	9/19/95	$5,261	$0	$0	$5,261
16	988 Loader	1	13h	0h	9/13/95	9/15/95	$1,125	$0	$0	$1,125
99	Butler Maintenance Cost	10	273h	0h	9/13/95	9/19/95	$2,730	$0	$0	$2,730

17 Equipment Storage Area $17,997 $0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
1	637 Scraper	4	69h	0h	9/11/95	9/13/95	$8,368	$0	$0	$8,368
2	D8N Dozer w/ripper	1	17h	0h	9/11/95	9/13/95	$1,032	$0	$0	$1,032
3	D7 Dozer	1	17h	0h	9/11/95	9/13/95	$884	$0	$0	$884
5	651 Waterwagon	1	17h	0h	9/11/95	9/13/95	$995	$0	$0	$995
6	14G Motorgrader	1	17h	0h	9/11/95	9/13/95	$741	$0	$0	$741
10	Operators	9	154h	0h	9/11/95	9/13/95	$2,968	$0	$0	$2,968
16	988 Loader	1	17h	0h	9/11/95	9/13/95	$1,471	$0	$0	$1,471
99	Butler Maintenance Cost	10	154h	0h	9/11/95	9/13/95	$1,540	$0	$0	$1,540

18 Revegetate Mill Yard & Ore Pad $42,312 $0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
1	637 Scraper	4	200h	0h	3/13/97	3/21/97	$24,254	$0	$0	$24,254
2	D8N Dozer w/ripper	1	50h	0h	3/13/97	3/21/97	$3,036	$0	$0	$3,036
3	D7 Dozer	1	50h	0h	3/13/97	3/21/97	$2,600	$0	$0	$2,600

White Mesa Mill Reclamation Plan

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ID	Name	Total Cost	Var.	Actual

"Revegetate Mill Yard & Ore Pad" continued

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
6	14G Motorgrader	1	50h	0h	3/13/97	3/21/97	$2,178	$0	$0	$2,178
10	Operators	7	350h	0h	3/13/97	3/21/97	$6,745	$0	$0	$6,745
39	Butler Maintenance Cost	10	350h	0h	3/13/97	3/20/97	$3,500	$0	$0	$3,500

19 RECLAMATION OF CELL 2 $1,297,047 ***** $0

20 Obtain Permit for Section 16 $10,000 ***** $0

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

21 Place Remainder of Bridging Lift $78,973 ***** $0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
1	637 scraper	4	304h	0h	9/22/95	10/6/95	$37,472	$0	$0	$37,472
2	D8N Dozer w/ripper	1	76h	0h	9/22/95	10/6/95	$4,735	$0	$0	$4,735
3	D7 Dozer	1	76h	0h	9/22/95	10/6/95	$4,055	$0	$0	$4,055
4	825 Compactor	1	76h	0h	9/22/95	10/6/95	$4,288	$0	$0	$4,288
5	651 Waterwagon	1	76h	0h	9/22/95	10/6/95	$4,565	$0	$0	$4,565
6	14G Motorgrader	1	76h	0h	9/22/95	10/6/95	$3,398	$0	$0	$3,398
10	Operators	9	684h	0h	9/22/95	10/6/95	$13,470	$0	$0	$13,470
39	Butler Maintenance Cost	10	684h	0h	9/22/95	10/5/95	$6,990	$0	$0	$6,990

22 Place Lower Random Fill (12") $146,480 ***** $0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
1	637 scraper	4	576h	0h	10/6/95	11/1/95	$69,730	$0	$0	$69,730
2	D8N Dozer w/ripper	1	144h	0h	10/6/95	11/1/95	$8,742	$0	$0	$8,742
3	D7 Dozer	1	144h	0h	10/6/95	11/1/95	$7,487	$0	$0	$7,487
4	825 Compactor	1	144h	0h	10/6/95	11/1/95	$7,917	$0	$0	$7,917
5	651 Waterwagon	1	144h	0h	10/6/95	11/1/95	$8,427	$0	$0	$8,427
6	14G Motorgrader	1	144h	0h	10/6/95	11/1/95	$6,273	$0	$0	$6,273
10	Operators	9	1296h	0h	10/6/95	11/1/95	$24,955	$0	$0	$24,955
39	Butler Maintenance Cost	10	1296h	0h	10/6/95	10/30/95	$12,950	$0	$0	$12,950

23 Clay Layer $551,281 ***** $0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
1	637 scraper	4	996h	0h	11/1/95	12/14/95	$120,785	$0	$0	$120,785
2	D8N Dozer w/ripper	1	249h	0h	11/1/95	12/14/95	$15,117	$0	$0	$15,117
3	D7 Dozer	1	249h	0h	11/1/95	12/14/95	$12,946	$0	$0	$12,946
4	825 Compactor	1	249h	0h	11/1/95	12/14/95	$13,690	$0	$0	$13,690
5	651 Waterwagon	1	249h	0h	11/1/95	12/14/95	$14,571	$0	$0	$14,571
6	14G Motorgrader	1	249h	0h	11/1/95	12/14/95	$10,846	$0	$0	$10,846
7	980C Loader	1	0h	0h	11/1/95	11/1/95	$0	$0	$0	$0
8	5000 gal water truck	1	249h	0h	11/1/95	12/14/95	$7,943	$0	$0	$7,943
9	Highway Trucks (12yd)	10	0h	0h	11/1/95	11/1/95	$0	$0	$0	$0
10	Operators	10	2490h	0h	11/1/95	12/14/95	$47,982	$0	$0	$47,982
39	Butler Maintenance Cost	10	2490h	0h	11/1/95	12/14/95	$24,900	$0	$0	$24,900
40	Additional Clay per 10k yds	11.3	0h	0h	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	Var.	Actual
24	Upper Random Fill	$238,314	*****	$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
1	637 scraper	4	882h	0h	12/14/95	1/22/96	$106,960	$0	$0	$106,960
2	D8N Dozer w/ripper	1	221h	0h	12/14/95	1/22/96	$13,417	$0	$0	$13,417
3	D7 Dozer	1	221h	0h	12/14/95	1/22/96	$11,490	$0	$0	$11,490
4	825 Compactor	1	221h	0h	12/14/95	1/22/96	$12,151	$0	$0	$12,151
5	651 Waterwagon	1	221h	0h	12/14/95	1/22/96	$12,933	$0	$0	$12,933
6	14G Motorgrader	1	221h	0h	12/14/95	1/22/96	$9,627	$0	$0	$9,627
8	5000 gal water truck	1	221h	0h	12/14/95	1/22/96	$7,050	$0	$0	$7,050
10	Operators	10	2210h	0h	12/14/95	1/22/96	$42,587	$0	$0	$42,587
39	Butler Maintenance Cost	10	2210h	0h	12/14/95	1/22/96	$22,100	$0	$0	$22,100

ID	Name	Total Cost	Var.	Actual
25	Dike Slope Reduction	$61,096	*****	$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
1	637 scraper	4	240h	0h	9/12/96	9/24/96	$29,105	$0	$0	$29,105
2	D8N Dozer w/ripper	1	60h	0h	9/12/96	9/24/96	$3,643	$0	$0	$3,643
3	D7 Dozer	1	60h	0h	9/12/96	9/24/96	$3,119	$0	$0	$3,119
4	825 Compactor	1	60h	0h	9/12/96	9/24/96	$3,299	$0	$0	$3,299
5	651 Waterwagon	1	60h	0h	9/12/96	9/24/96	$3,511	$0	$0	$3,511
6	14G Motorgrader	1	60h	0h	9/12/96	9/24/96	$2,614	$0	$0	$2,614
10	Operators	9	540h	0h	9/12/96	9/24/96	$10,406	$0	$0	$10,406
39	Butler Maintenance Cost	10	540h	0h	9/12/96	9/23/96	$5,400	$0	$0	$5,400

ID	Name	Total Cost	Var.	Actual
26	Desert Pavement of Top	$38,426	*****	$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
1	637 scraper	4	74h	0h	10/9/96	10/11/96	$8,974	$0	$0	$8,974
2	D8N Dozer w/ripper	1	19h	0h	10/9/96	10/11/96	$1,153	$0	$0	$1,153
3	D7 Dozer	1	19h	0h	10/9/96	10/11/96	$988	$0	$0	$988
4	825 Compactor	1	19h	0h	10/9/96	10/11/96	$1,045	$0	$0	$1,045
5	651 Waterwagon	1	19h	0h	10/9/96	10/11/96	$1,112	$0	$0	$1,112
6	14G Motorgrader	1	19h	0h	10/9/96	10/11/96	$828	$0	$0	$828
10	Operators	9	171h	0h	10/9/96	10/11/96	$3,295	$0	$0	$3,295
20	DP Rock per 100 yd3	18.85	1h	0h	10/9/96	10/9/96	$19,321	$0	$0	$19,321
39	Butler Maintenance Cost	10	171h	0h	10/9/96	10/11/96	$1,710	$0	$0	$1,710

ID	Name	Total Cost	Var.	Actual
27	Rock Armor on 5:1 slopes	$107,377	*****	$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
10	Operators	5	188h	0h	9/24/96	10/1/96	$3,623	$0	$0	$3,623
15	769 Haul Truck	4	150h	0h	9/24/96	10/1/96	$7,874	$0	$0	$7,874
16	988 Loader	1	38h	0h	9/24/96	10/1/96	$3,288	$0	$0	$3,288
20	DP Rock per 100 yd3	86.5	3363h	0h	9/24/96	10/1/96	$90,713	$0	$0	$90,713
39	Butler Maintenance Cost	10	188h	0h	9/24/96	9/26/96	$1,880	$0	$0	$1,880

ID	Name	Total Cost	Var.	Actual
28	Quality Control	$65,100	*****	$0

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

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ID	Name	Total Cost	Var	Actual
29	RECLAMATION OF CELL 3	$1,740,304	#####	$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
19	Dewatering Costs	20	20000h	0h	1/2/95	6/23/95	$20,000	$0	$0	$20,000

31 Lower Random Fill — $320,153 ##### $0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act Cost	Rem. Cost
1	637 scraper	4	1256h	0h	3/22/96	5/17/96	$152,315	$0	$0	$152,315
2	D8N Dozer w/ripper	1	315h	0h	3/22/96	5/17/96	$19,124	$0	$0	$19,124
3	D7 Dozer	1	315h	0h	3/22/96	5/17/96	$16,377	$0	$0	$16,377
4	825 Compactor	1	315h	0h	3/22/96	5/17/96	$17,319	$0	$0	$17,319
5	651 Waterwagon	1	315h	0h	3/22/96	5/17/96	$18,434	$0	$0	$18,434
6	14G Motorgrader	1	315h	0h	3/22/96	5/17/96	$13,721	$0	$0	$13,721
10	Operators	9	2831h	0h	3/22/96	5/17/96	$54,553	$0	$0	$54,553
39	Butler Maintenance Cost	10	2831h	0h	3/22/96	5/13/96	$28,310	$0	$0	$28,310

32 Lower Random Fill (12") — $147,499 ##### $0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act Cost	Rem. Cost
1	637 scraper	4	579h	0h	5/27/96	6/20/96	$70,215	$0	$0	$70,215
2	D8N Dozer w/ripper	1	145h	0h	5/27/96	6/20/96	$8,803	$0	$0	$8,803
3	D7 Dozer	1	145h	0h	5/27/96	6/20/96	$7,539	$0	$0	$7,539
4	825 Compactor	1	145h	0h	5/27/96	6/20/96	$7,972	$0	$0	$7,972
5	651 Waterwagon	1	145h	0h	5/27/96	6/20/96	$8,485	$0	$0	$8,485
6	14G Motorgrader	1	145h	0h	5/27/96	6/20/96	$6,316	$0	$0	$6,316
10	Operators	10	1304h	0h	5/27/96	6/18/96	$25,128	$0	$0	$25,128
39	Butler Maintenance Cost	10	1304h	0h	5/27/96	6/18/96	$13,040	$0	$0	$13,040

33 Clay Layer — $567,472 ##### $0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem Cost
1	637 scraper	4	1056h	0h	6/20/96	8/6/96	$128,061	$0	$0	$128,061
2	D8N Dozer w/ripper	1	264h	0h	6/20/96	8/6/96	$16,027	$0	$0	$16,027
3	D7 Dozer	1	264h	0h	6/20/96	8/6/96	$13,725	$0	$0	$13,725
4	825 Compactor	1	264h	0h	6/20/96	8/6/96	$14,515	$0	$0	$14,515
5	651 Waterwagon	1	264h	0h	6/20/96	8/6/96	$15,449	$0	$0	$15,449
6	14G Motorgrader	1	264h	0h	6/20/96	8/6/96	$11,500	$0	$0	$11,500
7	980C Loader	0	0h	0h	6/20/96	8/6/96	$0	$0	$0	$0
8	5000 gal water truck	1	264h	0h	6/20/96	8/6/96	$8,422	$0	$0	$8,422
9	Highway Trucks (12yd)	0	0h	0h	6/20/96	8/6/96	$0	$0	$0	$0
10	Operators	10	2640h	0h	6/20/96	8/6/96	$50,873	$0	$0	$50,873
39	Butler Maintenance Cost	10	2640h	0h	6/20/96	8/6/96	$26,400	$0	$0	$26,400
40	Additional Clay per 10k yds	11.3	2983.2h	0h	6/20/96	8/6/96	$282,500	$0	$0	$282,500

34 Upper Random Fill — $226,832 ##### $0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act Cost	Rem. Cost
1	637 scraper	4	890h	0h	8/6/96	9/12/96	$107,930	$0	$0	$107,930
2	D8N Dozer w/ripper	1	223h	0h	8/6/96	9/12/96	$13,538	$0	$0	$13,538
3	D7 Dozer	1	223h	0h	8/6/96	9/12/96	$11,594	$0	$0	$11,594

White Mesa Mill Reclamation Plan

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ID	Name	Total Cost	Var.	Actual

"Upper Random Fill" continued

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act Cost	Rem. Cost
4	825 Compactor	1	223h	0h	8/6/96	9/12/96	$12,261	$0	$0	$12,261
5	651 Waterwagon	1	223h	0h	8/6/96	9/12/96	$13,050	$0	$0	$13,050
6	14G Motorgrader	1	223h	0h	8/6/96	9/12/96	$9,714	$0	$0	$9,714
10	Operators	9	2007h	0h	8/6/96	9/12/96	$38,675	$0	$0	$38,675
39	Butler Maintenance Cost	10	2007h	0h	8/6/96	9/10/96	$20,070	$0	$0	$20,070

35 Dike Slope Reduction (South) $81,462 ##### $0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act Cost	Rem Cost
1	637 scraper	4	320h	0h	9/24/96	10/8/96	$38,806	$0	$0	$38,806
2	D8N Dozer w/ripper	1	80h	0h	9/24/96	10/8/96	$4,857	$0	$0	$4,857
3	D7 Dozer	1	80h	0h	9/24/96	10/8/96	$4,159	$0	$0	$4,159
4	825 Compactor	1	80h	0h	9/24/96	10/8/96	$4,398	$0	$0	$4,398
5	651 Waterwagon	1	80h	0h	9/24/96	10/8/96	$4,682	$0	$0	$4,682
6	14G Motorgrader	1	80h	0h	9/24/96	10/8/96	$3,485	$0	$0	$3,485
10	Operators	9	720h	0h	9/24/96	10/8/96	$13,874	$0	$0	$13,874
39	Butler Maintenance Cost	10	720h	0h	9/24/96	10/7/96	$7,200	$0	$0	$7,200

36 Dike Slope Reduction (West) $7,007 ##### $0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act Cost	Rem Cost
1	637 scraper	4	27h	0h	10/8/96	10/9/96	$3,274	$0	$0	$3,274
2	D8N Dozer w/ripper	1	7h	0h	10/8/96	10/9/96	$425	$0	$0	$425
3	D7 Dozer	1	7h	0h	10/8/96	10/9/96	$364	$0	$0	$364
4	825 Compactor	1	7h	0h	10/8/96	10/9/96	$385	$0	$0	$385
5	651 Waterwagon	1	7h	0h	10/8/96	10/9/96	$410	$0	$0	$410
6	14G Motorgrader	1	7h	0h	10/8/96	10/9/96	$305	$0	$0	$305
10	Operators	9	63h	0h	10/8/96	10/9/96	$1,214	$0	$0	$1,214
39	Butler Maintenance Cost	10	63h	0h	10/8/96	10/9/96	$630	$0	$0	$630

37 Desert Pavement of Top $38,426 ##### $0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
1	637 scraper	4	74h	0h	10/24/96	10/28/96	$8,974	$0	$0	$8,974
2	D8N Dozer w/ripper	1	19h	0h	10/24/96	10/28/96	$1,153	$0	$0	$1,153
3	D7 Dozer	1	19h	0h	10/24/96	10/28/96	$988	$0	$0	$988
4	825 Compactor	1	19h	0h	10/24/96	10/28/96	$1,045	$0	$0	$1,045
5	651 Waterwagon	1	19h	0h	10/24/96	10/28/96	$1,112	$0	$0	$1,112
6	14G Motorgrader	1	19h	0h	10/24/96	10/28/96	$828	$0	$0	$828
10	Operators	9	171h	0h	10/24/96	10/28/96	$3,295	$0	$0	$3,295
20	DP Rock per 100 yd3	18.85	1h	0h	10/24/96	10/24/96	$19,321	$0	$0	$19,321
39	Butler Maintenance Cost	10	171h	0h	10/24/96	10/28/96	$1,710	$0	$0	$1,710

38 Riprap and Bedding Material $244,283 ##### $0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
2	D8N Dozer w/ripper	1	135h	0h	10/28/96	11/20/96	$8,196	$0	$0	$8,196
3	D7 Dozer	1	135h	0h	10/28/96	11/20/96	$7,019	$0	$0	$7,019
5	651 Waterwagon	1	135h	0h	10/28/96	11/20/96	$7,900	$0	$0	$7,900

White Mesa Mill Reclamation Plan

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ID	Name	Total Cost	Var.	Actual

"Riprap and Bedding Material" continued

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
6	14G Motorgrader	1	135h	0h	10/28/96	11/20/96	$5,881	$0	$0	$5,881
10	Operators	9	945h	0h	10/28/96	11/14/96	$18,210	$0	$0	$18,210
15	769 Haul Truck	4	270h	0h	10/28/96	11/7/96	$14,172	$0	$0	$14,172
16	988 Loader	1	135h	0h	10/28/96	11/20/96	$11,682	$0	$0	$11,682
17	Type "D" Rock	11.63	1h	0h	10/28/96	10/28/96	$161,773	$0	$0	$161,773
39	Butler Maintenance Cost	10	945h	0h	10/28/96	11/13/96	$9,450	$0	$0	$9,450

39 Quality Control $87,172 ##### $0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
14	Quality contol contractor	0.3	1406h	0h	1/2/95	3/31/97	$87,172	$0	$0	$87,172

40 RECLAMATION OF CELL 1 $1,659,416 ##### $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	0h	1/2/95	1/2/95	$50,000	$0	$0	$50,000

42 Wheelwash Operation $104,752 ##### $0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
10	Operators	2	5436h	0h	1/2/95	4/19/96	$104,752	$0	$0	$104,752

43 Crystal Removal $529,118 ##### $0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
2	D8N Dozer w/ripper	1	725h	0h	9/1/95	1/5/96	$44,015	$0	$0	$44,015
3	D7 Dozer	1	362h	0h	9/1/95	11/3/95	$18,820	$0	$0	$18,820
5	651 Waterwagon	1	362h	0h	9/1/95	11/3/95	$21,184	$0	$0	$21,184
6	14G Motorgrader	1	362h	0h	9/1/95	11/3/95	$15,769	$0	$0	$15,769
10	Operators	10	6159h	0h	9/1/95	12/18/95	$118,684	$0	$0	$118,684
15	769 Haul Truck	4	2898h	0h	9/1/95	1/5/96	$152,116	$0	$0	$152,116
16	988 Loader	1	725h	0h	9/1/95	1/5/96	$62,734	$0	$0	$62,734
19	245 Excavator	1	725h	0h	9/1/95	1/5/96	$66,816	$0	$0	$66,816
39	Butler Maintenance Cost	10	2898h	0h	9/1/95	10/23/95	$28,980	$0	$0	$28,980

44 PVC Soil Cover Removal $421,540 ##### $0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
2	D8N Dozer w/ripper	1	544h	0h	1/5/96	4/10/96	$33,026	$0	$0	$33,026
3	D7 Dozer	1	272h	0h	1/5/96	2/22/96	$14,141	$0	$0	$14,141
5	651 Waterwagon	1	272h	0h	1/5/96	2/22/96	$15,917	$0	$0	$15,917
6	14G Motorgrader	1	272h	0h	1/5/96	2/22/96	$11,848	$0	$0	$11,848
10	Operators	10	4622h	0h	1/5/96	3/27/96	$89,066	$0	$0	$89,066
15	769 Haul Truck	4	2174h	0h	1/5/96	4/10/96	$114,113	$0	$0	$114,113
16	988 Loader	1	544h	0h	1/5/96	4/10/96	$47,072	$0	$0	$47,072
19	245 Excavator	1	544h	0h	1/5/96	4/10/96	$50,135	$0	$0	$50,135
39	Butler Maintenance Cost	10	4622h	0h	1/5/96	3/27/96	$46,220	$0	$0	$46,220

White Mesa Mill Reclamation Plan

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ID	Name	Total Cost	Vari.	Actual
45	Liner and Soil Removal	$140,188	#####	$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act Cost	Rem. Cost
2	D8N Dozer w/ripper	1	181h	0h	4/10/96	5/13/96	$10,989	$0	$0	$10,989
3	D7 Dozer	1	90h	0h	4/10/96	4/25/96	$4,679	$0	$0	$4,679
5	651 Waterwagon	1	90h	0h	4/10/96	4/25/96	$5,267	$0	$0	$5,267
6	14G Motorgrader	1	90h	0h	4/10/96	4/25/96	$3,920	$0	$0	$3,920
10	Operators	10	1537h	0h	4/10/96	5/7/96	$29,618	$0	$0	$29,618
15	769 Haul Truck	4	724h	0h	4/10/96	5/13/96	$38,003	$0	$0	$38,003
16	988 Loader	1	181h	0h	4/10/96	5/13/96	$15,662	$0	$0	$15,662
19	245 Excavator	1	181h	0h	4/10/96	5/13/96	$16,681	$0	$0	$16,681
39	Butler Maintenance Cost	10	1537h	0h	4/10/96	5/7/96	$15,370	$0	$0	$15,370

ID	Name	Total Cost	Vari.	Actual
46	Contaminated Materials Removal	$280,701	#####	$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act Cost	Rem. Cost
2	D8N Dozer w/ripper	1	362h	0h	5/13/96	7/15/96	$21,977	$0	$0	$21,977
3	D7 Dozer	1	181h	0h	5/13/96	6/12/96	$9,410	$0	$0	$9,410
5	651 Waterwagon	1	181h	0h	5/13/96	6/12/96	$10,592	$0	$0	$10,592
6	14G Motorgrader	1	181h	0h	5/13/96	6/12/96	$7,884	$0	$0	$7,884
10	Operators	10	3078h	0h	5/13/96	7/4/96	$59,313	$0	$0	$59,313
15	769 Haul Truck	4	1449h	0h	5/13/96	7/15/96	$76,058	$0	$0	$76,058
16	988 Loader	1	362h	0h	5/13/96	7/15/96	$31,324	$0	$0	$31,324
19	245 Excavator	1	362h	0h	5/13/96	7/15/96	$33,362	$0	$0	$33,362
39	Butler Maintenance Cost	10	3078h	0h	5/13/96	7/4/96	$30,780	$0	$0	$30,780

ID	Name	Total Cost	Vari.	Actual
47	Construct Channels	$1,080	#####	$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
2	D8N Dozer w/ripper	1	6h	0h	7/15/96	7/16/96	$364	$0	$0	$364
10	Operators	1	6h	0h	7/15/96	7/16/96	$116	$0	$0	$116
39	Butler Maintenance Cost	10	60h	0h	7/15/96	7/16/96	$600	$0	$0	$600

ID	Name	Total Cost	Vari.	Actual
48	Rock Protection	$58,506	#####	$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act Cost	Rem. Cost
2	D8N Dozer w/ripper	1	32h	0h	7/16/96	7/22/96	$1,943	$0	$0	$1,943
3	D7 Dozer	1	32h	0h	7/16/96	7/22/96	$1,664	$0	$0	$1,664
5	651 Waterwagon	1	32h	0h	7/16/96	7/22/96	$1,873	$0	$0	$1,873
6	14G Motorgrader	1	32h	0h	7/16/96	7/22/96	$1,394	$0	$0	$1,394
10	Operators	8	224h	0h	7/16/96	7/19/96	$4,316	$0	$0	$4,316
15	769 Haul Truck	2	64h	0h	7/16/96	7/22/96	$3,359	$0	$0	$3,359
16	988 Loader	1	32h	0h	7/16/96	7/22/96	$2,769	$0	$0	$2,769
17	Type "D" Rock	2.8	32h	0h	7/16/96	7/17/96	$38,948	$0	$0	$38,948
39	Butler Maintenance Cost	10	224h	0h	7/16/96	7/19/96	$2,240	$0	$0	$2,240

ID	Name	Total Cost	Vari.	Actual
49	Quality Control	$73,532	#####	$0

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

ID	Name	Total Cost	Vari.	Actual
50	CELL 4A WORK	$301,387	#####	$0

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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	0h	1/2/95	1/6/95	$5,000	$0	$0	$5,000

ID	Name	Total Cost	Vari.	Actual
52	Construct Wheel Wash	$20,000	#####	$0

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

ID	Name	Total Cost	Vari.	Actual
53	Wheel Wash Operation	$11,003	#####	$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
10	Operators	3	571h	0h	1/25/95	2/28/95	$11,003	$0	$0	$11,003

ID	Name	Total Cost	Vari.	Actual
54	Remove Fencing	$3,083	#####	$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
10	Operators	4	160h	0h	1/25/95	2/1/95	$3,083	$0	$0	$3,083

ID	Name	Total Cost	Vari.	Actual
55	Remove Liner to Cell 3	$87,839	#####	$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
3	D7 Dozer	1	137h	0h	9/1/95	9/26/95	$7,123	$0	$0	$7,123
5	651 Waterwagon	1	137h	0h	9/1/95	9/26/95	$8,017	$0	$0	$8,017
10	Operators	8	1096h	0h	9/1/95	9/26/95	$21,120	$0	$0	$21,120
15	769 Haul Truck	4	548h	0h	9/1/95	9/26/95	$28,765	$0	$0	$28,765
16	988 Loader	1	137h	0h	9/1/95	9/26/95	$11,855	$0	$0	$11,855
39	Butler Maintenance Cost	10	1096h	0h	9/1/95	9/20/95	$10,960	$0	$0	$10,960

ID	Name	Total Cost	Vari.	Actual
56	Remove Clay Layer	$154,312	#####	$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
3	D7 Dozer	1	137h	0h	9/26/95	10/19/95	$7,123	$0	$0	$7,123
5	651 Waterwagon	1	137h	0h	9/26/95	10/19/95	$8,017	$0	$0	$8,017
6	14G Motorgrader	1	137h	0h	9/26/95	10/19/95	$5,968	$0	$0	$5,968
10	Operators	5	1779h	0h	9/26/95	11/27/95	$34,281	$0	$0	$34,281
15	769 Haul Truck	4	1094h	0h	9/26/95	11/13/95	$57,424	$0	$0	$57,424
16	988 Loader	1	274h	0h	9/26/95	11/13/95	$23,709	$0	$0	$23,709
39	Butler Maintenance Cost	10	1779h	0h	9/26/95	10/26/95	$17,790	$0	$0	$17,790

ID	Name	Total Cost	Vari.	Actual
57	Quality Control	$20,150	#####	$0

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

ID	Name	Total Cost	Vari.	Actual
58	MISCELLANEOUS ITEMS	$1,905,704	#####	$0
59	Long Term Care Fund Allowance	$551,200	#####	$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
22	Long Term Care Fund	55.12	0h	0h	5/1/97	5/1/97	$551,200	$0	$0	$551,200

White Mesa Mill Reclamation Plan

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ID	Name	Total Cost	Var.	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
27	Mobilization per 10k dollars	13 1	0h	0h	9/1/95	9/1/95	$131,000	$0	$0	$131,000

ID				
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
28	Manager/Engineer	1	4866h	0h	1/2/95	5/1/97	$280,731	$0	$0	$280,731

ID				
63	Radiation Safety Officer	$175,457	#####	$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
29	Radiation Safety Officer	1	4866h	0h	1/2/95	5/1/97	$175,457	$0	$0	$175,457

ID				
64	Secretary	$70,183	#####	$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
30	Secretary	1	4866h	0h	1/2/95	5/1/97	$70,183	$0	$0	$70,183

ID				
65	Clerk	$58,486	#####	$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
31	Clerk	1	4866h	0h	1/2/95	5/1/97	$58,486	$0	$0	$58,486

ID				
66	Environmental Technician	$93,577	#####	$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
33	Environmental Technician	1	4866h	0h	1/2/95	5/1/97	$93,577	$0	$0	$93,577

ID				
67	Maintenance Foreman	$55,000	#####	$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
34	Maintneance Foreman	1	2080h	0h	1/2/95	12/29/95	$55,000	$0	$0	$55,000

ID				
68	Chemist	$45,000	#####	$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
37	Chemist	1	2080h	0h	1/2/95	12/29/95	$45,000	$0	$0	$45,000

ID				
69	Security	$110,596	#####	$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
35	Security Personnel	3	11502h	0h	1/2/95	11/1/96	$110,596	$0	$0	$110,596

ID				
70	Safety Engineer	$40,000	#####	$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
36	Safety Engineer	1	2080h	0h	1/2/95	12/29/95	$40,000	$0	$0	$40,000

ID				
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
38	Misc Supplies	1	4866h	0h	1/2/95	5/1/97	$182,475	$0	$0	$182,475

White Mesa Mill Reclamation Plan

5/15/95

ID	Name	Total Cost	Vari.	Actual
72	Health Physics Costs (Mill Decom)	$112,000	#####	$0

ID	Resource Name	Units	Work	Delay	Scheduled Start	Scheduled Finish	Cost	Plan Cost	Act. Cost	Rem. Cost
41	Health Physics Program Costs	1	1700h	0h	1/2/95	10/25/95	$112,000	$0	$0	$112,000

$8,382,101	#####	$0

ENERGY FUELS NUCLEAR, INC.
Cost Estimate

E/PROJECT: WHITE MESA   Date: 5/3/95   Calc by: RVH   Sheet 1 of 1

ASSUMPTIONS

TAILINGS COVER –

- NOMINAL 4 FOOT RANDOM FILL LAYER WILL BE REQUIRED FOR BRIDGING OVER TAILS.
- 2 FOOT OF CLAY/CLAYEY MATERIAL FOR RADON BARRIER
- 2 FOOT OF RANDOM FILL
- 3" OF [illegible] ROCK [illegible] IN FOR ARMOUR, IS "DESERT PAVING"

CELL 4A

- [illegible] WILL BE [illegible] TO CELL 3.
- [illegible] WILL BE REMOVED AND PLACED IN CELL 3
- ANY CONTAMINATED SOILS WILL BE REMOVED & PLACED IN CELL 3.
- REMAINING DIKE & BOTTOM MATERIALS WILL BE UTILIZED AS STOCKPILES FOR CLAY & RANDOM FILL. COST ASSOCIATED WITH THIS ACTIVITY ARE INCLUDED IN THE COVER COSTS FOR THE OTHER CELLS.

CELL 2

- MILL [illegible] TO [illegible] MATERIALS FROM DECON & CELL 1 & CELL 2 WORK WILL BE ADEQUATE TO FILL THE CELL TO FREEBOARD.

CELL 3

ANY REMAINING VOLUME IN SLIMES AREA WILL BE UTILIZED FOR DEBRIS DISPOSAL.

ENERGY FUELS NUCLEAR, INC.
Cost Estimate

E/PROJECT WHITE MESA MILL Date 5/5/95 Calc by E. Van Horn Sheet 1 of 5

MILL DECOMMISSIONING

A) REMOVAL OF CONTAMINATED MATERIAL FROM ORE PAD

- ASSUME –
  - 18" WILL HAVE TO BE REMOVED
  - PAD = [500 × 1500] + [450 × 600] = 1,020,000 ft^2
    = 23.4 ACRES

∴ VOLUME [1,020,000 ft^2 × 1.5 ft] ÷ 27 = 41,310 yd^3

say 41,300 yd^3

B) REMOVAL OF CONTAMINATED SOILS FROM MILL YARD

ASSUME –
- 18" WILL HAVE TO BE REMOVED
- AREA = [1150 × 520] + [650 × [illegible]] = 1,130,000 ft^2

VOLUME = [1,130,000 ft^2 × 1.5 ft] ÷ 27 = 62,778 yd^3

say 62,800 yd^3

C) REMOVAL OF CONTAMINATED SOILS FROM ORE STORAGE AREA

ASSUME
- 18" WILL HAVE TO BE REMOVED

AREA = 400 × 300 = 120,000 ft^2

VOLUME [120,000 × 1.5] ÷ 27 = 6,667 yd^3

say 6,700 yd^3

ENERGY FUELS NUCLEAR, INC.
Cost Estimate

E/PROJECT White Mesa Recl. Date 5/8/95 Calc by R. Van Horn Sheet 2 of 5

Mill Decom. (cont.)

D Removal of Contaminated Soils from "North Forty" Storage Area

Assume –

6" will have to be removed

Area is 950' × 500' = 475,000 ft²

∴ Volume [475,000 ft² × 0.5 ft] ÷ 27 = 8796 yd³

say 8,800 yd³.

E

Description	Qty	Nominal 637 Eff	Mult	Resulting Efficiency	637 Hrs	FLT Hrs
Ore Pad	41,300	256	.75	192	215	54
Mill Yard	62,800	256	.50	128	490	123
Ace Storage	6,700	256	.50	128	52	12
Storage Area	8,800	256	.50	128	69	17

ENERGY FUELS NUCLEAR, INC.
Cost Estimate

E/PROJECT White Mesa Mill Date 3/5/95 Calc by R Van Horn Sheet 3 of 5

MILL DECOMMISSIONING

F) Assume original 1985 UMETCO manhours were realistic @ 35,360 hrs. If job were to take 6 months, the crew size is

$$\frac{35{,}360\text{ hr}}{1} \times \frac{\text{wk}}{26\text{ wks}} \times \frac{\text{man-wk}}{40\text{ hr}} = \boxed{34\text{ men}}$$

Work Description	% Assigned	Hours
Mill Building	23	8133
Pre Leach	5	1768
Coarse Ore	9	3182
SX	18	6365
CCD	15	5304
Sample Plant	4	1415
Acid Tank	5	1768
PL Thickener	7	2475
Boiler	9	3182
Vanadium Oxidation	5	1768
	100	35,360

G) Tool Rental for small tools will be based on $5.00/hr worked. Includes:

- Safety Gear
- Bottled Gases
- Hand Tools
- Welding / Torches.

MILL DECON

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

	AREA
ORE PAD.	1,020,000
MILL YARD	1130,0000
ACID STORAGE	120,000
STORAGE AREAS	475,000
	2,745,000

2,745,000 ÷ 43560 ft²/A = 63 ACRES.

TOPSOIL NECESSARY =

6" THICK

2,745,000 ft² × $\frac{6}{12}$ ft = 1,372,500 ft²

= 50,833 yd³

So 50,850 yd³

EQUIPMENT REQUIREMENTS —

ASSUME 67 EFFICIENCY OF 256 BCY/HOUR

50,850 yd³ × $\frac{1 \text{ Hour}}{256 \text{ BCY}}$ = 199 hrs

So 200 hrs

ENERGY FUELS NUCLEAR, INC.
Cost Estimate

E/PROJECT White Mesa Decon Date ..... Calc by ..... Sheet 5 of 5

Mill Decon (Cont)

I) Assume 1985 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

30 ton Crane Costs [Less operator] $5500 /month

5500 — 172 HR/MO = 31.79

Say $40.00/HR

Week	65 ton %	65 ton Hrs	30 ton %	30 ton 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

ENERGY FUELS NUCLEAR, INC.
Cost Estimate

SITE/PROJECT White Mesa Rec Date 5/3/97 Calc by [illegible] Sheet 1 of 3

Volume Calculations for Cell 1

A Crystal Volume —

Cell Area is 53 Acres
Average Crystal Depth 2 FT

$53A \times 43{,}560\ ft^2/A \times 2$ ft thick = 4,617,360 ft^3
= 171,013 yd^3
say **171,000 yd^3**

B Soil Cover over PVC Liner

Cell Area is 53 Acres
Average Soil Depth is 18"

$53A \times 43{,}560\ ft^2/A \times 1.5$ = 3,463,020
= 128,260 yd^3
say **128,250 yd^3**

C PVC Liner

Assume Liner & Associated Material (voids) is 6" Thick

$53A \times 43{,}560\ ft^2/A \times 0.5$ ft Thick = 1,154,340 ft^3
= 42,753 yd^3
say **42,750 yd^3**

D Contaminated Material Under Liner

Assume Average of 1 Foot over cell

$53A \times 43{,}560\ ft^2/A \times 1.0$ Feet Thick = 2,308,680 ft^3
= 85,507 yd^3
say **85,500 yd^3**

ENERGY FUELS NUCLEAR, INC.
Cost Estimate

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

VOLUME CALCULATION 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

ENERGY FUELS NUCLEAR, INC.
Cost Estimate

E/PROJECT White Mesa Cell Date 3/6/95 Calc by [illegible] Sheet 3 of 3

CELL 1 EFFICIENCY CALCULATIONS

PER TOM GILLE'S 1/95 CALCULATIONS THE HAUL UNITS ARE RATED AT 59 BCY/HOUR FOR THE HAUL BETWEEN CELL 1 & CELL 4A. WHILE ALL CELL 1 MATERIALS ARE NOW SCHEDULED FOR CELL 3, WE WILL USE THESE FIGURES IN LIEU OF A NEW ROUTE CALCULATION. THIS WILL RESULT IN A CONSERVATIVE ESTIMATE.

ASSUME THAT [illegible] 980 [illegible] 245 WILL SUPPORT EFFORTS

DESCRIPTION	769	988	245	QTY	769 HRS	FLEET HRS
[illegible] RESIDUAL	4	1	1	171,000	2899	725
SOIL LINER	4	1	1	128,250	2174	544
PVC LINER	4	1	1	42,750	724	181
[illegible] MATERIALS	4	1	—	85,500	1449	362
TOTAL FLEET HOURS						1812

ASSUME WHEEL [illegible] 3 [illegible] TOTAL FLEET HOURS.

[illegible] × 1812 = 3426 hrs

ENERGY FUELS NUCLEAR, INC.
Cost Estimate

E/PROJECT White Mesa Recl. Date 5/3/95 Calc by E. Ve[illegible] Sheet 1 of 4

VOLUME CALCULATION FOR CELL 2

1) RANDOM FILL ALREADY PLACED

FROM CAD, AREA OF CELL 2 = 3,028,052 ft²
= 69.5 Acres
say **70 Acres**

AREA OF RANDOM FILL PLACED = 2,480,796 ft²
= 63.8 Acres

ASSUME FILL THICKNESS MINIMUM OF 3 ft . . .

∴ VOLUME PLACED = 2,480,796 × 3 = 7,442,388 ft³
= 275,644 yd³
say **275,500 yd³**

2) 12" LIFT OF RANDOM FILL LEFT TO PLACE

3,028,052 − 2,480,796 = 547,256 ft²

∴ 3 feet thick × 547,256 ft² = 1,641,768 ft³
= 60,806 yd³
say **60,800 yd³**

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

1 ft × 70 A × 43,560 ft²/A = 3,049,200 ft³
= 112,933 yd³
say **112,950 yd³**

ENERGY FUELS NUCLEAR, INC.
Cost Estimate

SITE/PROJECT White Mesa Cell Date 3/3/95 Calc by [illegible] Sheet 2 of 4

4) CLAY LAYER (2 ft thick)

2 ft × 70 A × 43,560 ft²/A = 6,098,400 ft³

= 225,866 yd³

say **225,900 yd³**

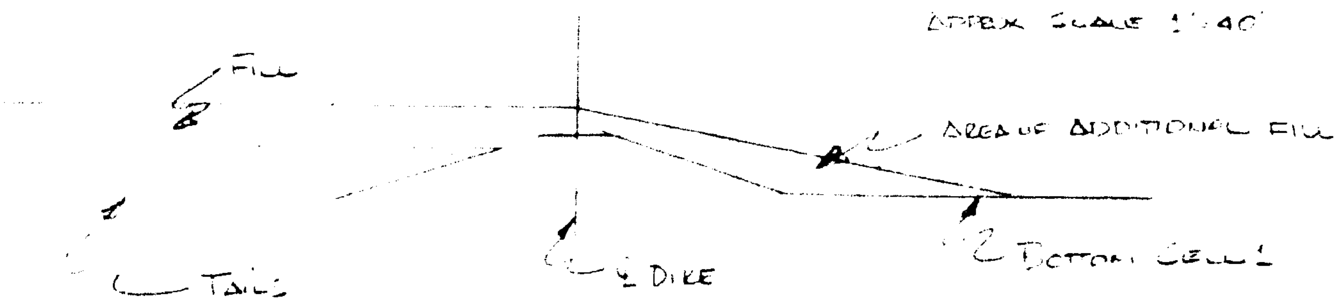
5) UPPER RANDOM FILL LAYER (2 FEET) [COVER ONLY]

2 ft × 70 A × 43,560 ft²/A = 6,098,400 ft³

= 225,866 yd³

say **225,900 yd³**

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



$$\text{AREA} = \left[\frac{90 \times 17}{2}\right] - \left[\frac{40 \times 17}{2}\right] = 425 \text{ ft}^2$$

GIVEN THAT NORTHERN PERIMETER IS 3400 feet LONG & THAT WESTERN DIKE IS 500 FEET ...

$$[3{,}400 + 500] \times 425 \text{ ft}^2 = 1{,}657{,}500 \text{ ft}^3$$

= 61,389 yd³

say **61,400 yd³**

ENERGY FUELS NUCLEAR, INC.
Cost Estimate

E/PROJECT: White Mesa Recl   Date: 5/3/95   Calc by: R Van Horn   Sheet 3 of 4

7) Rock Armor [Assuming Desert Pavement]

D_{50} = 0.5 [Assume Minimum Thickness Practical = 2"

∴ Thickness of Rock to be Pressed into Top of Fill:

$70 A \times 43,560\ ft^2/A \times 1/6 = 508,200\ ft^3$

$= 18,822\ yd^3$

say **18,850 yd^3**

8) Rock Armor on Side Slopes

$[2\ 400 + 500] \times 95$ Slope Dist $\times 1/6 = 61,750\ ft^3$

$= 2,287\ yd^3$

say $=$ **2,300 yd^3**

9) Rock Armor on Side Slopes Assuming D_{50} = 4" Riprap

@ D_{50} 4" Placed Thickness of 2 × dia = 8"

∴ $[2\ 400 + 500] \times 95'$ Slope Dist $\times 8/12 = 239,200\ ft^3$

$= 8,859\ yd^3$

$=$ **8,850 yd^3**

[illegible]

[illegible] (delivered to stockpile)

ENERGY FUELS NUCLEAR, INC.
Cost Estimate

[illegible]E/PROJECT White Mesa [illegible] Date 5/5/95 Calc by [illegible] Sheet 4 of 4

CELL 2 WORK.

AS PER T [illegible] CALCS OF 3/95, MATERIAL HAULS WILL BE ESTIMATED [illegible] 3 REPRESENTATIVE ROUTE MODELS AND ASSIGN % TO THEM

ROUTE	% OF TOTAL
1	24%
2	36%
3	40%

EFFICIENCIES AS CALCULATED BY CATERPILLAR FPC

627D [illegible]	1	2	3	WEIGHTED AVG.	PER EACH SCRAPER
CLAY	340	432	534	453	227
FILTER	537	398	598	511	256
RANDOM	537	398	598	511	256
VEGETATIVE	548	382	495	467	234

Therefore

DESCRIPTION	[illegible]	Eff	SCRAPER HOURS	FLEET HOURS	
[illegible] LIFT	60,850	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 [illegible]	61,400	256	240	60	
[illegible]	18,950	256	74	19	
[illegible] (1690)	8850	59	150	[illegible]	

* Because of irregularities in the tailings surface & potential for settling after the [illegible] the budget [illegible] these values need to be increased by 30% to [illegible] for [illegible].

ENERGY FUELS NUCLEAR, INC.
Cost Estimate

E/PROJECT White Mesa Cell Date 5/4/05 Calc by [illegible] Sheet 1 of 5

VOLUME CALCULATIONS FOR CELL 3

1) RANDOM FILL ALREADY PLACED

FROM CAD, AREA OF CELL 3 = 3,060,286 ft²

= 70.25 Acres

(SAY) 70 Acres

AREA OF RANDOM FILL PLACED = 851,820 ft²

= 18.30 Acres

ASSUME FILL THICKNESS AVERAGE = 3 ft

VOLUME PLACED = 851,820 × 3 = 2,555,460 ft³

= 94,647 yd³

(SAY) 94,650 yd³

2) ESTIMATE RANDOM FILL LEFT TO PLACE

3,060,286 − 851,820 = 2,208,466 ft²

3 ft thick × 2,208,466 ft² = 6,625,398 ft³

= 245,396 yd³

(SAY) 245,400 yd³

3) ESTIMATE = RANDOM FILL TO PLACE (2' COMPACTED)

70 A × 700 × 43,560 ft²/A = 3,049,200 ft³

= 112,933 yd³

(SAY) 112,950 yd³

ENERGY FUELS NUCLEAR, INC.
Cost Estimate

E/PROJECT White Mesa Mill Date [illegible] Calc by [illegible] Sheet 2 of [illegible]

Cell 3 Volume Calc

4) Clay Layer (2 ft thick)

2 ft × 70 A × 43,560 ft²/A = 6,098,400 ft³

= 225,866 yd³

(see [illegible] #[illegible])

say 225,900 yd³

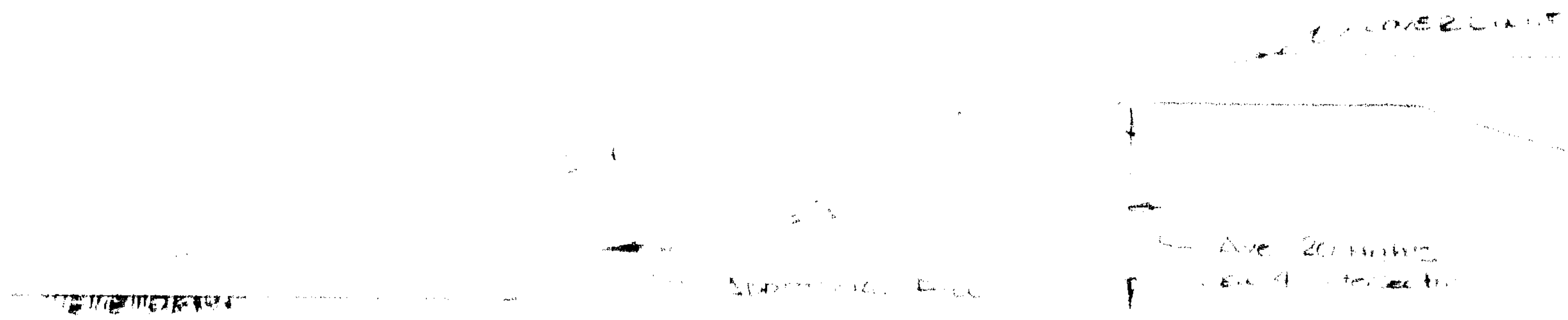
5. Upper Random Fill [illegible]

2 ft × 70 A × 43,560 ft²/A = 6,098,400 ft³

= 225,866 yd³

say 225,900 yd³

6. [illegible]



Area [illegible] 625 ft²

[illegible] the [illegible] 3500'

Volume = 625 × 3500 = 2,187,500 ft³

81,018 yd³

say 81,000 yd³

ENERGY FUELS NUCLEAR, INC.
Cost Estimate

E/PROJECT [illegible] Date [illegible] Calc by [illegible] Sheet [illegible] of

ENERGY FUELS NUCLEAR, INC.
Cost Estimate

MINE/PROJECT White Mesa [illegible] Date [illegible] Calc by [illegible] Sheet 4 of [illegible]

[illegible] Area [illegible] Assuming D_{50} 4" [illegible]

[120 [illegible] x [illegible]] + [[illegible] x [illegible]] = [illegible] ft^2

@ D_{50} 4" Placed Thickness = 2 x [illegible]

= [illegible] x [illegible] = 344,800 ft^3

[illegible] yd^3

say [[illegible]50 yd^3]

[illegible]

ENERGY FUELS NUCLEAR, INC.
Cost Estimate

E/PROJECT [illegible] Date [illegible] Calc by [illegible] Sheet [illegible] of [illegible]

[illegible]

ENERGY FUELS NUCLEAR, INC.
Cost Estimate

E/PROJECT [illegible] Date [illegible] Calc by [illegible] Sheet [illegible] of [illegible]

ENERGY FUELS NUCLEAR, INC.
Cost Estimate

E/PROJECT [illegible] Date [illegible] Calc by [illegible] Sheet [illegible] of [illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14

ENERGY FUELS NUCLEAR, INC.
Cost Estimate

MINE/PROJECT [illegible] Date [illegible] Calc by R. Ve[illegible] Sheet 1 of 1

[illegible] [illegible] 5,985

EFN [illegible] FUEL

[illegible] [illegible]

[illegible] ENGAGING TOOLS (GET)

[illegible] 15%

[illegible] AGE, [illegible]

[illegible] TIRE & GET [illegible]

[illegible]

[illegible] MONTH

[illegible]	[illegible]	# [illegible]	EXPENDABLES	TOTAL	[illegible]/T RATE
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	66.00
[illegible]	[illegible]	[illegible]	[illegible]	66.71	34.00
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	28.00
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	30.00
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	32.00
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	48.00
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	28.00
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	30.00
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	30.00
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18.00
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	24.00
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	34.00

[illegible] MINE CHARGE OF $[illegible] [illegible] BE INCLUDED EACH MONTH [illegible] BUTLER MOBILIZATION & WILL END WITH BUTLER DEMOB

CAT

Butler Machinery Company • (701) 232 0033 • FAX (701) 298 1717 • 1351 Page Dr. • Box 9559 • Fargo, ND 58106

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.

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 LUS 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 'EPAIR, 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

MODEL	QTY	MONTHLY RENTAL RATE	HOURS ALLOWED PER MONTH	EXCESS HOUR CHARGE	MINIMUM GUARANTEED NUMBER OF MONTHS RATE BASED UPON	TOTAL** FREIGHT CHARGES TO & FROM	MAINTENANCE RATE PER HOUR
*637E	4	$21,000 EA.	176 EA.	$66 EA.	3 EA.	$10,000 EA.	$1.95 EA.
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
325C	1	9,500	176	30	3	7,000	1.00
980F	1	10,000	176	32	3	7,000	1.05
988F	1	15,000	176	48	3	8,000	1.30
769C	4	9,000 EA.	176 EA.	28 EA.	3 EA.	7,000 EA.	1.35 EA.
45B	1	16,000	176	50	3	12,000	1.25
0,000 GALLON WATER WAGON	1	10,000	176	30	3	8,000	1.70
,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