M/049/0001
cc: Lynn
Wayne
Task: 5023

STAKER | PARSON
COMPANIES

RECEIVED
AUG 16, 2012
DIV. OF OIL, GAS & MINING

August 16, 2012

Paul Baker
Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Salt Lake City, UT 84114

Hand Delivered

Re: Staker Parson Companies Keigley Quarry Reclamation Cost Estimate

Dear Mr. Baker:

Staker & Parson Companies is providing the attached Keigley Quarry reclamation cost estimate spreadsheets for your review.

Please contact me with any questions you may have.

Sincerely,

Staker & Parson Companies

Michael Dalley
Mountain West Division Sustainability Director

PH 801-871-6600
FAX 801-871-6869
www.stakerparson.com
89 West 13490 South, Suite 100, Draper, UT 84020

ROCK PRODUCTS, READY MIX CONCRETE, ASPHALT, PAVING, & CONSTRUCTION SERVICE

THE PREFERRED SOURCE

Bonding Calculations		
Direct Costs		
Subtotal Demolition and Removal	$296,128.00	
Subtotal Backfilling and Grading	$561,943.00	
Subtotal Revegetation	$183,832.00	
Direct Costs	$1,041,903.00	
Indirect Costs		
Mob/Demob	$104,190.00	10.0%
Contingency	$52,095.00	5.0%
Engineering Redesign	$26,048.00	2.5%
Main Office Expense	$70,849.00	6.8%
Project Management Fee	$26,048.00	2.5%
Subtotal Indirect Costs	$279,230.00	26.8%
Total Cost 2012	$1,321,133.00	
Number of years		5
Escalation factor		0.012
Escalation	$81,193.00	
Reclamation Cost Escalated	$1,402,326.00	
Bond Amount (rounded to nearest $1,000) 2012 Dollars	$1,402,000.00	
Posted Bond		
Difference Between Cost Estimate and Bond	-$1,402,000.00	
Percent Difference		

Ref	Description	Material	Means Reference Number	Unit Cost*	operatg cost	unit	unit cost**	operatg cost	unit	Total Equip Cost	Labor Cost***	Unit	TOTAL Operating Cost/hour	Production Rate	Units	Seed Cost****	Unit	Quantity	Unit	TOTAL Cost
					Dozer			Seeder												
9.6	Revegetation		see below	113.64	117.2	$/op hr	18.89	24.90	$/op hr	274.63	70.25	$/hr	344.88	0.83	ac/hr	70.04	$/ac	378.6	ac	183,832

Sources and Notes

*All costs on this sheet are based on use of a D9 dozer - Means 2012 (01 54 33 20 4360)

**Cost for range broadcast seeder based on cost to rent/operate a 50 HP towed sheepsfoot roller (Means 2012 (01 54 33 20 3150))

Unit cost assumes monthly rental @ 176 operating hours per month. Operating cost from same line in Means

***Labor hourly cost = Means 2012, page 709, equipment operator, medium equip.

Labor hourly cost includes wages and all overhead and profit

**** Seed Cost from Granite Seed March 2012

PRODUCTIVITY CALCULATION

Operator factor	Efficiency factor	grade factor	elevation factor		Opr adj factor
0.75	0.83	1	1		0.62

average speed	eff width	ft/mi	acre	sqft/ac	ac/hr
1	11	5280	1	43560	1.333

ac/hr	opr adj factor	Production Rate
1.333	0.62	0.83

	Subtotal																			
	Total																			183,832

Ref.	Description	Structure #	Means Reference Number															TOTAL Cost
				signs/gates	labor													
1	Gates and Signs		lump sum estimate	600	900													1,500
				no. of acres	ac/hr	$/hr												
2	General site cleanup&trash removal (note 1)		Means p. 709	25	0.5	54												675
3	Removing eqpt w/Loader &trucking																	
				Loader			Trucking			Total Equip	Loader labor	Trucking labor	TOTAL Operating					
				unit cost	oper cost	unit	unit cost	oper cost	unit	Cost	Cost/hr	Cost/hr	Cost	Unit		No. of hours		
		7		43.32	56.5	$/ op hr	19.46	50.75	$/ op hr	170.03	72.15	53.55	295.73	$/ op hr		1		296
		11		43.32	56.5	$/ op hr	19.46	50.75	$/ op hr	170.03	72.15	53.55	295.73	$/ op hr		1		296
		16		43.32	56.5	$/ op hr	19.46	50.75	$/ op hr	170.03	72.15	53.55	295.73	$/ op hr		1		296
		17		43.32	56.5	$/ op hr	19.46	50.75	$/ op hr	170.03	72.15	53.55	295.73	$/ op hr		1		296
		20		43.32	56.5	$/ op hr	19.46	50.75	$/ op hr	170.03	72.15	53.55	295.73	$/ op hr		1		296
		22		43.32	56.5	$/ op hr	19.46	50.75	$/ op hr	170.03	72.15	53.55	295.73	$/ op hr		1		296
		28		43.32	56.5	$/ op hr	19.46	50.75	$/ op hr	170.03	72.15	53.55	295.73	$/ op hr		4		1,183
		35		43.32	56.5	$/ op hr	19.46	50.75	$/ op hr	170.03	72.15	53.55	295.73	$/ op hr		1		296
		38		43.32	56.5	$/ op hr	19.46	50.75	$/ op hr	170.03	72.15	53.55	295.73	$/ op hr		45		13,308
		39		43.32	56.5	$/ op hr	19.46	50.75	$/ op hr	170.03	72.15	53.55	295.73	$/ op hr		2		591
		40		43.32	56.5	$/ op hr	19.46	50.75	$/ op hr	170.03	72.15	53.55	295.73	$/ op hr		1		296
		41		43.32	56.5	$/ op hr	19.46	50.75	$/ op hr	170.03	72.15	53.55	295.73	$/ op hr		1		296
		45		43.32	56.5	$/ op hr	19.46	50.75	$/ op hr	170.03	72.15	53.55	295.73	$/ op hr		2		591
		50		43.32	56.5	$/ op hr	19.46	50.75	$/ op hr	170.03	72.15	53.55	295.73	$/ op hr		1		296
		52		43.32	56.5	$/ op hr	19.46	50.75	$/ op hr	170.03	72.15	53.55	295.73	$/ op hr		1		296
		53		43.32	56.5	$/ op hr	19.46	50.75	$/ op hr	170.03	72.15	53.55	295.73	$/ op hr		1		296
		55		43.32	56.5	$/ op hr	19.46	50.75	$/ op hr	170.03	72.15	53.55	295.73	$/ op hr		4		1,183
		56		43.32	56.5	$/ op hr	19.46	50.75	$/ op hr	170.03	72.15	53.55	295.73	$/ op hr		2		591
		62		43.32	56.5	$/ op hr	19.46	50.75	$/ op hr	170.03	72.15	53.55	295.73	$/ op hr		2		591
	Loader equip costs from Means 2012 (01 54 33 20 4760); Labor rate from p.709 Means																	
	Trucking equip costs from Means 2012 (01 54 33.40 7600); Labor rate from p.709 Means																	
4	Remove eqpt/trailer w/ truck									Total Equip		Trucking labor	TOTAL Operating					
							Trucking											
							unit cost	oper cost	unit	Cost		Cost/hr	Cost	Unit				
		2					19.46	50.75	$/ op hr	70.21		53.55	123.76	$/ op hr		1		124
		3					19.46	50.75	$/ op hr	70.21		53.55	123.76	$/ op hr		1		124
		4					19.46	50.75	$/ op hr	70.21		53.55	123.76	$/ op hr		1		124
		19					19.46	50.75	$/ op hr	70.21		53.55	123.76	$/ op hr		1		124
		33					19.46	50.75	$/ op hr	70.21		53.55	123.76	$/ op hr		1		124
		34					19.46	50.75	$/ op hr	70.21		53.55	123.76	$/ op hr		1		124
		43					19.46	50.75	$/ op hr	70.21		53.55	123.76	$/ op hr		1		124
		44					19.46	50.75	$/ op hr	70.21		53.55	123.76	$/ op hr		1		124
		46					19.46	50.75	$/ op hr	70.21		53.55	123.76	$/ op hr		2		248
		47					19.46	50.75	$/ op hr	70.21		53.55	123.76	$/ op hr		1		124
		48					19.46	50.75	$/ op hr	70.21		53.55	123.76	$/ op hr		1		124
		49					19.46	50.75	$/ op hr	70.21		53.55	123.76	$/ op hr		1		124
		64					19.46	50.75	$/ op hr	70.21		53.55	123.76	$/ op hr		1		124
		65					19.46	50.75	$/ op hr	70.21		53.55	123.76	$/ op hr		1		124
		66					19.46	50.75	$/ op hr	70.21		53.55	123.76	$/ op hr		1		124
		67					19.46	50.75	$/ op hr	70.21		53.55	123.76	$/ op hr		1		124
		68					19.46	50.75	$/ op hr	70.21		53.55	123.76	$/ op hr		1		124
		69					19.46	50.75	$/ op hr	70.21		53.55	123.76	$/ op hr		1		124
		70					19.46	50.75	$/ op hr	70.21		53.55	123.76	$/ op hr		1		124
		73					19.46	50.75	$/ op hr	70.21		53.55	123.76	$/ op hr		1		124

Trucking equip costs from Means 2012 (01 54 33.40 7600). Labor rate from p.709 Means

5	Building Demolition										TOTAL				
							length	width	diameter	height	cu ft	$/cu ft	Unit		
		1					104	61		25	158,600	0.35	$/cu ft		55,510
		6					16	9		60	8,640	0.35	$/cu ft		3,024
		8					11	13		56	8,008	0.35	$/cu ft		2,803
		9					20	17		10	3,400	0.35	$/cu ft		1,190
		10					62	25		19	29,450	0.35	$/cu ft		10,308
		12					33	201		18	119,394	0.35	$/cu ft		41,788
		13					32	21		15	10,080	0.35	$/cu ft		3,528
		14					37	21		13	10,101	0.35	$/cu ft		3,535
		15					26	33		10	8,580	0.35	$/cu ft		3,003
		18					32	58		18	33,408	0.35	$/cu ft		11,693
		21					43	75		37	119,325	0.35	$/cu ft		41,764
		23					15	11		11	1,815	0.35	$/cu ft		635
		25					12	19		9	2,052	0.35	$/cu ft		718
		26					27	32		70	60,480	0.35	$/cu ft		21,168
		27					9	23		20	4,140	0.35	$/cu ft		1,449
		29					9	23		20	4,140	0.35	$/cu ft		1,449
		30					9	25		20	4,500	0.35	$/cu ft		1,575
		31					33	44		27	39,204	0.35	$/cu ft		13,721
		32					33	22		19	13,794	0.35	$/cu ft		4,828
		36							11	28	2,661	0.35	$/cu ft		931
		37							11	27	2,566	0.35	$/cu ft		898
		51					26	13		16	5,408	0.35	$/cu ft		1,893
		52					10	11		10	1,100	0.35	$/cu ft		385
		53					12	15		12	2,160	0.35	$/cu ft		756
		55					11	87		10	9,570	0.35	$/cu ft		3,350
		56							12	55	6,220	0.35	$/cu ft		2,177
		57					9	38		23	7,866	0.35	$/cu ft		2,753
		58							12	60	6,786	0.35	$/cu ft		2,375
		59							12	60	6,786	0.35	$/cu ft		2,375
		60							12	60	6,786	0.35	$/cu ft		2,375
		61					8	8		34	2,176	0.35	$/cu ft		762
		63					57	66		4	15,048	0.35	$/cu ft		5,267
		71					23	13		18	5,382	0.35	$/cu ft		1,884
		72					8	9		10	720	0.35	$/cu ft		252
	Demolition costs from Means 2012 02 41 16.13 0100														
											TOTAL	$/ lin ft	Unit		
6	Pipeline Demolition										linear ft				
											2150	2.90	$/ lin ft		6,235
	Demolition costs from Means 2012 02 41 13.38 1700 for 6" plastic														
	Note supply well will remain and be sold to the local municipality														
7	Powerline Demolition										TOTAL	$/ 100 lin ft	Unit		
											linear ft				
											11000	76.00	$/ lin ft		8,360
8	Transformer Demolition										no. of units	$/ unit	Unit		
		24									1	1525	$/ unit		1,525
		42									1	1525	$/ unit		1,525
	Demolition costs from Means 2012 26 05 05.10 1570 for 6" plastic														
	Assume Substation will remain for future infrastructure expansion														
													TOTAL DEMOLITION COSTS		296,128

Ref	Description	Means Reference													TOTAL Cost
			acres	sq ft	depth (2 ft)	bank cu yd (bcy)	$/bcy								
b	Ripping Disturbed Area	31 23 16.32 2820	378.6	16,491,816	2	1,221,616	0.46								561,943
Total															561,943