COST SUMMARY WORK

Task de	escription:	Cost Summary					
Site:	Bowie No	o. 2 Mine		Permit Action:	Technical Revision 7	9 Permi	t/Job#: <u>C1996083</u>
<u>F</u>		<u> IDENTIFICAT</u>					
	Task #: Date:	352 8/9/2013	State: Colora County: Delta	do		Abbreviation Filename	
	User:	SLB					
	Ag	ency or organizatio	n name: DRMS				
<u>]</u>	<u>FASK LIS</u>	ST (DIRECT CO	<u>STS)</u>				
Task	Descrip	tion		Form Used	Fleet Size	Task Hours	Cost
350	Haul Fil Portal B		Strge Area to B-Seam	SCRAPER1	1	69.96	\$38,958.71
351		additional 270' Cul	vert C7	DEMOLISH	1	80.00	\$1,280.63
13	Credit C	Driginal Task 13		NA	1	0.00	(\$45,884.70)
				<u>SUB'</u>	<u>TOTALS:</u>	149.96	(\$5,645.36)
		<u>T COSTS</u> D AND PROFIT:					
<u> </u>	L P	iability insurance: erformance bond: bb superintendent: Profit:	2.02% 1.05% 0.00 hrs 10.00%		ТОТ	Total = Total = Total =	(\$114.04) (\$59.28) \$0.00 (\$564.54) (\$737.86)
			CC	ONTRACT AMO	UNT (direc	t + O & P) =	(\$6,383.22)
L	LEGAL - E	NGINEERING - PR	OJECT MANAGEME	NT:			
			sing (legal/related costs				0.00
	-	-	contract/bid preparation			Total =	
	Recl	amation manageme	nt and/or administration	n: <u>3.13%</u>		—	(\$199.79)
			CONTINGENCY	7: 0.00		Total =	\$0.00
				TOT	AL INDIRE	CT COST =	(\$1,192.98)
			TOTAL	BOND AMOUN	NT (direct +	- indirect) =	(\$6,838.34)
			TOTAL	BOND AMOUN	NT (direct +	- indirect) =	(\$6,838.34

SCRAPER TEAM WORK

TR-79

Task description:	Haul Fill f	from Upper	Mat'l	Strge Area to B-	-Seam Por	tal Bench		
Site: Bowie No. 2 Min	e	Permit A	ction:	Technical Revis	sion 79	Permit/Job#:	C199608	3
PROJECT IDEN	TIFICATION							
Task #: 350 Date: 8/9/20 User: SLB	013 Co	ounty: De	lorado lta			Abbreviation: Filename:	None C083-350	j
Agency or	organization name	: DRMS						
HOURLY EQUI	PMENT_			COSTS	hift basis:	1 per day		
		E	quipme	ent Description				
	-1			G w/push-pull				
	· T · · · · · ·		NA					
Suppo	ort Equipment -Loa		NA NA					
Road Ma	aintenance – Motor	1	NA					
100001			NA					
Cost Breakdown:	Scraper Wo	ork Team		Support Equi	pment	Mai	ntenance Eq	uipment
	Scraper	Dozei		Load Area	Dump A	Area Motor	Grader	Water Truck
%Utilization-machine:	100	NA		NA	NA	N	JA	NA
Ownership cost/hour:	\$65.78	NA		NA	NA	Ν	IA	NA
Operating cost/hour:	\$182.63	NA		NA	NA	Ν	JA	NA
Ripper op. cost/hour:	NA	NA		NA	NA	Ν	JA	NA

NA

NA

0

Support:

NA

NA

0

\$0.00

NA

NA

0

Maint:

NA

NA

0

\$0.00

Unit Subtotals:\$278.43NANumber of Units:20Group Subtotals:Work:\$556.86

\$30.02

Total work team cost/hour: **<u>\$556.86</u>**

MATERIAL QUANTITIES

Operator cost/hour:

Initial volume:	45,000	CCY	Swell factor:	1.165	
Loose volume:	52,425	LCY			
Sour	ce of estimated volume:	Operator E	stimate		
Source o	f estimated swell factor:	Cat Handbo	ook		

NA

HOURLY PRODUCTION

		Scraper Bowl (volu	me) Basis:	
Material weight:	2,900 lbs/LCY	Struck Volume:	15.70	LCY
Material description:	Decomposed rock - 50% Rock,	Heaped Volume:	22.00	LCY
	50% Earth			
Rated Payload:	52,800 pounds	Average Volume:	18.85	LCY
Payload Capacity:	18.21 LCY	Adjusted Capacity:	18.21	LCY

0.90 Minutes 0.60 Minutes

Site Altitude: 6750 feet

Cycle Time:

Scraper Loading Time:	
Maneuver and Spread Time:	

Job Condition Correction:

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	NA	(CAT HB)
Job Efficiency:	0.830	NA	(CAT HB)
Net Correction:	0.830	NA	

Travel Time:

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered, maintained 3.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	800.00	0.00	3.00	3.00	2824	0.52

Haul Time: 0.52 minutes

Return Route:

Sec #	Haul Distance (Ft)	Grade	Roll. Res	Total Res	Velocity (fpm)	Travel Time
Seg #	naui Distance (Ft)	(%)	(%)	(%)	velocity (Ipili)	(min)
1	800.00	0.00	3.00	3.00	2874	0.40

Return Time:	0.40	minutes	
Total Scraper team cycle time:	2.42	minutes	
Adjusted for job conditions:	749.34	LCY/Hour	
Selected Number of Scrapers:	2	Scraper(s)	
Adjusted single scraper team (unit) hourly production:	749.34	LCY/Hour	
Adjusted multiple scraper team (fleet) hourly production:	749.34	LCY/Hour	

Unadjusted unit production/hour: 902.82 LCY/Hour Optimal Number of Scrapers per push dozer:

JOB TIME AND COST

Fleet size:	1	Team(s)	Total job time:	69.96	Hours
Unit cost:	\$0.743	/LCY	Total job cost:	\$38,958.71	

SCRAPER TEAM WORK

TR-79

Task description:	Haul Fill f	rom Upp	per Mat'l	Strge Area to B	-Seam Portal Bei	nch		
Site: Bowie No. 2 Mine		Permi	t Action:	Permit Renewa	13 Per	mit/Job#:	C1996	5083
PROJECT IDENTIE	FICATION							
Task #: 013	<u>s</u>	State: 0	Colorado		Abbrev	viation:	None	
Date: 1/16/2013	Co	unty: l	Delta		Fil	ename:	C083-0	13
User: SLB								
Agency or orga	anization name:	DRM	IS					
HOURLY EQUIPM	ENT				hift basis: <u>1 per c</u>	lay		
				ent Description				
		Scraper:		/G w/push-pull				
Second and E		-Dozer:	NA					
Support E	Equipment -Loa		NA NA					
Road Mainte		p Area:	NA					
Road Maintenance – Motor Grader: -Water Truck:			NA					
	,, ator							
Cost Breakdown:	Scraper Wo	ork Team		Support Equi	pment	Mai	ntenance	Equipment
	Scraper	Do	zer	Load Area	Dump Area	Motor	Grader	Water Truck
%Utilization-machine:	100	N	A	NA	NA	N	A	NA

Ownership cost/hour: \$65.78 NA NA NA NA NA Operating cost/hour: \$182.63 NA NA NA NA NA Ripper op. cost/hour: NA NA NA NA NA NA \$30.02 NA Operator cost/hour: NA NA NA NA Unit Subtotals: \$278.43 NA NA NA NA NA Number of Units: 2 0 0 0 0 Group Subtotals: Work: \$556.86 Support: \$0.00 Maint: \$0.00

Total work team cost/hour: \$556.86

MATERIAL QUANTITIES

Initial volume:	53,000	CCY	Swell factor:	1.165	
Loose volume:	61,745	LCY			
S	Source of estimated volume:	Operator Estimate			
Sour	ce of estimated swell factor:	Cat Handbook			

HOURLY PRODUCTION

		Scraper Bowl (volu	me) Basis:	
Material weight:	2,900 lbs/LCY	Struck Volume:	15.70	LCY
Material description:	Decomposed rock - 50% Rock,	Heaped Volume:	22.00	LCY
	50% Earth			
Rated Payload:	52,800 pounds	Average Volume:	18.85	LCY
Payload Capacity:	18.21 LCY	Adjusted Capacity:	18.21	LCY

0

TR-79

Cycle Time						
	ading Time: and Spread Time:		<u>0.90</u> Minute <u>0.60</u> Minute			
Job Condit	ion Correction:			Si	ite Altitude: 6750 fe	eet
		Scraper	Push Dozer	Sourc	'е	
	Altitude Adj:	1.000	NA	(CAT H		
	Job Efficiency:	0.830	NA	(CAT H	HB)	
	Net Correction:	0.830	NA			
Travel Tim	le.					
	oad Condition: <u>Firn</u>	, smooth, rolling, di	rt/lt. surfaced, water	red, maintained 3.0		
Haul Route	7.	-				
Seg #	Haul Distance (Ft) Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	800.00	0.00	3.00	3.00	2824	0.52
					57 minuto	
Return Rou		Grade			0.52 minutes	
Return Rou Seg #	ute: Haul Distance (Ft		Roll. Res (%)	Haul Time:(Velocity (fpm)	s Travel Time (min)
) Grade (%) 0.00				Travel Time
Seg #	Haul Distance (Ft	(%)	Roll. Res (%) 3.00	Total Res (%) 3.00	Velocity (fpm)	Travel Time (min) 0.40
Seg #	Haul Distance (Ft	(%)	Roll. Res (%) 3.00 Re	Total Res (%) 3.00	Velocity (fpm)	Travel Time (min) 0.40
Seg #	Haul Distance (Ft	(%)	Roll. Res (%) 3.00 Re Total Scrap Adjusted	Total Res (%) 3.00 eturn Time: er team cycle time: for job conditions:	Velocity (fpm) 2874 0.40 minutes 2.42 749.34	Travel Time (min) 0.40 s minutes LCY/Hour
Seg #	Haul Distance (Ft	(%) 0.00	Roll. Res (%) 3.00 Re Total Scrap Adjusted Selected N	Total Res (%) 3.00 eturn Time: per team cycle time: for job conditions: fumber of Scrapers:	Velocity (fpm) 2874 0.40 minutes 2.42 749.34 2	Travel Time (min) 0.40 s minutes LCY/Hour Scraper(s)
Seg #	Haul Distance (Ft	(%) 0.00 Adjusted single	Roll. Res (%) 3.00 Re Total Scrap Adjusted Selected N scraper team (unit)	Total Res (%) 3.00 eturn Time: per team cycle time: for job conditions: fumber of Scrapers: hourly production:	Velocity (fpm) 2874 0.40 minutes 2.42 749.34 2 749.34	Travel Time (min) 0.40 s
Seg #	Haul Distance (Ft	(%) 0.00 Adjusted single	Roll. Res (%) 3.00 Re Total Scrap Adjusted Selected N scraper team (unit)	Total Res (%) 3.00 eturn Time: per team cycle time: for job conditions: fumber of Scrapers:	Velocity (fpm) 2874 0.40 minutes 2.42 749.34 2 749.34	Travel Time (min) 0.40 s minutes LCY/Hour Scraper(s)
Seg #	Haul Distance (Ft 800.00	(%) 0.00 Adjusted single Adjusted multiple unit production/hour	Roll. Res (%) 3.00 Re Total Scrap Adjusted Selected N e scraper team (unit) scraper team (fleet) r: 902.82	Total Res (%) 3.00 eturn Time: per team cycle time: for job conditions: fumber of Scrapers: hourly production: hourly production:	Velocity (fpm) 2874 0.40 minutes 2.42 749.34 2 749.34	Travel Time (min) 0.40 s
Seg # 1 Op	Haul Distance (Ft 800.00 Unadjusted	(%) 0.00 Adjusted single Adjusted multiple unit production/hour	Roll. Res (%) 3.00 Re Total Scrap Adjusted Selected N e scraper team (unit) scraper team (fleet) r: 902.82	Total Res (%) 3.00 eturn Time: per team cycle time: for job conditions: fumber of Scrapers: hourly production: hourly production:	Velocity (fpm) 2874 0.40 minutes 2.42 749.34 2 749.34	Travel Time (min) 0.40 s
Seg # 1 OF JOB TIM	Haul Distance (Ft 800.00 Unadjusted otimal Number of Scr	(%) 0.00 Adjusted single Adjusted multiple unit production/hour apers per push dozer	Roll. Res (%) 3.00 Re Total Scrap Adjusted Selected N escraper team (unit) scraper team (fleet) r: 902.82	Total Res (%) 3.00 eturn Time: per team cycle time: for job conditions: fumber of Scrapers: hourly production: hourly production:	Velocity (fpm) 2874 0.40 minutes 2.42 749.34 2 749.34 749.34 749.34	Travel Time (min) 0.40 s

TR-79

DEMOLITION WORK

	Task description:	Remove a	dditional 270' Culvert	C7				
Site:	Bowie No. 2 Mine		Permit Action: Tech	nnical Revision	79	Permit/	Job#:	C1996083
PROJE	CT IDENTIFICA	TION						
Task #:	: 351	State:	Colorado		Abbrev	viation:	None	
Date	: 8/9/2013	County:	Delta		Fil	ename:	C083-	-351
User	: SLB							
	Agency or org	anization name:	DRMS					
UNIT C	<u>OSTS</u>				<u>Locat</u>	tion adju	istment:	: 98.20 %
	<u>OSTS</u> Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	<u>Locat</u> Unit	tion adju Unit Cost		: 98.20 % otal Cost
	Structure or Item	Dimensions 36" x 400'		Quantity 270.00		Unit	Т	