

July 18, 2022

Robert Solberg Solberg Gravel LLC 13745 Garrett Rd Peyton, CO 80831-7620

Re: Solberg Pit, Permit No. M-1981-044; Third Adequacy Review for 112 Construction Materials Reclamation Permit Amendment Application (AM-3)

Dear Mr. Solberg:

The Division of Reclamation, Mining and Safety (DRMS) has reviewed your responses to our March 2, 2022 second adequacy review letter for your 112 Construction Materials Reclamation Permit Amendment Application (AM-3) for the Solberg Pit, Permit No. M-1981-044. This response required an amendment to the original AM-3 application to account for additional affected area and was received on April 18, 2022. The public comment period for the amended amendment application ended on June 19, 2022. The decision date for this application is July **31, 2022**. Please be advised that if you are unable to satisfactorily address any concerns identified in this review before the decision date, it will be your responsibility to request an extension of the review period. If there are outstanding issues that have not been adequately addressed prior to the end of the review period, and no extension has been requested, the DRMS may deny this application.

The following items must be addressed by the applicant in order to satisfy the requirements of C.R.S. 34-32.5-101 <u>et seq</u>. and the Mineral Rules and Regulations of the Mined Land Reclamation Board: (*the numbering sequence from the original adequacy letter has been retained for tracking purposes*)

6.4 SPECIFIC EXHIBIT REQUIREMENTS – REGULAR 112 OPERATIONS

6.4.1 EXHIBIT A - Legal Description

6. <u>Exhibit A</u>: The response is adequate.

6.4.4 EXHIBIT D – Mining Plan

12. <u>Affected Area</u>: The response requires additional clarification. All text responses were revised to a consistent 286 acres of affected area. However, the Exhibit C and F maps provided with the April 18, 2022 contradict this and the two maps are also inconsistent. The Exhibit C map lists the total affected area in the notes as 289 acres. Whereas, The Exhibit F map lists the total affected area in the notes as 306 acres. Exhibit F also includes the southwest corner as affected area, where that corner is not included as affected area in Exhibit C. Please provide Exhibit C



and F maps consistent with the revised 286 acres of affected area stated in the text. If the amended affected area is now to be 289 acres, Exhibits D, E and L will need to be revised.

13. <u>Perimeter slopes</u>: The DRMS accepts Pioneer's commitment to limit the length of active highwall to 1,700 feet. The response is adequate.

6.4.6 EXHIBIT F – Reclamation Plan Map

23. <u>Affected Area Boundary</u>: Please see Comment 12. Please revise Exhibit F to be consistent with the response to Comment 12.

6.4.12 EXHIBIT L – Reclamation Costs

- 25. <u>Task 001C</u>: Please see Comment 13. A DRMS bond estimate is enclosed for your review (see **Attachment A**). It assumes the affected area is 286 acres and the highwall length is limited to 1,700 feet. Please review the enclosed bond estimate.
- 26. Task 005: Please see Comment 12.
- 27. <u>Tasks 006 and 010</u>: Please see Comment 12.

6.4.13 EXHIBIT M – Other Permits and Licenses

30. <u>Update required</u>: The response is adequate.

6.4.19 EXHIBIT S – Permanent Man-Made Structures

32. <u>Utility lines/poles not addressed</u>: The response is adequate.

Please remember that the decision date for this application is July 31, 2022. As previously mentioned if you are unable to provide satisfactory responses to any inadequacies prior to this date, it will be your responsibility to request an extension of time to allow for continued review of this application. If there are still unresolved issues when the decision date arrives and no extension has been requested, the application may be denied. If you have any questions, please contact me at (303) 328-5229.

Sincerely,

Timothy A. Cazier, P.E. Environmental Protection Specialist

- Enclosures: Attachment A: AM-3 DRMS Bond Estimate History Colorado and Colorado Division of Water Resources Comments
- ec: Michael Cunningham, DRMS DRMS file Angela Bellantoni, PhD, Pioneer Landscaping Materials

ATTACHMENT A

COST SUMMARY WORK

Task description:		Cost Summary						
Site: Solberg Pit		Pe	rmit Action:	AM-3	Permit/Jol	o#: <u>M1981044</u>		
<u>PF</u>	ROJECT Task #:	IDENTIFIC	CATION State:	Colorado		Abbreviation:	None	
	Date: User:	7/14/2022 TC1	County:	El Paso		Filename:	M044-000	
Agency or organization name: DRMS								

TASK LIST (DIRECT COSTS)

Task		Form	Fleet	Task	Gert
	Description	Used	Size	Hours	Cost
001A	Knock down 1700 ft of 0.5H:1V Highwalls	DOZER	1	15.27	\$4,008
002	Rip haul roads and scale house site	RIPPER	1	1.73	\$490
003	Backfill water ponds	DOZER	1	48.97	\$12,855
005	Finish grade disturbed area	GRADER	1	49.93	\$7,571
006	Place 6" Topsoil over disturbed area	SCRAPER1	1	391.26	\$410,286
010	Revegetate 286 Acres	286 Acres REVEGE		120.00	\$902,913
011	Remove truck scale and house [ref. Exhibit L]	NA	1	4.00	\$13,962
012	Mob/Demob	MOBILIZE	1	1.57	\$3,662
		<u>SUBTO</u>	DTALS:	632.73	\$1,355,747

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$27,386
Performance bond:	1.05	Total =	\$14,235
Job superintendent:	316.37	Total =	\$23,769
Profit:	10.00	Total =	\$135,575
		TOTAL O & P =	\$200,965
		CONTRACT AMOUNT (direct + O & P) = $\frac{1}{2}$	\$1,556,712

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): Engineering work and/or contract/bid preparation: Reclamation management and/or administration:	\$0 4.25 5.00	Total = Total =	\$0 \$66,160 \$77,836
CONTINGENCY:	0.00	Total =	\$0
	TC	TAL INDIRECT COST =	\$344,960
TOTAL BO	\$1,700,707		

BULLDOZER WORK

e: <u>Solberg Pit</u> Permit Action: <u>AM-3</u> Permit/Job#: <u>M1981044</u> PROJECT IDENTIFICATION Task #: <u>001A</u> State: <u>Colorado</u> Abbreviation: <u>None</u> Date: <u>7/14/2022</u> County: <u>El Paso</u> Filename: <u>M044-001A</u> degney or organization name: <u>DRMS</u> HOURLY FOUIPMENT COST Basic Machine: <u>Cat D8T - 8SU</u> Horsepower: <u>310</u> Basic Machine: <u>Cat D8T - 8SU</u> Horsepower: <u>310</u> Basic Machine: <u>NA</u> Shift Basis: 1 per day Data Source: (CRG) Cost Breakdown: Overeship Cost/Hour: <u>\$124.85</u> <u>NA</u> Operating Cost/Hour: <u>\$77.63</u> 100 Ripper op. Cost/Hour: <u>\$00.00</u> O Operator Cost/Hour: <u>\$262.52</u> Total Fleet Cost/Hour: <u>\$262.52</u> Total Fleet Cost/Hour: <u>\$262.52</u> Total Fleet Cost/Hour: <u>\$262.52</u> Total Fleet Cost/Hour: <u>\$262.52</u> MATERIAL QUANTITIES Materialed Volume: <u>1Ast07 LCY</u> Source of estimated swell: <u>Task 00[C1 Spreadsheet</u> Source of estimated swell: <u>Task 00[C1 Spreadsheet</u> Source of estimated swell: <u>Task00[C1 Spreadsheet</u> Materials consistency description: <u>Compacted fill or embankment 0.9</u> Average push distance: <u>1060</u> Average push <u>-25 %</u> gradient: Materials consistency description: <u>Compacted fill or embankment 0.9</u> Average site altitude: <u>6,650 feet</u> Material weight: <u>2.900 Ibs/LCY</u> Weight description: Sand and gravel - Dry	Task description:	Knock down 1700 ft of 0.5H	:1V Highwalls		
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Average site altitude:6,650 feetMaterial weight:2,900 lbs/LCY		-25 %			
Material weight: 2,900 lbs/LCY	0				
	Average site altitude:	0,030 feet			
Weight description: Sand and gravel - Dry	Material weight:	2,900 lbs/LCY			
	Weight description:	Sand and gravel - Drv			

Job Condition Correction Factor		Source
Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.100	(50% SL)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	1.000	(DOZ-OC)
Push gradient:	1.516	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)
		1

Net correction: 0.7409

Adjusted unit production:	1,037.26 LCY/hr		
Adjusted fleet production:	1037.26 LCY/hr		

JOB TIME AND COST

Fleet size:	1 Dozer(s)
Unit cost:	\$0.253/LCY

Total job time:	15.27 Hours
Total job cost:	\$4,008



Task # 001A.1 Highwall Backfill Volume Estimate

BULLDOZER RIPPING WORK

-	Task descrij	otion:	Rip haul roa	ds and scale ho	use site				
Site:	Solberg l	Pit		Permit Action:	AM-3		Permit/Jo	b#: <u>M19810</u>	44
<u>P</u>	ROJECT	IDENTIFIC	ATION						
	Task #: Date: User:	002 7/14/2022 TC1	Stat			Ał	breviation: Filename:	None M044-002	
	Age	ency or organiz	ation name:	DRMS					_
H	OURLY	EQUIPMEN	T COST						
		asic Machine:	Cat D8T - 8			Horsepower		310	-
	Rippe	r Attachment:	3-Shank Rip	oper		Shift Basis Data Source		per day CRG)	-
<u>C</u>	ost Breakdo	own:						eney	
			hip Cost/Hour:		\$124.85	Utilization % NA	, 		
	т	Operati Ripper Ownersl	ing Cost/Hour:		\$97.63	100 NA			
		Ripper Ownersi Ripper Operati			\$13.10 \$7.30	NA 100			
			tor Cost/Hour:		\$40.04	NA			
		Total U	nit Cost/Hour:		\$282.92	-			
		Total Fl	eet Cost/Hour:	\$282	2.92	_			
		L QUANTIT	IES	Selec	cted estimating	g method: A	rea		
<u>A</u>	lternate Me	<u>thods:</u>							
Seismic: Area:	NA 1.20		20	Bank Volume: Rip Depth (ft):	NA 1.00	BCY Volume		NA	BCY or CCY
Alca.	1.20	acro							
			-	untity: <u>Google</u>	e Earth: acces	s road to truck	scale		
H	IOURLY	PRODUCTI	<u>ON</u>						
Se	eismic:								
			Seismic V	elocity:	NA	feet/s	second		
A	rea:		.						
			verage Ripping verage Ripping		2.56 7.08	feet/r feet/r			
			verage Ripping		800.00	feet/g			
			Average Doze	· · ·	88.00		ninute		
			erage Maneuvo		0.25		tes/pass		
		Pr	oduction per u	nit area:	0.835	acres	/hour		
Jc	ob Condition	n Correction Fa	actors						
		Unadjusted H	ourly Unit Pro	duction:	0.835	Acre	s/hr		
				Altitude:	6,650	feet			
				ıde Adj:	1.00		ΓHB)		
				ficiency:	0.83	(1 sh multi	ift/day)		
		. 1.					-		
			Adjusted Hourly Unit Production: Adjusted Hourly Fleet Production:		0.69 0.69	Acres/hr Acres/hr			
J.	OB TIME	AND COST	-						
<u>.</u>	Fleet siz		Grade	r(s)	Total job tir	me:	1.73	Hours	
	Unit cos	st: \$408.1	20 Per act	re	Total job co	ost:	\$490		

Page 1 of 2

BULLDOZER WORK

Task description:	Backfill water ponds			
: Solberg Pit	Permit Action:	AM-3	Permit/Jo	b#: <u>M1981044</u>
PROJECT IDENTIFI	CATION			
Task #: 003	State: Colorado		Abbreviation:	None
Date: 7/14/2022	County: El Paso		Filename:	M044-003
User: TC1				
Agency or organ	nization name: DRMS			
HOURLY EQUIPME	NT COST			
	t D8T - 8SU			
Horsepower: 310				
1	mi-Universal			
Attachment: NA				
	er day			
1	RG)			
	NU)			
Cost Breakdown:		Utilization %		
Ownership Cost/Hours	¢124.95			
Ownership Cost/Hour:	\$124.85	NA 100		
Operating Cost/Hour:	\$97.63	100		
Ripper own. Cost/Hour:	\$0.00	NA		
Ripper op. Cost/Hour:	\$0.00	0		
Operator Cost/Hour:	\$40.04	NA		
Source of estimated volu Source of estimated swe	220 50 143 LCY 1me: Exhibit L, task 003			
factor: <u>HOURLY PRODUCT</u>				
Average push distance: Unadjusted hourly production:	50 feet 1,400.0 LCY/hr			
Materials consistency de	escription: <u>Compacted fill or em</u>	bankment 0.9		
Average push gradient:	-10 %			
Average site altitude:	6,650 feet			
Material weight:	2,900 lbs/LCY			

Job Condition Correction Factor		Source
Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.100	(50% SL)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	1.000	(DOZ-OC)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5987

Adjusted unit production:	838.18 LCY/hr
Adjusted fleet production:	838.18 LCY/hr

JOB TIME AND COST

Fleet size:	1 Dozer(s)
Unit cost:	\$0.313/LCY

Total job time:	48.97 Hours
Total job cost:	\$12,855

MOTOR GRADER WORK

Task description:	Finish grade disturbe	ed area		
te: Solberg Pit	Permit A	Action: AM-3	Perm	it/Job#: <u>M1981044</u>
PROJECT IDENTI	FICATION			
Task #: 005	State: Col	lorado	Abbreviati	on: None
Date: 7/14/202		Paso	Filenar	
User: TC1				
Agency or org	anization name: DRMS			
HOURLY EQUIPM	ENT COST			
Basic Machi	ne: CAT 12M		Horsepower:	158
Ripper Attachme			Shift Basis:	1 per day
			Data Source:	(CRG)
Cost Breakdown:				
			Utilization %	
	nership Cost/Hour:	\$57.51	NA	
	erating Cost/Hour:	\$47.24	100 NA	
	nership Cost/Hour: erating Cost/Hour:	\$0.00 \$0.00	NA	
	perator Cost/Hour:	\$46.87	NA	
	al Unit Cost/Hour:	\$151.62		
Tota	al Fleet Cost/Hour:	\$151.62	_	
MATEDIAL OUAN			_	
MATERIAL QUAN				
Total Are	a to be graded or ripped:	286.00		acres
Sour	rce of estimated acreage:	Exhibit L		
HOURLY PRODUC	<u>CTION</u>			
	Average Grader Speed:	6.25	mph	
	Selected Application:		aintenance (3-9.5 mph) -	6.25
	Selected Blade Angle:	30	degrees	
W/: 441	Effective Blade Length:	10.40	feet	
	of blade overlap per pass: g or ripping width per pass:	8.40	feet feet	
	ed Hourly Unit Production:	6.3636	acres/hour	
Job Condition Correction			Site Altitude: <u>6650</u> feet	
		Source		
Altitude Adj:		CAT HB)		
Job Efficiency:		sh/d, fav.)		
Net Correction:	<u>0.9000</u> mu	ıltiplier		
	Adjusted Hourly Unit Produ	uction: 5.7273	acres/Hour	
1	Adjusted Hourly Fleet Produ	action: 5.7273	acres/Hour	
JOB TIME AND CO	<u>)ST</u>			
Fleet size:	1 Grader(s)	Total job tin	ne: 49.94	Hours
Unit cost: \$	26.47 per acre	Total job co	st: \$7,571	
φ		10.00 00	<i>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>	

SCRAPER TEAM WORK

Site: Solberg Pit		Perm	it Action:	AM-3	P	ermit/Job#: <u>M1</u>	981044
PROJECT IDENT	IFICATION						
Task #: 006	Stat	te (Colorado		Abbre	viation: None	
Date: $7/14/20$			El Paso			ename: M044-	006
User: TC1	<u>,22</u> 00000	. <u> </u>	511 450				000
Agency or o	rganization name:	DRM	[S				
				000	N.O.1 · 1	1	
HOURLY EQUIPM	<u>VIEN I</u>				Shift basis: <u>1 per</u>	<u>day</u>	
	-Scra		Equipme Cat 623	nt Description			
		ozer:	NA	0			
Suppor	t Equipment -Load A	Area:	NA				
	-Dump A		CAT 12	2M			
Road Main	ntenance –Motor Gra -Water Tr		NA Watar T	anker, 2,500 Ga	1		
	-water 11	ruck:	water 1	anker, 2,300 Ga			
Cost Breakdown:	Scraper Work	Team		Support Equi	ipment	Maintenanc	e Equipment
	Scraper	Doz	zer	Load Area	Dump Area	Motor Grader	Water Truc
%Utilization-machine:	100		NA	NA	100	NA	10
Ownership cost/hour:	\$222.02		NA	NA	\$57.51	NA	\$10.2
Operating cost/hour:	\$164.11		NA	NA	\$47.24	NA	\$20.3
%Utilization-ripper:	NA		NA	NA	NA	NA	N
Ripper own. cost/hour:	NA		NA	NA	\$0.00	NA	\$0.0
Ripper op. cost/hour:	NA		NA	NA	\$0.00	NA	\$0.0
Operator cost/hour:	\$47.07		NA	NA	\$46.87	NA	\$0.0
Unit Subtotals:	\$433.20		NA	NA	\$151.62	NA	\$30.6
Number of Units:	2		0	0	1	0	
Group Subtotals:	Work:	\$866	.40	Support:	\$151.62	Maint:	\$30.60
Total work team cost/l MATERIAL QUA Initial volume:			ССҮ	Swell fac	tor: 1.215		
Loose volume:	230,707		LCY	Swell lac	1.215		
Sour	ce of estimated volu	me:	286 acres				
Source of	f estimated swell fac	tor:	Cat Hand	lbook			
HOURLY PRODU	<u>CTION</u>						
				<u>Scraper E</u>	Bowl (volume) Ba	sis:	
Material weight:	1,600 lbs/LCY			Struck	Volume: 18.00	L	CY
Material description:	Top Soil		<u> </u>		Volume: 23.00		CY
Rated Payload:	55,200 pounds			Average	Volume: 20.50		CY
Payload Capacity:	34.50 LCY			Adjusted (Capacity: 20.50	L	CY

<u>0.90</u> Minutes

<u>0.70</u> Minutes

Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

Site Altitude: 6650 feet

	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	1000.00	0.00	3.00	3.00	2189	0.67

Haul Time: **0.67** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1000.00	0.00	3.00	3.00	2666	0.58
				Return Time:	0.58	minutes
			Total Scrape	r team cycle time:	2.85	minutes
			Adjusted f	or job conditions:	358.21	LCY/Hour
			Selected Nu	mber of Scrapers:	2	Scraper(s)
	Adjusted	single scrape	er team (unit) h	ourly production:	716.42	LCY/Hour
	Adjusted mu	ltiple scrape	r team (fleet) h	ourly production:	716.42	LCY/Hour
	Unadjusted unit proc Number of Scrapers per			LCY/Hour		

Fleet size:	1	Team(s)	Total job time:	391.26	Hours
Unit cost:	\$1.464	/LCY	Total job cost:	\$410,286	

REVEGETATION WORK

Task descri	ption:	Revegetate 286 Acres			
e: Solberg	Pit	Permit Action:	AM-3	Permit/Job#	t: <u>M1981044</u>
PROJECT	IDENTIFIC	CATION			
Task #:	010	State: Colorado		Abbreviation:	None
Date:	7/14/2022	County: El Paso		Filename:	M044-010
User:	TC1				
Aø	ency or organ	ization name: DRMS			

FERTILIZING

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			Total Fertilizer Materials	
			Cost/Acre	\$0.00

Application

Description	Cost /Acre
	\$
Total Fertilizer Application Cost/Acre	\$0.00

TILLING

Description		Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)		\$117.18
Weed control spraying (MEANS 31 31 16.13 3100)		\$290.40
	Total Tilling Cost/Acre	\$407.58

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Blue Grama - Native	2.00	32.64	\$27.45
Little Bluestem - Native	4.00	23.88	\$54.27
Sideoats Grama - Vaughn	8.00	26.26	\$67.00
Intermediate Wheatgrass - Rush	10.00	21.35	\$28.00
Western Wheatgrass - Native	12.00	30.30	\$72.00
Needlegrass, Green - Lodorm	6.00	24.93	\$70.65
Regreen Hybrid	30.00	7.58	\$140.25
Totals Seed Mix	72.00	166.94	\$459.62

Application

Description		Cost /Acre
Hydro seeding (MEANS 32 92 19.14 0200)		\$1,247.99
	Total Seed Application Cost/Acre	\$1,247.99

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Hydromulch, 1 ton/ac. rate {Materials Only}	1.00	ACRE	\$407.29	\$407.29
Total Mulch Materials Cost/Acre				\$407.29

Application

Description	Cost /Acre
	\$
Total Mulch Application Cost/Acre	\$0.00

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
		Totals	Nursery Stoc	k Cost / Acre	\$0.00

JOB TIME AND COST

Estimate *Selected Replanti	No. of Acres: ed Failure Rate: ng Work Items:	30%	ĪNG	Cost /Acre: Cost /Acre*:	
Initial Job Cost:	\$721,429.28				
Reseeding Job Cost:	\$181,483.30				
Total Job Cost:	\$902,913				
Job Hours:	120.00				

EQUIPMENT MOBILIZATION/DEMOBILIZATION

	Solberg Pit		Permit	Action: <u>AM-3</u>	3	I	Permit/Job#: <u>N</u>	11981044
PR	OJECT IDE	NTIFICATI	<u>ON</u>					
	Task #: 012	2	State: Co	olorado		Abbre	viation: None	e
	Date: 7/1 User: TC	8/2022 1	County: El	Paso		Fi	lename: M04	4-012
	Agency	or organization	n name: DRMS					
EQ	UIPMENT 1	RANSPOR	<u>T RIG COST</u>					
						Shift ba		
					C	Cost Data Sour	ce: CRG D	ata
	Truck	c Tractor Desc	ription: GENE	RIC ON-HIGH			OR, 6X4, DIESE	L POWERED,
					400 HP	(2ND HALF,		
	Truc	k Trailer Desc	ription: G			,	OP DECK EQU	JIPMENT
	Truc	k Trailer Desc	ription: G			SENECK, DR (25T, 50T, AN	· · ·	JIPMENT
⁷ 05		k Trailer Desc	ription: G			,	· · ·	JIPMENT
	st Breakdown:		·		<u>FRAILER</u>	(25T, 50T, AN	· · ·	JIPMENT
	st Breakdown: vailable Rig C	apacities	0-25 Tons	26-50 Tons	TRAILER	(25T, 50T, AN		JIPMENT
	<u>st Breakdown:</u> vailable Rig C Ownership	apacities Cost/Hour:	0-25 Tons \$15.25	26-50 Tons \$23.06	<u>FRAILER</u>	(25T, 50T, AN • Tons 7.58		JIPMENT
	<u>st Breakdown:</u> vailable Rig C Ownership Operating	apacities Cost/Hour: Cost/Hour:	0-25 Tons \$15.25 \$25.26	26-50 Tons \$23.06 \$30.83	TRAILER 51+ \$3 \$5	(25T, 50T, AN Tons 7.58 1.41		JIPMENT
	<u>st Breakdown:</u> vailable Rig C Ownership Operating Operator	apacities Cost/Hour: Cost/Hour: Cost/Hour:	0-25 Tons \$15.25 \$25.26 \$27.71	26-50 Tons \$23.06 \$30.83 \$27.71	TRAILER 51+ \$3 \$5 \$2	(25T, 50T, AN Tons 7.58 1.41 7.71		JIPMENT
	st Breakdown: vailable Rig C Ownership Operating Operator Helper	apacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour:	0-25 Tons \$15.25 \$25.26 \$27.71 \$0.00	26-50 Tons \$23.06 \$30.83 \$27.71 \$20.22	S1+ \$3 \$5 \$2 \$2	(25T, 50T, AN Tons 7.58 1.41 7.71 0.22		JIPMENT
	st Breakdown: vailable Rig C Ownership Operating Operator Helper	apacities Cost/Hour: Cost/Hour: Cost/Hour:	0-25 Tons \$15.25 \$25.26 \$27.71	26-50 Tons \$23.06 \$30.83 \$27.71	S1+ \$3 \$5 \$2 \$2	(25T, 50T, AN Tons 7.58 1.41 7.71		JIPMENT
	st Breakdown: vailable Rig C Ownership Operating Operator Helper Total Uni	apacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour:	0-25 Tons \$15.25 \$25.26 \$27.71 \$0.00 \$68.22	26-50 Tons \$23.06 \$30.83 \$27.71 \$20.22	S1+ \$3 \$5 \$2 \$2	(25T, 50T, AN Tons 7.58 1.41 7.71 0.22		JIPMENT
	st Breakdown: vailable Rig C Ownership Operating Operator Helper	apacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour:	0-25 Tons \$15.25 \$25.26 \$27.71 \$0.00 \$68.22	26-50 Tons \$23.06 \$30.83 \$27.71 \$20.22	S1+ \$3 \$5 \$2 \$2	(25T, 50T, AN Tons 7.58 1.41 7.71 0.22		JIPMENT
NO	st Breakdown: vailable Rig C Ownership Operating Operator Helper Total Uni	apacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour:	0-25 Tons \$15.25 \$25.26 \$27.71 \$0.00 \$68.22 MENT:	26-50 Tons \$23.06 \$30.83 \$27.71 \$20.22 \$101.82	S1+ \$3 \$5 \$2 \$2	(25T, 50T, AN Tons 7.58 1.41 7.71 0.22 36.92	ND 100T)	DOT Permit
<u>Av</u> NO M	st Breakdown: vailable Rig C Ownership Operating Operator Helper Total Unit	apacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour:	0-25 Tons \$15.25 \$25.26 \$27.71 \$0.00 \$68.22	26-50 Tons \$23.06 \$30.83 \$27.71 \$20.22	S1+ \$3 \$5 \$2 \$1:	(25T, 50T, AN Tons 7.58 1.41 7.71 0.22	ND 100T)	
<u>Av</u> NO M	st Breakdown: vailable Rig C Ownership Operating Operator Helper Total Uni ON ROADAB	apacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: t Cost/Hour: LE EQUIPN Weight/	0-25 Tons \$15.25 \$25.26 \$27.71 \$0.00 \$68.22 MENT: Owner ship	26-50 Tons \$23.06 \$30.83 \$27.71 \$20.22 \$101.82 Haul Rig	TRAILER 51+ \$3 \$5 \$2 \$11 Fleet	(25T, 50T, AN 7.58 1.41 7.71 10.22 36.92 Haul Trip	ND 100T)	DOT Permit
Av NO M Do	st Breakdown: vailable Rig C Ownership Operating Operator Helper Total Uni ON ROADAB	apacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: LE EQUIPN Weight/ Unit	0-25 Tons \$15.25 \$25.26 \$27.71 \$0.00 \$68.22 MENT: Owner ship Cost/hr/ unit \$137.95	26-50 Tons \$23.06 \$30.83 \$27.71 \$20.22 \$101.82 Haul Rig Cost/hr/uni	TRAILER 51+ \$3 \$5 \$2 \$11 Fleet	(25T, 50T, AN Tons 7.58 1.41 7.71 0.22 36.92 Haul Trip Cost/hr/	ND 100T)	DOT Permit
Av NO M Da	st Breakdown: vailable Rig C Ownership Operating Operator Helper Total Univ DN ROADAB	apacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: LE EQUIPN Weight/ Unit (TONS)	0-25 Tons \$15.25 \$25.26 \$27.71 \$0.00 \$68.22 MENT: Owner ship Cost/hr/ unit	26-50 Tons \$23.06 \$30.83 \$27.71 \$20.22 \$101.82 Haul Rig Cost/hr/uni t	STRAILER 51+ \$3 \$5 \$2 \$11 Fleet Size	(25T, 50T, AN Tons 7.58 1.41 7.71 0.22 36.92 Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Av NO M Da Ca Ca	st Breakdown: vailable Rig C Ownership Operating Operator Helper Total Univ DN ROADAB Iachine escription at D8T - 8SU	apacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: LE EQUIPN Weight/ Unit (TONS) 53.08	0-25 Tons \$15.25 \$25.26 \$27.71 \$0.00 \$68.22 MENT: Owner ship Cost/hr/ unit \$137.95	26-50 Tons \$23.06 \$30.83 \$27.71 \$20.22 \$101.82 Haul Rig Cost/hr/uni t \$136.92	TRAILER 51+ \$3 \$5 \$2 \$11 Fleet Size 1	(25T, 50T, AN Tons 7.58 1.41 7.71 0.22 36.92 Haul Trip Cost/hr/ fleet \$274.87	Return Trip Cost/hr/ fleet \$136.92	DOT Permit Cost/ fleet \$250.00
Av NO M Da Ca Ca	st Breakdown: vailable Rig C Ownership Operating Operator Helper Total Univ DN ROADAB Iachine escription at D8T - 8SU at 623G	apacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: LE EQUIPN Weight/ Unit (TONS) 53.08 41.35	0-25 Tons \$15.25 \$25.26 \$27.71 \$0.00 \$68.22 MENT: Owner ship Cost/hr/ unit \$137.95 \$222.02	26-50 Tons \$23.06 \$30.83 \$27.71 \$20.22 \$101.82 Haul Rig Cost/hr/uni t \$136.92 \$101.82 \$68.22	FRAILER 51+ \$3 \$5 \$2 \$11 Fleet Size 1 2	(25T, 50T, AN Tons 7.58 1.41 7.71 0.22 36.92 Haul Trip Cost/hr/ fleet \$274.87 \$647.68	Return Trip Cost/hr/ fleet \$136.92 \$203.64	DOT Permit Cost/ fleet \$250.00 \$500.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Water Tanker, 2,500 Gal.	\$30.60	1	\$30.60	\$30.60
Hydroseeder with Tractor	\$25.23	1	\$25.23	\$25.23
		Subtotals:	\$55.83	\$55.83

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	FALCON	
Total one-way travel distance:	5.00	miles
Average Travel Speed:	35.00	mph
Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	\$3,645.73	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$15.95	

Transportation Cycle Time:

Haul Time (Hours): Return Time (Hours): Loading Time (Hours):	Non- Roadable Equipment 0.14 0.25	Roadable Equipment 0.14 0.14 NA
Unloading Time (Hours):	0.25	NA NA
Subtotals:	0.79	0.29

JOB TIME AND COST

Total job time: 1.57 Hours

Total job cost: \$3,662