



# COLORADO DIVISION OF MINERALS AND GEOLOGY MINERALS PROGRAM INSPECTION REPORT PHONE: (303) 866-3567

The Division of Minerals and Geology has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance of the mining operation with the permit and the regulations of the Mined Land Reclamation Board. The report notes 1) Areas of successful compliance; 2) Problems and suggested corrective actions and/or 3) Possible violations to be considered for possible enforcement action by the Mined Land Reclamation Board. OPERATORS SHOULD READ THIS REPORT CAREFULLY BECAUSE IT MAY REQUIRE CORRECTIVE ACTION AND/OR RESPONSES TO THE DIVISION IN ORDER TO AVOID CONSIDERATION OF POSSIBLE ENFORCEMENT ACTION BY THE MINED LAND RECLAMATION BOARD.

MINE NAME: Gold King Mine **OPERATOR:** Gold King Mines Corporations COUNTY: San Juan MINERAL: Au, Ag, Cu, Pb, Zn TYPE OF OPERATION: 110-d Underground INSPECTOR(S): Wallace H. Erickson, Harry H. Posev MINE ID # OR PROSPECTING ID #: M-1986-013; INSPECTION DATE 4/8/04 DATE OF COMPLAINT INSPECTOR'S INITIALS WHE TIME OF DAY (MILITARY) 1200 INSPECTION TYPE CODE(1) SI POST INSP. CONTACTS(2) NO JOINT INSP. AGENCY CODE(2) NO REASON FOR INSP. CODE(3) ΙE WEATHER CODE(4): BOND CALCULATION TYPE(6): CL BC **OPERATOR REP. PRESENT:** None Present

- INSPECTION TYPE CODE [CL-IN: IL=Illegal Operation, Ml=Monitoring, MP=Mineral Prospect, Si=Surety-related, PR=Pre-operation]
   POST INSPECTION CONTACTS AND JOINT INSPECTION AGENCY CODE [CL-AG: NO=None, BL=BLM, CH=Colo. Dept. Health; CL=Land Board, CT=Citizen; CW=Wildlife, FS=Forest Service, HW=Hwy. Dept., LG=Local Government, SE=State Engr.]
- 3. REASON FOR INSPECTION CODE [CL-RS: AG=Other Agency Request, CT=Citizen Complaint, IE=Normal I&E Program, HP=High Priority, PY=Priority]
- 4. / <u>WEATHER CODE</u> [CL-WE: CL=Cloudy, CR=Clear, IN=Inciement prevented inspection, RN=Raining, SN=Snowing, WD=Windy]
  5. <u>BOND CALCULATION TYPE CODE</u> [BC=Complete Bond, BP=Partial Bond, NN=None]

This list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each. IF PB OR PV IS INDICATED, YOU SHOULD READ THE FOLLOWING PAGES CAREFULLY IN ORDER TO ASSURE COMPLIANCE WITH THE TERMS OF YOUR PERMIT AND APPLICABLE RULES AND REGULATIONS. If PV is indicated, you will be notified under separate cover when the Mined Land Reclamation Board will consider possible enforcement action.

# **GENERAL INSPECTION TOPICS**

(AR) RECORDS <u>Y</u>	(FN) FINANCIAL WARRANTYPV	(RD) ROADS <u>N</u>
(HB) HYDROLOGIC BALANCE N	(BG) BACKFILL & GRADING <u>N</u>	(EX) EXPLOSIVES <u>N</u>
(PW)PROCESSING WASTE/TAILINGS N	(SF) PROCESSING FACILITIES N	(TS) TOPSOIL <u>N</u>
(MP) GENL MINE PLAN COMPLIANCE. PB	(FW)FISH & WILDLIFE <u>N</u>	(RV) REVEGETATION <u>N</u>
(SM) SIGNS AND MARKERS N	(SP) STORM WATER MGT PLAN N	(SB) COMPLETE INSP N
(ES) OVERBURDEN/DEV. WASTE N	(SC) EROSION/SEDIMENTATION N	(RS) RECL PLAN/COMP PB
(AT) ACID OR TOXIC MATERIALS N	(OD)OFF-SITE DAMAGE <u>N</u>	(ST) STIPULATIONS NA

Y=Inspected and Found in Compliance PV=Inspected and Possible Violations Noted PB=Inspected and Problems Noted N = Not Inspected NA = Not Applicable

MINE ID # OR PROSPECTING ID # M-1986-013 INSPECTION DATE 4/8/04

INSPECTOR'S INITIALS WHE

# **OBSERVATIONS**

This inspection occurred to document the extent of affected lands and to review the cost of reclamation and corresponding amount of financial warranty required for the operation as of March 24, 2004, and to prepare information relative to a then-proposed April, 2004 Board hearing over loss of financial warranty.

The Gold King Mine is located approximately 8 miles north of Silverton, in the NW ¼ of Section 21, T42N, R7W, NMPM, San Juan County, Colorado. The permit is approved for 9.9 acres affected area for underground extraction of precious metals ore. DMG set a \$47,270 financial warranty, which covers surface reclamation. Affected lands will be reclaimed to support wildlife habitat post-mining land use.

The Gold King Mine is located at 12,000 feet elevation. DMG could not access the site due to snow depth and unplowed roads. DMG will return and conduct a complete inspection of all permit areas after snowmelt.

Operations have been in Temporary Cessation status since October 1, 1998. Therefore, activities at the permit area have been limited to maintenance and/or compliance activities since 1998, and installation of the pipeline from the Level 7 Gold King portal to the American Tunnel facility. DMG documents indicate that although the permit is approved for 9.9 acres affected area, mining activities have only affected 4.67 acres. The 4.67 acres includes four portals with associated access roads and waste rock stockpiles, all established prior to the DMG permit. The four portals include the Level 1 portal, highest elevation of Gold King Mine workings and utilized as ventilation and emergency escape; the Samson portal below; and the Level 7 portal, lowest elevation of Gold King workings and utilized as primary mine access. Some time after permit issuance but prior to 1995, the Level 7 portal caved and the operator drove a new portal (fourth portal) beside the old collapsed portal. Permit application documents indicate that all portal for the Gold King Mine were dry portals with no significant mine discharge, presumably due to drawn-down of the American Tunnel portal, which is lower in elevation than the Level 7 portal.

During 1995 the first of three hydrologic bulkheads was constructed by Sunnyside Gold Corporation in the American Tunnel. The mine pool created behind the bulkhead in the American Tunnel reached the same approximate elevation as the Level 7 Gold King portal. DMG records indicate mine drainage from the Gold King Level 7 portal beginning in late 1995. Permit documents indicate that the original permittee for the Gold King Mine did not anticipate flooding of the Gold King Mine from the American Tunnel mine pool due to the absence of man-made connection in the underground workings between the two mines. Permit documents indicate that underground workings for the Gold King Mine do not approach the workings for the American Tunnel closer than 500 feet.

In May 2001, Water Quality Control Division (WQCD) issued Colorado Discharge Permit System (CDPS) CO-0027529 to Gold King Mines Corporation for the Level 7 portal discharge. In October 2002, Gold King installed a 3,500-foot pipeline from the Level 7 portal to the water treatment facility at American Tunnel, to convey the mine drainage to the treatment facility. In January 2003, ownership of the water treatment facility and the associated WQCD permit was transferred to Gold King Mines Corporation. Currently, DMG is reviewing a new permit application, submitted by Gold King Mines Corporation, to bring the American Tunnel water treatment facility under a new reclamation plan. The reclamation permit for the American Tunnel water treatment facility will be a separate permit and independent from the Gold King Mine permit.

The pipeline from the Level 7 portal to the water treatment facility was originally installed to ensure compliance with the WQCD discharge permit issued first to Sunnyside Gold and transferred to Gold King Mines. The DMG did not ask for and Gold King Mines did not submit plans for adding the pipeline to the Gold King permit. However, upon further review, DMG is requiring that the pipeline be added to the Gold King permit and that bond be established for its maintenance, even though it is anticipated that this structure may remain after mining and reclamation have been completed. As of the date of this inspection DMG has not received the pipeline revision to the Gold King reclamation plan.

DMG has reviewed the current cost of reclamation totaling \$47,119. Therefore, the existing \$47,270 financial

# MINE ID # OR PROSPECTING ID # M-1986-013 INSPECTION DATE 4/8/04

### INSPECTOR'S INITIALS WHE

warranty appears sufficient to ensure reclamation. Copy of DMG's April 30, 2004 reclamation cost estimation, totaling \$47,119, is enclosed. Specific reclamation tasks and their costs are itemized in the enclosed 12 pages of summaries, calculations and data sheets.

The existing financial warranty does not include reclamation maintenance costs associated with the pipeline from the Level 7 portal to the American Tunnel water treatment plant because the existing reclamation plan pre-dates the pipeline and did not anticipate such pipeline. Reclamation maintenance cost for the pipeline will be included during the review of the pipeline revision when submitted by Gold King Mines Corporation. It is anticipated that DMG will calculate reclamation maintenance costs after a site visit, which will take place after snowmelt this season.

The previously existing \$47,270 financial warranty was in the form of corporate surety bond 400JY8370 with St. Paul Fire & Marine Insurance Company in the amount of \$42,000; <u>and</u> corporate surety bond 052480G080A with Travelers Indemnity Company, in the amount of \$5,000; <u>and</u> cash bond CA-86013, in the amount of \$270.

On March 24, 2004, the corporate surety bond 400JY8370, in the amount of \$42,000, canceled. During the April 28, 2004 Board meeting, the Board found Gold King Mines Corporation in violation of its permit conditions and of the Act and Rules for failure to maintain the financial warranty. The notice of violation for failure to maintain the financial warranty, MV-2004-024, will order Gold King Mines Corporation to replace the canceled bond within 30 days from the signature date of the Board Order. If Gold King Mines Corporation does not comply with the Board Order, DMG will pursue revocation of the permit and forfeiture of the entire \$47,270 financial warranty.

Pursuant to Minerals Rules and Regulations, a copy of this report is being forwarded to St. Paul Fire & Marine Insurance Company to document the extent of affected lands on the date of expiration of the bond.

Responses to this inspection report should be directed to the Division of Minerals and Geology, 701 Camino del Rio, Room 125, Durango, Colorado 81301, Attn: Wally Erickson, phone no. 970-247-5469.

1 d. L. Comaci Addies	33	cc. Harry r osby, Divid	
		□ CE	
NAME	Stephen C. Fearn	□ BL	
OPERATOR	Gold King Mines Corporation	□ FS	
STREET	P.O. Box 299	□ HW	
CITY/STATE/ZIP	Silverton, CO 81433	☐ HMWMD (CH)	
		□ SE	
		x WQCD, Greg Brand, District Eng	ineer
		x St. Paul Fire & Marine Insurance	e Co.,
		Kellev Blake	

## MINE ID # OR PROSPECTING ID # M-1986-013 INSPECTION DATE 4/8/04

# INSPECTOR'S INITIALS WHE

The following problems (PB) and/or possible violations (PV) (and suggested corrective actions) were identified during this inspection. The problems should be corrected by the dates given, or they will become possible violations. The possible violations should be corrected by the dates given to reduce their severity when considered by the Mined Land Reclamation Board. The inspector noted on the previous page should be notified of all corrective actions taken.

# PROBLEMS/POSSIBLE VIOLATIONS AND **CORRECTIVE ACTIONS**

1. On March 24, 2004, the corporate surety bond 400JY8370, in the amount of \$42,000, canceled. During the April 28, 2004 Board meeting, the Board found Gold King Mines Corporation in violation of its permit conditions and of the Act and Rules for failure to maintain the financial warranty. The Board Order containing the notice of violation for failure to maintain the financial warranty. MV-2004-024, will order Gold King Mines Corporation to replace the canceled bond within 30 days from the signature date of the Board Order. If Gold King Mines Corporation does not comply with the Board Order; DMG will pursue revocation of the permit and forfeiture of the entire \$47,270 financial warranty.

CORRECTION DATE

To Be Determined PB or PV: PV TOPIC(S): FW

CORRECTIVE ACTION: Comply with the corrective actions specified in the Board Order for MV-1004-024.

2. In October 2002, Gold King installed a 3,500-foot pipeline from the Level 7 portal to the water treatment facility at American Tunnel. The pipeline was originally installed to ensure compliance with the WQCD discharge permit. DMG did not ask for and Gold King Mines did not submit plans for adding the pipeline to the Gold King permit. Upon further review, DMG is requiring that the pipeline be added to the Gold King permit and that bond be established for its maintenance, even though it is anticipated that this structure may remain after mining and reclamation have been completed.

June 7, 2004 PB or PV: PB TOPIC(S): MP <u>RS</u>,\_,

CORRECTIVE ACTION: Within 30 days of the signature date of this inspection report, by June 7, 2004, submit either an amendment to the existing 110-d permit OR submit a conversion application, converting the existing 110-d permit to a 112-d permit, which includes all portions of the pipeline into the Gold King permit. The new permit application shall provide full engineering plans and materials utilized for the pipeline. The new permit application shall include cost estimation addressing maintenance of the pipeline for a five-year period. including replacement of portions or the entire pipeline during winter conditions. as well as final removal of the pipeline and reclamation of lands affected by the pipeline.

Attachment: DMG's 4/30/04 reclamation cost estimation totaling \$47,119; and Certificate of Service

# CIRCES Cost Estimating Software COST SUMMARY FORM

PROJ	ECT IDENTIFICATION	•					
Date	: 30-Apr-2004	Permit or job no.:	M-1986-013	Site	Gold Kir	ng Mine	
User	: WHE	Abbreviation:	none	State	Colorad	0	-
		Filename :	M013-000	County	San Jua	п	
	Agency or organization name : I			<u> </u>			
	Permit or job action:	Routine 110-d bond up	date		·	<del></del>	
TACK	LIGT (DIDEAT COSTO)			1 5004	) c. cc+	1 740%	DIDEOT
	LIST (DIRECT COSTS)	DESCRIPTION		FORM	FLEET		DIRECT
NO.	TASP	DESCRIPTION		USED	SIZE	HOURS	COST
001	-Close 4 portals			mineseal	1	16.00	\$7,469
				***************************************	<del> </del>		
002	-Rip & grade 4.67 acres for pos	itive drainage		dozer	1	32.22	\$4,886
003	-Haul and place earthen cover	over waste rock dump	s	truck1	1	24.07	\$10,424
004	-Revegetate 4.67 acres affected	d land		revege	1	8.00	\$8,692
		<del></del>				10.00	
005	-Haul reclamation equipment to	and from job site		mobilize	9	10.00	\$4,927
006	-Remove misc debris, assume	20'1 v 10'H v 10'W @	\$0.22/of	NA NA	1	4.00	\$440
	-nerrove misc debris, assume	EUL X IUN X IUW W	<b>90.22/CI</b>		<del></del>	4.00	3440
				<del></del>			
			, ,	+			
				<u> </u>		-	
			· · · · · · · · · · · · · · · · · · ·				
	<u> </u>				l		
					BTOTALS :	94.29	\$36,838
	* includes inflation factor adjustment of :	NA NA	%	τ	OTAL DIRE	CT COST • –[	\$36,838
INDIDE	SCT CORTS						
IIVUINI	ECT COSTS OVERHEAD AND PROFIT -	Liability insurance :	1.55	% of direct		total =	\$571
	OVERHERS AND PROTTI	Performance bond :	1.05	% of direct		total =_	\$387
		Job superintendent :	47.14	hrs*\$/hr:		total =	\$1,650
		Profit :	10.00	% of direct		total =	\$3,684
	* assume net hours = 50% of task hours					TALO&P=	\$6,292
	LEGAL - ENGINEERING - PROJECT M.	ANAGEMENT -		CONTRACT AM		_	\$43,130
	Financial warranty processing	(legal/related costs):		•	,	total =	
	Engineering work and/or con	• •	4.25	% of cntr.	NA	total =	\$1,833
	Reclamation management a	•	5.00	% of cntr.	NA	total =	\$2,156
	CONTINGENCY -		NA*	NA		total =	NA
	* contingencies accounted for at task leve	y .		70	TAL INDIR	ECT COST =	\$10,281
			TOTAL BONI	) TNUOMA	direct + i	ndirect) =	\$47,118

# CIRCES Cost Estimating Software SAFEGUARDING UNDERGROUND OPENINGS

#### PROJECT IDENTIFICATION

COJECT IDENTIFICATION						
Task #	: 001	State	: Colorado		Permit/job #	M-1986-013
Date	: 04/30/2004	County	: San Juan		Abbreviation	none
User	: WHE	Site	: Gold King Mil	ne	Filename :	M013-001
Agency or organization name	: DMG				<u> </u>	
Permit or other job action	: Routine 110-D Bond Update	9				
Task description	Close 4 portals					
NIT COSTS		Equipment cost	data source :	NA	Shift basis :	<u>NA</u>
PENING DESCRIPTION	DIMENSIONS	CLOSURE METHOD	QUANTITY	UNIT	UNIT COST	TOTAL COST
	1					

UNIT COSTS		Equipment cost		NA	Shift basis	
OPENING DESCRIPTION	DIMENSIONS	CLOSURE METHOD	QUANTITY	UNIT	UNIT COST	TOTAL CO
Double City American	101101101	Aulta haat #11 /aus	1-1-0		A-700 00	40.474.0
Backfill 4 portals	12' x 12' x 40'L	Adit - backfill (ea)	4.00	EA	\$738.00	\$2,952.00
Drain pipe for 2 portals	80'L per portai	PVC drain pipe, 6" d. (If)	160.00	LF	\$4.52	\$723.20
Culvert access, 2 portals	12' x 12'	Adit - cmp w/gr.door (ea)	2.00	EA	\$1,897.00	\$3,794.00
					1	
	<del> </del>				<del> </del>	<del></del>
					<u> </u>	
			<del> </del>		<del>                                     </del>	<del></del>
	·				<del> </del>	<u> </u>
**					<del> </del>	
			<del> </del>		<del> </del>	
					<del> </del>	<u> </u>
			<del> </del>		<del> </del> -	
					<del>  .                                   </del>	
	<del> </del>					
<u> </u>						ļ
			-	<del></del>	<del> </del>	ļ
			1 7			

# CIRCES Cost Estimating Software BULLDOZER WORK

Task #:	DENTIFICATION 002	State	: Colorado		Permit/ioh#	: <b>M-1986-013</b>	
Date:	04/30/2004		;San Juan		Abbreviation		<del></del> _
User:	WHE		:Gold King Mir		<del></del>	:M013-002	
Agency or	organization name :	DMG			· .		
Permi	t or other job action:	Routine 11	0-d bond updat	9			-
	Task description :	Rip & gra	de 4.67 acres	for positive	drainage		
HOUD! V.E	OUDMENT COST						
HOURLY E	QUIPMENT COST		, Basic machine :	Cat DSR Sadi	es II - ASI I	Horsepower	: 310
		'		Semi-Univers		- noreapower	
		Att	achment no. 1 :			Shift basis	: 1 per day
			achment no. 2 :		r	- 0,111, 04010	por day
		710		o chann nppu		- Data source	: <i>(CRG)</i>
					Utilization %		
	Cost Breakdown:	Owner	ship cost/hour :	\$49.85	N/	=	
		•	ating cost/hour :	\$66.44	100	-	
		-	r op. cost/hour :	\$3.51	50	_	
		• •	ator cost/hour:		N/	-	
		•	unit cost/hour :	\$151.64	·	: otal fleet cost/hour	\$151.64
		, ola,	dim occinical .		- '		. \$101.04
MATERIAL	QUANTITIES						
Initial			Swell		Loose		
volume :	15,068	LCY	factor :	NA	volume	15,068	LCY
			10000,		-		-
	, Source of estima	ted volume	· (4 67ac)(4356	//ef/ac\/2'/D\/2	7 = 15 068 5 cv		
	Source of estimated:			Vollaci(Z D)Z	7 = 10,000.5 cy		
	bodice of equinaled	SWEII IACIO	.14/		·		
HOURI V P	RODUCTION			Job Condition	Correction Fact	ore	Source
DOURLI F	RODDOTTOR		1	JOD CONTRACTOR	Operator skili	<del></del>	(avg.)
Δνα	rage push distance :	50	feet	Meto	rial consistency		(Cat HB)
	d hourly production:	1,400.0	LCY/hr		Dozing method		
Oriadjusto	o nouny production .	1,400.0			Visibility		(gen.) (avg.)
Material cor	sistency description	• .			Job efficiency		(1shift/day)
	fill or embankment	• `			Spoil pile		(fnd-rf)
Compacied	mi oi empantiion				Push gradient		(Cat HB)
Ave	rage push gradient ;	0.00	% (pos)		Altitude		<del></del>
	· · · · · · · · · · · · · · · · · · ·				Material weight:		(Cat HB)
, , , , , , , , , , , , , , , , , , ,	verage site altitude :	12,000	_feet		Blade type		(Cat HB) (S/SU/U)
	Matorial seniaht	2,900	lbs/LCY		Net correction		(3/30/0)
Weight desc	Material weight:	2,800	ID8/LC1		MAR COLLECTION	<del></del>	-
_	chpuon : ed rock - 50% Rock, 5	nor East		Adinata	unit production	AST 50	I CV/h-
Dacorripose	u IUUK - 30% NUUK, S	U70 CAILIT		-	•		LCY/hr
				Adjusted t	leet production	467.63	LCY/hr
JOB TIME A	ND COST						
	Fleet size :	1	Dozer(s)		Total job time	32.22	Hours
	- Unit cost :	\$0.324	/LCY		Total job cost		-
	J J	·			,	¥ -,,	

# CIRCES Cost Estimating Software TRUCK/LOADER TEAM WORK

PROJEC	T IDENTIFICATION						
	Agency or organize	ation name	:DMG				
Task # :	: 003	State	: Colorado		Permit/iob #	: M-1986-013	
Date :	04/30/2004	County	: San Juan		<b>-</b>		
User :		•		ne	-		
		•			-		
Pe	rmit or other job action :	Routine 11	0-d bond upda	te			
	Task description :	Haul and	place earth	en cover over	waste rock	dumps	
			-				<u></u>
HOURLY	EQUIPMENT COST		_		Shift basis	: _ 1 per day	
			Equipment De	escription			<u> </u>
	Truck/loader te	am -Truck	:Generic 10-12	2 cy, 6x4			
		-Loader	Cat 322C L				
		Dump area	Cat D8R Serie	es II - 8\$U			
	Road maintenance -Mo	otor grader	:NA				
	-V	Vater truck	:NA				
Cost Bre	akdown:	Truck/Load	er Work Team	Support E	quipment	Road Maintenanc	e Equipment
		Truck	Loading Tool	Load Area	Dump Area	Motor Grader	Water Truck
	Import data filename :	truck2	excavate	NA	dozer	NA NA	NA
	% Utilization-machine :	88	100	NA	50	NA	NA
	-Ripper attachment :	NA	NA	NA	NA NA	NA NA	NA
	Ownership cost/hour :	\$16.52	\$28.63	NA	\$43.83	NA	NA
	Operating cost/hour :	\$19.32	\$33.28	NA	\$33.22	NA NA	NA
	Ripper op. cost/hour :	NA.	NA	NA NA	\$0.00	NA NA	NA
	Operator cost/hour :	\$21.72	\$32.02	NA	\$31.83	NA NA	NA
	Unit subtotals :	\$57.56	\$93.92	NA	\$108.88	NA	NA
	Number of units:	4	1	0	1	0	0
	Group subtotals :	Work	\$324.16	Support :	\$108.88	Maintenance :	\$0.00
		·		Total work te	am cost/hour	\$433.04	
				, , , , , , , , , , , , , , , , , , ,			-
MATERIA	AL QUANTITIES						
			Swell		Loosa		
	6.324	ICY		NA.		6 324	ICV
10.0.110 .	0,024		iautoi .		·	0,024	-
	Source of quent	ity tako-off	· /1 06aa\/4256	:nef/en//2!D\/27 -	- 6324 2 au		
				OSINGCI(E DIJET -	- 0024.0 Cy		
				A CV	Total cont	- 60	
	waterial put	cilase cost	. 30.00	, LO 1	TOTAL COST	<b>3</b> 0	-
HOURIN	/ SDADUATION						
				Turali Bard 6			
Truck							
D	· ·		<u>-</u> *	l			•
Descr. :		····		f	•		•
			•*		-		•
Date   04/30/2004   County   San Juan		-					
		Final truck	volume based	on number of l	oader passes :	11.22	LCY
		* truck volume			•		
	Tool Capacity:			Job Condition	Corrections:	Site altitude (ft.) :	12,000
	apacity (nom. heaped) :		LCY		Truck	Loader	Source
Descr. :	Other - rock/dirt mixture		1% )	Altitude adj. :	0.890	1.000	(Cat HB)
	Bucket fill factor :	1.100	_	Job efficiency :	0.830	0.830	(1 shift/day)
Adj	justed bucket capacity:	1.870	LCY	Net correction :	0.739	0.830	1

Truck/L	oader Team Work c	ont'd	Task #	: 003	-		sheet 2 of 2
Loading	Tool Cycle Time :	Numb	er of loading to	ool passes requir	ed to fill truck :	6	passes
	ors and front shovels -n	nachine cyc	ie time vs. job	condition rating	AVERAGE		<b>-</b> *
		- 89	ected value wil	thin basic rating	AVERAGE		-
Track lo	aders - material descr. :	:NA		•			-
- cyci	e time elements (min.) :	Load	: NA	Maneuver	NA NA	Dump	: 0.100
Wheel ar	nd track loaders - unadji	usted basic	loader cycle ti	me ( load, mane	uver, and dump	NA	minutes
	Out of Time Contact	, h		A:		Factor (min)	
		<del></del>	ondition Descri	puon		Factor (min.)	Source
	Material :					NA NA	NA.
	Stockpile :		· ————————————————————————————————————	<del></del>		NA NA	NA NA
	Truck ownership :	<del></del>		<del></del>			<del></del>
	Operation :				·	NA NA	NA NA
	Dump target :	IVA		Not evel a time	a adjustes and		
		A -11a1		-	e adjustment :	NA NA	minutes
		Adjusted	loader cycle tin	ne (total time pe		0.293	minutes
			•		ne per truck 1.	1.565	minutes -
	vcle Time :		*	•	•	te time < exchange time	
•	Truck exchange time **:		_minutes	•	or site altitude :		minutes
	Truck load time:		_minutes		or site altitude :	1.565	minutes
	aneuver and dump time:		_minutes	•	or site altitude :	1.011	_minutes
** set at 0	) if exchange time < adj. loader	•	_	-			
Truck tra	ivel (haul & return) time:	: F	Road condition	: Rutted dirt, little	maintenance,	no water, 2" tire pe	netration
Haul rout	i				1		
Road	Haul distance	Grade	Rolling	Tota!	Speed	Travel time *	
segment #	(feet)	res. (%)	res. (%)	resistance (%)	(feet/minute)	(minutes)	_
1	3,000	5.00	5.00	10.00	1068	2.838	-
							-
			1				_
							_
							_
							-
							•
							-
Return ro	oute :	<u> </u>	<u></u>	<u> </u>	Haul time **:	3.189	minutes
1	3.000	-5.00	5.00	0.00	2938	1.060	-
		0.00	1	-			=
		<u> </u>	<del></del>				-
		<del>                                     </del>	· · · ·				-
		<u> </u>	+				<del>.</del>
		<del></del>	<del> </del>	· · · · · · · · · · · · · · · · · · ·	<del></del>		-
				-			-
		<del> </del>	<del>                                     </del>				-
• tenud simo	shown for each segment inclu	dae annulanda	nidocolomitas adia	I	Return time**:	1.191	- minutes
	•		•				minutes
" total haul	and return time shown includes	altitude adjust	ment	) otal tru	ick cycle time :	7.518	minutes
Loadi	ing tool unit production:		_LCY/hour	•	job efficiency :	262.72	_LCY/hour
_	Truck unit production :		_LCY/hour	•	job efficiency:	74.32	_LCY/hour
Optimal	no. trucks/loading tool:	4	_trucks	•	trucks/loader:	4	trucks
				I hourly truck tea		297.27	LCY/hr
		Adjuste	ed hourly single	truck/loader tea	m production:	262,72	LCY/hr
		Adjusted	hourly multiple	truck/loader tea	m production:	262.72	LCY/hr
JOB TIM	E AND COST						
- <del>-</del>	Fleet size :	1	Team(s)	•	Total job time :	24.07	Hours
	I Init cost	\$1.648	- ''		Total job cost	\$10,424	-

•

# CIRCES Cost Estimation Software REVEGETATION WORK

	HEICATION		Agency / company name :					
	Task no. :	004	_ State :	Colorado	_	Permit/job no.	: M-1986-013	
	Date :	30-Apr-2004	Oounty:	Sen Juan		Abbreviation		
	User:			<b>Gold King Mine</b>			M013-004	
				GOOD THE MICH		THOMASTIO	- MU (U-UL)	
			: Routine 110-d bond update					
		Task description	: Revegetate 6 acres affected la	nds				
FERTILIZING			DESCRIPTION (data source)		UNITS / ACRE	UNIT	TINU/TEOD	COST / ACRE
LEGITATION								
	Materiela	- Item no. 1	: Hydrated lime (MEANS 04060 400 001	0)	3.00	ton	\$228.00	\$684.00
		- item no. 2	: 10-34-0, 18-48-0, 5-10-5 (DMG survey	datal	200.00	pound	\$0.23	\$45.39
		- Item no. 3	·		<u> </u>		<u> </u>	
					TOTAL	L FERTILE ER WATE	RIALE COST / ACRE :	\$729.39
	Annlication	a medical so 1	: Tractor apreeder (MEANS 02920 340 4	(05/1)				\$27.01
	Charlesonson							
		- method no. 2	: Tractor towed spreader (MEANS 0292	0 340 4150)				\$27.01
					TOTAL	FERTILIZER APPLIC	ATION COST / ACRE :	\$54.02
	•							
TILLING		<ul> <li>method no. 1</li> </ul>	: Disc harrowing, 6" deep (MEANS 0292	0 340 6100)				\$68.82
		- method no. 2						
		· messou ro. z	<del>`</del>					I
						TOTAL TI	LLING COST / ACRE ;	\$68.82
OCENINO			1	HATE - PLS	NATIVE OR	WARM / COOL	l econe '	Teop (
<u>ecedino</u>						1	SEEDS	
Seed Mbx : COMM	MON NAME	- VARIETY	SCIENTIFIC NAME	LBS / ACRE	INTRODUCED	SEASON	PER SQ. FT.	PL8 / ACRE
GRASSES, RUSI			* NOTE: Table values on drill seed bar					
		DOEG.	•		1	-		
Alpine Bluegrass			Poa alpina	0.20	Native	Cool	_4.6	52.19
Smooth Brome - I	Mancher		Bromus inermis	1.70	Introduced	Cool	5.7	\$4.03
Alpine Fescue			Feetuca bractryphylla	0.17	Native	Cool	5.1	\$38,84
Slander Wheatgn	ese - Pryor		Agropyron trachyceutum	1.40	Native	Cool	5.1	\$7.59
Timothy, Alpine -				0.25	Native	Gool	7.5	
			Phioum alpinum					\$4.74
Meedow Foxlali -	Garrison		Alopecurus pratensis	0.30	Introduced	Coal	4.0	\$15.98
Needlegross, Gre			Stipe viridula	1.00	Native	Cool	4.2	\$12.32
roungerson, Cire	- LUGOIII		Copes THISCHIN	,	Indita	5600	4.4	912.32
			<u> </u>		L	L	1	
						i		l
				<del></del>	<del> </del>			
							<u> </u>	l
					1		ı — —	
						<del></del>		
					ļ			
			l i		1		1	
			<u> </u>					
			<del> </del>					
			L				l	1
							l	
FORBS:			·					·
rongo.			1			1		
								_
			1					
Cute TO AND Y								
SHRUBS AND T	REES (seed)							
SHIRLIBS AND TE	REES (seed)	2						
SHRUBS AND TO	REES (seed)							
SHRUBS AND TO	REES (seed)	):						
SHRUBS AND TR	REES (seed)	12						
SHRUBS AND TR	REES (seed)							
SHRUBS AND TE	REES (seed)	):						
SHRUBS AND TE	REES (seed)							
SHRUBS AND TE	REES (seed)							
SHRUBS AND TE	REES (seed)							
SHRUBS AND TE	REES (seed)							
SHRUBS AND TO	REES (seed)							
SHRUBS AND TE	REES (seed)	:						
	REES (seed)	72.1	1707AL POLICIO PLEI ACRE:	10.04		*TOTAL SEE	D MIX CONT / AGRE :	\$107.32
• TOTAL BEI	E08/50_FT.	72.1	-					
• TOTAL BEI		72.1	*TOTAL POUNDS PLS / ACRE : Broadcast seeding (DMG contract data				D BIX COST / ACRE :	
• TOTAL See	Ecs / so. FT.:	72.1 - method	Broadcast seeding [DMG contract data			OTAL SEED APPLIC	KTION COST / AGRE :	\$187.00
• TOTAL BEI	Ecs / so. FT.:	72.1 - method	-		UNITS / ACRE			
• TOTAL See	Eos/so_FT.: 1 evolication M/SCELLAR	72.1 - method	Broadcast seeding [DMG contract data DESCRIPTION (data source)		UNITS / ACRE	OYAL SEED APPLICA	COST/UNIT	\$187.00 COST / ACRE
• TOTAL See	Ecs / so. FT.:	72.1 - method #EOUS	Broadcast seeding [DMG contract data DESCRIPTION (data source) Straw, delivered (DMG survey data)			OTAL SEED APPLIC	KTION COST / AGRE :	\$187.00
• TOTAL See	Eos/so_FT.: 1 evolication M/SCELLAR	72.1 - method: #EOUS - item no. 1 - item no. 2	Broadcast seeding [DMG contract data DESCRIPTION (data source) Straw, delivered (DMG survey data)		UNITS / ACRE	OYAL SEED APPLICA	COST/UNIT	\$187.00 COST / ACRE
• TOTAL See	Eos/so_FT.: 1 evolication M/SCELLAR	72.1 - method #EOUS	Broadcast seeding [DMG contract data DESCRIPTION (data source) Straw, delivered (DMG survey data)		UNITS / ACRE	OYAL SEED APPLICA	COST/UNIT	\$187.00 COST / ACRE
• TOTAL See	Eos/so_FT.: 1 evolication M/SCELLAR	72.1 - method #EOUS - item no. 1 - item no. 2 - item no. 8	Broadcast seeding (DMG control data DESCRIPTION (data source) Straw, delivered (DMG survey data)		UNITS / ACRE	OYAL SEED APPLICA	COST/UNIT	\$187.00 COST / ACRE
• TOTAL See	Eos/so_FT.: 1 evolication M/SCELLAR	72.1 - method: #EOUS - item no. 1 - item no. 2	Broadcast seeding (DMG control data DESCRIPTION (data source) Straw, delivered (DMG survey data)		UNITS / ACRE	UNIT	COST/UNIT	\$187.00 COST / ACRE \$173.00
• TOTAL See	E08/so. FT. : 1 epolication MISCELL Al Materials	72.1 - method: NEOUS - Rem no. 1 - Item no. 2 - Item no. 3 - Item no. 4	Broedeast seeding (DMG contract data DESCRIPTION (data source) Braw, delivered (DMG survey data)		UNITS / ACRE	UNIT	COST/UNIT	\$187.00 COST / ACRE
• TOTAL See	E08/so. FT. : 1 epolication MISCELL Al Materials	72.1 - method: NEOUS - Rem no. 1 - Item no. 2 - Item no. 3 - Item no. 4	Broedeast seeding (DMG contract data DESCRIPTION (data source) Braw, delivered (DMG survey data)		UNITS / ACRE	UNIT	COST/UNIT	\$187.00 COST / ACRE \$173.00 \$178.00
• TOTAL See	E08/so. FT. : 1 epolication MISCELL Al Materials	72.1 - method: #EOUS - Item no. 1 - Item no. 2 - Item no. 4 - method no. 1	Broedcast seeding (DMG contract data DESCRIPTION (data source) Straw, delivered (DMG survey data) Power mulcher (MEANS 02910 500 03	50)	UNITS / ACRE	UNIT	COST/UNIT	\$187.00 COST / ACRE \$173.00 \$172.00 \$80.65
• TOTAL See	E08/so. FT. : 1 epolication MISCELL Al Materials	72.1 - method FEOUS - litern no. 1 - tern no. 2 - tern no. 4 - method no. 1 - method no. 2	Broedeast seeding (DMG contract data DESCRIPTION (data source) Straw, delivered (DMG survey data) Power mulcher (MEANS 02910 500 03 Crimping, with tractor (DMG survey data)	50)	UNITS / ACRE	UNIT	COST/UNIT	\$187.00 COST / ACRE \$173.00 \$178.00
• TOTAL See	E08/so. FT. : 1 epolication MISCELL Al Materials	72.1 - method: #EOUS - Item no. 1 - Item no. 2 - Item no. 4 - method no. 1	Broedeast seeding (DMG contract data DESCRIPTION (data source) Straw, delivered (DMG survey data) Power mulcher (MEANS 02910 500 03 Crimping, with tractor (DMG survey data)	50)	UNITS / ACRE	UNIT	COST/UNIT	\$187.00 COST / ACRE \$173.00 \$172.00 \$80.65
• TOTAL See	E08/so. FT. : 1 epolication MISCELL Al Materials	72.1 - method FEOUS - litern no. 1 - tern no. 2 - tern no. 4 - method no. 1 - method no. 2	Broedeast seeding (DMG contract data DESCRIPTION (data source) Straw, delivered (DMG survey data) Power mulcher (MEANS 02910 500 03 Crimping, with tractor (DMG survey data)	50)	UNITS / ACRE	OTAL SEED APPLICA  UNIT  FOR  STAL SPURCH MATER	COST / UNIT \$86.50	\$187.00 COST / ACRE \$173.00 \$172.00 \$80.65 \$48.82
• TOTAL See	E08/so. FT. : 1 epolication MISCELL Al Materials	72.1 - method FEOUS - litern no. 1 - tern no. 2 - tern no. 4 - method no. 1 - method no. 2	Broedeast seeding (DMG contract data DESCRIPTION (data source) Straw, delivered (DMG survey data) Power mulcher (MEANS 02810 500 03 Crimping, with tractor (DMG survey data)	50)	UNITS / ACRE	OTAL SEED APPLICA  UNIT  FOR  STAL SPURCH MATER	COST/UNIT	\$187.00 COST / ACRE \$173.00 \$172.00 \$80.65
• TOTAL BEE Seed MUS. CHTING and	Eos / so. FT.: 1 epolication MISCEL Af Materials Acolication	72.1 - method - item no. 1 - item no. 2 - item no. 8 - item no. 4 - method no. 1 - method no. 2 - method no. 3	Broedeast seeding (DMG contract data DESCRIPTION (data source) Straw, delivered (DMG survey data) Power mulcher (MEANS 02810 500 03 Crimping, with tractor (DMG survey data)	50)	UNITS / ACRE	OTAL SEED APPLICA  UNIT  FOR  STAL SPURCH MATER	COST / UNIT \$86.50	\$187.00 COST / ACRE \$173.00 \$172.00 \$80.65 \$48.82
• TOTAL BEE Seed MUS. CHTING and	Eos / so. FT.: 1 epolication MISCEL Af Materials Acolication	72.1 - method - item no. 1 - item no. 2 - item no. 8 - item no. 4 - method no. 1 - method no. 2 - method no. 3	Broedcast seeding (DMG contract data DESCRIPTION (data source) Straw, delivered (DMG survey data)  Power mulcher (MEANS 02910 500 03 Crimping, with Iractor (DMG survey data)	50)	UNITS / ACRE	OTAL SEED APPLICATION OF TAL MULICH APPLICATION	COST / UNIT \$88.50  RIALS COST / ACRE:	\$167.00 COST / ACRE \$173.00 \$172.00 \$60.66 \$40.92 \$100.37
• TOTAL SEE Seed MULICHING and	EOS / SO. FT.: 1 explication MISCELLAN Materials Acollection	72.1 - method **EOUS* - litern no. 1 - litern no. 2 - litern no. 4 - method no. 1 - method no. 2 - method no. 3	Broedcast seeding (DMG contract data DESCRIPTION (data source) Straw, delivered (DMG survey data)  Power mulcher (MEANS 02810 500 03 Crimping, with tractor (DMG survey data)	SO)  B)  MATERIAL	UNITS / ACRE 2.00 TO TO	UNIT FOR  TAL MULCH MATER  TAL MULCH APPLICA  COST / FERT.	COST/UNIT S88.50  RIALS COST/ACRE:  ATION COST/ACRE:  TOTAL	\$187.00 COST / ACRE \$173.00 \$173.00 \$1773.00 \$00.05 \$40.92 \$100.97 TOTAL
• FOTAL SEE SEES: MULICHING and NURSERY STOC	Ece / so. FT. : d epolication MISCELLA Materials Acolication	72.1 - method - item no. 1 - item no. 2 - item no. 8 - item no. 4 - method no. 1 - method no. 2 - method no. 3	Broedcast seeding (DMG contract data DESCRIPTION (data source) Straw, delivered (DMG survey data)  Power mulcher (MEANS 02910 500 03 Crimping, with Iractor (DMG survey data)	50)	UNITS / ACRE 2.00 TO TO	OTAL SEED APPLICATION OF TAL MULICH APPLICATION	COST / UNIT \$88.50  RIALS COST / ACRE:	\$167.00 COST / ACRE \$173.00 \$172.00 \$60.66 \$40.92 \$100.37
• TOTAL SEE Seed MULICHING and	Ece / so. FT. : d epolication MISCELLA Materials Acolication	72.1 - method **EOUS* - litern no. 1 - litern no. 2 - litern no. 4 - method no. 1 - method no. 2 - method no. 3	Broedcast seeding (DMG contract data DESCRIPTION (data source) Straw, delivered (DMG survey data)  Power mulcher (MEANS 02810 500 03 Crimping, with tractor (DMG survey data)	SO)  B)  MATERIAL	UNITS / ACRE 2.00 TO TO	UNIT FOR  TAL MULCH MATER  TAL MULCH APPLICA  COST / FERT.	COST/UNIT S88.50  RIALS COST/ACRE:  ATION COST/ACRE:  TOTAL	\$187.00 COST / ACRE \$173.00 \$173.00 \$1773.00 \$00.05 \$40.92 \$100.97 TOTAL
• FOTAL SEE SEES: MULICHING and NURSERY STOC	Ece / so. FT. : d epolication MISCELLA Materials Acolication	72.1 - method **EOUS* - litern no. 1 - litern no. 2 - litern no. 4 - method no. 1 - method no. 2 - method no. 3	Broedcast seeding (DMG contract data DESCRIPTION (data source) Straw, delivered (DMG survey data)  Power mulcher (MEANS 02810 500 03 Crimping, with tractor (DMG survey data)	SO)  B)  MATERIAL	UNITS / ACRE 2.00 TO TO	UNIT FOR  TAL MULCH MATER  TAL MULCH APPLICA  COST / FERT.	COST/UNIT S88.50  RIALS COST/ACRE:  ATION COST/ACRE:  TOTAL	\$187.00 COST / ACRE \$173.00 \$173.00 \$1773.00 \$00.05 \$40.92 \$100.97 TOTAL
• FOTAL SEE SEES: MULICHING and NURSERY STOC	Ece / so. FT. : d epolication MISCELLA Materials Acolication	72.1 - method **EOUS* - litern no. 1 - litern no. 2 - litern no. 4 - method no. 1 - method no. 2 - method no. 3	Broedcast seeding (DMG contract data DESCRIPTION (data source) Straw, delivered (DMG survey data)  Power mulcher (MEANS 02810 500 03 Crimping, with tractor (DMG survey data)	SO)  B)  MATERIAL	UNITS / ACRE 2.00 TO TO	UNIT FOR  TAL MULCH MATER  TAL MULCH APPLICA  COST / FERT.	COST/UNIT S88.50  RIALS COST/ACRE:  ATION COST/ACRE:  TOTAL	\$187.00 COST / ACRE \$173.00 \$173.00 \$1773.00 \$00.05 \$40.92 \$100.97 TOTAL
• FOTAL SEE SEES: MULICHING and NURSERY STOC	Ece / so. FT. : d epolication MISCELLA Materials Acolication	72.1 - method **EOUS* - litern no. 1 - litern no. 2 - litern no. 4 - method no. 1 - method no. 2 - method no. 3	Broedcast seeding (DMG contract data DESCRIPTION (data source) Straw, delivered (DMG survey data)  Power mulcher (MEANS 02810 500 03 Crimping, with tractor (DMG survey data)	SO)  B)  MATERIAL	UNITS / ACRE 2.00 TO TO	UNIT FOR  TAL MULCH MATER  TAL MULCH APPLICA  COST / FERT.	COST/UNIT S88.50  RIALS COST/ACRE:  ATION COST/ACRE:  TOTAL	\$187.00 COST / ACRE \$173.00 \$173.00 \$1773.00 \$00.05 \$40.92 \$100.97 TOTAL
• FOTAL SEE SEES: MULICHING and NURSERY STOC	Ece / so. FT. : d epolication MISCELLA Materials Acolication	72.1 - method **EOUS* - litern no. 1 - litern no. 2 - litern no. 4 - method no. 1 - method no. 2 - method no. 3	Broedcast seeding (DMG contract data DESCRIPTION (data source) Straw, delivered (DMG survey data)  Power mulcher (MEANS 02810 500 03 Crimping, with tractor (DMG survey data)	SO)  B)  MATERIAL	UNITS / ACRE 2.00 TO TO	UNIT FOR  TAL MULCH MATER  TAL MULCH APPLICA  COST / FERT.	COST/UNIT S88.50  RIALS COST/ACRE:  ATION COST/ACRE:  TOTAL	\$187.00 COST / ACRE \$173.00 \$173.00 \$1773.00 \$00.05 \$40.92 \$100.97 TOTAL
• FOTAL SEE SEES: MULICHING and NURSERY STOC	Ece / so. FT. : d epolication MISCELLA Materials Acolication	72.1 - method **EOUS* - litern no. 1 - litern no. 2 - litern no. 4 - method no. 1 - method no. 2 - method no. 3	Broedcast seeding (DMG contract data DESCRIPTION (data source) Straw, delivered (DMG survey data)  Power mulcher (MEANS 02810 500 03 Crimping, with tractor (DMG survey data)	SO)  B)  MATERIAL	UNITS / ACRE 2.00 TO TO	UNIT FOR  TAL MULCH MATER  TAL MULCH APPLICA  COST / FERT.	COST/UNIT S88.50  RIALS COST/ACRE:  ATION COST/ACRE:  TOTAL	\$187.00 COST / ACRE \$173.00 \$173.00 \$1773.00 \$00.05 \$40.92 \$100.97 TOTAL
• FOTAL SEE SEES: MULICHING and NURSERY STOC	Ece / so. FT. : d epolication MISCELLA Materials Acolication	72.1 - method **EOUS* - litern no. 1 - litern no. 2 - litern no. 4 - method no. 1 - method no. 2 - method no. 3	Broedcast seeding (DMG contract data DESCRIPTION (data source) Straw, delivered (DMG survey data)  Power mulcher (MEANS 02810 500 03 Crimping, with tractor (DMG survey data)	SO)  B)  MATERIAL	UNITS / ACRE 2.00 TO TO	UNIT FOR  TAL MULCH MATER  TAL MULCH APPLICA  COST / FERT.	COST/UNIT S88.50  RIALS COST/ACRE:  ATION COST/ACRE:  TOTAL	\$187.00 COST / ACRE \$173.00 \$173.00 \$1773.00 \$00.05 \$40.92 \$100.97 TOTAL
• FOTAL SEE SEES: MULICHING and NURSERY STOC	Ece / so. FT. : d epolication MISCELLA Materials Acolication	72.1 - method **EOUS* - litern no. 1 - litern no. 2 - litern no. 4 - method no. 1 - method no. 2 - method no. 3	Broedcast seeding (DMG contract data DESCRIPTION (data source) Straw, delivered (DMG survey data)  Power mulcher (MEANS 02810 500 03 Crimping, with tractor (DMG survey data)	SO)  B)  MATERIAL	UNITS / ACRE 2.00 TO TO	UNIT FOR  TAL MULCH MATER  TAL MULCH APPLICA  COST / FERT.	COST/UNIT S88.50  RIALS COST/ACRE:  ATION COST/ACRE:  TOTAL	\$187.00 COST / ACRE \$173.00 \$173.00 \$1773.00 \$00.05 \$40.92 \$100.97 TOTAL
• FOTAL SEE SEES: MULICHING and NURSERY STOC	Ece / so. FT. : d epolication MISCELLA Materials Acolication	72.1 - method **EOUS* - litern no. 1 - litern no. 2 - litern no. 4 - method no. 1 - method no. 2 - method no. 3	Broedcast seeding (DMG contract data DESCRIPTION (data source) Straw, delivered (DMG survey data)  Power mulcher (MEANS 02810 500 03 Crimping, with tractor (DMG survey data)	SO)  B)  MATERIAL	UNITS / ACRE 2.00 TO TO	UNIT FOR  TAL MULCH MATER  TAL MULCH APPLICA  COST / FERT.	COST/UNIT S88.50  RIALS COST/ACRE:  ATION COST/ACRE:  TOTAL	\$187.00 COST / ACRE \$173.00 \$173.00 \$1773.00 \$00.05 \$40.92 \$100.97 TOTAL
• FOTAL SEE SEES: MULICHING and NURSERY STOC	Ece / so. FT. : d epolication MISCELLA Materials Acolication	72.1 - method **EOUS* - litern no. 1 - litern no. 2 - litern no. 4 - method no. 1 - method no. 2 - method no. 3	Broedcast seeding (DMG contract data DESCRIPTION (data source) Straw, delivered (DMG survey data)  Power mulcher (MEANS 02810 500 03 Crimping, with tractor (DMG survey data)	SO)  B)  MATERIAL	UNITS / ACRE 2.00  TO  TO  PLANTING COST / PLANT	UNIT  ION  TAL MULCH MATE  COST / PERT.  PELLET	COST/UNIT S88.50  RUALS COST/ACHE:  TOTAL COST/PLANT	\$187.00  COST / ACRE \$173.00  \$173.00  \$00.65  \$48.82  \$108.37  TOTAL COST / ACRE
• FOTAL SEE SEES: MULICHING and NURSERY STOC	Ece / so. FT. : d epolication MISCELLA Materials Acolication	72.1 - method **EOUS* - litern no. 1 - litern no. 2 - litern no. 4 - method no. 1 - method no. 2 - method no. 3	Broedcast seeding (DMG contract data DESCRIPTION (data source) Straw, delivered (DMG survey data)  Power mulcher (MEANS 02810 500 03 Crimping, with tractor (DMG survey data)	SO)  B)  MATERIAL	UNITS / ACRE 2.00  TO  TO  PLANTING COST / PLANT	UNIT  ION  TAL MULCH MATE  COST / PERT.  PELLET	COST/UNIT S88.50  RIALS COST/ACRE:  ATION COST/ACRE:  TOTAL	\$167.00  COST / ACRE \$173.00  \$173.00  \$00.65  \$48.82  \$108.37  TOTAL COST / ACRE
• FOTAL SEE SEES: MULICHING and NURSERY STOC	Ece / so. FT. : d epolication MISCELLA Materials Acolication	72.1 - method **EOUS* - litern no. 1 - litern no. 2 - litern no. 4 - method no. 1 - method no. 2 - method no. 3	Broedcast seeding (DMG contract data DESCRIPTION (data source) Straw, delivered (DMG survey data)  Power mulcher (MEANS 02810 500 03 Crimping, with tractor (DMG survey data)	SO)  B)  MATERIAL	UNITS / ACRE 2.00  TO  TO  PLANTING COST / PLANT	UNIT  ION  TAL MULCH MATE  COST / PERT.  PELLET	COST/UNIT S88.50  RUALS COST/ACHE:  TOTAL COST/PLANT	\$187.00  COST / ACRE \$173.00  \$173.00  \$00.65  \$48.82  \$108.37  TOTAL COST / ACRE
NURSERY STOC	Ece / so. FT. : d epolication MISCELLA Materials Acolication	72.1 - method **EOUS* - litern no. 1 - litern no. 2 - litern no. 4 - method no. 1 - method no. 2 - method no. 3	Broedcast seeding (DMG contract data DESCRIPTION (data source) Straw, delivered (DMG survey data)  Power mulcher (MEANS 02810 500 03 Crimping, with tractor (DMG survey data  TYPE and SIZE (planting cost data source)	SO)  B)  MATERIAL  COST / PLANT	UNITS / ACRE 2.00  TO  PLANTING COST / PLANT	UNIT  ION  TAL MULCH MATE  COST / PERT.  PELLET	COST / UNIT S88.50  RIALS COST / ACRE:  TOTAL COST / PLANT	\$107.00  COST / ACRE \$173.00  \$173.00  \$173.00  \$173.00  \$0.05  \$40.92  \$100.97  TOTAL COST / ACRE
* TOTAL SEE Sees: MULICHING and NURSERY STOC COMMON NAME No nursery stock:	Ece / so. FT.: d epolication MISCEL LAI Materials Acolication	72.1 - method: FEOUS - item no. 1 - item no. 2 - item no. 3 - item no. 4 - method no. 1 - method no. 2 - method no. 3	Broadcast seeding (DMG contract data  DESCRIPTION (data source)  Brain, delivered (DMG survey data)  Power mulcher (MEANS 02810 500 03  Crimping, with Iractor (DMG survey data)  TYPE and SIZE (planting ocel data source)	MATERIAL COST / PLANT Cost / acre	UNITS / ACRE 2.00  TO  TO  PLANTING COST / PLANT  \$1,488.01	UNIT  ION  TAL MULCH MATE  COST / PERT.  PELLET	COST/UNIT S88.50  RUALS COST/ACHE:  TOTAL COST/PLANT	\$187.00  COST / ACRE \$173.00  \$173.00  \$20.65  \$48.82  \$108.37  TOTAL COST / ACRE  \$2.00  \$2.00  \$2.00
* TOTAL SEE Sees: MULICHING and NURSERY STOC COMMON NAME No nursery stock:	Ece / so. FT.: d epolication MISCEL LAI Materials Acolication	72.1 - method **EOUS* - litern no. 1 - litern no. 2 - litern no. 4 - method no. 1 - method no. 2 - method no. 3	Broadcast seeding (DMG contract data  DESCRIPTION (data source)  Brain, delivered (DMG survey data)  Power mulcher (MEANS 02810 500 03  Crimping, with Iractor (DMG survey data)  TYPE and SIZE (planting ocel data source)	MATERIAL COST / PLANT Cost / acre	UNITS / ACRE 2.00  TO  TO  PLANTING COST / PLANT  \$1,488.01	UNIT  ION  TAL MULCH MATE  COST / FERT.  PELLET  TOTAL MURSERY 5	COST / UNIT S88.50  RIALS COST / ACRE:  TOTAL COST / PLANT	\$107.00  COST / ACRE \$173.00  \$173.00  \$173.00  \$173.00  \$0.05  \$40.92  \$100.97  TOTAL COST / ACRE
NURSERY STOC COMMON NAME No rursery stock	Eos / so. FT.: 1 explication MISCELLA! Materials Acolication 28 PLANTIN	72.1 - method: FEOUS - item no. 1 - item no. 2 - item no. 3 - item no. 4 - method no. 1 - method no. 2 - method no. 3	Broadcast seeding (DMG contract data  DESCRIPTION (data source)  Brain, delivered (DMG survey data)  Power mulcher (MEANS 02810 500 03  Crimping, with Iractor (DMG survey data)  TYPE and SIZE (planting ocel data source)	SO)  B)  MATERIAL  COST / PLANT	UNITS / ACRE 2.00  TO  TO  PLANTING COST / PLANT  \$1,488.01	OTAL SEED APPLICATION  TOTAL SPURCH MATER  TAL MULICH APPLICATION  TOTAL MUSICHERY STATE  TOTAL MUSICHERY STATE  REE	COST / UNIT S88.50  RIALS COST / ACRE:  ATION COST / ACRE:  TOTAL COST / PLANT	\$187.00  COST / ACRE \$173.00  \$1778.00  \$00.65  \$48.82  \$108.37  TOTAL COST / ACRE  \$2.00  \$5.003.68  \$1,738.42

# CIRCES Cost Estimating Software EQUIPMENT MOBILIZATION / DEMOBILIZATION

PROJECT IDENTIFICATIO	_						
Ager Tesk#:		zation name :					
	04/30/2004	-	Colorado San Juan		Abbreviation	:M-1986-013	
	WHE		Gold King Mil	ne .		: M013-005	
		_			- '''		
	•		D Bond Upda				
Task	description	Haul recla	mation equ	ipment to an	d from job s	ilte	
EQUIPMENT TRANSPORT	TPOS SIG				Shift basis	: 1 per day	
BASE TOWN TO SERVE STATE	The HOUSE	,		Cox	st data source		-
Truck tractor	description	Generic on-l	highway truck	tractor, 6x4, die			_
Truck trailer	description					(25T, 50T, and 10	<u>o</u> r)
0	Dan aladasan .		ig capacities :		26-50 Tons	51+ Tons	_
528E	Breakdown	<u> </u>	ng cost/hour :	\$24.34 \$28.49	\$26.99 \$30.27	\$33.09 \$34.34	_
•			tor cost/hour :		\$27.07	\$27.07	-
			per cost/hour :		\$23.78	\$23.78	<del></del>
		Total U	nit Cost/hour:	\$79.90	\$108.11	\$118.28	-
NON BOADADI E BOLHINA	ENT						
NON-ROADABLE EQUIPM Machine	<u>ENII.</u> Weight/unit	Ownership	Haul Rig	Fleet Size	Hauf Trip	Return Trip	DOT permi
Description	(Tons)		Cost/hr/unit	(No. units)	Cost/hr/fleet	Cost/hr/fiset	Cost/fleet
							1
-Cat D&R Series II - &SU	52.55	\$49.85	\$118.28	1	\$168.13	\$118.28	\$0.00
0.40004		444	2422 44	<b>}</b>			
-Cat 322C L	26.68	\$28.63	\$108.11	1	\$136.74	\$108.11	\$0.00
-Reveg Equipment	20.00	\$20.00	\$79.90	1	\$99.90	\$79.90	\$0.00
							1
							1
							1
		<b></b>			<u> </u>		<del></del>
							┼
				-			<del> </del> -
				ļ			<del> </del>
	·	<del> </del>					<del> </del>
							- <del> </del>
		L					
				Subtotals :	\$404.77	\$306.29	\$0.00
ROADABLE EQUIPMENT							
Machine		Total	,	Flest Size	Haul Trip	Return Trip	
Description		Cost/hour/un	it	(No. units)	Cost/hr/fleet	Cost/hr/fleet	
							_
-Generic 10-12 cy, 6x4		\$60.10		4	\$240.39	\$240.39	_
-Flatbed Truck, 4x2, 30K GV	w	\$43.83		1	\$43.83	\$43.83	-
		910.00			0.0.00	V-13-35	_
Light Duty Pickup, 4x4, 3/4	T.	\$39.97		1	\$39.97	\$33.97	_
							_
<del></del>						<del></del>	_
							-
							-
							<del>-</del> -
							_
							-
		<u> </u>		Subtotais	\$318.19	\$318.19	-
							_
EQUIPMENT HAUL DISTAL	ICE and TIV					_	
Tanana adallar A. A. S	<b>5.</b> 1	Nearest n		wn within projec		· · · · · · · · · · · · · · · · · · ·	_
Transportation Cycle Time:	Non- Roadable	Roadable	1	Total one-way tr Average	ave! distance ; travel speed ;		_miles
	Equipment	Equipment		wangg	ave. opend ;		_mph
Haul time (hours) =	2.00	2.00	Total non	dom eldabaon-r	demob cost * :	\$3,859.78	_
Return time (hours) =	2.00	2.00		4 two round tr	pe with heal rig		-
Loading time (hours) =	0.50	NA	Total	roadable mobile		\$1,272.74	_
Unloading time (hours) =	0.50 5.00	4.00		" one round	trip, no haul rig		
Subtotals =	3.00	7.00					
IOB TIME AND COST					Total lob time :	10.00	hours

Total job cost: \$4,927

## EQUIPMENT COST AND PERFORMANCE DATA WORKSHEET

Machine make and model : Cat DBR Series U - 8SU

Dozer blade type :

Attachment No. 1 : Dozer blade

Attachment No. 2:3-5 shank ripper

CRG date update : Third Guarter, 2009 DECG date update : Second Quarter, 2003 Lebor date update : 08-13-03

#### DATA SOURCES:

Base costs :

nata: Coef Reterence Guide (CRG)

Adjusted costs: Contractors Egutpment Cost Guide (CECG)

Operator costs: Colorado Department of Transportation

Labor overhead: Colorado Department of Transportation

Specifications: Caterpillar Performance Handbook

BASE COSTS (CRG deta)	<u> </u>	Ownership Costs			··············		Overhauf a	nd Operating Co	osta		
			Ove	verhaul Field Repair			}				
	Depreciation	· CFC	Overhead	Labor	Parts	Labor	Parts	Fuel	_Lube	Tires	3.E.C
Basic Machine :	\$21.97	\$5.97	\$8,78	\$8.04	\$12.49	\$8.72	\$12.05	\$17.15	\$4.63	\$0.00	\$2.01
Attachment no.1 :	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Attachment no. 2 :	\$3.73	\$0.61	\$0.87	\$1.01	\$1.22	\$1.85	\$1.22	\$0.00	\$0.32	\$0.00	\$1.02

				ACQUISITION COST BREAKDOW!	1	
Factor Description	Base Value	Adj. Value	Multiplier	Cost Elements (CECG)	Factor	Adj. Cost
Acquisition goet :	\$462,015.00	\$355,332.50	0.769 .	Base purchase price :	0:	
Economic life hours - Base Machine :	13,245	10,458	1.267	Less dealer discount :	0.142	\$65,606.13
Attachment no.1 :	11,000	11,000	1.000	Plus freight:	0.020	\$9,240.30
Attachment no. 2 :	8,200	8,200	1.000	Plus dealer charges : *	0.005	\$2,310.08
Annual use hours :	2.112	1,525	1.385	* estimated		
Mechanio's labor cost :	\$35.46	\$25.38	0.715	Adjusted purchase price :		\$407,959,24
Fuel cost per gallon - gasoline :	\$1.58	\$1.58	1.000	Plus taxes : Sales Tax @ 3%	3.00%	\$12,238.78
-diesel :	\$1.51	\$1.51	1.000	8MM Tex @ 2%	2.00%	\$8,159.18
Lube met :	\$4,63	\$4.63	1.000	Less tire cost :		\$0.00
Tire life hours :	0	0	1,000	Less salvage value :	17.90%	\$73,024.70
Tire factor :	0.000	0.000	1.000			
Tire cost :	\$0.00	\$0.00	1,000	Net	acquisition cost :	\$355,332.5

ADJUSTED COSTS		Ownership Costs		Overhaut and Operating Costs								
				Ove	rhaul	Fleid	Repair					
	Depreciation	CFC	Overhead	Labor	Parts	Lebor	Parts	_ Fuel	Lube	Tires	G.E.C.	
Acquisition cost :	\$19.77	NA	NA NA	NA	NA	NA NA	NA	NA NA	NA	NA	NA	
Econ.life -Machine and Attach. No. 1	\$25.04	NA	NA	\$7.65	\$15.82	\$8.51	\$15.27	NA	NA	NA	NA.	
-Attachment No. 2			NA	\$1.20	\$1.55	\$2.94	\$1.55	NA	NA .	NA	NA	
Annual caspe :	\$27.57	\$9.11	\$13.38	NA NA	NA	NA	NA	NA	NA NA	NA	NA	
Double shifts :	\$20.53	\$4.56	\$6.68	NA	NA	NA .	NA NA	NA	NA	NA	NA	
Triple shifts :	\$18.20	\$3.03	\$4.45	NA.	NA	NA	NA	NA	NA NA	NA.	NA	
Mech. forMachine and Attach. No. 1:	NA .	NA.	NA NA	\$5.47	NA	\$8.09	NA	NA	NA	NA.	NA	
-Attachment No. 2 :	NA .	NA	NA NA	\$0.92	NA	\$1.68	NA	NA (	NA	NA NA	NA NA	
Fuel/lube -Machine and Attach. No. 1:	NA NA	NA	NA NA	NA	NA	NA.	NA.	\$17.15	\$4.63	\$0.00	\$2.01	
Attachment No. 2 :	NA NA	NA NA	NA NA	NA.	NA	NA	NA	\$0.00	\$0.32	\$0.00	\$1.02	

ADJUSTED COST SUSTOTALS		Ownership Costs				Overhauf and Operating Costs								
[					Overhaul Field Repair			1						
	Depreciation	CFC	Overhead	Labor	Parts	Labor	Parts	Fuel	Liba	Tires	G.E.C.			
Basic Machine and Attachments No. 1 an	nd No. 2 :			Basic Machin	e and Attachn	nent No. 1:								
Single shifts :	\$27.57	\$9.11	\$13.96	\$5.47	\$15.82	\$6.00	\$15,27	\$17.15	\$4.69	\$0.00	\$2.01			
Double shifts :	\$20.53	\$4.58	\$6.68	Attachment:										
Triple shifts:	\$18.20	\$3.03	\$4.45	\$0.92	\$1.55	\$1.68	\$1.55	\$0.00	\$0.32	\$0.00	\$1.02			

HOURLY OPERATOR WAGES	Base	Fringe	F.I.C.A.	Unempl.	Wk.Comp.	Total		
	Rate	Benefits	7.70%	8.20%	12.50%	(\$/hr)	Shift Differential	Teamsters labor zone : 2
Dozer operator (< 70hp)	\$20.62	\$5.77	\$1.59	\$1.28	\$2.58	\$91,63	Day \$0.00	Two shift per day average : \$0.15
Dozer operator (>=70hp)	\$20.62	\$5.77	\$1.59	\$1.28	\$2.58	\$31.69	Swing: \$0.30	Three shift per day average : \$0.25
Machanic	\$18.74	\$4.20	\$1.00	\$1.04	\$2.00	\$25.35	Maht \$0.45	

HOURLY EQUIPMENT COST SUMMARY	Ownership	Operatin	g and Overhaul	Operator	Total
		Machine	Attechments		Cost/hr (\$)
Single shifts:	\$49.85	\$88.44	\$7.02	\$31.63	\$155.15
Double chifts:	\$31.77	\$86.44	\$7.02	\$31,98	\$197.21
Triple shifts:	\$25.74	\$55.44	\$7.02	\$32.08	\$131.29

EQUIPMENT PERFORMANCE DATA	- !	Struck	Heaped	Weight	Weight	Length	Width	Height	Min. turning	Ногверомег	Fuel
Description	Type	Capacity (cy)	Capacity (cy)	(TSU)	(NIT)	(ft)	(ft)	(ft)	circle (ft)	(thp)	type
Cal DBR Senss II - 8SU	Powershift	NA	NA	41.75	NA	22.67	8.67	11.50	NA.	310.00	Diese
Dozer blade	Semi-Universal	NA.	11.40	5.42	NA	NA	12.92	5.54	NA	NA	NA
	T						4-4			1	***
3-5 strank ripper	Adj. Parallelogram	NA	NA NA	5.37	NA .	NA.	NA	NA	NA NA	NA	NA
3-5 shank ripper	Adj. Parallelogram	NA NA	NA NA	5.37	NA .	NA .	N/A	NA _	NA NA	J MA	NA.
	Adj. Parallelogram	2nd	NA 3rd	j 5.37   4th	5th	6th	7th	- AZA	Minimum dump	Max. dump	NA
Travel speeds (mph): Forward	1st (or max.)										

Loader bucket type or	Compaction	Maximum vertical	Max. hortz.	Excaves	or bucket cape	scity (cy)	Lift cape	city (lbs)	Max.dig/rip	8henk	No.
Compactor drum type	width/pass (ft.)	reach height (ft.)	reach (ft)	ama#	wegnu	large	optimal	max, reach	depth (ft.)	specing	shanks
NA .	NA NA	N/A	NA .	NA	NA .	2	NA	NA ]	2.58	9.58	3

## **EQUIPMENT COST AND PERFORMANCE DATA WORKSHEET**

Machine make and model : Cat 322C L

Dozer blade type : Atlachment no. 1 : ROPS Cab Attachment no. 2 : NA

CRG data update : Third Quarter, 2009 CECG data update : Second Quarter, 2003 Labor data update : 08-13-03

#### DATA SOURCES :

Base costs : Cost Reference Guide (CRG)

Adjusted costs : Contractors Equipment Cost Guide (CECG)

Operator costs : Colorado Department of Transportation

Labor overhead : Colorado Department of Transportation Specifications : Caterpillar Performance Handbook

BASE COSTS (CRG data)		Ownership Costs			Overheut and Operating Costs							
i I					Overhaul Fleid Repair							
	Depreciation	CFC	Overhead	Labor	Parts	Labor	Parts	Fuel	Lube	Tires	G.E.C.	
Machine :	\$15.48	\$3.57	\$3.64	\$5.04	\$5.18	\$8.21	\$5.30	\$10.65	\$3.17	\$0.00	\$0.85	
Attachment no. 1 3	\$0.00	\$0.00	\$0.00	\$0.00	\$0,00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Attachment no. 2 :	\$0.00	\$0.00	\$0.00	\$0.00	\$9.00	\$0.00	\$0.00	\$0.00	\$7.00	\$0.00	\$0.00	

				ACQUISITION COST BREAKDOV	VN .	
Factor Description	Base Value	Adj. Value	Multiplier	Cost Elements (CECG)	Factor	Adj. Cost
: taco roidaupoA	\$256,644.00	\$199,807.62	0.779	Base purchase price :		\$256,644.00
Economic lite hours :	9,250	9,210	1.004	Lees dealer discount :	0.093	\$23.887.89
Attachment no.1 :	NA	NA .	1,000	Plus freight:	0.026	\$6,672.74
Attachment no. 2 :	NA .	NA	1.000	Plus dealer charges :*	0.005	\$1,269.22
Annual use hours :	2.112	1,420	1,487	* estimated		
Mechanic's labor cost :	\$35.48	\$25.36	0.715	Adjusted purchase price :		\$240,732.0
Fuel cost per gallon - gasoline :	\$1.66	\$1,58	1,000	Plus taxes : Sales @ 3%	3.00%	\$7,221.98
-diesel :	\$1.51	\$1.51	1.000	SMM @ 2%	2.00%	\$4,814.64
Lube cost :	\$2.68	\$2.68	1,000	Less tire cost :		\$0.00
Tire life hours :	NA	NA .	1.000	Less salvage value :	22.00%	\$52,961.06
Tire factor:	NA.	NA NA	1,000			
Tire cost :	N/A	NA.	1.000	l N	et acquisition cost :	\$199,807.6

DJUSTED COSTS		Ownership Costs					Overhaul a	nd Operating (	Costs		
				Ove	rheul	Fleid	Repair	}			
Y	Depreciation	CFC	Overhead	i,abor	Parts	Labor	Parts	Fuel	Lube	Tirea	G.E.C.
Acquisition cost :	\$12.04	NA .	NA	NA.	NA	NA	NA	NA	NA .	NA	NA
Econ.tite -Machine and Attach. no. 1 :	\$12.09	NA	NA	\$5.08	\$5.20	\$6.24	\$5.32	NA.	NA	NA	NA.
-Attachment no. 2 :	NA NA	NA	NA	NA.	NA	NA.	NA.	24	NA	NA	NA
Annual usage :	\$17.90	\$5.31	\$5,41	<b>X</b>	NA _	NA .	NA	NA	NA	NA	NA.
Double shifts:	\$13.43	\$2.85	\$2.71	NA.	NA	NA	NA.	NA	NA	NA	NA
Triple shifts :	\$11.94	\$1.77	\$1.80	NA.	NA.	NA	NA	NA .	NA 1	NA	NA_
Mech. IbrMechine and Attach. No. 1:	NA	NA NA	NA NA	83.62	NA	\$4.48	NA	NA.	NA	NA	NA
-Attachment no. 2 :	NA	NA	NA NA	NA.	NA NA	NA .	NA	NA	NA.	NÁ	NA
Fuel/tube -Machine and Attach. No. 1:	NA	NA .	NA.	NA	NA.	NA	ź	\$10.68	\$9.17	\$0.00	\$0.85
Attackment no. 2 :	NA	NA.	NA NA	NA.	NA	NA.	14	NA	NA	NA.	NA

ADJUSTED COST SUBTOTALS	· · · · · · · · · · · · · · · · · · ·	Ownership Costs				Overhauf and Operating Costs							
				Ove	heul	Field I	Tapair						
	Depreciation	CFC	Overhead	Lation	Parts	Labor	Parts	Fuel	Lube	Tires	G.E.C.		
Basio Machine and strachments No. 1 and	No. 2 :			Basic Machin	e and Attacht	nent No. 1 :							
Single shifts:	\$17.90	\$5.31	\$5.41	\$1.62	\$5.20	\$1,46	\$5,32	\$10.65	\$9.17	\$0.00	\$0.65		
Double shifts :	818.43	\$2.65	\$2.71	Attachment N	o, 2 :								
Tricle shifts :	\$11.94	\$1.77	\$1,80	NA.	NA	NA	NA.	NA	NA.	NA	NA		

HOURLY OPERATOR WAGES	Base	Fringe	F.I.C.A.	Unempi.	Wk.Comp.	Total		
L	Rate	Benefits	7.70%	820%	12.50%	(\$/hr)	Shift Differential	Teamsters labor zone: 2
Excevator - under .75cy	\$20.77	\$5.77	\$1.60	\$1.29	\$2.60	\$32.02	Day: \$0.00	Two shift per day average: \$0.15
Excevetor - 75cy and over	\$20.77	\$5.77	\$1.00	\$1.29	\$2.60	225.05	Swing: \$0.30	Three shift per day average \$0.25
Mechanic	\$18.74	\$4.20	\$1.29	\$1.04	\$2.09	\$25.36	Night: \$0.45	

HOURLY EQUIPMENT COST SUMMARY	Ownership	Operatir	ng and Overhaul	Operator	Total
		Machine	Attachments	·	Cost/hr (\$)
Single shifts :	\$20.69	\$33.26	NA	\$32.02	\$93.82
Double shifts:	\$18.79	\$33.28	NA.	\$32.17	\$84.24
Triple shifts :	\$15.51	\$39.20	NA NA	\$32.27	\$81.08

EQUIPMENT PERFORMANCE DATA		Struck	Heaped	Weight	Weight	Length	Width	Height	Min. turning	Horsepower	Fuel
Description _	Туре	Capacity (cy)	Capacity (cy)	(UST)	(MT)	(ft.)	(ft.)	(ft.)	circle (ft.)	(fhp)	type
Cal 322C L	track	NA	NA_	28.68	24.19	30.63	9.33	9.83	NA NA	162.00	Diesel
ROPS Cab	NA	NA	NA	NA	NA	NA	NA	NA.	NA	N/A	NA
NA T	NA	NA	NA	NA	NA	NA	NA.	NA.	NA	NA	NA
,											
Fravel speeds (mph) :	1st (or max.)	2nd	3rd	4th	5th	6th	7th	8th	Min, dump	Max.dump	
Forward :	3.4	NA	NA	NA	NA.	NA	. NA	NA	clest.(ft)	he.(ft)	
Reverse :	3.4	NA	NA.	NA	NA	NA	NA	NA	NA	19,58	

Reverse :	3.4	NA NA	NA NA	NA	NA	N/A	NA	NA	NA .	19.58	<u> </u>
Loeder bucket type	Compection	Maximum vertical	Max. horizontal	Excavat	or bucket cap	acity (cy)	Lift cape	icity (fbs)	Maximum dig/rip	Shank .	Number
or compactor drum type	width per pass (ft.)	reach height (ft)	reach (ft)	email	medium	large	optimum	max.reach	depth (ft)	spealing	of shanks
NA NA	N/A	30.08	29.92	1.05	1.44	1.70	22,500	7,950	19.42	N/A	NA .

## EQUIPMENT COST AND PERFORMANCE DATA WORKSHEET

#### REORMANCE DATA WORKSHEET DATA 9

Machine make and model : General	c 10-12 cy. 8x4
Dozer blade type :	
Attachment no. 1 :NA	
Attachment no. 2 : NA	

CRG data update: Second Quarter, 2003 CEC9 data update: Second Quarter, 2003 Labor data update: 06-13-03

DATA	SOURCES :	
------	-----------	--

Base costs	Cost Reference Guide (CRG)
Adjusted costs	: Contractors Equipment Cost Guide (CECG)
Operator costs	Colorado Department of Transportation
Labor overhead	Colorado Department of Transportation
Specifications:	Caterpillar Performance Handbook

BASE COSTS (CRG data)		Ownership Costs					Overheul &	nd Operating C	osts		
				. Ove	rhaul	Fleid	Repair	ļ			
1	Depreciation	OFC_	_ Overhead _	Labor	Parts	Labor	Parts	Fuel	Lide	Tires	G.E.C.
Machine	\$7.37	\$1.36	\$1.60	\$1.93	\$1.93	\$3.02	\$2.34	\$10.64	\$1.74	\$1.65	\$0.00
Attachment no. 1:	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Attachment no. 2	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

				ACQUISITION COST BREAKDON	WN	
Factor Description	Boss Value	Adj. Value	Multiplier	Cost Elements (CECG)	Factor	Adj. Cost
Acquisition cost	\$107,350.00	\$87,919.65	0.819	Sase purchase price ;		\$107,380.00
Economic life hours	9.800	10,100	0.970	Less dealer discount :	0.100	\$10,795.00
Attachment no.1	NA	NA	1.000	Plus freight:	0.015	\$1,610.25
Attachment no. 2	NA	NA .	1.000	Plus dealer charges :*	0.005	\$536.75
Annual use hours :	2.112	1,150	1.837	* estimated		
Machanio's labor cost :	\$35.48	\$24.80	0.690	Adjusted purchase price :		\$98,762.00
Fuel cost per gation - gasoline :	\$1.44	\$1.44	1.000	Plus texes : Sales @ 3%	3.00%	\$2,962.88
-dlessi :	\$1,49	\$1.49	1.000	SMM 0 2%	2.00%	\$1,975.24
Lube cost :	\$1.74	\$1.74	1.000	Lean tire cost :		\$5,904.25
Tire life hours :	3,000	2,600	1.200	Less salvage value :	10.00%	\$9,876.20
Tire factor :	NA	0.068	1.000			
Tire cost :	\$4,950.00	\$5,904.25	1.199	N N	\$87,919.63	

ADJUSTED COSTS		Ownership Costs		Overhaul and Operating Costs									
				Overhaul		Field Repair							
	Depreciation	CFG	Overhead	Labor	Parts	Labor	Perte	Fuel	Lube	Tires	G.E.C.		
Acquisition cost :	\$8.04	N/A	NA NA	NA	NA	NA	NA	NA	NA	NA	NA		
Econ.life -Machine and Attach. no. 1:	\$5.86	N/A	NA NA	\$1.87	\$1.87	\$2.93	\$2.27	NA	NA	ÑA	NA		
-Attachment no. 2 :	NA NA	NA.	NA NA	NA	NA	N/A	NA	NA	NA.	NA.	NA		
Annual usage :	\$11.09	\$2.50	\$2.94	NA	NA	NA	NA.	NA NA	NA	NA NA	NA.		
Double shifts	\$8.31	\$1.25	\$1.47	NA NA	· NA	NA	NA	NA NA	NA	NA NA	NA		
Triple shifts :	\$7.30	\$0,83	\$0.98	NA	NA NA	NA.	NA	NA	NA	NA	NA		
Mech. IbrMachine and Attach. No. 1:	NA .	NA .	NA.	\$1.31	NA	\$2.06	NA	NA NA	NA	NA	NA		
-Attachment no. 2 1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Fuel/lube -Machine and Attach. No. 1:	NA NA	NA.	NA	NA	NA	NA	NA NA	\$10.64	\$1.74	\$1.98	\$0.00		
Affachment no. 2	NA	NA .	NA.	NA.	NA	NA	NA.	NA	NA	NA	NA		

ADJUSTED COST SUSTOTALS		Ownership Costs		T			Overheut a	nd Operating C	osta		
1				Ova	haul	Fleid	Repair	ŀ			
	Depreciation	CFC	Overhead	Labor	Parts	Labor	Parts	Fuel	Lube	Tires	G.E.C.
Sasio Machine and attachments No. 1 en	d No. 2 :			Basic Machin	e and Attachr	nent No. 1:					
Single shifts	\$11,09	\$2.50	52.94	\$1.31	\$1.87	\$2.05	\$2.27	\$10.64	\$1.74	\$1.98	\$0.00
Double shifts:	\$8.31	\$1.25	\$1.47	Atlachment N	0.2:						
Triple shifts	<b>\$</b> 7.39	\$0.83	\$0.98	N/A	NA	N/A	N/A	NA	NA .	NA	NA

HOURLY OPERATOR WAGES	Base	Fringe	F.I.C.A.	Unempl.	Wit Comp.	Total			
	Flate	Benefits	7.70%	6.20%	12.50%	(\$∕1π)	Shift Differentia	i Teamsters labor zone :	2
Truck Driver, 07- 14 cy	\$14.15	\$3.63	\$1.09	\$0.88	\$1.77	\$21.72	Day : 80.	00 Two shift per day average : \$0.	16
NA NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Swing : \$0.	30 Three shift per day everage : \$0.	25
Truck Mechanic	\$15.97	\$4,61	\$1,23	\$0,99	\$2.00	\$24.80	Night SQ	45	

	HOURLY EQUIPMENT COST SUMMARY	Ownership	Operatir	ng and Overhauf	Operator	Total
			Machine	Attachments		Cost/hr (\$)
٠	Single shifts:	\$16.52	\$21.88	NA NA	\$21.72	\$60,10
	Double shifts :	\$11.03	\$21,66	NA.	\$21.87	\$54.76
	Triple shifts :	\$9.20	\$21.86	NA NA	\$21.97	\$53,09

EQUIPMENT PERFORMANCE DATA		Struck	Hesped	Weight	Weight	Length	Width	Height	Min. turning	Horsepower	Fuel
Description	Туре	Capacity (cy)	Capacity (cy)	(UST)	(MT)	(fL)	(ft.)	(ft.)	circle (ft.)	(fhp)	type
Generic 10-12 cy, 8x4	On-Highway Rear Dump	10,00	12.00	7.30	6.62	22.75	8.00	11.00	80.00	255.00	Diesel
NA .	NA	NA	NA	NA	N/A	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA NA	NA	NA.	NA	NA	NA	NA	NA	NA
Travel speeds (mph) :	1st (or max.)	2nd	3rd	4th	8th	_ 6th	7th	8th	Min. dump	Max.dump	
Forward :	NA ·	NA .	NA .	NA	N/A	NA NA	NA	NA	clear.(ft)	hi.(ft)	
Reverse	NA	NA NA	NA NA	NA	NA	NA	NA	NA	9.00	NA	l.,
Loader buckst type	Compaction	Maximum vertical	Max. horizontal	Excevat	or bucket cap	acity (try)	Lift cape	scity (lbs)	Maximum dig/rip	Shank	Number
or compactor drum type	width per pass (ft.)	reach height (ft)	(each (ff)	small:	medium	large	optimum	max.reach	depth (ft)	spacing	of shanks
NA	NA	NA	NA	NA.	N/A	NA	NA	NA	NA.	NA	NA

#### **EQUIPMENT COST AND PERFORMANCE DATA WORKSHEET**

Machine make and model : Flatbed Truck, 4x2, 30K GVW

Dozer blade type : Attachment No. 1 : NA Attachment No. 2 : NA

CRG data update :2000 CRG, 3000 CECO CECG data update : Second Quarter, 2008 Labor data update : 06-13-03

#### DATA SOURCES:

Base costs :

pata: Cost Reference Guide (CRG)
Adjusted costs: Contractors Equipment Cost Guide (CECG)
Operator costs: Colorado Department of Transportation
Labor overhead: Colorado Department of Transportation

Specifications : Caterpillar Performance Handbook

BASE COSTS (CRG data)	Ownership Costs				Overheut and Operating Costs							
1				Ove	rhaul	Field	Repair	l				
l	Depreciation	L CFC	Overhead	Lebor	Parts	Lebor	Parte	Fuel	Lube	Three	G.E.C.	
Basic Machine :	\$3,77	\$0.75	\$0.86	\$0.87	\$1,00	\$1.46	\$1.25	\$6.18	\$0.98	\$0.83	\$0.00	
Attachment no.1 :	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Attachment no. 2 :	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	

			Į.	ACQUISITION COST BREAKDOW	N	
Factor Description	Base Value	Adj. Vehre	Multiplier	Cost Elements (CECG)	Factor	Adj. Cost
: teca notificación	\$57,578.00	\$48,378.38	0.840	Base purotisse price :		\$57,576.0
conomic life hours - Base Machine	10,350	8,000	1.294	Less dealer discourt :	0.022	\$1,268.67
Attachment no.1	NA	N/A	1.000	Plus freight:	0.015	\$983.64
Attachment no, 2 :	NA	NA NA	1.000	Plus dealer charges : *	0.005	\$287.88
Annual use hours :	2,112	1,250	1:890	* setimated		
Mechanic's labor oset :	\$35.46	\$24.80	0.699	Adjusted purchase price :	. 1	\$57,460.8
Fuel cost per gallon - gasolina :	\$1.44	\$1.44	1.000	Plus taxes : Sales Tax @ 3%	3.00%	\$1,723.8
-diesal :	\$1.49	\$1.49	1.000	SMM Tex Q 2%	2.00%	\$1,149.22
Lube cost :	\$0.98	\$0.98	1.000	Less tire post :		\$3,339.41
Tire life hours :	1,800	2,000	0.900	Lees salvage value :	15.00%	\$8,619,15
Tire factor :	NA NA	0.058	1.000			
Tire cost :	\$1,494.00	\$3,339.41	2.235	i Ne	t acquisition cost :	\$48,375.3

DJUSTED COSTS		Ownership Costs					Overhaud a	nd Operating C	costs		
1				Ove	rhaul	Fleid	Repair	1			
į	Depreciation	CFC	Overhead	Labor	Parts	Lebor	Parts	Fuel	Lube	Tires	G.E.C.
Acquisition cost :	\$3.17	NA	NA NA	NA	NA	NA	NA	NA .	NA	NA NA	NA.
Econ.life -Mechine and Atlach. No. 1 :	84.10	NA	NA NA	\$1.13	\$1.20	\$1.89	\$1.62	NA	NA	NA	NA.
-Attachment No. 2		•	NA.	NA	NA.	NA.	NA	NA NA	NA	) NA	NA
Annual usage :	\$5.35	\$1,27	\$1.45	NA	NA .	NA.	NA	NA	NA	NA	NA
Double ships :	\$4.01	\$0.63	\$0.79	NA _	NA .	NA	NA NA	NA NA	NA	NA.	NA.
Triple shifts :	\$3.57	\$0.42	\$0.48	NA.	NA	NA	NA	NA	NA.	NA.	NA
Mech. forMachine and Attach. No. 1:	NA NA	NA	NA NA	\$0.79	NA	\$1.52	NA.	NA	NA	NA	NA
-Attachment No. 2	NA NA	NA	NA NA	NA	NA.	NA	NA	NA NA	NA	NA	NA
Fuel/tube -Mechine and Attach, No. 1:	NA NA	NA.	NA.	NA NA	NA	NA	NA NA	\$8.13	\$0.98	\$1.86	\$0.00
Attachment No. 2 :	NA NA	NA	NA.	NA.	NA	NA.	NA.	NA	NA.	MA	NA

ADJUSTED COST SUSTOTALS	IT SUSTOTALS Ownership Costs					Overtisad and Operating Costs							
1				Ove	rhaul	Field	Repair						
	Depreciation	CFC	Overhead	Labor	Parts	Lebor	Parts	Fuel	Lube	Tires	G.E.C.		
Besic Machine and Attachments No. 1 an	d No.2:			Basic Machin	e and Attache	nent No. 1:							
Single shifts :	\$5.38	\$1.27	\$1.45	\$0.79	\$1.29	\$1.32	\$1.62	\$6.13	\$0.98	\$1.88	\$0.00		
Double shifts :	\$4.01	\$0.63	\$0.73	Attachment:					-				
Triple shifts :	\$3.57	\$0.42	\$0.48	NA.	NA	NA	NA	NA	NA.	NA.	NA.		

HOURLY OPERATOR WAGES	Base	Fringe	F.I.C.A	Unempl.	WicComp.	Total	ſ			
	Plate	Benefite	7.70%	6.20%	12.50%	(S/hr)	Shift Diff	erential	Teamsters labor zone	2
Flatbad Driver - 1 rear exis	\$14.24	\$9.77	\$1.10	\$0.88	\$1.78	\$21.77	Day :	\$0.00	Two shift per day average :	\$0.15
N	\$2.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	Swing :	\$0.90	Three shift per day average :	\$0.25
Truck Machanic	\$15.97	\$4.61	\$1.23	\$0.99	\$2.00	\$24.80	Micht -	\$0.45		

HOURLY EQUIPMENT COST SUMMARY	Ownership	Operation	g and Overhaul	Operator	Total
		Machine	Attachments		Cost/hr (3)
Single shifts:	\$8.07	\$13.98	- AA	\$21.77	\$49.89
Double shifts:	\$5.97	\$13.98	NA NA	\$21.92	\$41:28
Triple shifts:	\$4.48	\$13.00	NA NA	\$22.02	\$40.48

EQUIPMENT PERFORMANCE DATA	······································	Struck	Heaped	Weight	Weight	Length	Width	Height	Min. turning	Horsepower	Fuel
Description	Type	Capacity (cy)	Capacity (cy)	(TEU)	(MT)	(ft)	(ft)	(h)	circle (ft)	(fhp)	type
Flatbed Truck, 4x2, 30K GVW	NA	NA	NA	5.50	4.99	18.50	8.00	10.00	N/A	210.00	Dissel
NA	NA	NA_	NA	NA	NA .	N	NA	NA	NA	NA	NA
NA .	M	NA .	N/A	NA	NA	NA	NA	NA	NA NA	NA	NA
Travel speads (mph):	1st (or max.)	2nd	Srd	4th	5th	eth eth	7th	6th	Mintmum dump	Max. dump	1
Ecoup	4/4	ALA.	NA .	MA	814	ALA	ALA	A14	1	halahi da k	

1.01	,										L
		·									
1		1									
Loader bucket type or	Compaction	Maximum vertical	Max. hortz.	Excavat	or bucket cape	scity (cy)	Lift cape	c#v (lbe)	Max.dig/rip	Shank	No.
A			reach (ft)						4		
Compactor drum type	widtivpass (fl.)	reach height (ft.)	teers (td)	amail	. medium	egrat	optimal	max. reach	depth (ft.)	specing	shanks
NA	NA.	NA	N/A	NA	NA	NA	NA	NA .	NA	NA.	NA
			<del> </del>								

#### EQUIPMENT COST AND PERFORMANCE DATA WORKSHEET

Machine make and model : Light Duty Pickup, 4x4, 3/4 T.

Dozer blade type : Attachment No. 1 : NA Attachment No. 2 : NA

CRG data update : 2003 CRG, 3003 CECG CECG data update : Second Ouarter, 2003 Labor data update : 06-13-03

#### DATA SOURCES :

sts: Cost Reference Guide (CRG)

Adjusted costs: Contractors Equipment Cost Guide (CECG)

Operator costs: Colorado Department of Transportation Labor overhead : Colorado Department of Transportation Specifications : Caterpillar Performance Handbook

BASE COSTS (CRG data)		Overhaul and Operating Costs									
				Ove	rheui	Field	Repair	1			
	Depreciation	CFC	Overhead	Labor	Parte	Labor	Parte	Fuel	Lube	Tires	G.E.C.
Basic Machine :	\$2.64	\$0.39	\$0.37	\$0.45	\$0.53	\$0.57	\$0.52	\$2.32	\$0.38	\$0.39	\$0.00
Attachment no.1	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Attachment no. 2 :	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

			. 1	ACQUISITION COST BREAKDOW	Ν	
Factor Description	Base Value	Adj. Value	Multiplier	Cost Elements (CECG)	Factor	Adj. Cost
Acquisition cost :	\$23,677.00	\$17,885.37	0.755	Base purchase price :		\$23,677.00
Economic life hours - Base Machine :	7,000	9.000	0.778	Less dealer discount :	Q 150	\$3,551.55
Attachment no.1	N/A	NA NA	1.000	Plus freight:	0.015	\$353.15
Attachment no. 2 :	N/A	NA	1.000	Plus dealer charges : *	0.005	\$118.39
Annual use hours :	2,112	2.000	1.068	estimeted		
Machanic's labor cost :	\$35.46	\$24.80	0.699	Adjusted purchase price :	1	\$20,598.99
Fuel cost per gellon - gasoline :	\$1.44	\$1.44	1.000	Plus taxes : Sales Tax @ 3%	3.00%	\$617.97
-dissel :	\$1.49	\$1,49	1.000	SMM Tax 9 2%	2.00%	\$411.99
Lube sost :	\$0.38	\$0.38	1.000	Less tire cost :		\$591.63
Tire life hours :	1,800	1,650	1.001	Less salvage value :	15,30%	\$3,151.65
Tire fector :	NA	0.025	1.000			
Tire cost :	\$702.00	\$591.93	0.843	No.	t accondistupos i	\$17,885,37

ADJUSTED COSTS	_	Ownership Costs		Overheat and Operating Costs									
				Ove	thaui	Field	Repair	1					
	Depreciation	cro	Overhead	Labor	Parts	Labor	Parts	Fuel	Lube	Tires	Q.E.C.		
Acquisition cost :	\$1.89	NA NA	NA NA	NA.	NA NA	NA	NA.	NA NA	NA	NA	NA		
Econ.life -Machine and Attach. No. 1 :	\$1.55	NA NA	NA NA	\$0.35	\$0.41	\$0.44	\$0.40	NA	NA	NA	NA		
-Affachment No. 2 :		1	NA NA	NA	NA	NA	NA	NA NA	NA	NA	NA		
Annual usage :	\$2.11	\$0.35	\$0.39	NA	NA.	NA	NA	NA NA	NA	NA	NA		
Double shifts :	\$1.50	\$0.17	\$0.20	NA.	NA	NA.	NA.	NA .	NA	NA	NA		
Triple shifts :	£1.40	\$0.12	\$0.13	NA	NA	NA.	NA.	NA NA	NA	NA	NA		
Mech. ibrMachine and Attach. No. 1:	NA NA	NA	NA	\$0.24	NA	\$0.31	NA	NA NA	NA	NA	NA		
-Attachment No. 2 :	NA	NA NA	NA NA	NA .	NA.	NA	NA	NA NA	NA	NA.	NA.		
Fuel/lube -Machine and Attach. No. 1:	NA	NA NA	NA NA	NA NA	NA	NA NA	NA NA	\$2.32	\$0.96	\$0.43	\$0.00		
Attachment No. 2 :	NA NA	NA.	NA.	NA.	NA	NA	NA	NA NA	NA.	NA.	NA.		

ADJUSTED COST SUSTOTALS	ADJUSTED COST SUBTOTALS Ownership Costs					Overheal and Operating Costs								
				. Ove	rhaul	Field	Tepair	l						
	Depreciation	CFC	Overhead	Lebor	Pert4	Labor	Parts	Fuel ]	Lube	Tiree	G.E.C.			
Basic Machine and Attachmenta No. 1 ar	nd No. 2 :			Basic Machin	e and Attachr	nent No. 1:								
Single shifts :	\$2.11	\$0.35	\$0.39	\$0.24	\$0.41	\$0.31	\$0.40	\$2.32	\$0.38	\$0.43	\$0.00			
Double shifts:	\$1.68	\$0.17	\$0.20	Attachment:										
Triple shifts:	\$1.40	\$0,12	\$0.13	N/A	N/A	NA	NA	NA	NA	NA.	NA			

HOURLY OPERATOR WAGES	Base	Fringe	F.I.C.A.	Unempi.	Wk.Comp.	Total		
	Rate	Benefits	7.70%	8.20%	12.50%	(\$/hr)	Shift Differential	Teamsters labor zone 2
Foreman	\$17.74	\$4:20	\$1.97	\$1.10	\$2.22	\$26.62	Day : \$0.00	Two shift per day average : \$0.18
NA NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	8wing : \$0.90	Three shift per day everage : \$0.26
Truck Mechanic	\$15.97	\$4.61	\$1.23	\$0.99	\$2.00	\$24.80	Hight: \$0.45	

HOURLY EQUIPMENT COST SUMMARY	Ownership	Operatir	g and Overheul	Operator	Total	
		Machine	Attachmenta		Cost/hr (\$)	
Single shifts	\$2.65	\$4.50	NA NA	\$26.62	\$33.97	
Double shifts	\$1.95	\$4.50	NA NA	\$26,77	\$33.22	
Triple shifts	\$1.65	\$4.50	NA NA	\$26.67	\$33.02	

EQUIPMENT PERFORMANCE DATA	A	7	Struck	Heaped	Weight	Weight	Length	Width	Height	Min. turning	Horsepower	Fuel
Description		Туре	Capacity (cy)	Capacity (cy)	(UST)	(MT)	(11)	(ft)	(H)	circle (f1)	(fhp)	type
Light Duty Pickips, 4x4, 3/4 T.	NA		NA	NA	2.25	2.04	18.00	6.00	6.00	NA	130.00	Dised
NA .	NA		NA NA	NA	NA	NA	NA	NA .	NA.	NA	NA .	NA
NA	NA.		NA	NA	NA.	MA	NA	NA	NA .	NA	NA	NA
Travel speeds (moh):	i	1 st (or max.)	2nd	3rd	4th	5th	l 6th	) 7th	8th	Minimum dumo	Max. dumo	Í

POPWER	<u> </u>	N/A		N/A	N/A	_ NA	NA	NA.	Clearance (ft.)	neight (fl.)	i
Reverse	NA NA	NA .	NA	NA	NA	NA	NA.	NA	NA	NA	ł
		1									
Loader bucket type or	Compaction	Maximum vertical	Max. horiz.	Fronvat	or bucket cen	activ (cs/	Lift cana	ARV MAIN	May diotrin	Shenk	Al-

Loader bucket type or	Compaction	Maximum vertical	Max. hortz.	Excevak	er bucket cape	acity (cy)	Lift cape	city (lbs)	Max.dig/rip	Shank	No.
Compector drum type	wkith/pass (ft.)	reach height (h.)	reach (fi)	ernali .	medium	large	optimal	max. reach	depth (ft.)	specing	shanka
N/A	NA .	NA NA	NA NA	NA	N/A	NA	NA	NA	NA NA	NA	NA

## **CERTIFICATE OF SERVICE**

I, Wallace H. Erickson, hereby certify that on this 7<sup>th</sup> day of May, 2004, I deposited a true copy of the foregoing (description of document) DMG's inspection report, signature date May 7, 2004, generated from the April 8, 2004 inspection of the Gold King Mine, Permit No. M-1986-013, and DMG's April 30, 2004 reclamation cost estimation for the Gold King Mine totaling \$47,119, in the United States Mail, postage paid, addressed to the following:

Stephen C. Fearn Gold King Mines Corporation P.O. Box 299 Silverton, CO 81433

Gregory Brand, District Engineer Colorado Department of Public Health & Environment Water Quality Control Division P.O. Box 140 Durango, CO 81302

St. Paul Fire & Marine Insurance Company Attn.: Ms. Kelley Blake 2000 S. Colorado Blvd., Ste. 2-280 Denver, CO 80222

Signature