

40-8502,

August 18, 2003

License SUA-1341 Docket No. 40-8502

U.S. Nuclear Regulatory Commission ATTN: Ms. Susan Frant, Chief Fuel Cycle Licensing Branch Mail Stop T-8A33 Two White Flint North 11545 Rockville Pike Rockville, MD 20852-2738

RE: Submittal of Annual Surety Update

Dear Ms. Frant:

Pursuant to Condition No. 9.5 of SUA-1341, please find enclosed COGEMA Mining, Inc.'s updated surety bond calculation for the 2003-2004 annual period.

Please note that the new proposed surety amount of \$11,652,503 is significantly lower than the current bond amount of \$13,652,478. The primary contributing reasons are a review and adjustment of individual unit cost rates (described in the attachment to the surety worksheets), and taking credit for the completion of groundwater sweep in all wellfields at both Irigaray and Christensen Ranch. Please also note that no inflation factor has been added because all unit rates were reviewed and adjusted where necessary to reflect 2003 dollars.

In NRC's review of COGEMA's 2002 surety dated September 27, 2002, it was noted that the NRC policy is to not reduce the surety amount for work completed unless that work has been inspected and approved by the NRC staff. NRC further stated that they had not reviewed the final groundwater restoration report and therefore could not give credit for a phase of groundwater restoration until the final report was submitted. I point to our tailings reclamation activities for Pathfinder Mines Corporation, whereby portions of the tailings have been completed, and applicable surety released by NRC, but the final tailings construction completion report will not be submitted until 2004 after tailings completion. We believe that ISL groundwater should be treated equally as tailings reclamation for the purpose of releasing portions of the surety.

Since receipt of NRC's September 27, 2002 letter, the State of Wyoming, Department of Environmental Quality (DEQ), approved the credit for groundwater sweep requested in COGEMA's August 18, 2002 surety submittal (letter dated April 3, 2003, copy attached). We believe that the DEQ's release of this portion of the surety should be sufficient justification for NRC to do the same.

Ms. Susan Frant August 18, 2003 Page 2

Accordingly, we request that NRC reconsider their policy regarding surety reduction for groundwater restoration work completed, and work approved for deletion from the surety by the Wyoming DEQ.

Your assistance with this matter is appreciated. Please contact me if I may answer any questions.

Sincerely,

Donna L. Wichers General Manager

Attachments:

2003-2004 Annual Reclamation/Restoration Bond Estimate Reclamation Bond Assumptions – 2003-2004 Bond Estimate April 3, 2003 letter from Glenn Mooney, DEQ-LQD

cc: NRC – Ms. Elaine Brummett, Project Manager NRC – Region IV W. Heili, T. Nicholson - COGEMA COGEMA Mining, Inc. 2003-2004 Annual Surety Update NRC License SUA-1341 Docket No. 4-8502

August 18, 2003

COGEMA Mining, Inc.

SUMMARY OF RECLAMATION/RESTORATION BOND ESTIMATE, 2003 - 2004 WDEQ PERMIT NO. 478/USNRC LICENSE SUA-1341 TABLE 1

1	GROUNDWATER RESTORATION - Worksheet 1:	\$4,000,780
	DECOMMISSIONING AND SURFACE RECLAMATION:	
	A. Process Plant(s) Equipment Removal and Disposal	\$205,103
	Worksheet 2	
	B. Plant Building(s) Demolition and Disposal	\$720,777
	Worksheet 3	
	C. Process Pond Sludge and Liner Handling	\$1,258,692
	Worksheet 4	
	D. Well Abandonment	\$744,573
	Worksheet 5	
	E. Wellfield Equipment Removal and Disposal	\$850,720
	Worksheet 6	
	F. Topsoil Replacement and Revegation	\$753,148
	Worksheet 7	
	G. Miscellaneous Reclamation Activities	\$129,778
	Worksheet 8	· ·
	Sub Total - Decommissioning and Surface Reclamation	\$4,662,790
L	TOTAL RESTORATION AND RECLAMATION	\$8,663,571
		· · ·
	CLIPTOTAL	¢0 660 571
		\$0,003,371
	Miscellaneous Costs Associated with Third Party Contractors	
	Project Design	

Project Design	2%
Contractor Profit & Mobilization	8%
Pre-construction Investigation	1%
Project Management	5%
On-site monitoring	0.5%
Site Security & Liability Assurance	1%
Longterm Administration	2%
Contingency	15%
TOTAL CONTINGENCY	34.5%

GRAND TOTAL RESTORATION AND RECLAMATION

\$2,988,932

\$11,652,503

ROUNDWATER RESTORATION	Mine Unit(s)	Irigaray Mine Unit(s)	Christensen Mine Unit	Christense Mine Unit					
	<u>ר איי איי איי</u>		L		<u>+</u>		<u>**</u>	· · · · · ·	
ecnnical Assumptions:	500700	704000	000000	700044	F10000	1010000			
Welfield Area (Fr)	522/20	/84080	890000	795944	510088	1210968	2021243	1332936	160000
weimeid Area (Acres)	12.00	18.00	20.43	18.34	11.71	27.80	46.40	30.6	36.
Affected Ore Zone Area (Ft*)	522720	784080	890000	798944	550193	1346004	2058344		•
Avg Completed Thickness (Ft)	15.0	18.0	11.0	10.0	12.7	19.9	21.8		
Affected Volume:									
Factor For Vertical Flare	20%	20%	20%	20%	20%	20%	20%		i i i i i i i i i i i i i i i i i i i
Factor For Horizontal Flare	20%	20%	20%	20%	20%	20%	20%		
Total Volume (FI ^a)	11290752	20323353.6	14097600	11504793.6	10061929.6	38593685.7	64615534.85		
Porosity	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%		
Gallons Per Cubic Foot	7.48	7.48	7.48	7.48	7.48	7.48	7 48		
Gallons Per Pore Volume	21958254.49	39524858.1	27417012.5	22374522.6	19568440.7	75057000	125664292 2		
Number of Wells in Linit(s)		00024000.1	21411012.0	LLOI TOLLIO	1000000000	10001000	10000-000		
Production Wells	150	974	183	195	105	217		155	
Injection Wells	310	220	172	277	120	277	202	135	
Manitar Malle	150	105	1/3	211	120	211	244	1/0	
Penaliza Mates Quality wells (are day init)	100	1 105	50	40		/0	60		
Dasenne water Quanty wens (prod or inj)	19	2/	24	19	15	25	47		
Average well Spacing (Ht)	35	35	85	70	85	85	100	100	
Average Well Depth (Ft)	250	250	345	300	430	450	520	550	
	Г								
A. PLANT & OFFICE		1	I		<u> </u>				
Operation Assumptions:	-								
Elourate (orga)	200	200	2000	2000		منم			
Plowiate (gpm)	200	200	200	200	200	200	200		
FVS Hequived			'			1	1		
Total Gallons For Treatment	87833017.96	39524858.1	2/41/012.5	22374522.6	19568440.7	75057000	125664292.2		
Total KGals for Treatment	87833	39525	27417	22375	19568	75057	125664		
Cost Assumptions:	127358								
Power		1							
Avg Connected Hp	51.30	51.30	40.00	40.00	40.00	40.00	40.00		
Kwh's/Hp	1.00	1.00	0.83	0.83	0.83	0.83	0.83		
S/Kwh	\$0.051	\$0.051	\$0.0365	\$0.0365	\$0.0365	\$0.0365	\$0.0365		
Gallons Per Minute	200	200	200	200	200	200	100		
Gallons Per Hour	12000	12000	12000	12000	12000	12000	6000		
Cost Per Hour	2.62	2.60	1 21	1 21	1 1 2 3 3	1 2 3 1	1 21		
Cost Per Collen	0.0000	0,0000	0.00010	0.00010	0,00010	0.00010	1.21		
	0.00022	0.00022	0.00010	0.00010	0.00010	0.00010	0.00020		
Cost Per KGal (5)	\$0.218	\$0.218	\$0.101	\$0.101	\$0.101	\$0,101	\$0.202		
Chemicals	1			· · · · · · ·					
Antiscalent (\$/Kgais)	\$0.0947	\$0.0947	\$0.0947	\$0.0947	\$0.0947	\$0.0947	\$0.0947		
Elution (S/KGals)	\$0.099	\$0.099	\$0.099	\$0.099	\$0.099	\$0.099	\$0.099	1	
Repair & Maintenance (\$/KGais)	\$0.0379	\$0.0379	\$0.0379	\$0.0379	\$0.0379	\$0.0379	\$0.0379		
Analysis (\$/KGals)	\$0.043	\$0.137	\$0.175	\$0.170	\$0.153	\$0.067	\$0.075		1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -
Total Cost Per KGal	\$0.493	\$0.586	\$0.508	\$0.502	\$0.486	\$0.399	\$0.508	1	
Total Treatment Cost	\$43,292	\$23,171	\$13,918	\$11.241	\$9.508	\$29,963	\$63,884		
Utilities							••	1	
Power (\$/Month)	\$65	\$65	\$65	\$65	\$85	\$65	\$85		
Telephone (\$/Month	\$500	\$500	\$500	\$500	\$500	\$500	\$500		
Time For Treatment	1	1			****	*500	*500	1	
Minutes East Treatment	400100	107004	10700-	144870				1 · ·	
MINUTES FOR I REALMENT	439165	19/624	13/085	111873	97842	3/5285	628321	i 1	
Hours For Treatment	7319	3294	2285	1865	1631	6255	10472	1	
Days For Treatment	305	137	95	78	68	261	436	1	1
Average Days Per Month	30.4	30.4	30.4	30.4	30.4	30.4	30.4		
Months For Treatment	10.0	4.5	3.1	2.6	2.2	8.6	14.3		
Utilities Cost (\$)	\$5,665	\$2,549	\$1,768	\$1,443	\$1,262	\$4,841	\$8,105		
TOTAL PLANT & OFFICE COST	\$49.057	\$25 721	\$15 697	\$12 694	\$10 770	\$24 PO4	\$71.090	¢0	

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GROUNDWATER RESTORATION	Irigaray Mine Unit(s)	Irigaray Mine Unit(s)	Christensen Mine Unit						
	#1 Thru #5	#6 Thru #9	#2	#3	#4	#5	#6	#7	#8
GROUNDWATER SWEEP (Continued)	·		Y	· · · · ·					
D. WELLFIELD			ł						
Bower								1	
	2 20		1 20						
Avg How/Pump (gpm)	3.00	3.00	20	20	20	20	20		
Avg nprrump	1.50	1.50	3.00	3.00	3.00	3.00	3.00		
Avg # of Pumps Required	77.0	51.0	10.0	10.0	10.0	10.0	10.0		
Avg Connected rip	17.0	1000	20	20	25	20	20		
t Kwiszip	1.000	1.000	0.830	0.830	0.830	0.830	0.830		
aviter a Dec Minute	\$0.051	\$0.051	\$0.0365	\$0.0365	\$0.0365	\$0.0365	\$0.0365		
Gallons Per Minute	200	200	200	200	200	200	200		
Gallons Per Hour	12000	12000	12000	12000	12000	12000	12000	1	
Cost Per Hour (\$)	\$3.97	\$3.9/	\$0.76	\$0.76	\$0.76	\$0.76	\$0.76	1	
Cost Per Gallon (\$)	\$0.0003	\$0.0003	\$0.0001	\$0.0001	\$0.0001	\$0.0001	\$0.0001	1	1
Cost Per KGal (\$)	0.331	0.331	0.063	0.063	0.063	0.063	E80.0	1	
Hepair & Maintenance (\$/KUais)	\$0.289	\$0.289	\$0.289	\$0.289	\$0.289	\$0.289	\$0.289		
Total Cost Per KGal	\$0.620	\$0.620	\$0.353	\$0.353	\$0.353	\$0.353	\$0.353		L
TOTAL WELLFIELD COST	\$54,426	\$24,492	\$9,665	\$7,887	\$6,898	\$26,459	\$44,298	\$0	\$0
TOTAL GHOUND WATER SWEEP COST	\$103,383	\$50,212	\$25,352	\$20,572	\$17,668	\$61,262	\$116,287	\$0	\$0
	1								
A DIANT & OFFICE		r	1	I	1	1			·
					1				
Elemente (com)			500	500	6 600	600	e		
Pilos Required	300			500	500		500		
Total Gallons For Transmont	0.0 05074709 47	107004000	497096092	111070010	0.0	975095000	0.0		
Total KGala for Treatment	000/4/00.4/	107804	137005002	+++072	07042203.3	375265000	020321400.8		1
Ford to PO (com)	00075	19/024	13/005	111073	8/042	3/3285	020321		· ·
Peed to no (goin)	300	300	500		300	000	500		
Permeate Flow (gom)			3/5	3/5	3/5	3/5	3/5		
Brite Flow (gom)			120	120		123	120		
Cost Assumptions	80.0%	80.0%	/5.0%	75.0%	/5.0%	/5.0%	/5.0%	·	
Cost Assumptions:	1	ł		Į –					
Power Aug Connected Lin		10000				*****			1
Avg Connected Hp	120.00	120.00	560.00	560.00	560.00	560.00	560.00		1
Kwirs/rip	1.000	1.000	0.830	0.830	0.830	0.830	0.830		
Syrkwn Callege Der Minute	\$0.051	30.051	\$0.0365	\$0.0365	\$0.0365	\$0.0365	\$0.0365		
Gallons Per Minute	300	300	500	500	500	500	500	· ·	
Gallons Per Hour	18000	18000	30000	30000	30000	30000	30000		1
Cost Per Hour (5)	\$6.12	\$6.12	\$18.97	\$16.97	\$16.97	\$16.97	\$16.97]
Cost Per Gallon (\$)	\$0.00034	\$0.00034	\$0.00057	\$0.00057	\$0.00057	\$0.00057	\$0.00057		ł
Cost Per KGal (\$)	\$0.340	\$0.340	\$0.566	\$0.566	\$0.566	\$0.566	\$0.566		
Chemicals		1	1						
Caustic Soda (\$/KGats)	\$0.018	\$0.018	\$0.018	\$0.018	\$0.018	\$0.018	\$0.018		ł
Antiscalent (\$/Kgals)	\$0.0947	\$0.0947	\$0.0947	\$0.0947	\$0.0947	\$0.0947	\$0.0947		
Elution (\$/Kgals)	\$0.099	\$0.099	\$0.099	\$0.099	\$0.099	\$0.099	\$0.099		
Repair & Maintenance (\$/KGals)	\$0.038	\$0.038	\$0.038	\$0.038	\$0.038	\$0.039	\$0.038		1
Sampling & Analysis (\$/KGals)	\$0.094	\$0.048	\$0,101	\$0.132	\$0.102	\$0.043	\$0.036		
Total Cost Per KGal (\$)	\$0.684	\$0.637	\$0.916	\$0.947	\$0.917	\$0.858	\$0.851		
Total Pumping Cost (\$)	\$45,040	\$125,919	\$125,539	\$105,988	\$89,752	\$321,897	\$534,549	1	l
Utilities					1			1	1
Power (\$/Month)	\$65	\$65	\$65	\$65	\$65	\$65	\$65		
Propane (\$/Month	\$500	\$500	\$500	\$500	\$500	\$500	\$500		1
Time For Treatment	1	1	ł]				I	1
Minutes For Treatment	219583	658748	274170	223745	195684	750570	1256643	1	
Hours For Treatment	3660	10979	4570	3729	3261	12510	20944	1	
Days For Treatment	152	457	190	155	136	521	873	l	
Average Days Per Month	30.4	30.4	30.4	30.4	30.4	30.4	30.4	1	
Months For Treatment	5.0	15.0	6.3	5.1	4.5	17.1	28.7	Ì	1
Utilities Cost (\$)	\$2,825	\$8,475	\$3,560	\$2,882	\$2,543	\$9,662	\$16,216	I	
TOTAL PLANT & OFFICE COST	\$47.865	\$134 394	\$129.098	\$109 870	\$92 204	\$331 550	\$550 785	50	\$0

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	Irigaray	Irigaray	Christensen	Christensen	Christensen	Christensen	Christensen	Christensen	Christense
IOUNDWATER RESTORATION	Mine Unit(s)	Mine Unit(s)	Mine Unit	Mine Unit					
	#1 Thru #5	#6 Thru #9	#2	#3	#4	#5	#6	#7	#8
REVERSE OSMOSIS (Continued)									
B. WELLFIELD									
Cost Assumptions:	T								· · · ·
Power									
Avg Flow/Pump (gpm)	3.86	3.86	20.00	20.00	20.00	20.00	20.00		
Avg Hp/Pump	1.50	1.50	3.00	3.00	3.00	3.00	3.00		
Avg # of Pumps Required	77.7	77.7	25.0	25.0	25.0	25.0	25.0		
Avg Connected Hp	116.6	116.6	75.0	75.0	75.0	75.0	75.0		
Kwh's/Hp	1.000	1.000	0.830	0.830	0.830	0.830	0.830		
\$/Kwh	\$0.051	\$0.051	\$0.0365	\$0.0365	\$0.0365	\$0.0365	\$0.0365		
Gallons Per Minute	300	300	500	500	500	500	500		
Gallons Per Hour	18000	18000	30000	30000	30000	30000	30000		
Cost Per Hour (\$)	\$5.95	\$5.95	\$2.27	\$2.27	\$2.27	\$2.27	\$2.27		
Cost Per Gallon (\$)	\$0.0003	\$0.0003	\$0.0001	\$0.0001	\$0.0001	\$0.0001	\$0.0001		
Cost Per KGal (\$)	\$0.330	\$0.330	\$0.076	\$0.076	\$0.076	\$0.076	\$0.076		
Repair & Maintenance (\$/KGals)	\$0.269	\$0.289	\$0.289	\$0.289	\$0.289	\$0.289	\$0.289		
Total Cost Per KGal	\$0.619	\$0.619	\$0.365	\$0.365	\$0.365	\$0.365	\$0.365		
TOTAL WELLFIELD COST	\$40,797	\$122,391	\$50,000	\$40,804	\$35,687	\$136,881	\$229,172	\$0	
Add for 1 PV of Hydrogen Sutfide gas reductant	\$18,950	\$34,110	\$23,661	\$19,309	\$16,888	\$64,774	\$108,448		
\$0.863 per Kgal								1	
TOTAL REVERSE OSMOSIS COST	\$107,612	\$290,895	\$202,759	\$168,983	\$144,869	\$533.214	\$888.385	\$0	1

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OUNDWATER RESTORATION	Mine Unit(s)	Mine Unit(s)	Mine Unit	Mine Uni					
	#1 Thru #5	#6 Thru #9	#2	#3	#4	#5	#6	#7	#8
WASTE DISPOSAL WELL	1								
Operating Assumptions:			1						
Annual Evaporation Capacity (Gals)			1,917,612	1,917,612	1,917,612	1,917,612	1,917,612		
Avg. Monthly Evap. Capacity (Gals)		i	159,801	159,801	159,801	159,801	159,801		
Total Disposal Requirement	1	}							
RO Brine Total Gallons	1		34,271,266	27,968,153	24,460,551	93,821,250	157,080,385		
RO Brine Total KGallons	l	l	34,271	27,968	24,461	93,821	157,080		
Brine Concentration Factor			60%	60%	60%	60%	60%		
Total Concentrated Brine (Gals)			20,562,759	16,780,892	14,676,330	56,292,750	94,248,219		
Months of RO Operation	1		6.3	5.1	4.5	17.1	28.7		
Average Monthly Reqm't (Gallons)	ł		3,263,930	3,290,371	3,261,407	3,291,974	3,283,910		
Monthly Balance for DDW (Gals)			3,104,129	3,130,570	3,101,606	3,132,173	3,124,109		1
Total WDW Disposal (Gallons)			19,556,013	15,965,907	13,957,226	53,560,153	89,661,930		
Total WDW Disposal (KGals)			19,556	15,966	13,957	53,560	89,662		
Cost Assumptions:									
Power	1	1	1)			1	
Avg Connected Hp			100.00	100.00	100.00	100.00	100.00	1	
WDW Avg Connected Hp			180.00	180.00	180.00	180.00	180.00	1	1
Kwh's/Hp			0.830	0.830	0.830	0.830	0.830		
\$/Kwh		1	\$0.0365	\$0.0365	\$0.0365	\$0.0365	\$0.0365		
Gallons Per Minute			150	150	150	150	150	1	
Gallons Per Hour			9000	9000	9000	9000	9000	ł	
Cost Per Hour (\$)			\$8.48	\$8.48	\$8.48	\$8.48	\$8.48		
Cost Per Gallon (\$)			\$0.0009	\$0.0009	\$0.0009	\$0.0009	\$0.0009	· ·	
Cost Per KGal (\$)			\$0.943	\$0.943	\$0.943	\$0.943	\$0.943	1	
Chemicals (\$/Kgals)		1			I				1 ·
RO Antiscalent (\$/Kgals)		1	\$0.190	\$0.190	\$0.190	\$0.190	\$0.190		· ·
WDW Antiscalent (\$/Kgals)	1		\$0.237	\$0.237	\$0.237	\$0.237	\$0.237	1.1	
Sulturic Acid (\$/Kgals)	1	1	\$0.534	\$0.534	\$0.534	\$0.534	\$0.534		l .
Corrosion Inhibitor	1		\$0.000	\$0.000	\$0.000	\$0.000	\$0.000		i
Algacide			\$0.111	\$0.111	\$0.111	\$0.111	\$0.111		
Repair & Maint (\$/Kgals)			\$0.077	\$0.077	\$0.077	\$0.077	\$0.077	1	
Total Cost Per KGal			\$2.092	\$2.092	\$2.092	\$2.092	\$2.092	l	
TOTAL WASTE DISPOSAL WELL COST	1		\$40,902	\$33,393	\$29,192	\$112,022	\$187,529	\$0	
STABILIZATION MONITORING	٦								
Operating Assumptions:		1	<u> </u>		1				r
Time of Stabilization (mos)	6	9	9	9	9	9	9		
Frequency of Analysis (mos)	3	1 3	3	3	3	3	3		
Total Sets of Analysis	1 3	3	i 3	3	3	3	3		
Cost Assumptions:	1	1	1	_				1	
Generator Rental per sample set	\$280	\$280	\$280	\$280	\$280	\$280	\$280]	1
Analytical costs per set	\$3,800	\$5,400	\$4,800	\$3,800	\$3.000	\$5,000	\$9,400		
Total Sampling & Analysis Cost (\$)	\$12,240	\$17,040	\$15,240	\$12,240	\$9,840	\$15,840	\$29,040		
Utilities (Power + Telephone per month)	\$565	\$565	\$565	\$565	\$565	\$565	\$565	ł	1
Total Utilities Cost (\$)	\$5,085	\$5,085	\$5,085	\$5,085	\$5,085	\$5,085	\$5,085	1 .	
TOTAL STABILIZATION COST	\$17.325	\$22,125	\$20,325	\$17.325	\$14.925	\$20,925	\$34,125	\$0	

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TO ROTELI I										
	Irigaray	Irigaray	Christensen	1						
GROUNDWATER RESTORATION	Mine Unit(s)	Mine Unit(s)	Mine Unit							
V LABOD (Internet and Christenson Combined)	#1 Thru #5	#6 Thru #9	#2	#3	#4	#5	#6	#7	#8	I.
Cost Assumptions	Cost/Hour	T Hours/Veer	Cost	ו						
Crew:	COSTINUE	Tricerarie		J						
1 Supervisor	\$25.00	2080	\$52.000	1						
4 Operators	\$20.00	2080	\$168,400							
2 Maintenance	\$20.00	2080	\$83,200							
2 Vehicles	\$12.00	2080	\$49,920							
Cost per Year			\$351,520							
Time Required - Years (See Figure 1)	26	1								
TOTAL RESTORATION LABOR COST	\$913,952	1								
	Irigaray	Christensen	Total	1						
	Mine Unit(s)	Mine Unit	Christensen							
	#1 Thru #9	#2 Thru #4	& Irigaray							
	~~~			_						
VI RESTORATION CAPITAL REQUIREMENTS				-						
I Deep Disposal Well(s)		\$0	\$0	1						
II Plug and Abandon DDW (2)		\$200,000	\$200,000	1						
III 500 GPM Heverse Osmosis Unit		\$0	\$0	4						
	\$0	1_\$200,000	\$200,000	1						
	Irigaray	Irigaray	Christensen	<b>—</b>						
	Mine Unit(s)	Mine Unit(s)	Mine Unit	1						
	#1 Thru #5	#6 Thru #9	#2	#3	#4	#5	#6	#7	#8	ŀ.
SUMMARY:										
I GROUNDWATER SWEEP	\$103,383	\$50,212	\$25,352	\$20,572	\$17,668	\$61,262	\$116,287	\$0		1
II REVERSE OSMOSIS	\$107,612	\$290,895	\$202,759	\$168,983	\$144,869	\$533,214	\$888,385	\$0	1	1
III WASTE DISPOSAL WELL	\$0	\$0	\$40,902	\$33,393	\$29,192	\$112,022	\$187,529	\$0		i i
IV STABILIZATION	\$17,325	\$22,125	\$20,325	\$17,325	\$14,925	\$20,925	\$34,125	\$0		L
SUB TOTAL	\$228,319	\$363,232	\$289,338	\$240,273	\$208,654	\$727,423	\$1,226,327	\$0	I ł	

IV STABILIZATION SUB TOTAL V LABOR VI CAPITAL TOTAL GROUNDWATER RESTORATION COST Credit for Completion of Groundwater Sweep GRAND TOTAL \$103,383 \$50,212 \$25,352

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\$17,668 \$61,262 \$116,287

\$20,572

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\$3,281,565 \$913,952 \$200,000 \$4,395,517 \$394,737 \$4,000,780

\$0

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PLANT EQUIPMENT REMOVAL AND DISPOSIL         Maint Area Lobationy         Maint Area Building         Building         Filter Media         Area Area         Building         Statelline         Restoration         Statelline         Restoration         Wolding         Statelline         Statelline         Restoration         Wolding         Statelline				Christensen									
PLANT FECUIPMENT FIEMOVAL AND DISPOSAL Laboratory Building Filter Media Area Building Sub Total Plant Filter Media Extension Modules Sub Total / Plant Filter Media Extension Modules Sub Total / Volume (Ydar) Volume		Maint Area &	Main Process	Expansion	Resin +Sand	Dry Pack	Restoration		Satellite	Resin + Sand	Restoration	Wellfield	
Volume (Yda*)         40         200         180         110         40         40         91         197         42         55           Cuantly Per Trock Load         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0 <th>PLANT EQUIPMENT REMOVAL AND DISPOSAL</th> <th>Laboratory</th> <th>Building</th> <th>Building</th> <th>Filter Media</th> <th>Area</th> <th>Building</th> <th>Sub Total</th> <th>Plant</th> <th>Filter Media</th> <th>Extension</th> <th>Modules</th> <th>Sub Total</th>	PLANT EQUIPMENT REMOVAL AND DISPOSAL	Laboratory	Building	Building	Filter Media	Area	Building	Sub Total	Plant	Filter Media	Extension	Modules	Sub Total
Volume (1997)         40         200         100         80         40         91         197         42         55           Number of Track Load         2.0         1.00         8.0         5.5         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0         2.0	Notice (Vite)		000	400									
Column per fince. Loads         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20	Overtity Bet Truck Load (Vdet)	40	200	180	110	40	40		91	197	42	55	
Index Data         2.0         1.00         9.0         5.5         2.0         2.0         4.55         9.9         2.1         2.8           In Decontamination Cost (\$Load)         \$435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4435         \$4456         \$4075         \$4075	Coantity Fer Frock Loads (Fos-)	20	20	20	20	20	20		20	20	20	20	
Decontamination Cost         Stass         Stass </th <th>Number of Trock Loads</th> <th>2.0</th> <th>10.0</th> <th>9.0</th> <th>5.5</th> <th>2.0</th> <th>2.0</th> <th></th> <th>4.55</th> <th>9.9</th> <th>2.1</th> <th>2.6</th> <th></th>	Number of Trock Loads	2.0	10.0	9.0	5.5	2.0	2.0		4.55	9.9	2.1	2.6	
Decontamination Core (stroked)         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         34:55         <	Decontamination Cost		A 105		<b>.</b>		a			<b>.</b>			
Percent negung Deconstruing Deconsteconstruing Deconstruing Deconstruing Deconstruing Deconstruing	Decontamination Cost (\$/Load)	- 3435	\$435	\$435	\$435	\$435	\$435		\$435	\$435	\$435	\$435	
India Cost Cost Per Truck Load (\$)         \$1/4         \$4,350         \$3,975         \$30         \$270         \$10,179         \$1,979         \$20         \$914         \$1,186         \$4,068           Cost Per Truck Load (\$)         \$650         \$660         \$8650         \$660         \$660         \$660         \$660         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650         \$8650 <th>Tetel Cent</th> <th>20.0%</th> <th>100.0%</th> <th>100.0%</th> <th>0.0%</th> <th>100.0%</th> <th>100.0%</th> <th></th> <th>100.0%</th> <th>0.0%</th> <th>100.0%</th> <th>100.0%</th> <th></th>	Tetel Cent	20.0%	100.0%	100.0%	0.0%	100.0%	100.0%		100.0%	0.0%	100.0%	100.0%	
In Distance and Loading Cost         Seco	I Dismosti and Londing Cost	\$1/4	\$4,350	\$3,915	\$0	\$870	\$870	\$10,179	\$1,979	\$0	\$914	\$1,195	\$4,089
Cost rew frick Load (s)         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3650         3526         3526         3526         3526         3526         3526         3526         3526         35260         3526         3526	Dismantie and Losoling Cost												
Other Content         \$1,200         \$5,200         \$3,375         \$1,200         \$19,825         \$2,958         \$4,403         \$1,788         \$12,513           IP Oversize Charges         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%         40,0%	Cost Per Inuck Load (5)	\$650	0006	0696	\$650	\$650	\$650		\$650	\$650	\$650	\$650	
IIII Overaize Charges       40.0%       40.0%       40.0%       0.0%       60.0%       40.0%       40.0%       0.0%       60.0%         Cost Per Tuck Load (\$)       \$326       \$326       \$326       \$326       \$326       \$326       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328       \$328		\$1,300	\$6,500	\$5,850	\$3,575	\$1,300	\$1,300	\$19,825	\$2,958	\$6,403	\$1,365	\$1,788	\$12,513
Percent regulting Permis         40.0%         40.0%         40.0%         40.0%         40.0%         40.0%         40.0%         40.0%         40.0%         40.0%         40.0%         40.0%         40.0%         40.0%         40.0%         40.0%         40.0%         40.0%         40.0%         40.0%         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         5326         532	Devest Develope												
Cost Per Index Load (s)         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$328         \$309         \$587         \$386         \$309         \$588         \$32.58         \$32.58         \$32.58         \$32.58         \$32.58         \$32.58         \$32.58         \$32.58         \$32.58         \$32.58         \$32.58         \$32.58         \$32.58         \$32.58         \$32.58         \$32.50         \$32.68         \$32.58         \$32.58         \$32.50         \$32.68         \$32.58         \$32.58         \$32.58         \$32.58	Percent Requiring Permits	40.0%	40.0%	40.0%	0.0%	60.0%	40.0%		40.0%	0.0%	40.0%	0.0%	
Total Cost       S281       \$1,304       \$1,174       \$0       \$391       \$2261       \$3,990       \$583       \$0       \$274       \$0       \$887         IV Transportation & Disposal       A. Landfill       Percent To Be Shipped       80.0%       80.0%       50.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0	Cost Per Truck Load (\$)	\$326	\$326	\$326	\$326	\$326	\$326		\$326	\$326	\$326	\$326	
IV       Transportation & Disposal       A       Landfill       0.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%	Total Cost	\$261	\$1,304	\$1,174	\$0	\$391	\$261	\$3,390	\$593	\$0	\$274	\$0	\$867
A. Landfill       Percent To Be Shipped       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0%       80.0% <t< td=""><td>IV Transportation &amp; Disposal</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	IV Transportation & Disposal												
Percent To Be Shipped         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%         80.0%<	A. Landfill												
Distance (Miles)         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48	Percent To Be Shipped	80.0%	80.0%	80.0%	0.0%	50.0%	80.0%		80.0%	0.0%	80.0%	80.0%	
Cost Per Mile (\$)         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58	Distance (Miles)	48	48	48	48	48	48		48	48	48	48	
Transportation Cost         \$198         \$991         \$892         \$0         \$124         \$198         \$451         \$0         \$208         \$272           Disposal Fee Per Cubic Yard         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$10.00         \$1	Cost Per Mile (\$)	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58		\$2.58	\$2.58	\$2.58	\$2.58	
Disposal Fee Per Cubic Yand         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$12.00         \$10.00         \$10.00         \$10.00         \$10.00         \$10.00         \$10.00 <td>Transportation Cost</td> <td>\$198</td> <td>\$991</td> <td>\$892</td> <td>\$0</td> <td>\$124</td> <td>\$198</td> <td></td> <td>\$451</td> <td>\$0</td> <td>\$208</td> <td>\$272</td> <td></td>	Transportation Cost	\$198	\$991	\$892	\$0	\$124	\$198		\$451	\$0	\$208	\$272	
Disposal Cost (\$)         \$384         \$1,920         \$1,728         \$0         \$240         \$384         \$974         \$0         \$403         \$528           Total Cost         \$582         \$2,911         \$2,620         \$0         \$384         \$582         \$1,324         \$0         \$403         \$528           B. Licensed Site         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         <	Disposal Fee Per Cubic Yard	\$12.00	\$12.00	\$12.00	\$12.00	\$12.00	\$12.00		\$12.00	\$12.00	\$12.00	\$12.00	
Total Cost         \$582         \$2,911         \$2,620         \$0         \$364         \$582         \$1,324         \$0         \$611         \$900           B. Licensed Site	Disposal Cost (\$)	\$384	\$1,920	\$1,728	\$0	\$240	\$384	l	\$874	- \$0	\$403	\$528	
B. Licensed Site         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%	Total Cost	\$582	\$2,911	\$2,620	\$0	\$364	\$582		\$1,324	\$0	\$611	\$800	
Percent To Be Shipped         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%         20.0%<	B. Licensed Site												
Distance (Miles)         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150         150	Percent To Be Shipped	20.0%	20.0%	20.0%	100.0%	50.0%	20.0%		20.0%	100.0%	20.0%	20.0%	
Cost Per Mile (\$)         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58 <td>Distance (Miles)</td> <td>150</td> <td>150</td> <td>150</td> <td>150</td> <td>150</td> <td>150</td> <td></td> <td>150</td> <td>150</td> <td>150</td> <td>150</td> <td>•</td>	Distance (Miles)	150	150	150	150	150	150		150	150	150	150	•
Transportation Cost         \$155         \$774         \$697         \$2,129         \$387         \$155         \$332         \$3,812         \$163         \$213           Disposal Cost Per Cubic Foot (\$)         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$10.00         \$10.00         \$10.00	Cost Per Mile (\$)	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58		\$2.58	\$2.58	\$2.58	\$2.58	
Disposal Cost Per Cubic Foot (\$)         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.0	Transportation Cost	\$155	\$774	\$697	\$2,129	\$387	\$155		\$352	\$3,812	\$163	\$213	
Quantity Per Truck Load (Yds ⁷ )         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0         20.0	Disposal Cost Per Cubic Foot (\$)	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00		\$11.00	\$11.00	\$11.00	\$11.00	
Guantify Per Truck Load (Ft*)         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         540         54	Quentity Per Truck Load (Yds ^a )	20.0	20.0	20.0	20.0	20.0	20.0		20.0	20.0	20.0	20.0	
Disposal Cost         \$2,376         \$11,880         \$10,692         \$32,670         \$5,940         \$2,376         \$5,405         \$58,509         \$2,495         \$3,267           Total Cost Licensed Site         \$2,531         \$12,654         \$11,389         \$34,799         \$6,327         \$2,531         \$5,758         \$62,321         \$2,657         \$3,480           Total Cost Licensed Site         \$2,531         \$15,565         \$14,008         \$34,799         \$6,691         \$3,113         \$77,288         \$7,082         \$62,321         \$3,269         \$4,280         \$76,952           TOTAL COST         \$4,848         \$27,719         \$24,947         \$38,374         \$9,252         \$5,544         \$110,683         \$12,612         \$68,723         \$5,821         \$7,264         \$94,420           TOTAL COST         \$4,848         \$27,719         \$24,947         \$38,374         \$9,252         \$5,544         \$110,683         \$12,612         \$68,723         \$5,821         \$7,264         \$94,420           TOTAL COST         \$4,848         \$27,719         \$24,947         \$38,374         \$9,252         \$5,544         \$110,683         \$12,612         \$68,723         \$5,821         \$7,264         \$94,420           TOTAL COST - IRIGARAY AND CHRISTENSEN <th>Quantity Per Truck Load (FIN)</th> <th>540</th> <th>540</th> <th>540</th> <th>540</th> <th>540</th> <th>540</th> <th></th> <th>540</th> <th>540</th> <th>640</th> <th>20.0 640</th> <th></th>	Quantity Per Truck Load (FIN)	540	540	540	540	540	540		540	540	640	20.0 640	
Depose         Depose         Strate         Strate<	Dienosel Cost	\$2 276	¢11 000	\$10,603	\$22 670	SE 040	62 270		#E 40E	950 505	540	040	
Total Cost         \$4,848         \$27,719         \$24,947         \$38,374         \$9,252         \$5,544         \$10,683         \$12,612         \$68,723         \$5,821         \$7,264         \$94,420           TOTAL COST         \$4,848         \$27,719         \$24,947         \$38,374         \$9,252         \$5,544         \$110,683         \$12,612         \$68,723         \$5,821         \$7,264         \$94,420           TOTAL COST         \$4,848         \$27,719         \$24,947         \$38,374         \$9,252         \$5,544         \$110,683         \$12,612         \$68,723         \$5,821         \$7,264         \$94,420           TOTAL COST         \$4,848         \$27,719         \$24,947         \$38,374         \$9,252         \$5,544         \$110,683         \$12,612         \$68,723         \$5,821         \$7,264         \$94,420	Total Cost Licensed Site	\$2,570	\$12,854	\$11 390	\$34,700	\$6,040	\$2,070		\$5,400	400,008	\$2,455	\$3,207	1
TOTAL COST \$4,848 \$27,719 \$24,947 \$38,374 \$9,252 \$5,544 \$110,683 \$12,612 \$68,723 \$5,821 \$7,266 \$94,420 \$76,952 \$074L COST \$4,848 \$27,719 \$24,947 \$38,374 \$9,252 \$5,544 \$110,683 \$12,612 \$68,723 \$5,821 \$7,264 \$94,420 \$70TAL COST \$5,821 \$7,264 \$94,420 \$70TAL COST \$5,821 \$7,264 \$94,420 \$70TAL COST \$5,821 \$10,683 \$12,612 \$68,723 \$5,821 \$7,264 \$94,420 \$70TAL COST \$100 \$100 \$100 \$100 \$100 \$100 \$100 \$10	Total Cost Transportation & Disposal	\$2,001	\$12,034	\$11,009	934,733	30,327	92,531	e77 000	\$5,755	\$02,321	\$2,057	\$3,480	ATTA ATTA
TOTAL COST \$4,848 \$27,719 \$24,947 \$38,374 \$9,252 \$5,544 \$110,683 \$12,612 \$68,723 \$5,821 \$7,264 \$94,420	Letter over manaportation a Disposal	- 33,113	410,000	- #14,000	- #34,189	90,081	<u> </u>		a7,052	\$92,321	\$3,208	ə4,280	\$10,802
TOTAL COST - IRIGARAY AND CHRISTENSEN	TOTAL COST	\$4.848	\$27,719	\$24,947	\$38.374	\$9.252	\$5,544	\$110,683	\$12,612	\$68,723	\$5,821	\$7 264	\$94 420 ]
	TOTAL COST - IRIGARAY AND CHRISTENSEN						<b>V U U U U</b>				401021 I		\$205,103

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		Irigaray										
Maint Area & Warehouse	Main Process	Expansion	Dry Pack	Restoration		Satellite	Wellfield	Booster	Restoration	Office		
Laboratory & Offices	Building	Building	Area	Building	Sub Total	Plant	Modules	Pump Bldgs.	Extension	Building	Warehouse	Sub Total

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#### BUILDING DEMOLITION AND DISPOSAL

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Structural Character	1 Story	1 Story	1 Story	1 Story	3 Story	1 Story		2 Story	1 Story	1 Story	2 Story	1 Story	1 Story	
	Steel Frame	Steel Frame	Steel Frame	Steel Frame	Steel/Masonry	Steel Frame		Steel Frame	Pre Fab (22)	Pre Fab (4)	Steel Frame	Pre-Fab	Steel Frame	
Demolition Volume (Ft ^a )	179400	108720	430400	386400	126000	69640		192000	95040	46720	72000	64800	11000	
Cost of Demolition Per Ft ^a	\$0.1650	\$0.1650	\$0.1650	\$0.1650	\$0.1650	\$0.1650		\$0.1650	\$0.1650	\$0.1650	\$0.1650	\$0.1650	\$0.1650	
Demolition Cost (\$)	\$29,601	\$17,939	\$71,016	\$63,756	\$20,790	\$11,491	\$214,592	\$31,680	\$15,682	\$7,709	\$11,880	\$10,692	\$1,815	\$79,457
Factor For Gutting	15.0%	10.0%	30.0%	10.0%	20.0%	10.0%		20.0%	0.0%	0.0%	20.0%	10.0%	10.0%	
Cost For Gutting (\$)	\$4,440	\$1,794	\$21,305	\$6,376	\$4,158	\$1,149	\$39,221	\$6,336	\$0	\$0	\$2,376	\$1,069	\$182	\$9,963
Weight (pounds)	158761	96212	380885	341947	111504	61628		169912	66660	28032	63717	38802	9735	
Weight per Truckload	40000	40000	40000	40000	40000	40000		40000	40000	40000	40000	40000	40000	
Number of Truckloads	4.0	2.4	9.5	8.5	2.8	1.5		4.2	1.7	0.7	1.6	1.0	0.2	
Distance to Landfill	48	48	48	48	48	48		48	48	48	48	48	48	
Cost per Mile	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	}	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	
Transportation Cost	\$492	\$298	\$1,179	\$1,059	\$345	\$191	\$3,563	\$526	\$205	\$87	\$197	\$120	\$30	\$1,167
Disposal Cost per Truckload (25 CY)	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00		\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	\$300.00	
Disposal Cost	\$1,191	\$722	\$2,857	\$2,565	\$836	\$462	\$8,632	\$1,274	\$500	\$210	\$478	\$291	\$73	\$2,826
TOTAL COST	\$35,723	\$20,752	\$96,357	\$73,755	\$26,129	\$13,293	\$266,009	\$39,816	\$16,388	\$8,006	\$14,931	\$12,172	\$2,100	\$93,413
TOTAL COST IRIGARAY AND CHRISTENSEN														\$359,423

#### CONCRETE DECONTAMINATION, DEMOLITION & DISPOSAL

	and the second sec				and the second sec					the second s				Contraction of the local division of the loc
Area (Ft ² )	8020	7100	17600	18400	5600	3600		9600	0	1440	3600	0	1000	
Average Thickness (Ft)	0.5	0.5	0.5	0.5	1	0.5		0.5	0.0	0.5	0.5	0.0	0.5	
Volume (Ft ^a )	4010	3550	8800	9200	5600	1800		4800	0	720	1800	0	500	
Percent Requiring Decontamination	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%		100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	
Percent Decontaminated	0.0%	0.0%	75.0%	75.0%	40.0%	75.0%		75.0%	0.0%	100.0%	100.0%	0.0%	0.0%	
Decontamination (\$/Ft ² )	\$0.134	\$0.134	\$0.134	\$0.134	\$0.134	\$0.134		\$0.134	\$0.134	\$0.134	\$0.134	\$0.134	\$0.134	
Decontamination Cost	\$0	\$0	\$1,769	\$1,849	\$300	\$362	\$4,280	\$965	\$0	\$193	\$482	\$0	\$0	\$1,640
Demolition (\$/Ft ² )	\$3.05	\$3.05	\$3.05	\$3.05	\$3.05	\$3.05		\$3.05	\$3.05	\$3.05	\$3.05	\$3.05	\$3.05	
Demolition Cost	\$24,461	\$21,655	\$53,680	\$56,120	\$17,080	\$10,980	\$183,976	\$29,280	\$0	\$4,392	\$10,980	\$0	\$3,050	\$47,702
Transportation & Disposal	1											1		
A. Onsite Disposal	1 1	1	1	1					1		· 1	1		1
Percent to be Disposed Onsite	100%	100%	90%	90%	40%	90%		90%	0%	100%	100%	0%	100%	
Transportation Cost	\$0	\$0 j	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$0	\$0	
Disposal Cost per Cubic Foot	\$0.230	\$0.230	\$0.230	\$0.230	\$0.230	\$0.230		\$0.230	\$0.230	\$0.230	\$0.230	\$0.230	\$0.230	· ·
Disposal Cost (\$)	\$922	\$817	\$1,822	\$1,904	\$515	\$373	\$8,353	\$994	\$0	\$166	\$414	\$0	\$115	\$1,688
B. Licensed Site														
Percent to be Shipped	0%	0%	10%	10%	60%	10%		10%	100%	0%	0%	100%	0%	i
Distance (Miles)	150	150	150	150	150	150		. 150	150	150	150	150	150	. 1
Cost per Mile (\$)	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58		\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	1
Transportation Cost	50	\$0	\$631	\$659	\$2,408	\$129	\$3,827	\$344	\$0	\$0	\$0	\$0	\$0	\$344
Disposal Cost per Cubic Foot	\$3.70	\$3.70	\$3.70	\$3.70	\$3.70	\$3.70		\$3.70	\$3.70	\$3.70	\$3.70	\$3.70	\$3.70	
Quantity Per Truck Load (Yds ^a )	20	20	20	20	20	20		20	20	20	20	20	20	1
Quantity Per Truck Load (Ft ^a )	540	540	540	540	540	540		540	540	540	540	540	540	1
Disposal Cost (\$)	\$0	\$0	\$3,256	\$3,404	\$12,432	\$666	\$19,758	\$1,776	\$0	\$0	\$0	\$0	\$0	\$1,776
TOTAL COST	\$25,383	\$22,472	\$61,157	\$63,937	\$32,735	\$12,509	\$218,194	\$33,358	\$0	\$4,751	\$11,876	\$0	\$3,165	\$53,150
TOTAL COST IDICADAY AND CHRISTENSEN	1													\$271.344

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TOTAL COST IRIGARAY AND CHRISTENSEN

				Irigaray				Christensen						
	Maint Area &	Warehouse	Main Process	Expansion	Dry Pack	Restoration		Satellite	Wellfield	Booster	Restoration	Office		
	Laboratory	& Offices	Building	Building	Area	Building	Sub Total	Plant	Modules	Pump Bidgs.	Extension	Building	Warehouse	Sub Total
	1													
SOIL ACMOVAL & DISPOSAL	j													
Assume removal of 3" of Contaminated Soil under	ו													
Primary Areas, Disposal at a Licensed facility.														
Removal with Loader (\$75/hr) \$75	\$0	\$0	\$1,222	\$1,278	\$389	\$250	\$3,139	\$667	\$0	\$0	50 [	\$0	62	\$667
Quantity to be Shipped (Ft ^a )	0	ō	4400	4600	1400	900		2400	ŏ			ŏ		
Distance (Miles)	150	150	150	150	150	150		150	150	150	150	150	150	
Cost Per Mile (\$)	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58		\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	
Transportation Cost (\$)	\$0	\$0	\$3,153	\$3,297	\$1,003	\$645	\$8,098	\$1,720	\$0	\$0	\$0	\$0	\$0	\$1,720
Disposal fee Per Cubic Foot(\$)	\$3.70	\$3.70	\$3.70	\$3.70	\$3.70	\$3.70		\$3.70	\$3.70	\$3.70	\$3.70	\$3.70	\$3.70	
Quantity per Truckload (Ft ⁹ )	540	540	540	540	540	540		540	540	540	540	540	540	
Disposal Cost (\$)	\$0	\$0	\$16,280	\$17,020	\$5,180	\$3,330	\$41,810	\$8,880	\$0	\$0	\$0	\$0	\$0	\$8,880
Removal, NPDES Pts.														
Quantity to be Shipped (Ft ^a )			559					5 030						
Distance (Miles)	150	150	150	150	150	150		150	150	150	150	150	150	
Cost Per Mile (\$)	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58		\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	
Transportation Cost (\$)	<b>SO</b>	\$0	\$401	\$0	\$0	\$0	\$401	\$3,605	\$0	\$0	so	\$0	\$0	\$3,605
Disposal fee Per Cubic Foot(\$)	\$3.70	\$3.70	\$3.70	\$3.70	\$3,70	\$3.70		\$3.70	\$3.70	\$3.70	\$3.70	\$3.70	\$3.70	
Quantity per Truckload (FI9)	540	540	540	540	540	540		540	540	540	540	540	540	
Disposal Cost (\$)	\$0	\$0	\$2,068	\$0	\$0	\$0	\$2,068	\$18,611	\$0	\$0	\$0	\$0	<b>\$0</b>	\$18,611
Total Cost	\$0	so	\$23,124	\$21.594	\$8 572	\$4,225	\$55 516	\$33 483	\$0	5	50	\$0	•	\$33.483
TOTAL COST	\$0	\$0	\$23,124	\$21,594	\$6,572	\$4,225	\$55,516	\$33,483	\$0	50	\$0	\$0	\$0	\$33 483
TOTAL COST IRIGARAY AND CHRISTENSEN					44444	7,177,2							······································	\$88,999
												+		
RADIATION SURVEY	<u> </u>								· · · · · · · · · · · · · · · · · · ·				· · · · · · · · · · · · · · · · · · ·	1
Area required (acres)	1 0.18	0.16	0.40	0.42	0.13	0.08		0.22	0.00	0.03	0.08	0.00	0.02	
Survey Cost (\$/acre)	\$580.00	\$580.00	\$580.00	\$580.00	\$580.00	\$580.00	1 - E - E - E - E - E - E - E - E - E -	\$590.00	\$580.00	\$580.00	\$580.00	\$580.00	\$580.00	
TOTAL SURVEY COST (\$)	\$107	\$95	\$234	\$245	\$75	\$48	\$804	\$128	\$0	\$19	\$48	\$0	\$13	\$208
									<u>ZX</u>	•				
TOTAL COST	\$61,214	\$43,319	\$180,872	\$159,531	\$65,512	\$30.075	\$540,522	\$106.786	\$16.388	\$12,775	\$26,856	\$12,172	\$5,278	\$180,255
TOTAL COST IRIGARAY AND CHRISTENSEN											,			\$720,777

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									1	Christensen							
				Irigaray						517		Brine	Brine	Brine	Brine	Permeste	
POND RECLAMATION COST	Pond A	Pond B	Pond C	Pond D	Pond E	Pond RA	Pond RB	Pond 1	Pond 2A	Pond 2B	Pond 3	Pond 1	Pond 2	Pond 3	Pond 4	Pond	
														····	اليورية بينية بينيون		
POND SLUDGE:																	
Average Sludge Depth (Ft)	0.168	0.156	0.123	0.135	0.227	0.188	0.156					0.166	0.222	0.143	0.068	0.000	
Average Area of Studge (Ft*)	50,845	50,604	62,291	62,291	29,583	50,845	50,604					20,909	20,909	20,909	20,909	- 1	
Volume of Sludge (Ft ^s )	9,583	7,907	7,683	8,435	6,729	9,583	7,907					3,466	4.651	2.983	1.414		
Volume of Sludge (Yds*)	355	293	285	312	249	355	293	0	0	l o	0	128	172	110	52	0	
Volume of Sludge Per Truck Load (Yds*)	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	
# of Truck Loads of Sludge	17.8	14.7	14.3	15.6	12.5	17.8	14.7	0.0	0.0	0.0	0.0	6.4	8.6	5.5	2.6	0.0	
Sludge Handling Cost Per Load (\$)	\$240.00	\$240.00	\$240.00	\$240.00	\$240.00	\$240.00	\$240.00	\$240.00	\$240.00	\$240.00	\$240.00	\$240.00	\$240.00	\$240.00	\$240.00	\$240.00	
Total Sludge Handling Cost (\$)	\$4,272	\$3,528	\$3,432	\$3,744	\$3,000	\$4,272	\$3.528	\$0	\$0	<b>\$</b> 0	\$0	\$1.538	\$2.064	\$1,320	\$624	\$0	
Transportation & Disposal																	
Percent To Be Shipped	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Distance (Miles)	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	5. S.
Cost Per Mile (S)	\$2,58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	
Transportation Cost (\$)	\$6,889	\$5.689	\$5.534	\$6,037	\$4,838	\$6,889	\$5,689	\$0	<u></u>	50	\$0	\$2 477	\$3,328	\$2 120	\$1.008	\$0	
Disposal Cost Per Cubic Foot (S)	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	
Quantity Per Truck Load (Yds ^a )	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	200	20.0	20.0	
Quantity Per Truck Load (FIN)	540	540	540	540	540	540	540	540	540	540	540	540	£0.0 640	540	540	540	
Disposel Cost (\$)	\$105 792	\$87 319	\$84 942	\$92 664	\$74 250	\$105 732	597 310	en				\$38,014	\$51 094	\$32 870	\$15 AAA	60	
Total Transportation & Disposal (\$)	\$112 621	\$93.007	\$90 478	\$98 701	\$79 088	\$112 821	\$93,007	•n				S40,403	\$54 A12	C34 700	\$18,450	en	
TOTAL SLUDGE COST (S)	\$116,893	\$96 535	\$93,908	\$102.445	\$82,088	\$116.893	\$98,535	\$0	\$0	5		\$42 020	\$58 478	\$36 110	\$17.074	\$0	\$958 005
							000,000	ΨŸ					400,470	400,1101	φ(1,0/+ )		φ000,880
POND LINER:		r	1											1			
Total Pond Area (Acres)	1.75	1.72	1.75	1.72	0.78	2.17	2 17					1 10	1 10	1 10	1 10	0 00	
Total Pond Area (Ft*)	76230	74923.2	76230	74923 2	33976.8	94525.2	94525 2					47916	47916	47916	47916	0	
Factor For Sloping Sides	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	0.0%	
Total Liner Area (FIT)	91476	89908	91476	80008	40772	113430	113430	20.0%	20.070			57400	57400	57499	57400	0.070	
t iner Thickness (Millimeters)	30	30	30	30	30	30	30	30	30	30	90	30	30	30	30	0	
Liner Thickness (Inches)	0 1181	0 1 181	0 1181	0.1181	0 1181	0 1181	0 1181	0 1181	0 1 181	0 1181	0 1191	0 1181	0 1191	0 1181	0 1181	័	
Liner Thickness (Ft)	0.0098	0.0098	0.0098	0.0098	0.0098	0.0098	0.0098	0.0098	0.0098	0.0098	0.0098	0.0098	0.0094	0.0098	0.0098	ň	
"Swell" Factor	25.0%	25.0%	25.0%	25.0%	25 0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25 0%	25.0%	25.0%	0.0%	
tiner Volume (FI9)	1121	1101	1121	1101	400	1390	1390	20.070	20.070	20.00	20.070	704	20.076	704	204	0.07	
Truck Loads of Liner	21	20	21	20	0.0	28	28		പ്	ിംപ്		13	19	1 1 1	1.3		
Liner Handling Cost (\$)			<u> </u>	2.0	0.0	2.9	2.0	0.0	0.0	0.0	0.0	1.5	1.5	1,3	1.5	0.0	
Labor Crew Cost per Hour (\$)	- sool	\$90	500		<b>500</b>	<b>500</b>	•00			<b>600</b>		eon	500		600	en	
Hours per Load	20	20	20	20	20	20	20	20	20	200	20	300	400	20	20		
Liner Handling Cost Per Load (\$)	\$180.00	\$180.00	\$180.00	\$180.00	\$180.00	\$180.00	\$180.00	\$180.00	\$180.00	\$180.00	\$180 M	\$180.00	\$180.00	\$180.00	\$190.00	\$0.0	
Total Liner Handling Cost (\$)	\$370	\$360	\$379	5360	\$162	\$469	\$100.00	en	¢100.00	en	#100.00 #0	\$224	\$100.00	\$100.00	\$100.00		
Transportation & Disposal		4000		4000		<del>4100</del>						92.34	94.04		92.54		
Percent To Re Shipped	~ 100 m	100.0%	100.0%	100.0%	100.0%	100.0%	100 004	100.04	100.0%	100.00	100 0	100.00	100.0	1000	100 0	100.00	
Distance (Miles)	150	160	150	140	150	160	160	150	150	150.078	150	100.076	160	150	150	100.076	
Cost Per Mile (\$)	82 58	\$2.54	\$2.69	\$2.58	\$2.58	\$2 59	\$2.60	50 KB	\$2 60	20 KB	\$2.50	100 82 68	60 KQ	100 82 59	\$2 KB	\$2 50	
Transportation Cost (\$)	\$213	\$774	\$813	\$774	\$948	\$1.008	\$1 008		#2.00 ¢0	#2.00 en	\$2.00 \$0	\$5.00	\$5.00	\$5.00	\$502	44.00 90	
Disposal Cost Par Cubic Fort (\$)	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11 m	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	1 11 00 L	\$11.00	e11 00	
Quantity Par Truck Load (5%)	540	540	<b>5</b> 40	840	φ11.00 640	640	540	R40	#11.00 R40	611.00 E40	#11.00 R40	640	#11.00 #A0	840	411.00 840	#11.00 #40	
Disposal Cost (\$)	\$12 474	\$11 890	\$12 474	\$11 880	\$5 348	\$15 444	\$15 444	 			540	\$7 722	\$7 799	\$7 722	\$7 722	540	
Total Transportation & Disposal (S)	\$13 297	\$12 854	\$13 287	\$12 654	\$5 694	\$18 450	\$18 450					\$9.225	\$9.995	\$8.225	\$9.225		
TOTAL LINER COST (\$)	\$13,695	\$13,014	\$13.665	\$13,014	\$5,854	\$16.918	\$16,919	\$0	60	<u>en</u>		\$8 450	\$9.450	\$8 450	\$8 450	50	\$126 897
		<u> </u>		410,014	w0,000	<u>_</u>	w10,010	40		1		ψ0, <del>4</del> 08		L	φ0, <del>-</del> 03		\$120,001
POND BACKFILL:			r											I			
Backfill required (Yds ² )	B740	8580	8740	8580	2517	14817	16319	2345	1897	1537	183	9048	9049	9048	9048	18070	
Backfill Cost (\$/Yd9)	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	
TOTAL BACKFILL COST (S)	\$8,740	\$8,580	\$8,740	\$8,580	\$2.517	\$14.617	\$16,319	\$2.345	\$1,837	\$1.537	\$163	\$9.048	\$9.048	\$9.048	\$9.048	\$18,070	\$128,237
	+++++										<u>, , , , , , , , , , , , , , , , , , , </u>		40,010		441444		

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														Christensen			
				Irigaray						517		Brine	Brine	Brine	Brine	Permeate	
POND RECLAMATION COST	Pond A	Pond B	Pond C	Pond D	Pond E	Pond RA	Pond RB	Pond 1	Pond 2A	Pond 2B	Pond 3	Pond 1	Pond 2	Pond 3	Pond 4	Pond	
PADIATION CUDVEY																	1
Areal maninet (area)	1 75	1 70	4.75	1 70	0.70	0.17	0.17				امما						
Superv Cost (\$/acro)	*****	5500.00	5590.00	\$590.00	6E90.00	£500.00	2.17 #590.00	*590.00	0.00	0.00	0.00	1.10	1.10	1.10	1.10		
TOTAL SUBVEY COST (\$)	\$1 015	\$360.00	\$1.015	\$380.00	\$360.00	\$1 259	\$1 259	\$380.00 \$0	3000.00 ¢0	\$080.00	\$580.00	3000.00	3350.00	\$580.00	\$380.00	\$1.00	\$0.54P
		4900	φ1,015	4990	9406		φ1,238				<u>40</u>	9030	3030	9030	\$030		
LEAK DETECTION SYSTEM REMOVAL																	
Volume of Gravel and Piping (Ft ³ ) (Assume 3*)			14337	13851				0			T T	·····				1	
Quantity per Truckload (Ft ^a )			540	540				540								1	
Quantity to be Shipped (Loads)			26.6	25.7				0.0									
Distance (Miles)			150	150				150									
Cost per Mile (\$)			\$2.58	\$2.58				\$2.58									
Transportation Cost (\$)			\$10,275	\$9,927				\$0					j			· ·	
Handling Cost per load			\$6,372	\$6,156				\$0								1 1	
Disposal Fee per Cubic Foot (\$)			\$3.70	\$3.70				\$3.70								1	
Disposal Cost (\$)			\$53,047	\$51,249				\$0									
TOTAL LEAK DETECTION SYSTEM REMOVAL	\$0	\$0	\$69,694	\$67,331	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$137,025
TOTAL POND RECLAMATION COST	\$140,313	\$119,127	\$187,021	\$192,368	\$90,913	\$149,687	\$131,031	\$2,345	\$1,837	\$1,537	\$163	\$60,174	\$74,621	\$54,264	\$35,219	\$18,070	\$1,258,692

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#### SUMMARY - IRIGARAY:

TOTAL SLUDGE COST (\$)	
TOTAL LINER COST (\$)	
TOTAL BACKFILL COST (\$)	
TOTAL RADIATION SURVEY COST (S)	•
LEAK DETECTION SYSTEM REMOVAL	
TOTAL POND RECLAMATION COST	

ļ	\$705,297	
	\$93,050	
	\$73,975	
	\$6,996	
	\$137,025	
	\$1,016,343	

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#### SUMMARY - CHRISTENSEN:

TOTAL SLUDGE COST (\$) TOTAL LINER COST (\$) TOTAL BACKFILL COST (\$) TOTAL RADIATION SURVEY COST (\$) LEAK DETECTION SYSTEM REMOVAL TOTAL POND RECLAMATION COST

\$151,698 \$33,836 \$54,262 \$2,552 \$0 \$242,348 \$1,258,692

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TOTAL PROJECT COST - CR and IR (\$)

08/18/2003

		Irigaray						
WELL PLUGGING AND ABANDONMENT	Mine Units	517 USMT	Monitor/		Mine Units	Monitor/	Misc.	
	#1 Thru #9	Test Sites	Trend	Sub Total	#2 Thru #7	Trend	Regional	Sub Total
Number of Wells	1064	11	314	1389	2062	327	137	2526
Average Depth	250	250	250		410	410	410	
Average Diameter	4.5	4.5	4.5		4.5	4.5	4.5	
Materials								
Bentonite Chips Required (Ft?/Well)	11.4	11.4	11.4		11.4	11.4	11.4	
Bags of Chips Required/Well	15.0	15.0	15.0		15.0	15.0	15.0	
Cost Per Bag (S)	\$4.50	\$4.50	\$4.50		\$4.50	\$4.50	\$4.50	
Cost/Well Bentonite Chips (\$)	\$67.50	\$67.50	\$87.50		\$67.50	\$67.50	\$67.50	
Gravel Fill Required (Ft3/Well)	15.7	15.7	15.7		33.6	33.6	33.6	
Gravel Fill Required (Yd?/Well)	0.58	0.58	0.58		1.24	1.24	1.24	
Cost of Gravel/YrP (\$)	\$20.00	\$20.00	\$20.00	·	\$20.00	\$20.00	\$20.00	
Cost/Well Gravel Fill (\$)	\$11.63	\$11.63	\$11.63		\$24.89	\$24,89	\$24.89	
Cement Cone/Markers Reg'd/Well	1.0	1.0	1.0		1.0	1.0	1.0	
Cost of Cement Cones/Markers (\$)	\$4.00	\$4.00	\$4.00		\$4.00	\$4.00	\$4.00	
Total Materials Cost per Well	\$83.13	\$83.13	\$83,13		\$96.39	\$96.39	\$96.39	
Labor								
Hours Required per Well	1.0	1.0	1.0		1.0	1.0	1.0	
Labor Cost per Hour	\$60.00	\$60.00	\$60.00		\$60.00	\$60.00	\$60.00	
Total Labor Cost per Well (\$)	\$60.00	\$60.00	\$60.00		\$60.00	\$60.00	\$60.00	
Equipment Rental	· .							
Hours Required per Well	1.0	1.0	1.0		1.0	1.0	1.0	
Backhoe w/Operator Cost/Hr (\$)	\$38.50	\$38.50	\$38.50		\$38.50	\$38.50	\$38.50	
Total Equipment Cost per Well (\$)	\$38.50	\$38.50	\$38.50		\$38.50	\$38.50	\$38.50	
Total Cost per Well (\$)	\$181.63	\$181.63	\$181.63		\$194.89	\$194.89	\$194.89	
TOTAL WELL ABANDONMENT COST (\$)	\$193,254	\$1,998	\$57.032	\$252.284	\$401.861	\$63.729	\$26,700	\$492,289

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GRAND TOTAL IRIGARAY AND CHRISTENSEN

\$744,573

	Irigaray	Christensen	Christensen	Christensen	Christensen	Christensen	Total
	Mine Unit(s)	Mine Units	Mine Unit	Mine Unit	Mine Unit	Mine Unit	Christensen
WELLFIELD EQUIPMENT REMOVAL & DISPOSAL	#1 Thru #9	#2 Thru #4	#5	#6	#7	#8	& Irigaray
	_						
I Wellfield Piping							
A. Removal							
Length/Well (Ft)	100	300	300	300			
Total Number of Wells	1064	1021	494	446			
Total Quantity (Pt)	106400	306300	148200	133800		<b>i</b> '	
Cost of Removal (\$/Ft)	\$0.202	\$0.202	\$0.202	\$0.202			
Cost of Removal (\$)	\$21,493	\$61,873	\$29,936	\$27,028	1		\$140,329
Average OD (Inches)	3.0	3.0	3.0	3.0	[		
Chipped Volume Reduction (Ft%Ft)	0.016	0.016	0.016	0.016	i		
Chipped Volume (Ft ^e )	1,702	4,901	2,371	2,141			
Quantity Per Truck Load (Ft ⁹ )	540	540	540	540	1		
Total Number of Truck Loads	3.2	9.1	4.4	4.0	1		
B. Survey & Decontamination							
		1					
Percent Requiring Decontamination	0%	0%	0%	0%			
Loads for Decontamination	0.0	0.0	0.0	0.0			
Cost for Decontamination (\$/Load)	\$435.00	\$435.00	\$435.00	\$435.00	[		
Cost for Decontamination (\$)	\$0	\$0	\$0	\$0			\$0
C. Transport & Disposal							
1.) Landfill		1					
a. Transportation	1			l	l i	[	
Percent To Be Shipped	0.0%	0.0%	0.0%	0.0%			
Loads To Be Shipped	0.0	0.0	0.0	0.0			
Distance (Miles)	48	48	48	48			
Transportation Cost (\$/mile)	\$2.58	\$2.58	\$2.58	\$2.58			
Transportation Cost (\$)	\$0	\$0	\$0	\$0			\$0
b. Disposal							
Disposal Fee Per Yd ^a	\$12.00	\$12.00	\$12.00	\$12.00			
Yds ^s Per Load	20	20	20	20	1		
Disposal Cost (\$)	\$0	\$0	\$0	\$0	1		
Total Cost - Landfill	\$0	\$0	\$0	\$0	1		\$0
2.) Licensed Site							
a. Transportation						1	
Percent To Be Shipped	100.0%	100.0%	100.0%	100.0%		ł .	
Loads To Be Shipped	32	9.1	4.4	4.0			
Distance (Miles)	150	150	150	150			
Cost Per Mile (S/mile)	\$2.58	\$2.58	\$2.58	\$2.58			
Transportation Cost (\$)	\$1,238	\$3.522	\$1,703	\$1.548	1	1 '	\$8.011
b. Disoosal							
Disposal Cost Per Et	\$11.00	\$11.00	\$11.00	\$11.00			
Disposal Fee Per VrP	\$297.00	\$297.00	\$297.00	\$297.00			
Quantity Per Truck ( osd /Vde3)	90	201.00	201.00	200			
Dienceal Cost (\$)	\$10 MP	1 154 054	428 124	\$23 760	1		\$100 OFP
Total Cost - Licensed Site	\$20,000	657 574	\$27,000	\$25,700			\$120,000
Total Cost - Transport & Disposal	\$20,240	\$57 570	\$97,000	\$25,300	1		\$130,809 \$130,000
Total Cost, WE Dining Removal & Discossel	\$41 700	6110 449	\$\$7 77E	640,000			\$130,808
Transportation Cost (\$) b. Disposal Disposal Cost Per Ft ^a Disposal Fee Per Yd ^a Quantity Per Truck Load (Yds ^a ) Disposal Cost (\$) Total Cost - Licensed Site Total Cost - Transport & Disposal Total Cost - WF Piping Removal & Disposal	\$1,238 \$11.00 \$297.00 \$19,008 \$20,246 \$20,246 \$41,739	\$3,522 \$11.00 \$297.00 \$54,054 \$57,576 \$57,576 \$119,448	\$1,703 \$11.00 \$297.00 20 \$26,136 \$27,839 \$27,839 \$57,775	\$1,548 \$11.00 \$297.00 \$23,760 \$25,308 \$25,308 \$25,308	\$0	\$0	\$8,011 \$122,958 \$130,969 \$130,969 \$271,298

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	Irigaray	Christensen	Christensen	Christensen	Christensen	Christensen	Total
	Mine Unit(s)	Mine Units	Mine Unit	Mine Unit	Mine Unit	Mine Unit	Christensen
LFIELD EQUIPMENT REMOVAL & DISPOSAL	#1 Thru #9	#2 Thru #4	#5	#6	#7	#8	& Irigaray
Production Well Pumps							
A. Pump and Tubing Removal		1					
Number of Production Wells	424	443	217	202	(	{	
Cost of Removal (\$/well)	\$22.50	\$22.50	\$22.50	\$22.50	1		
Cost of Removal (\$)	\$9,540	\$9,968	\$4,883	\$4,545	1		\$28,935
Number of Pumps Per Truck Load	180	180	180	180	1	1	
Number of Truck Loads (Pumps)	2.4	2.5	1.2	1,1	L		
B. Survey & Decontamination (Pumps)	1						
Percent Requiring Decontamination	50.0%	50.0%	50.0%	50.0%			
Loads for Decontamination	1.2	1.3	0.6	0.6	Į	}	
Cost for Decontamination (\$/Load)	\$435.00	\$435.00	\$435.00	\$435.00	ł		
Cost for Decontamination (\$)	\$522	\$566	\$261	\$281	1		\$1 610
C. Tubing Volume Reduction & Loading		1					
Length per Well (Ft)	100	300	300	450			
Total Quantity (Ft)	42,400	132,900	65,100	90,900			
Cost of Removal (S/Ft)	\$0.025	\$0.025	\$0.025	\$0.025			
Cost of Removal (S)	\$1.060	\$3,323	\$1.628	\$2 273			\$8 283
Average OD (inches)	3.0	3.0	3.0	3.0			40,200
Chipped Volume Reduction (Ft%Ft)	0.016	0.016	0.016	0.016			
Chipped Volume (FP)	678	2,126	1.042	1.454			
Quantity per Truckload (FI ^a )	540	540	540	540			
Number of Truck Loads	1.3	3.9	1.9	27		1	
D. Transport & Disposal							
1.) Landfill							
a. Transportation	1				· ·	1 · · · ·	
Percent To Be Shipped (Pumps)	50.0%	50.0%	50.0%	80.0%		}	1.00
Loads To Be Shipped	12	13	0.6	0.04	· ·		
Distance (Miles)	49	49	49	49			
Cost Per Mile (S/mile)	\$2 58	\$2.58	\$2.58	62 58			1.
Transportation Cost (\$)	\$149	\$161	\$7A	\$74	Į		. e459
h Disposal			•/*			1	****
Disposal Eas Par Vd3	e12 00	e12 00	612.00	e12.00	1 ·		,
Viel Deri ced	912.00	412.00		112.00			
Disposal Cost (\$)	enee	6310		20			
Total Cost . Landfill	\$400	012	\$144 6010	. 3144	1		2000
2 Licensed Sile	\$437		9210	\$210			\$1,340
	1						
a. Transportation Beneat Te Be Chinned (Burnet)	50.00						
Percent To Be Shipped (Pumps)	50.0%	50.0%	50.0%	50.0%			
Percent to be Shipped (Tubing)	100.0%	100.0%	100.0%	100.0%			
Loads to be Snipped	2.5	5.2	2.5	3.2			
Uistance (Miles)	150	150	150	150			
Cost Per Mile (S/mile)	\$2.58	\$2.58	\$2.58	\$2.58			1
Transportation Cost (\$)	\$951	\$2,008	\$979	\$1,255	[		\$5,192
D. Disposal					1		
Disposal Cost Per Ft	\$11.00	\$11.00	\$11.00	\$11.00		1	
Disposal Fee Per Yo	\$297.00	\$297.00	\$297.00	\$297.00	1	1	
Quantity Per Truck Load (Yds ³ )	20	20	20	20		Į	1
Disposal Cost (\$)	\$14,590	\$30,815	\$15,022	\$19,265		1	\$79,693
Total Cost - Licensed Site	\$15,541	\$32,823	\$16,000	\$20,521		1	\$84,885
Total Cost - Transport & Disposal	\$15,978	\$33,296	\$16,219	\$20,739		L	\$86,231
iotal Cost - Pump Removal & Disposal	\$27,100	\$47,152	\$22,990	\$27,817	\$0	\$0	\$125,058

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	Irigaray	Christensen	Christensen	Christensen	Christensen	Christensen	Total
	Mine Unit(s)	Mine Units	Mine Unit	Mine Unit	Mine Unit	Mine Unit	Christensen
LFIELD EQUIPMENT REMOVAL & DISPOSAL	#1 Thru #9	#2 Thru #4	#5	#6	#7	#8	& Ingaray
Surface Trunkline Piping						_	
A. Removal					1		
Total Quantity (Ft)	44700	0	0	0	0	0	
Cost of Removal (\$/Ft)	\$0.146	\$0.146	\$0.146	\$0.146	\$0.146	\$0.146	
Cost of Removal (\$)	\$8,526	\$0	\$0	\$0	\$0	\$0	\$6,526
Average OD (Inches)	8.750	8.750	0.000	0.000	0.000	0.000	
Chipped Volume Reduction (Ft%Ft)	0.088	0.088	0.088	0.086	0.089	0.088	
Chipped Volume (Ft ^a )	3934	0	0	0	4 O	0	
Quantity Per Truck Load (Ft ^s )	540	540	540	540	( O	0	
Total Number of Truck Loads	7.3	0.0	0.0	0.0	0.0	0.0	
B. Survey & Decontamination		1					
Percent Requiring Decontamination	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Loads for Decontamination	0.0	0.0	0.0	0.0	0.0	0.0	
Cost for Decontamination (\$/Load)	\$435.00	\$435.00	\$435.00	\$435.00	\$0.00	\$0.00	
Cost for Decontamination (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$
C. Transport & Disposal							
1.) Landfill							
a. Transportation							1
Percent To Be Shipped	0.0%	0.0%	0.0%	. 0.0%	0.0%	0.0%	
Loads To Be Shipped	0.0	0.0	0.0	0.0	0.0	0.0	
Distance (Miles)	48	48	48	48	0	0	
Cost Per Mile (\$/mile)	\$2.58	\$2.58	\$2.58	\$2.58	\$0.00	\$0.00	
Transportation Cost (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$
b. Disposal					-		
Disposal Fee Per Yd ^a	\$12.00	\$12.00	\$12.00	\$12.00	\$0.00	\$0.00	
Yds ^a Per Load	20	20	20	20	0	0	1
Disposal Cost (\$)	\$0	\$0	\$0	- \$0	\$0	\$0	\$
Total Cost - Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$
2.) Licensed Site	1	1					
a. Transportation					1		
Percent To Be Shipped	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Loads To Be Shipped	7.3	0.0	0.0	0.0	0.0	0.0	
Distance (Miles)	150	150	150	150	0	0	
Cost Per Mile (\$/mile)	\$2.58	\$2.58	\$2.58	\$2.58	\$0.00	\$0.00	
Transportation Cost (\$)	\$2,819	\$0	\$0	\$0	\$0	\$0	\$2,81
b. Disposal					· · ·		
Disposal Cost Per Ft	\$11.00	\$11.00	\$11.00	\$11.00	\$0.00	\$0.00	
Disposal Fee Per Yd ^a	\$297.00	\$297.00	\$297.00	\$297.00	\$0.00	\$0.00	
Quantity Per Truck Load (Yds ^a )	20	20	20	20	0	0	
Disposal Cost (\$)	\$43,270	\$0	\$0	\$0	\$0	50	\$43,27
Total Cost - Licensed Site	\$46,089	\$0	\$0	\$0	\$0	50	\$46.08
Total Cost - Transport & Disposal	\$46,089	\$0	\$0	\$0	\$0	50	\$46,085
otal Cost - Surface Trunkline Removal & Disposal	\$52,615	\$0	\$0	\$0	50	\$0	\$52.61

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	trigaray	Christensen	Christensen	Christensen	Christensen	Christensen	Total
	Mine Unit(s)	Mine Units	Mine Unit	Mine Unit	Mine Unit	Mine Unit	Christensen
WELLFIELD EQUIPMENT REMOVAL & DISPOSAL	#1 Thru #9	#2 Thru #4	#5	#6	#7	#8	& Irigeray
IV Burled Trunkline							
A. Removal							
Total Quantity (Ft)	7300	11565	24500	47000	0	0	
Cost of Removal (\$/Ft)	\$3.12	\$3.12	\$3.12	\$3.12	\$3.12	\$3.12	
Cost of Removal (\$)	\$22,776	\$36,083	\$76,440	\$146,640	\$0	\$0	\$281,939
Average OD (inches)	8.750	8.750	8.750	12.000	12.000	12.000	
Chipped Volume Reduction (Ft*/Ft)	0.088	0.088	0.088	0.130	0.130	0.130	
Chipped Volume (Ft ^e )	642	1018	2156	6110	} 0	0	
Quantity Per Truck Load (Ft ^a )	540	540	540	540	j o	0	
Number of Truck Loads	1.2	1.9	4.0	11.3	0.0	0.0	
B. Survey & Decontamination							
Percent Requiring Decontamination	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Loads for Decontamination	0.0	0.0	0.0	0.0	0.0	0.0	
Cost for Decontamination. (\$/Load)	\$435.00	\$435.00	\$435.00	\$435.00	\$0.00	\$0.00	
Cost for Decontamination. (\$)	\$0	\$0	\$0	\$0	· \$0	\$0	\$0
C. Transport & Disposal							
1.) Landfill						1	
a. Transportation	1						1 1
Percent To Be Shipped	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Loads To Be Shipped	0.0	0.0	0.0	0.0	0.0	0.0	
Distance (Miles)	48	48	48	48	0	0	
Cost Per Mile (S/mile)	\$2.58	\$2.58	\$2.58	\$2.58	\$0.00	\$0.00	
Transportation Cost (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
b. Disposal			· · ·				
Disposal Fee Per Ydª	\$12.00	\$12.00	\$12.00	\$12.00	\$0.00	\$0.00	
Yds ^a Per Load	20	20	20	20			
Disposal Cost (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1 otal Cost - Landhil	\$0	<b>\$</b> 0	80	\$0	\$0	\$0	\$0
2.) Licensed Site					1		
a. Transportation				100.00	100.00	1 100 000	
Percent to be snipped	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Coace to be Shipped	1.2	1.9	4.0	11.3	0.0	0.0	
Cast Res Miles)	100	150	150	150			
Cost Per Mile (s/mile)	\$2.00	92.00	\$2.06		30.00	\$0.00	
Fransportation Cost (\$)	\$404	. a/35	\$1,340	\$4,373	<b>a</b> 0	\$0	\$7,1Z1
0. Disposel Disposel Cost Res 5th							
Disposal Cost Per Pr	a11.00	a11.00	eona eo	\$11.00	30.00	30.00	
Disposal Fee Fer for	\$297.00	\$297.00	\$297.00	\$297.00	\$0.00	\$0.00	
Disposal Cost (f)	20	20	20	20			e
Uisposal Cost (3)	\$7,128	\$11,286	\$23,760	30/,122	50	50	\$109,296
Total Cost - Licenseo Site	37,592	\$12,021	323,308	\$/1,495	\$0	50	3110,41/
Total Cost - Transport & Disposal	\$7,582	<u> </u>	923,308	3/1,495	\$0	20	\$110,417
Fotal Cost + Duneo Frankine Hemoval & Disposal	\$30,308	040,104		j0210,135	\$0	<b>3</b> 0	2320,330

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	Irigaray	Christensen	Christensen	Christensen	Christensen	Christensen	Total
	Mine Unit(s)	Mine Units	Mine Unit	Mine Unit	Mine Unit	Mine Unit	Christensen
WELLFIELD EQUIPMENT REMOVAL & DISPOSAL	#1 Thru #9	#2 Thru #4	#5	#6	#7	#8	& Irigaray
V Manholes							
A. Removal							
Total Quantity	5	8	5	11	. 0	0	
Cost of Removal (\$ Each)	\$117.00	\$117.00	\$117.00	\$117.00	\$117.00	\$117.00	
Cost of Removal (\$)	\$585	\$936	\$585	\$1,287	\$0	\$0	\$3,393
Quantity Per Truck Load	10	10	10	10	10	10	
Number of Truck Loads	0.5	8.0	0.5	1.1	0.0	0.0	
B. Survey & Decontamination							
Percent Requiring Decontamination	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Loads for Decontamination	0.0	0.0	0.0	0.0	0.0	0.0	
Cost for Decontamination (\$/Load)	\$435.00	\$435.00	\$435.00	\$435.00	\$0.00	\$0.00	
Cost for Decontamination (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
C. Transport & Disposal				-			
1.) Landfill						1	
a. Transportation						1	
Percent To Be Shipped	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Loads To Be Shipped	0.0	0.0	0.0	0.0	0.0	0.0	
Distance (Miles)	48	48	48	48	0	0	
Cost Per Mile (\$/mile)	\$2.58	\$2.58	\$2.58	\$2.58	\$0.00	\$0.00	
Transportation Cost (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
b. Disposal	1	· ·		1	Į		[
Disposal Fee Per Yd ^e (\$)	\$12.00	\$12.00	\$12.00	\$12.00	\$0.00	\$0.00	
Yds ^a Per Load	20	20	20	20	0	{` 0	
Disposal Cost (\$)	\$0	\$0	\$0	\$0	\$0	\$0	į \$0
Total Cost - Landfill	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2.) Licensed Site			1			l	
a. Transportation			1			1	
Percent To Be Shipped	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Loads To Be Shipped	0.0	0.0	0.0	0.0	0.0	0.0	·
Distance (Miles)	150	150	150	150	0	0	l
Cost Per Mile (\$/mile)	\$2.58	\$2.58	\$2.58	\$2.58	\$0.00	\$0.00	
Transportation Cost (5)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
b. Disposal							
Disposal Cost Per Ft*	\$11.00	\$11.00	\$11.00	\$11.00	\$0.00	\$0.00	1
Uisposal Fee Per To*	\$297.00	\$291.00	\$297.00	\$291.00	\$0.00	\$0.00	
Diamanti Cart (E)	20	20	20	20	0		
Total Cost   Insered Site	1 30	<b>1</b>	1 20	\$0	30	<b>3</b> 0	90
Total Cost - Econord & Disposal	\$0	) ÷	80	\$0	50	¥0	30
Total Cost Manhola Removal & Diesseal		8036	\$0 €595	¢1 297			\$2 303
Total Gost Mainible Herioval a Disposal	<u> </u>	4900	L 9000	<u>  91,207</u>	J	1. <u></u>	40,000
OTAL COST - WELLFIELD EQUIP REMOVAL & DISP	\$152,407	\$215,640	\$183,098	\$299,575	\$0	\$0	\$850,720

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	Irigaray	Christensen	Christensen	Christensen	Christensen	Christensen	Total
4	Mine Unit(s)	Mine Units	Mine Unit	Mine Unit	Mine Unit	Mine Unit	Christensen
SOIL REPLACEMENT & REVEGETATION	#1 Thru #9	#2 Thru #4	#5	#6	#7	#8	& Irigarey
Process Plant and Office Building	- <b>'</b> 1						
A Toppoil Handling & Grading					· · · · ·		
Afforded Area (Acres)	50				1		
Austral Affected Thickness (Inc)	5.0	2.5	0.0	0.0	0.0	0.0	
	12.0	12.0	0.0	0.0	0.0	0.0	
Lipit Cast Maul/Place (20/2)	800/	4033	<b>1</b>				
Tennell Unardian Cast (1)	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	
I opsoli Handling Cost (\$)	\$8,067	\$4,033	\$0	\$0	\$0	\$0	
Unit Cost - Grading (S/Ac)	\$38.45	\$38.45	\$38.45	\$38.45	\$38.45	\$38.45	
Grading Cost (\$)	\$192	\$96	\$0	\$0	\$0	\$0	
Sub Total - Topsoil	\$8,259	\$4,129	\$0	\$0	\$0	<b>\$0</b>	\$12,38
B. Hadiation Survey & Soil Analysis			•		I 4		
Unit Cost (\$/Ac)	\$580.00	\$580.00	\$580.00	\$580.00	\$580.00	\$580.00	
Sub Total - Survey & Analysis	\$2,900	\$1,450	\$0	\$0	\$0	\$0	\$4,35
C. Revegetation							
Fertilizer (\$/Ac)	\$46.49	\$46.49	\$46.49	\$46.49	\$46.49	\$48.49	
Seeding Prep & Seeding (\$/Ac)	\$168.68	\$168.68	\$168.68	\$168.68	\$168.68	\$168.68	
Mulching & Crimping (\$/Ac)	\$276.54	\$278.54	\$276.54	\$276.54	\$276.54	\$276.54	
Sub Total Cost/Acre	\$491.71	\$491.71	\$491.71	\$491.71	\$491.71	\$491.71	
Sub Total - Revegation	\$2,459	\$1,229	\$0	\$0	\$0	\$0	\$3,66
Sub Total - Process Plant and Office Bldg.	\$13,617	\$6,809	\$0	\$0	\$0	\$0	\$20,42
Ponds							
A. Topsoil Handling & Grading							
Affected Area (Acres)	20.0	12.0	0.0	0.0	0.0	0.0	
Average Affected Thickness (Ins)	12	12	0	0		0	
Topsoil Volume (Yds ^a )	32267	19360	0.	0	. 0	0	
Unit Cost - Haul/Place (\$/YdP)	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	
Topsoil Handling Cost (\$)	\$32,267	\$19,360	\$0	\$0	\$0	\$0	
Unit Cost - Grading (\$/Ac)	\$38.45	\$38.45	\$38.45	\$38.45	\$38.45	\$38.45	
Grading Cost (\$)	\$769	\$461	\$0	\$0	\$0	\$0	
Sub Total - Topsoil	\$33.036	\$19.821	\$0	\$0	\$0	\$0	\$52.8
B. Radiation Survey & Soil Analysis	1						
Unit Cost (\$/Ac)	\$580.00	\$580.00	\$580.00	\$580.00	\$580.00	\$580.00	
Sub Total - Survey & Analysis	\$11,600	\$6.960	\$0	\$0	\$0	\$0	\$18.56
C. Revegation	1				1		
Fertilizer (S/Ac)	\$48.49	\$46.49	\$46.49	\$46.49	\$46.49	\$46,49	
Seeding Prep & Seeding (\$/Ac)	\$168.68	\$168.68	\$168.68	\$168.68	\$168.68	\$168.68	
Mulching & Crimping (\$/Ac)	\$276.54	\$276.54	\$276.54	\$276 54	\$278.54	\$276.54	
Sub Total Cost/Acre	8401 71	\$491.71	\$491 71	\$491 71	\$491 71	\$491 71	
Sub Total - Devection	1						
	\$9,834	\$5,901	02	50	50	50	\$15.73

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		irigaray	Christensen	Christensen	Christensen	Christensen	Christensen	Total
		Mine Unit(s)	Mine Units	Mine Unit	Mine Unit	Mine Unit	Mine Unit	Christensen
TOPSO	IL REPLACEMENT & REVEGETATION	#1 Thru #9	#2 Thru #4	#5	#6	67	#8	& Irigaray
III We	allfields							
¨ <b> </b> ▲	Topsoil Handling & Grading					•		
	Affected Area (Acres)	40.0	55.0	90.0	50.0	35.0	40.0	
	Average Affected Thickness (Ins)	3.5	0.0	0.0	0.0	0.0	0.0	
	Topsoil Volume (Yds*)	18822	0	0	0	0	0	
1	Unit Cost - Haul/Place (\$/Yd ^a )	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	
	Topsoil Handling Cost (\$)	\$18,822	\$0	\$0	\$0	\$0	\$0	
	Unit Cost - Grading (\$/Ac)	\$38.45	\$38.45	\$38.45	\$38.45	\$38.45	\$0.00	
	Grading Cost (5)	\$1,538	\$2,115	\$1,154	\$1,923	\$1,346	\$0	
⊢	Sub Total - Topson	\$20,360	\$2,115	\$1,154	\$1,923	\$1,348	\$0	\$26,897
В.	Hadiation Survey & Soli Analysis		*****					
	Crist Cost (SPAC)	\$580.00	\$580.00	\$580.00	\$550.00	\$0.00	\$0.00	*****
<u>.</u>	Sub Total - Survey & Analysis	\$23,200	\$31,900	\$17,400	\$29,000	20	<u>\$0</u>	\$101,500
0.	Affected Area (Acres)	0.054	0.079			_  ا		
	Allected Ales (Actes)	0.054	0.030	0				
	Affected Area (ft ⁻ )	2,352	1,568	0	0	0	0	
	Average Affected Thickness (it)	0.25	0.25	•	•	•	0	
	Affected Volume (ft ^a )	588	392	0	0	0	0	
	Quantity per Truckload (ft*)	540	540	540	540	540	540	
	Quantity to be Shipped (Loads)	1.1	0.7	0.0	0.0	0.0	0.0	
	Distance (Miles)	150	150	150	150	150	150	
1	Cost per Mile (\$)	\$2.58	\$2.58	\$2.56	\$2.58	\$2.58	\$2.58	
	Transportation Cost (\$)	\$421	\$281	\$0	\$0	\$0	\$0	
	Handling Cost (\$240/load)	\$261	\$174	\$0	\$0	\$0	\$0	
	Disposal Fee per Cubic Foot (\$)	\$3.70	\$3.70	\$3.70	\$3.70	\$3.70	\$3.70	
1	Disposal Cost (\$)	\$2,176	\$1,450	\$0	\$0	\$0	\$0	
	Sub Total - Spill Cleanup	\$2,597	\$1,731	\$0	\$0	\$0	\$0	\$4,328
D.	Revegation		1		<b>.</b>	<b>.</b>		
	Fertilizer (\$/Ac)	\$46.49	\$46.49	\$46.49	\$46.49	\$46.49	\$46.49	· · ·
1	Seeding Prep & Seeding (\$/Ac)	\$168.68	\$168.68	\$168.68	\$168.68	\$168.68	\$168.68	
	Mulching & Crimping (\$/Ac)	\$276.54	\$276.54	\$276.54	\$276.54	\$276.54	\$276.54	
	Sub Total Cost/Acre	\$491.71	\$491.71	\$491.71	\$491.71	\$491.71	\$491.71	
	Sub Total - Revegation	\$19,668	\$27,044	\$14,751	\$24,586	\$17,210	\$19,668	\$122,928
Su	b Total - Weltfields (\$)	\$65,826	\$62,790	\$33,305	\$55,508	\$18,556	\$19,668	\$255,653
IV Ro	ads							
_   <b>^</b>	. Topsoil Handling & Grading				· · · ·			
	Affected Area (Acres)	25.0	20.0	15.0	21.0	0.0	0.0	
	Average Affected Thickness (Ins)	12	12	12	12	12	12	
	Topsoil Volume (Yds*)	40333	32267	24200	33880	0	0	
	Unit Cost - Haul/Place (\$/Yd ^a )	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	
	Topsoil Handling Cost (\$)	\$40,333	\$32,267	\$24,200	\$33,880	\$0	\$0	
	Unit Cost - Grading (\$/Ac)	\$38.45	\$38.45	\$38.45	\$38.45	\$38.45	\$38.45	
	Grading Cost (\$)	\$961	\$769	\$577	\$807	\$0	\$0	
	Sub Total - Topsoil	\$41,295	\$33,036	\$24,777	\$34,687	<u>  \$0</u>	\$0	\$133,794
Į 8.	Radiation Survey & Soil Analysis					1	1 4-1-	
ļ	Unit Cost (\$/Ac)	\$580.00	\$580.00	\$580.00	\$580.00	\$0.00	\$0.00	
	Sub Total - Survey & Analysis	\$14,500	\$11,600	\$8,700	\$12,180	\$0	\$0	\$46,980
C.	. Revegation		<b>1</b>			l		
1	Fertilizer (\$/Ac)	\$46.49	\$46.49	\$46.49	\$46.49			
1	Seeding Prep & Seeding (\$/Ac)	\$168.68	\$168.68	\$168.68	\$168.68	I		
	Mulching & Crimping (\$/Ac)	\$276.54	\$276.54	\$276.54	\$276.54	t		
	Sub Total Cost/Acre	\$491.71	\$491.71	\$491.71	\$491.71	l		
	Sup Total - Revegation	\$12,293	\$9,834	\$7,376	\$10,326	1 \$0	\$0	\$39,829
ISui	D LO(S) + HOSOS (5)	1 \$68.087	I 554.470	I 540.852	I 557.193	I SO	I \$0	5220,603

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		Irigaray	Christensen	Christensen	Christensen	Christensen	Christensen	Total
		Mine Unit(s)	Mine Units	Mine Unit	Mine Unit	Mine Unit	Mine Unit	Christensen
TOPSOIL REPLACEMENT & REVEGETATION		#1 Thru #9	#2 Thru #4	#5	#6	#7	#8	& Irigaray
V Ot	her							
	. Topsoil Handling & Grading							
	Affected Area (Acres)	41.0	19.0	5.0	5.0	0.0	0.0	
	Average Affected Thickness (Ins)	0.0	0.0	0	0	0	0	
	Topsoli Volume (Yds ^a )	0	0	0	0	0	0	
	Unit Cost - Haul/Place (\$/Yd*)	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	
	Topsoil Handling Cost (\$)	\$0	\$0	\$0	\$0	\$0	\$0	
	Unit Cost - Grading (\$/Ac)	\$38.45	\$38.45	\$38.45	\$38.45	\$38.45	\$0.00	
	Grading Cost (\$)	\$1,576	\$731	\$192	\$192	<b>\$</b> 0	\$0	
	Sub Total - Topsoil	\$1,576	\$731	\$192	\$192	\$0	\$0	\$2,692
B	. Radiation Survey & Soil Analysis							
	Unit Cost (\$/Ac)	\$580.00	\$580.00	\$580.00	\$580.00	\$0.00	\$0.00	
	Sub Total - Survey & Analysis	\$23,780	\$11,020	\$2,900	\$2,900	\$0	\$0	\$40,600
10	. Revegation							
	Fertilizer (S/Ac)	\$46.49	\$46.49	\$46.49	\$46.49	\$0.00	\$0.00	
	Seeding Prep & Seeding (\$/Ac)	\$168.68	\$168.68	\$168.68	\$168.68	\$0.00	\$0.00	
	Mulching & Crimping (\$/Ac)	\$276.54	\$276.54	\$276.54	\$276.54	\$0.00	\$0.00	
	Sub Total Cost/Acre	\$491.71	\$491.71	\$491.71	\$491.71	\$0.00	\$0.00	
	Sub Total - Revegation	\$20,160	\$9,342	\$2,459	\$2,459	\$0	\$0	\$34,420
SU	ib Total - Other	\$45,517	\$21,093	\$5,551	\$5,551	\$0	\$0	\$77,711
VI Re	emedial Action							
A	. Topsoil Handling & Grading							
	Affected Area (Acres)	65.5	54.3	25.0	38.0	17.5	20.0	
	Average Affected Thickness (Ins)	0.0	0.0	0.0	0.0	0.0	0.0	
	Topsoil Volume (Yds*)	0	0	0	0	0	0	
	Unit Cost - Haul/Place (\$/Yd ^s )	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	Topsoil Handling Cost (\$)	\$0	\$0	\$0	\$0	\$0	\$0	•
	Unit Cost - Grading (\$/Ac)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	100 C
	Grading Cost (\$)	\$0	\$0	\$0	\$0	\$0	\$0	
	Sub Total - Topsoil	\$0	\$0	\$0	\$0	<b>\$0</b>	\$0	\$0
18	. Radiation Survey & Soil Analysis							
	Unit Cost (\$/Ac)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	Sub Total - Survey & Analysis	\$0	\$0	\$0	<u>\$0</u>	\$0	<b>\$0</b>	\$0
	. Revegation	• · · · ·						
	Fertilizer (\$/Ac)	\$46.49	\$46.49	\$46.49	\$46.49	\$46.49	\$46.49	
	Seeding Prep & Seeding (\$/Ac)	\$168.68	\$168.68	\$168.68	\$168.68	\$0.00	\$0.00	
	Mulching & Crimping (\$/Ac)	\$276.54	\$276.54	\$276.54	\$276.54	\$0.00	\$0.00	
	Sub Total Cost/Acre	\$491.71	\$491.71	\$491.71	\$491.71	\$46.49	\$46.49	
	Sub Total - Revegation	\$32,207	\$26,675	\$12,293	\$18,685	\$814	\$930	\$91,603
Su	ub Total - Remedial Action	\$32,207	\$26,675	\$12,293	\$18,685	<u>  \$814</u>	\$930	\$91,603
IOTAL	CUST - TOPSOIL & REVEGE TATION	\$2/9,724	\$204,519	\$92,001	\$136,937	519,369	\$20,598	\$753,148

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		Irigaray	Christensen	Christensen	Christensen	Christensen	Christensen	Total
		Mine Unit(s)	Mine Units	Mine Unit	Mine Unit	Mine Unit	Mine Unit	Christensen
M	ISCELLANEOUS RECLAMATION	#1 Thru #9	#2 Thru #4	#5	#6	#7	#8	& Irigaray
<u> </u>	Fence Removal & Disposal							
	Quantity (Feet)	15240	35260	20000	9000	0	0	
	Cost of Removal/Disposal (\$/Ft)	\$0.68	\$0.68	\$0.68	\$0.68	\$0.68	\$0.68	
	Cost of Removal/Disposal (\$)	\$10,363	\$23,977	\$13,600	\$6,120	\$0	\$0	\$54,060
*	Powerline Removal & Disposal							
	Quantity (Feet)	9450	10565	18000	18000	0	0	
	Cost of Removal/Disposal (\$/Ft)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	Cost of Removal/Disposal (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Powerpole Removal & Disposal							
	Quantity	25	30	60	60	0	0	
	Cost of Removal/Disposal (\$/Each)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
	Cost of Removal/Disposal (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
IV	Transformer Removal & Disposal							
	Quantity	3	1	0	18	0	0	
	Cost of Removal/Disposal (\$/Each)	\$2,500	\$2,500	\$2,500	\$600	\$600	\$600	
	Cost of Removal/Disposal (\$)	\$7,500	\$2,500	\$0	\$10,800	\$0	\$0	\$20,800
V	Booster Pump Assembly Removal &	Disposal						
	Quantity	0	6	5	5	0	0	
	Cost of Removal/Disposal (\$/Each)	\$300	\$300	\$300	\$300	\$300	\$300	
	Cost of Removal/Disposal (S)	\$0	\$1,800	\$1,500	\$1,500	\$0	\$0	\$4 800
VI	Culvert Removal & Disposal							
	Quantity (Feet)	150	1200	1000	1000	0	0	
	Cost of Removal/Disposal (S/R)	\$3.48	\$3.48	\$3.48	\$3.48	\$3.48	\$3.48	
	Cost of Removal/Disposal (\$)	\$522	\$4 178	\$3.480	\$3,490	50	\$0.40 \$0	\$11 858
VU	Guardrait Removal					40		<b>411,000</b>
	Quantity (Feet)	200	3000	0	0	0	0	· · · · · · · · · · · · · · · · · · ·
	Cost of Removal/Disposal (\$/Ft)	\$6.30	\$8.30	\$6.30	<b>48 30</b>	່ແກ	66 30	
	Cost of Removal/Disposal (\$)	\$1,260	\$18,000	\$0.00	\$0.00 \$0	\$0.50 \$0	\$0.50	\$20 160
Viii	Low Water Stream Crossing	•1,200	\$10,000			40	¢0	(LU,100)
	Quantity	0	1	1	0	0	<u>^</u>	
	Cost of Removal/Disposal (\$/Fach)	\$8.500	\$8 500	\$8.500	58.500	\$8.500	\$9.500	
	Cost of Removal/Disposal (\$)	\$0,000	\$9,500	89 500	(\$0,000 en	40,000	40,000	#17 000
17	Litilities Cost	40	40,000			φv	30	\$17,000
<u>~</u>	Quantity (Mos)	4	g	1	4	0	<u> </u>	
	Cost Per Month (SMonth)	605	eer -	ear a	e			
	Total Cost (2)	8360	600	600	606	60% An		
			402U	\$20U	926U	\$0	<u>ູ</u> ຈູບ	\$1,300
i	TOTAL MISCELLANEOUS COST	\$10 00E	CE0 272	¢07.940	600 160	to.	<b>A</b> 0	£100 770
	TOTAL MISOELLANEOUS COST	\$19,905	<i>4</i> 00,373	₩₹7,340	ə <i>22</i> ,160	<u>\$0</u>	\$0	\$128,778

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Figure 1							
	2001	2002	2003	2004	2005	2006	
	JFMAMJJASOND	JFMAMJJASOND	JFMAMJJASOND	JFMAMJJASOND	JFMAMJJASOND	JFMAMJJASOND	
Christensen							
Mine Unit 2			Call RC 17 South There	Ring Approved Star Part Starter			
Mine Unit 3		9.00.0000000000000000000000000000000000	RC SubmyPiere Set	Reg Approval			
Mine Unit 4		even states and	Saluting (Track 1998) Plag. A	CONTRACT OF CONTRACT.			
Mine Unit 5				nala ( Sala ) ( Ney Approval )	anna 211 saidh		
Mine Unit 6				n an	Reg Approval	and the part of the	
Mine Unit 7						<b>BUSH</b>	
Mine Unit 8							
Facilities Reclamation	· ·						
Plant, Ponds, Roads, etc.					Language commissi sayang Pangayi Fac		
Irigaray Wellfield Restoration						<u>. .</u>	
Production Units 1-9		Stability PU's (ant unit) Reg. App	ravel PU 1-9				
Facilities Reclamation Plant, Ponds, Roads, etc.			an a				

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# Reclamation Bond Assumptions Irigaray and Christensen Ranch ISL Projects Permit to Mine No. 478 2003 Annual Report, August 2003

#### Table 1 – Summary of Reclamation/Restoration Bond Estimate

Table 1 is a summary of costs from individual bond worksheets. Added to the grand total of estimated spending are "miscellaneous" costs associated with the hiring of a third part contractor to actually perform the work. The specific miscellaneous costs are a requirement of the Wyoming Department of Environmental Quality (WDEQ), as outlined in the WDEQ Land Quality Division's Guideline No. 12, "Standardized Reclamation Performance Bond Format and Cost Calculation Methods", page 11. The U.S. Nuclear Regulatory Commission (NRC) also mandates that a standard contingency, in this case 15%, be added to the overall estimate for contingency for unknowns. An explanation of the various miscellaneous costs and contingency for Table 1 are as follows.

# **Project Design**

This is the cost for an independent firm to design the final reclamation project. This includes all design and engineering work through production of construction documents. Some surveying and redesign of the operator's reclamation plan to fit the current situation may be required. WDEQ reference sources place this category at 2 to 6.5% of the total bond cost. WDEQ typically uses 3%. COGEMA has been approved to use 2% for this category based on the details of our reclamation plan.

# **Contractor Profit & Mobilization**

This percentage covers contractor costs typically not found in the basic unit rates. This percentage specifically covers contractor profit, overhead costs, mobilization costs to the site and demobilization costs after job completion. According to WDEQ, assorted references place this cost from 8% to 15% of the total bond cost. WDEQ typically uses 10%. COGEMA has been approved by the WDEQ to use 8% for this category.

#### **Pre-construction Investigation**

This item addresses all fieldwork necessary to document and mitigate dangerous and/or quickly deteriorating conditions. Any assessment under this item will be based on the WDEQ's knowledge of specific site conditions and length of time between bond forfeiture (reason for a third party contractor) and initiation of the final reclamation project. WDEQ uses 1%, and has reference sources placing this cost between 1% and 2%. COGEMA has been asked by WDEQ to incorporate the 1% into our bond estimate.

# **Project Management**

This category includes the costs for an independent firm to manage the final reclamation project. It includes complete oversight of all demolition, construction and reclamation activities. Examples would include supervision of groundwater restoration, wellfield piping and structures removal, plant buildings and equipment demolition, soil sampling, byproduct waste shipments, etc. References place this cost at 3% to 4%. WDEQ typically uses 3%. However, WDEQ has required a 4% project management cost for COGEMA due to the more technical aspects of groundwater restoration. Furthermore, at the suggestion of NRC, COGEMA has included a Radiation Safety Officer as part of the project management team, bringing the percentage for this estimate up to 5%.

## **On-site Monitoring**

This category covers the costs for any miscellaneous monitoring felt necessary by the WDEQ after the final reclamation is completed. Costs of this item typically vary, depending upon the volume of monitoring already included in the bond or the type of reclamation activity required. The WDEQ typically uses 0.5%, and this is what COGEMA is bonded for.

#### Site Security & Liability Assurance

This category covers the cost for the WDEQ, or third party contractor, to provide any necessary site security measures during the reclamation program, and to purchase liability insurance to cover the timeframe of the reclamation program and full bonding period. WDEQ references place this cost at about 1% of the total bond amount. The WDEQ typically uses 1%, and this is what COGEMA is bonded for.

## Longterm Administration

This category applies to the period between completion of the reclamation project and final bond release which is a minimum 5 year period for uranium mines. During this time the WDEQ will incur administrative costs prior to the final bond release. WDEQ typically uses 1% to 2% for this category depending upon the scale or complexity of the reclamation and post-reclamation monitoring. WDEQ has required COGEMA to use 2%.

## Contingency

Contingency is included in the bond estimate to cover unknown conditions that could occur during the reclamation project. The WDEQ references place this cost at 2% to 5% of the total bond cost. Under normal circumstances WDEQ uses 4%. NRC requires a contingency of 15% regardless of the detail of the bond estimate, so COGEMA has incorporated the 15%.

WDEQ Reference Sources: The reference sources used by WDEQ to establish the ranges of percentages used in the miscellaneous items are:

- Means Heavy Construction Cost Data (current edition), R.S. Means Company, Inc., Kingston MA
- Means Site Work Cost Data (current edition), R.S. Means Company, Inc.
- Building Construction Cost Data (current edition), R.S. Means Company, Inc.
- Handbook for Calculation of Reclamation Bond Costs, 1987, Department of Interior, Office of Surface Mining Reclamation and Enforcement, Washington, D.C.
- Wyoming DEQ Abandoned Mine Land Program contracting and reclamation practices and cumulative experience.

# Worksheet 1 – Groundwater Restoration

Worksheet 1 provides the cost estimate to complete the groundwater restoration work at both the Irigaray and Christensen sites. Most of the input data and calculations are self-explanatory. Explanations for the various unit rates or factors used in the calculations are described below:

## **Technical Assumptions:**

All of the input data provided in the technical assumptions are actual site specific information. These data are used throughout the bond estimate as needed.

## **Restoration Operating Assumptions:**

Flowrates, pore volumes required, RO efficiencies and disposal well information are taken from the restoration plan. The remainder of the operating assumptions are calculated using the conversion factors listed and the technical assumptions. A new line has been added this year to account for the number of baseline wells in each mine unit.

#### **Restoration Cost Assumptions:**

Power costs are based on actual (average) installed horsepower and actual costs for electricity at each of the sites. A factor of 1.0 has been requested by WDEQ for use as the Kwh/Hp ratio to account for motor efficiencies. This factor is used for the Irigaray operations, because we do not have current data on pumping costs. COGEMA's actual ratio of Kwh/Hp is 0.83 Kwh/Hp for Christensen Ranch, where restoration operations continue. This includes all operating submersible pumps, reverse osmosis feed pumps, the plant injection pumps, the two disposal well pumps, and miscellaneous electricity used in the restoration plant (lights, etc.). The factor of 0.83 Kwh/Hp is based on actual data from Christensen operations in years 2002 and 2003 (see Attachment 1), 0.83 has been incorporated into the bond estimate. Using this number, a unit rate for power (\$/Kgal) is calculated.

Chemical costs are based on actual spending (year 2003) at the Christensen site. These costs have been applied to Irigaray, where appropriate. Repair and maintenance is also a unit rate based on actual spending for this category. These costs are outlined below:

#### Groundwater Sweep and Reverse Osmosis Phases - Other Operating Assumptions:

- BaCl (barium chloride) would not be used in the future; instead would use radium resin currently on site.
- Anti-scalent (is used at Christensen only for surface discharge during GWS): Purchase of 250 gallon tote = \$2,958 = \$11.832/gallon

Addition target rate of 8 ppm <u>8 gallons X \$11.832</u> = \$0.0947/Kgal 1,000 Kgal H20 gallon

- Elution cost is based on actual spending of \$2,850 per average elution (includes labor and chemicals). \$2,850 divided by 28,800 Kgal/elution = \$0.099/Kgal.
- Sulfuric Acid, Hydrochloric acid and sodium sulfide are no longer used in the restoration process. Updated membranes for the RO units no longer need low pH feedwater, thus eliminating the need for acid addition prior to reverse osmosis. Hydrogen sulfide gas is now used instead of sodium sulfide.
- A unit rate of \$0.863/Kgal is used for hydrogen sulfide gas. This is based on actual spending at Christensen Mine Units 2 and 4 over the past 10 months. The cost includes purchase of the chemical (\$0.41/lb), an addition rate of 100 ppm, a flow rate of 100 gpm, one pore volume of use, plus a \$75/day trailer rental fee. This cost has been added as a separate line item below the Reverse Osmosis wellfield section, as only 1 PV of hydrogen sulfide per mine unit is assumed.
- The unit rate of \$0.0181/Kgal for caustic soda (reverse osmosis phase) is based on actual spending from August 2002 through July 2003.

 Restoration Plant repair and maintenance (GWS and RO) is based on actual spending from August 2002 through July 2003. These costs include purchase of piping, fittings, pump maintenance, filters and miscellaneous supplies.

Supplies	= \$0.0358 per Kgal
Outside Services	= \$0.0021 per Kgal
	= \$0.0379 per Kgal

 Restoration wellfield repair and maintenance (GWS and RO) is based on actual spending from August 2002 through July 2003. Costs include purchase of submersible pumps, piping, fittings, filters and miscellaneous supplies.

Supplies	= \$0.1185 per Kgal
Outside Services	= \$0.1709 per Kgal
	= \$0.2894 per Kgal

Sampling and Analysis for Groundwater Sweep is based on taking a round of samples from each baseline well after the final GWS pore volume and analyzing the samples for a full suite Guideline 8 (26 parameters). This amount is then converted to a cost per Kgal for the pore volume:

Irigaray Units 6-9: (27 baselines X \$200 = \$5,400) = \$0.137/Kgal 1 PV GWS = 39,525 Kgal

Christensen Unit 2: (24 baselines X \$200 = \$4,800) = \$0.175/Kgal 1 PV GWS = 27,414 Kgal

Sampling and Analysis for the Reverse Osmosis phase is based on one round of Guideline 8 analyses for each baseline well at the end of RO; plus a recovery composite analyzed for Guideline 8 in each mine unit (or area for Irigaray) for each PV; and miscellaneous samples during the process. For Christensen miscellaneous, assume 10 wells in each wellfield module of each mine unit are analyzed for 4 parameters, each PV. The cost of analysis is \$10 each parameter, or \$40. Christensen Unit 2 has 4 modules, Unit 3: 5 modules, Unit 4: 3 modules, Unit 5: 5 modules; and Unit 6: 6 modules. For Irigaray, assume 15 wells per Units 1-5, and 15 wells for Units 6-9, each PV, for the 4 parameters. These costs are divided by the total Kgals in 5 PV of RO treatment:

Irigaray Units 6-9: 27 baselines X \$200 = \$5,400 Rec. Comp.: 5 PV X 1 wellfield area (Units 6-9) X \$200 = \$1,000 Misc.: 5 PV X 15 wells X (4 analytes, \$10 each) = \$3,000 Total = \$9,400/(197,624 Kgal/5 PV) = \$0.048/Kgal

Christensen Unit 2: 24 baselines X \$200 = \$4,800 Rec. Comp.: 5 PV X 1 mine unit X \$200 = \$1,000 Misc.: 5 PV X (10 wells/module*4 modules)*(4 analytes*\$10 each) = \$8,000 Total = \$13,800/(137,085 Kgal/5 PV) = \$0.101/Kgal

Utility costs listed are for electricity, heating and telephone for the offices during the restoration operations. The cost per month has been revised since last year. It was previously assumed that the main offices would continue operating if the work were contracted. In reality, to save costs during contracting, one of the on-site trailers would be used to office project management personnel during this time period. Powder River Energy Corp. has provided an average cost of \$65/month for a typical full electric house trailer (heating and lights), thus eliminating the need for propane. Current telephone costs at Irigaray and Christensen combined are approximately

\$500/month. Thus the new monthly unit rate of \$565 is more appropriate than the \$1000/month estimate in the previous bond estimate.

#### Waste Disposal Well Cost Assumptions:

Operating assumptions for the waste disposal well are based on the restoration plan and historical experience (such as the brine concentration factor). Cost assumptions follow the same rationale as for restoration costs (unit rates are based on actual site spending for the power, chemicals, repair and maintenance).

- Electrical power costs are based on the average Kwh/Hp factor of 0.83, which is the actual ratio for Christensen (includes all site pumps).
- RO Antiscalent cost (RO processed feed water for disposal well):
  - Purchase of 250 gallon tote (delivered)= \$4,758(Chemico Int'l RO 9)= \$19.032/gallonAddition target rate of 10 ppm10 gallonsX \$19.0321,000 Kgal H20gallonDisposal Well Antiscalent cost:440 gallons delivered= \$5,220.60
- (Champion Tech Gyptron t-67)= \$11.865/gallonAddition target rate of 20 ppm20 gallonsX \$11.8651,000 Kgal H20gallon
- Sulfuric Acid (used prior to RO to avoid precipitation). Actual spending in 2003 was \$22,243, divided by 41,662 Kgal = \$0.5339/Kgal.
- Corrosion inhibitor: no longer required.
- Algaecide: 2003 purchases = \$4,634; 2003 Kgal = 41,662; = \$0.111/Kgal
- Repair and maintenance is based on actual spending from August 2002 through July 2003 for bag filters, pump parts, oil and lube, fittings. The unit rate for this is equal to \$0.0116/Kgal as RO feed. Converted to Kgal of disposal well injection is: \$0.0116 X 1000 Kgal RO feed
  - Kgal RO feed 150 Kgal disposal well feed = \$0.0773/Kgal

#### **Stabilization Monitoring:**

Three sample sets will be taken during the 9-month stabilization-monitoring period. The first set is taken three months after the beginning of stabilization monitoring. The next set is taken after six months and the last after 9 months. The sampling cost per set is based on rental of a 30 Kw, 480 volt, 3-phase portable generator for a one week period at a rate of \$280/week (Industrial Engine Service, Casper WY, quote of August 2003). As each well is pumped for an hour period, and the generator can service 4 wells at a time, then it is possible to sample a maximum of 32 wells per day during 8 hours (assuming a 10-hour workday). A one-week rental is more than sufficient to sample all baseline wells in a mine unit, so this number is very conservative. The analytical cost is a calculation based on sampling all baseline wells in each wellfield with an analysis cost of \$200/well for a DEQ Guideline 8 analysis for uranium mines (increased from last year's \$150/sample). For this calculation, a new line has been added to the technical assumptions to show the number of baseline wells per area. Labor is included at the end of Worksheet 1. Utilities (electricity, telephone) are included for maintaining the office open during stabilization monitoring. These costs were previously described under the groundwater sweep explanations, above.

#### Labor:

Labor costs for 2.6 years of restoration operations are included (unchanged from last year). In reality, the completion of restoration at Christensen is only one year forward.

The operations crew consists of 1 supervisor, 4 operators, and 2 maintenance personnel. Operating costs for 2 vehicles are also included in this category. Unit rates for each worker category are shown in the table. A higher labor rate is used for groundwater restoration than is used in the remainder of the surface reclamation portion of the bond. This is because more skilled labor is required for operating the restoration equipment. Management labor is included in the Miscellaneous category under Project Management in Table 1.

#### **Restoration Capital Requirements:**

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The only capital requirement listed is the plugging and abandonment of the two wastewater disposal wells. This has been listed as capital as the plugging and abandonment were included in the original capital construction estimate for the well, and this is the amount remaining. The plugging cost estimate of \$100,000 per well is based on a consultant's estimate in 1999 of approximately \$75,000 per well (placing cement plugs in accordance with Wyoming Oil & Gas Commission abandonment guidance).

# Worksheet 2 – Plant Equipment Removal and Disposal

This worksheet calculates the costs to decontaminate, dismantle and remove, transport and dispose of plant process equipment. Explanations for the various unit rates or factors used in the calculations are described below:

## **Decontamination Cost**

The decontamination unit rate was first developed in 1994, and was \$462/load. In 2001, this estimate was inflated to 2001\$ by applying a factor of 19.1%. This increased the base unit rate to \$550/load. However, checking local rental rates for equipment, the current price for labor and hydrochloric acid, the 1994 assumptions are very close to today's cost. Accordingly, the decontamination unit rate has been revised downwards to \$435/load.

Assumptions:

- 2 cubic feet = 6 square feet (surface)
- 2 laborers can powerwash or sandblast 10 square feet per minute, or 1.7 cubic feet per minute = 102 cubic feet/hour
- 1 load = 540 cubic feet

Labor:

- 2 laborers @ \$15/hour = \$30/hour
- 540 cubic feet/load divided by 102 cubic feet/hour = 5.29 hours/load
- 5.29 hours/load x \$30/hour = \$158.7, say \$160

**Equipment Rental:** 

- 2 3500 psi pressure washers @ \$6/hour x 2 = \$12/hour* (\$60/day, 10 hr/day)
- 1 185 cfm air compressor with sandblast pot, hood, wand, hose
   2 \$24.5/hour
- *rates based on 08-15-03 quote from Contractor's Equipment, Casper, WY

5.29 hours x \$24.5/hour = \$129.61, say \$130

Materials:

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- Sand: 75 cubic feet @ \$1/foot** = \$75
- 10% HCI, 440 gallons @ \$0.155/gal*** = <u>\$68</u>

**\$1/foot from 08-15-03 quote of \$19/ton for fine sand (100 lbs/ft3) from JTL, Casper

*** 10% HCl = 506 lbs/yd3, 202 gallons/yd3, \$124/ton = \$0.155/gal TOTAL = \$160 + \$130 + \$145 = \$435/load

## **Dismantling and Loading Cost**

The base detail of this cost was also generated in 1994 (\$600/load) and inflated to 2001\$ (\$715/load). Using current quotes, the cost is now estimated at \$650/load. Dismantling and loading cost of \$600/load (1994 \$):

Labor Crew: 1 foreman @ \$20/hour

1 toreman	@ \$20/nour
4 laborers	@ \$15/hour = \$60/hour
1 truck	@ \$10/hour
1 welder	@ \$35/hour
	A

\$125/hour

Estimate: 4 hours @ \$125/hour = \$500

Equipment Rental: 1 front-end loader with operator @ \$75/hour (CAT 988C, June 2003 guote from Rapid Construction)

Productivity: 1 load = 20 yd3, 10 yd3/hr Estimate: 2 hours @ 75/hour = 150

TOTAL = \$650/load

#### **Oversize Charges**

The cost of \$326/per truckload for oversize charges was provided to COGEMA by our former trucking firm, Key Trucking (Kaycee, Wyoming). This was their estimate of what they would be paying for permits for any loads that were larger than 15' wide, 15' high and 75' long. No other details are available. Standard charges from the Wyoming Department of Transportation, Port of Entry, are \$15 plus \$0.03/foot/mile for the oversized item. We believe that the \$326/load is very conservative based on the standard charges quoted.

# **Transportation & Disposal**

- Cost per mile of \$2.58 for transportation of decommissioned materials is standard throughout the bond estimate. This is the actual price charged by Key Trucking for hauling materials short distances (less than 200 miles). The mileages listed in the bond are 48 miles from the project sites to the Edgerton, Wyoming industrial landfill, and 150 miles to Shirley Basin, Wyoming (tailings facility for byproduct disposal). The \$2.58 charge is based on a loaded mile (one-way).
- Landfill costs of \$12.00/cubic yard are the actual rates charged by the Edgerton, Wyoming industrial landfill (July 2003 rate sheet).
- COGEMA Mining has a byproduct material disposal agreement with Pathfinder Mines Corporation's Shirley Basin tailings facility. The disposal fee per cubic foot for piping, process equipment, demolition waste is \$11/cubic foot.

# Worksheet 3 - Plant Building(s) Demolition and Disposal

This spreadsheet provides the costs for demolition and disposal of all buildings at Irigaray and Christensen, including concrete decontamination, demolition and disposal. Also included in the spreadsheet are costs for the removal and disposal of contaminated soils under the process buildings, and at the NPDES surface discharge points (one each site). Individual cost items are:

#### Structural Character

Western Water Consultants, Sheridan, Wyoming, provided factors for gutting, and estimated material weights for the Irigaray process buildings volumes. Volumes,

etc., for the Christensen buildings were estimated by COGEMA's in-house staff, using the Western Water Consultants work at Irigaray.

- The building demolition cost of \$0.165/cubic foot is taken directly from Appendix K of LQD's Guideline No. 12.
- The building demolition disposal cost of \$300/truckload (25 CY trailer) is from the July, 2003 rate sheet from the Edgerton, Wyoming industrial landfill.

#### **Concrete Decontamination, Demolition & Disposal**

- The decontamination costs of \$0.134/square foot is based on the decontamination estimate of \$435/load discussed above for Worksheet 2. One load = 540 cubic feet; assuming 1 cubic foot = 6 square feet (surface), then \$435/load divided by 3240 square feet per load = \$0.134 per square foot.
- The concrete demolition rate of \$3.05/square foot is taken directly from Appendix K of LQD's Guideline No. 12.
- The on-site disposal cost has been calculated as \$0.23/ft3, or \$6.25/yd3. This is based on the following:

1 988C loader with operator @ \$75/hour (Rapid Construction quote, 2003)

1 dump truck with operator @ \$50/hour

\$125/hour

Productivity: 2 loads/hr (10 yd3 load) = 20 yd3, or 540 ft3 TOTAL = 125/540 = 0.23/ft3

The disposal fee of \$3.70/cubic foot is based on the byproduct waste disposal agreement with Pathfinder Mines Corporation's Shirley Basin site. This rate is based on the agreement fee of \$100/cubic yard for soils and concrete rubble. (\$100/27 cubic feet per cubic yard = \$3.70 per cubic foot).

# Soil Removal & Disposal

The estimate of contaminated soils is simply a contingency for unknowns. All unit rates associated with this contingency have previously been justified, except that the unit rate for a front end loader (with operator) has been increased from \$50/hr to \$75/hr (Rapid Construction quote for a 988C loader, 2003).

#### **Radiation Survey**

The cost for radiation surveys is detailed below:

Soil sampling and analysis cost:

- \$75/soil sample for digestion, U and Ra-226 analysis (Energy Lab, Casper quote)
- \$25/soil sample for labor
- Total = \$100/sample, and an average of 4 samples per acre = \$400/acre
   Gamma characterization and verification survey
- \$100/acre for GPS survey
- \$50/acre for grid establishment
- \$30/acre for verification after excavation
- Total = \$180/acre (quotes from ERG, New Mexico)

Grand Total = \$580/acre

# **Worksheet 4 – Pond Reclamation Costs**

Worksheet 4 provides all costs for the decommissioning of evaporation ponds located at the Irigaray and Christensen site. Unit rates used for this work that have not been identified in detail for other worksheets are provided following:

#### Pond Sludge

Last year's sludge handling costs per load were \$238/load. This was based on a 1994 cost estimate of \$200/load then inflated to 2001\$ (19.1%). Using current rates, the sludge handling costs per load are given as \$240/load.:

- Front-end loader with operator @ \$75/hr (10 c.y./hr) for 2 hrs. = \$150
- Labor crew (1 hour) = 1 foreman @ \$20/hr

4 laborers @ \$15/hr <u>1 truck @ \$10/hr</u> = \$90/hr = \$90

### TOTAL = \$240/load

Pond Liner

- Labor crew costs per hour for handling the pond liner are taken from the above estimate of \$90/hour. Labor costs are relatively unchanged over the past few years
- The \$11/ft3 for disposal is the current contract price for this type of material at Pathfinder's Shirley Basin tailings impoundment.

#### Pond Backfill

The unit rate for backfilling of \$1.00 per cubic yard is conservative. A third party contractor at Pathfinder's Shirley Basin facility is currently charging \$0.70 per cubic yard for backfilling/excavation work and \$0.54 per cubic yard for regrading (Rapid Construction, 2003).

#### Radiation Survey – See Worksheet 3

#### Leak Detection System Removal

This section assumes that contamination is found in the leak detection system wherever a leak has been detected in a pond during its operating life. This is why volumes are included for only Ponds C and D at Irigaray. The amounts from Pond 1 at the 5I7 site have been removed as this area has already been decontaminated and is ready for clean backfill. Handling costs for removal of these systems are included as \$240/load, or the same as the pond liner handling costs.

## Worksheet 5 – Well Abandonment

The method used for well abandonment in this bond calculation involves the placement of bentonite chips in the bottom 75 feet and upper 30 feet of each well, with the intermediate volume filled with gravel. A cement cone is placed two feet below the surface, then the surface casing is removed and the hole is backfilled with soil using a backhoe. The abandonment unit rate for 2003 has increased very slightly over last year's rate due to price changes, described as follows:

- Cost of bentonite chips \$4.50/bag is a quote from Casper Well Products, Casper, Wyoming (August 2003).
- Cost of gravel/cubic yard two quotes were obtained in August 2003 for sand & gravel to fill the wells for final abandonment. The first was from JTL Group (Casper, WY) for screened, washed pea gravel. The quote was \$16.00/ton, with a 1.5 tons/yard conversion, or \$24.00 per yard. The second quote was from '71 Construction (Casper, WY) for a sand-pea gravel mix, suitable for well abandonment.

This cost came in at \$16 per ton with a 1.25 tons/yard conversion, or \$20 per yard. This cost has been used to replace last year's cost of \$17.53 per cubic yard.

- Cost of cement cones/markers \$4.00 each from Casper Well Products, Wyoming.
- An example of a typical well abandonment calculation for <u>Irigaray</u> is as follows: Assume: well volume = 27.6 ft3; well depth = 250 ft; casing diameter = 4.5 inches Materials per well:

Bentonite chips from 250' to 175' (Christensen = 410' to 3 Sand/gravel from 175' to 30' (Christensen = 335' to 30') Bentonite chips from 30' to 2' Cement cone and backfill from 2' to surface	335')
Materials/well: 15 bags bentonite chips @ \$4.50/bag	= \$67.50
(65 lbs/ft3, 11.4 ft3/well, 50 lb. bags)	
0.58 c.y. gravel @ \$20/c.y.	= \$11.60
[Well T.D. – (105'-2') x 0.11( <u>πr²)/</u> 27]	
144 in ² /ft ²	
Cement cone and marker @ \$4.00 each	= \$ 4.00
Labor: 1 hr./well	
1 – Foreman @ \$20.00/hour	
2 – Laborers @ \$15.00/hour	
$1 - Vehicle \underline{@ \$10.00/hour}$	
\$60.00/hour	
\$60.00/hour x 1 hour/well	= \$60.00
Equipment Rental: 1 backhoe @ \$38.50/hour x 1 hour/well (Operator included – rate is actual 2003 rental rate)	= \$38.50
TOTAL cost per well	= \$181.60
•	

# Worksheet 6 - Wellfield Equipment Removal & Disposal

This spreadsheet covers the removal & disposal of all wellfield piping, submersible pumps and tubing, trunklines running from the wellfields to the plant, and manholes along the trunklines. Unit rates not addressed previously are detailed below.

#### Wellfield Piping Removal

The 1994 cost of \$0.162/ft to remove buried lines running from the module buildings to each individual well was used for last year's unit rate, then inflated by 19.1% to 2001\$ for the unit rate of \$0.193/ft. This year costs have been updated, such as an increase in the backhoe and chainsaw rental charges, providing a new unit rate of \$0.202/ft of removal. An example of the calculation is provided as follows:

#### **Open Trenches:**

- 300'/well, 446 wells = 133,800 linear feet of pipe
- trenches: 300'/well x 2' deep x 2' wide = 1,200 ft³ = 44 c.y./well
- 44 c.y./well x 446 wells (Christensen Unit 6) = 19,624 c.y.
- 19,624 c.y. @ 50 c.y/hour = 392 hours
- Equipment rental: 2 backhoes @ \$38.5/hour x 196 hours each = \$15,092 (operators included)
   \$15,092 (\$0.113/ft)

Remove Pipe, Chip and Load: (assume approximately 20,000 feet /day chipped)

Labor: 1 – Foreman @ \$20.00/hr.

	4 – Laborers	@ \$15.00/hr.			
	1 — Vehicle	<u>@ \$10.00/hr.</u>	·		
		\$90.00/hr. x 6 da	ays	=	\$ 4,320
	Equipment Rental: 2 cha	ainsaws @ \$5.00/hr x	3 days	=	\$30
	(chainsaw rental = \$5	50/day, assume 10 hr	day)	=	(\$0.0325/ft)
Bad	ckfill Trenches:				
E	19,624 c.y. @100 c.y./hr	. = 196 hrs.			
E	Equipment rental: 2 bac (operation)	khoes @ \$38.50/hr. x ators included)	98 hrs each	=	\$ 7,546 (\$0.056/ft)
		•	TOTAL=	\$0.20	2/linear foot

Non-contaminated landfill charges of \$12/yd3 throughout Worksheet 6 is from the July 2003 rate sheet from the Edgerton landfill (quote for demolition trash).

#### **Pump Removal**

Submersible pumps are set in each production well for mining and restoration. Last year's pump removal cost of \$21.44 is the 1994 cost of \$18.00 per well adjusted to 2001\$ (19.1% increase). This year, we have updated the pulling unit cost and now have a unit rate of \$22.50 per pump or well. Using Christensen Mine Unit 6 as an example, the details are as follows:

Pull pumps and tubing – 4 wells/hour, 202 production wells

	iii puinps a	10 (uping $-7$ W	cilorious, zoz producu			
	Labor:	1 – Foreman	@ \$20.00/hour			
		2 – Laborers	@_\$15.00/hour			
			\$50.00/hour	x 50.5 hours	=	\$ 2,525
×	Equipmer	nt Rental: 1 pull	ling unit @ \$40.00/hr.	x 50.5 hours	=	<u>\$ 2,020</u>
				<b>***</b>		<b>"\$ 4,5</b> 45

TOTAL = \$4,545 / 202 wells = \$22.50/ pump or well

#### Survey & Decontamination – see Worksheet 2

## Tubing Volume Reduction and Loading

Using Christensen Mine Unit 6 as an example, the details of this cost are as follows:

Tubing: 300'/well average x 202 wells = 60,600 linear feet

- Chip and load: average O.D. (inches) = 3; chipped volume reduction (ft³/ft) = 0.016; chipped volume = 970 ft³; assume approximately 20,000 feet per day chipped.
- Labor: 1 Foreman @ \$20.00/hour
  - 2 Laborers @ \$15.00/hour

\$50.00/hour x 3 days (30 hours) = \$1,500

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 Equipment: shredder is owned by COGEMA TOTAL = \$1,500 / 60,600 linear feet = \$0.025/linear foot

#### Surface Piping Removal

Surface piping exists at the Irigaray site. The cost for removing the Irigaray is the same as the wellfield piping removal cost of \$0.202 above, but \$0.056/ft must be removed for the cost of backfilling. The \$0.113/ft. cost for opening trenches was kept, because portions of the surface lines are partially covered with soil, and buried in some locations. So, the removal, chipping and loading costs for surface lines (only located at Irigaray) is \$0.146/ft. Last year's estimate was \$0.143/ft based on an inflated 1994 cost estimate.

# **Buried Trunkline Removal**

Last year's unit rate of \$2.80 was developed from the 1994 cost for removal of buried trunklines, inflated to 2001\$ (19.1%). Using the buried 12" lines at Irigaray for an example, the updated unit cost for removal of buried trunklines is now estimated as \$3.12/ft. Cost changes for backhoe rental and 10 hour days are incorporated.

**Open Trenches:** 

	7,300	linear	feet of	pipeline	

- 2' deep x 4' wide = 29.6 c.y. soil per 100 feet of trench
- 29.6 c.y. x 7,300' / 100 = 2,163 c.y. soil to be removed

Equipment Rental: 1 Trackhoe @ \$110.00/hour x 14.4 hours	= \$ 1,586
(operator included, 150 c.y./hr rate)	(\$0.22/ft)

Remove Pipe, Chip and Load: Assume 500' per day

•	Labor:	1 – Foreman 4 – Laborers 1 – Vebicle	@ \$20 @ \$15 @ \$10	).00/hr 5.00/hr 9.00/br		
				) 00/hr	x 1/ 6 days (1/6	(hro) = (12, 140)
			φ9(		x 14.0 uays (140	(\$1.80/ft)
•	Equipmen	t Rental: 1 Ch	ainsaw	@ \$5.00/hr		
	• •	1 Bad	ckhoe	@ \$38.50/hr		
				\$43.50/hr	x 14.6 days	= \$ 6,351 (\$0.87/ft)
Bad	ckfill Trenc	hes:				
	Assume 5	0 c.v./hr x 2.16	3 hours	= 43.3 hours		
=	Equipmen	it rental: 1 bac	khoe @	\$38.50/hr	x 43.3 hours	= \$ 1,667 (\$0.23/ft)

TOTAL = \$22,744 / 7,300 linear feet = \$3.12/linear foot

#### Manhole Removal

Manholes are present along each of the buried trunklines to permit access to valves. Removal is essentially the crushing of the 12' by 8' culvert in place and backfilling. Removal cost of \$110 per manhole is based on the following:

		-		· ·	
	Labor:	1 – Foreman	@ \$20.00/hr		
		2 – Laborers	@ \$15.00/hr		
		1 – Vehicle	@ \$10.00/hr		
			\$60.00/hr	x 1.3 hour/manhole	= \$ 78.00
=	Equipment Rental: 1 Backhoe @ \$38.50/hr			x 1 hour/manhole	= <u>\$ 38.50</u>
					\$116.50
				say	= \$117.00

In the previous bond estimate, it is assumed that the manhole culverts are contaminated. In reality, these culverts are not contaminated and will be demolished as stated, in place. Another potential is to pull and sell them.

# Worksheet 7

Worksheet 7 provides to costs to replace topsoil in areas where topsoil was stripped and stockpiled, to conduct radiation surveys & soil analysis prior to topsoil placement, then the revegetation of the topsoil or ground surface without topsoil. Unit rates used in the calculations that have not been previously detailed are described below.

#### Unit Cost – Grading

- A cost of \$1/yd3 is used to haul and place topsoil. This is conservative considering that Rapid Construction is hauling and placing topsoil at Pathfinder's Shirley Basin mine in July 2003 for a unit rate of \$0.80/yd3.
- \$38.45/acre WDEQ Guideline 12 places the cost for final grading using a Caterpillar 16H Motor Grader at \$38.45 per acre (\$102.28/hr, 2.66 acres/hr).

#### Wellfield - Spills

• Wellfield spill areal estimates are based on documentation of on-site spills. The handling cost of \$240/load is taken from Worksheet 4 for handling of pond sludge.

#### Revegetation

\$491.71/acre – This cost has been used in past bond estimates and was taken from previous issues of the WDEQ Guideline 12. In the most recent edition of Guideline 12, operators are allowed to calculate their own revegetation costs, because the \$491.71/acre is very high. The last revegetation done at Christensen in year 2000 cost \$195/acre (seed plus drill costs). Mulching and crimping were not necessary, and will only be necessary on steep slopes. We have continued to use the \$491.71/acre as it is considered conservative.

# **Remedial Action**

 An assumption is made that 50% of all surface areas that have been revegetated will require remedial action. The costs assume that these areas will be revegetated again at the same cost of \$491.71/acre.

# Worksheet 8

Worksheet 8 provides all the remaining miscellaneous items that could be involved in the final reclamation. Unit rates are described below:

#### Fence Removal & Disposal

The unit rate of \$0.68/ft is taken from Appendix H, WDEQ – LQD Guideline 12.

#### Powerline Removal & Disposal, Powerpole Removal & Disposal

Distribution lines and power poles are owned by Powder River Energy Corp. (PREC) and will be removed upon request at no charge. Transmission lines and power poles which go from the main metering points to various electrical substations will also be removed by PREC at no cost for their salvage value.

#### **Transformer Removal & Disposal**

The costs for removal and disposal of transformers are based on the 1994 issue of WDEQ-LQD's Guideline No. 12. The costs for the larger transformers at Irigaray and Christensen Units 2 through 5 were \$2,040 each, inflated to 2001\$ = \$2,428. The smaller transformers used in Christensen Unit 6 are \$500 each inflated to 2001\$ = \$595 each. To account for any additional inflation since 2001, the large transformers have been increased to \$2,500 and small transformers to \$600.

# Booster Pump Assembly Removal & Disposal

Removal of the booster pump assemblies along the trunklines at Christensen is based on labor, and will be non-contaminated. An internal estimate of 200/assembly was used in 1994\$, then inflated to 2001 = 298. Current listed cost is 300.

#### **Culvert Removal & Disposal**

The cost of \$3.48/foot of culvert is taken from the most recent edition of WDEQ-LQD Guideline 12, Appendix J.

#### **Guardrail Removal**

The 2001 cost for guardrail removal of \$6.19/foot was based on the 1994 edition of WDEQ-LQD Guideline 12 where the cost per foot for guardrail removal was \$5.20/foot. The value of \$6.30/foot has been incorporated as a 2003 cost.

#### Low Water Stream Crossing

In 1994, this cost was estimated as the same as the construction cost (\$7,000). Inflated to 2001\$, the cost was \$8,330. A cost of \$8,500 has been incorporated as the 2003 cost.

#### **Utilities Cost**

In 1994, the utility cost per month for heating or providing electricity during the reclamation operations was estimated at \$2,000/month for Irigaray and \$1,000/month for Christensen. These costs were simply inflated to 2001\$, or \$2,380/month for Irigaray and \$1,190/month for Christensen. This cost has been revised to show the cost of utilities for use of one of the on-site office trailers instead of operating the power system for the offices. An average cost of \$65/month for a full electric house trailer was obtained from PREC and is used for this estimate.

# ATTACHMENT 1 POWER BILL HISTORY Christensen Ranch Mine

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Month	Billed	Billed Billed E				• 1/234/1.3	
	Days	Tiours	NWU	, nr		Φ// <b>Λ</b> ₩Π	
					· · · · · · · · · · · · · · · · · · ·		
Jan-02	30	720	820,800	1,225	0.93	0.0380	
Feb-02	33	792	974,400	1,346	0.91	0.0358	
Mar-02	29	696	868,800	1,347	0.93	0.0374	
Apr-02	27	648	793,200	1,385	0.88	0.0391	
May-02	30	720	798,000	1,387	0.80	0.0381	
Jun-02	29	696	760,800	1,377	0.79	0.0371	
Jul-02	33	792	838,800	1,375	0.77	0.0350	
Aug-02	30	720	746,400	1,340	0.77	0.0363	
Sep-02	32	768	724,800	1,345	0.70	0.0365	
Oct-02	35	840	840,000	1,345	0.74	0.0341	
Nov-02	25	600	740,400	1,345	0.92	0.0374	
Dec-02	38	912	900,000	1,345	0.73	0.0355	
Jan-03	31	744	950,400	1,353	0.94	0.0343	
Feb-03	28	672	792,000	1.353	0.87	0.0369	
Mar-03	27	648	775,200	1,353	0.88	0.0377	
Apr-03	29	696	708,000	1.288	0.79	0.0388	
May-03	28	672	760.800	1.288	0.88	0.0366	
Jun-03	29	696	723.600	1.299	0.80	0.0375	
Jul-03	35	840	937.200	1,299	0.86	0.0329	
Aug-03	33	792	805,200	1.301	0.78	0.0344	
TOTAL	611	14664	16,258,800	1,317	0.842	0.0364	

* Note: KWH/HP = Billed KWH / Billed Hours / Active HP



Fax (307) 672-2213

April 3, 2003

Fax (307) 674-6050

Mrs. Donna Wichers COGEMA Mining, Inc. P. O. Box 730 Mills, WY 82644

# RE: Irigaray-Christensen Operations, Permit No. 478, Review of 2002 Annual Report

Dear Mrs. Wichers:

I have reviewed the 2002 Annual Report on the Irigaray and Christensen Ranch Operations as well as the reclamation bond calculations submitted with the Annual Report.

In the attached memo, I find the reclamation bond could be reduced to a total of \$13,539,000. A recommendation for reduction of the bond to this amount will be made to the Director.

Please feel free to call me if you have any questions.

Sincerely,

. M. Glenn Mooney

Senior Geologist

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Attachments

cc: Cheyenne File w/attach. NRC-MD w/attach.

478an02rv.3gm



Fax (307) 674-6050

# MEMORANDUM

**TO:** File, COGEMA Mining Co's. Irigaray-Christensen Ranch In Situ Uranium Operations, Permit No. 478

FROM: Glenn Mooney

**DATE:** April 3, 2003

SUBJECT: Review of 2002 Annual Report and 2003 Semiannual Report

#### Introduction

A review was conducted of the Annual Report, covering the period July 1, 2001, to June 30, 2002, and received August 16, 2002. The Semiannual Monitoring Report covers the period July 1, 2002, through December 31, 2002, and was received by the District III Office on February 28, 2003.

Restoration work at COGEMA's operations consist of the following phases:

1. Groundwater sweep

The procedure removes the affected groundwater within the well field and replaces it with native groundwater from outside the mining zone. The affected water pumped from the well field is treated with reverse osmosis (RO) where the cleaned portion (permeate) is surface-discharged and the reject portion is disposed in evaporation ponds or deep well injection.

2. Reverse osmosis with permeate injection

Water from the well field is processed by a RO unit with the cleaned permeate reinjected into the well field and the reject portion disposed in evaporation ponds or deep well injection.

The use of chemical reductants is authorized by the restoration plan during this phase, but to date, their use has not been required.

3. Groundwater recirculation

Water from the well field is pumped from the recovery wells and reinjected into the mining zone aquifer through the injection wells. No treatment of the water is normally done. The effect is to insure the complete mixing of cleaned and partially cleaned groundwater. Up to one pore volume is involved in this procedure.

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4. Stabilization monitoring

This is a nine-month-long period where the baseline wells are sampled for a full suite of chemical and radiological parameters at the beginning, at three-month intervals during and again at the end of the period for a total of four samples. This procedure is intended to demonstrate that the restoration effort has been complete and that the aquifer and ore zone have reached equilibrium.

## Chronology

The following production and restoration milestones and other occurrences happened during the past report year.

August 15, 2001	Irigaray Unit 2 Monitor Well M2 goes into excursion again
August 21, 2001	Christensen Ranch Unit 5 Monitor Well 5MW66 goes into excursion
September 2001	Oxygen scavenging unit installed at Christensen Ranch
October 2001	RO filtration and permeate injection phase completed in Irigaray Unit 6
	NPDES discharge ended at Irigaray
	RO permeate injection begun in final module of Christensen Unit 3
October 11, 2001	Excursion ends in Irigaray Unit 2 Monitor Well M2
November 2001	Well field recirculation completed in Irigaray Unit Wellfield 6
	Groundwater restoration completed at Irigaray
November 30, 2001	Excursion ends in Irigaray Unit 5 Monitor Well RS27
December 2001	Irigaray staff reassigned to Christensen
January 15, 2002	Excursion ends in Christensen Unit 5 Monitor Well 5MW66
March 2002	RO phase completed in Christensen Unit 2; 10.8 pore volume displacements processed

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April 2002	RO permeate phase begins in Christensen Unit 4
May 2002	Groundwater stabilization monitoring completed in Irigaray Unit 7
June 6, 2002	Restoration confirmation samples from Irigaray Unit 7 split with DEQ/LQD
August 2002	Groundwater stabilization monitoring completed in Irigaray Unit 6
	RO permeate injection suspended in Christensen Unit 3; 15.5 pore volume displacements processed
August 13, 2002	Restoration confirmation samples from Irigaray Unit 6 split with DEQ/LQD
November 2002	RO permeate injection suspended in Christensen Unit 4
November 22, 2002	Monitor Well 5MW54 in Christensen Ranch Unit 5 goes into excursion
December 2002	Recirculation of groundwater with added $H_2S$ begins in Christensen Unit 4
December 17, 2002	Monitor Well 5MW8 in Christensen Ranch Unit 5 goes into excursion

# Excursions

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A number of monitor wells at both the Irigaray and Christensen Ranch operations are or have been on excursion status.

Excursion status in a monitor well at both Irigaray and Christensen Ranch is determined when two or more of the three excursion parameters, conductivity, chloride and total alkalinity, are found during biweekly sampling to be at or above a predetermined level known as the Upper Control Limit or UCL.

COGEMA files a monthly report listing those wells that have been in excursion status during the previous month.

#### Irigaray

The following monitor wells at Irigaray have remained on excursion status the entire report period: SSM3, SSM18, SSM40, SSM41, SSM42 SSM43 and DM10. In addition, M-2 went on excursion status from August 15, 2001 to October 11, 2001.

With one exception, the wells on long-term excursion at Irigaray are completed into a shallow sand located above the ore zone aquifer. Most have been on excursion status for a number of years.

The following Irigaray wells on long-term excursion status are as follows:

This Mine Unit 2 well has been on excursion since August 30, 1999.
This Mine Unit 8 well has been on excursion since September 13, 1996.
This Mine Unit 8 well has been on excursion since August 16, 1996.
This Mine Unit 4 well has been on excursion since Nov. 19, 1998.
This Mine Unit 3 well has been on excursion since October 20, 1990.
This Mine Unit 1 well has been on excursion since October 11, 1989.
This is a deep monitor zone well, having been completed in the nearest aquifer below the ore zone. This Mine Unit 6 well has been on excursion since February 2, 1994.

# Christensen Ranch

Monitor well 5MW54 in Christensen Mine Unit 5 has been on excursion status since November 22, 2002. Monitor well 5MW8, also in Christensen Mine Unit 5, has been on excursion status since December 17, 2002.

#### **Monitoring Data**

The report documents contain a large amount of monitoring data. Information from the monitoring of 327 monitor and trend wells is presented for a one-year period, January through December 2003. Data from the other six months is presented in the Semiannual Report submitted in late February. Samples are taken monthly from monitor wells not in excursion status. For those wells in excursion status, samples are taken weekly. For monitor wells located in or adjacent to restored well fields, samples are only taken quarterly. Samples taken are analyzed for the excursion parameters: chloride, specific conductance and total alkalinity, along with pH. The potentiometric elevations of the water in the wells are also measured just prior to sampling. Uranium levels are measured for those wells in excursion status.

The results of testing regional surface water and water wells for radiometric parameters are presented on Table 2 of both reports. This information is required by the Nuclear Regulatory Commission (NRC).

# **Mechanical Integrity Testing**

Results of mechanical integrity testing (MIT) for the period are presented in Appendix 4 of the Annual Report. Sixteen (16) wells, in Christensen Units 2 and 5, were tested with six (6) failed casings found.

## Surface Disturbances

There was no additional land disturbed during the report period.

Some reclamation work has been carried out in the 517 site area where the evaporation ponds have been removed and the wells abandoned.

Attached as Figure 1 to the Reclamation Bond calculations, a schedule of restoration and reclamation tasks shows that Facilities Reclamation of the Irigaray Plant, Ponds and Road is to begin as early as January 2003. Plugging and abandonment of the Irigaray well field wells is shown on this figure to begin as early as June 2003.

No application for bond release of costs associated with restoration of the Irigaray well fields has been received as of early March 2003.

#### Bond

A detailed bond estimate was included with the Annual Report. Some aspects of the bond estimate are:

- 1. The estimate does not include any costs for groundwater restoration of Christensen Ranch Units 7 and 8 as injection never occurred in either of these well fields. The estimate does show that a total of 391 wells were drilled in Unit 7 and the cost for abandonment of these wells was included. Costs for revegetation of disturbances in both these units were also included.
- 2. Unlike previous estimates, this one assumes credit for most well field restoration work already carried out, such as Irigaray Units 1 through nine or Christensen Ranch Units 2 and three.

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Credit has been taken for groundwater sweep in all Irigaray well field units and Units 2, 3, 4, and 5 at Christensen Ranch.

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- 3. COGEMA has revised the groundwater restoration costs in several areas by updating the estimate based on the actual methods and processes now in use. Some of the changes include the elimination of costs for barium chloride, hydrogen sulfide, hydrochloric acid, sulfuric acid, and addition of costs for antiscalent, sodium sulfate and elution.
- 4. COGEMA continues to include the \$400,000 I added, beginning in 1998, for cleanup of the monitor wells in long-term excursion status at Irigaray. This amounts to \$300,000 for the six shallow sand monitor wells plus \$100,000 for the deep monitor well for an additional bond cost of \$400,000.
- 5. The estimate shows a cost of \$12.00 per cubic yard for disposal of demolition debris at the Edgerton/Midwest landfill. This cost was confirmed with a telephone call to the Town of Midwest which operates this landfill.
- 6. The estimate continues to show disposal of radiologically contaminated material at Pathfinder's NRC-licensed Shirley Basin mill tailings pond at a cost of \$11.00 per cubic foot.
- 7. The estimate continues to show a cost for disposal of radiologically contaminated concrete and soil at Pathfinder's NRC-licensed Shirley Basin mill tailings pond at \$3:70 per cubic foot.
- 8. The estimate includes \$200,000 to cover plugging of the two deep disposal wells.
- 9. COGEMA set the amount of contingencies totaling 34.5%, an increase over the 21.5% contingency used over the past several years. The increase comes with increase of Project Management Costs from 3% to 5% and Unknowns, or Contingency as it is termed in this year's COGEMA estimate, from 4% to 15%.
- 10. Review of this estimate was made much more difficult because there was no list of assumptions around which the estimate was constructed. The sources of as many costs as possible should be given. For instance, it is believed that the costs for much of the surface reclamation are based on Land Quality Division Guideline 12 costs, but there was no mention of the sources of any costs. For the next report, a list of assumptions upon which the bond costs are based is requested.

# **Review of Bond Estimate**

Attached are printouts of spreadsheets based on revisions and updating of an earlier bond estimate received from COGEMA. Values in red are those that differ from values in

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COGEMA's 2002 estimate. Other values may differ slightly, probably from differences in rounding. A computer diskette containing these spreadsheets is also included.

# Worksheet No. 1, Groundwater Restoration

- 1. In Section 1.A, Groundwater Sweep, on Page 1, the cost assumptions for power have been changed back to 1.00 kilowatt/hour per horsepower (Kwh/Hp) as was the case a couple of years ago and is still the case for the Irigaray Mine calculations. The estimate used was 0.75 which is very near the theoretical efficiency of 0.746 Kwh/Hp. Review of the literature has found that downhole pumps are far less efficient.
- 2. In Section 1A on Page 1 the barium chloride for Christensen Ranch Unit 6 was changed from \$0.00 to \$0.041 per kgal to reflect the cost used for the other Christensen Ranch well fields.
- 3. In Section 1.B. on Page 2 the costs for the Wellfield Groundwater Sweep have been changed to increase the number of pumps from 5 to 10 for Christensen Ranch Units 2 through six. Given an average flow per pump of 20 g.p.m., 10 pumps are needed to accomplish a total flow of 200 g.p.m., not the 5 pumps listed in the original estimate. The Kwh/Hp has been increased to 1.0 here also for the same well fields.
- 4. In Section 1.B, Reverse Osmosis, on Page 3, the Kwh/Hp has been increased to 1.0 here also for Christensen well fields 2 through 6.
- 5. In Section III, Waste Disposal Well, the Kwh/Hp has been increased to 0.90. Review of the literature has found that the very large electric motors driving the injection pumps are capable of 90% efficiency, unlike the much smaller downhole pump motors.
- 6. On Page 4 the total cost for groundwater restoration has increased to \$5,499,554.00 up from \$4,842,891.00 as a result of the above changes.

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Worksheet No. 2, Plant Equipment and Disposal

1. This spreadsheet contains a number of minor differences from COGEMA's numbers, believed to be mostly from rounding differences. The total amount has increased from \$212,109.00 to \$213,414.00.

Worksheet No. 3, Building and Foundation Demolition, Disposal and Soil Cleanup

1. Here again, apparent rounding differences have resulted in a total of \$587,618.00, nearly the same as COGEMA's cost of \$587,632.00.

Worksheet No. 4, Pond Reclamation Cost

 No changes were found necessary for this spreadsheet. However, because of apparent differences in rounding, some subtotals are different and the total is different, \$1,258,180.00, down from COGEMA's total of \$1,259,496.00.

Worksheet No. 5, Well Plugging and Abandonment

1. The total here is identical to COGEMA's total of \$760,261.00.

Worksheet No. 6, Wellfield Equipment Removal and Disposal

1. The total here is identical to COGEMA's total of \$832,873.00.

Worksheet No. 7, Topsoil Replacement and Revegetation

- 1. In Section II, Ponds, Page 1, the total adds up to \$87,521.00, compared to COGEMA's total of \$71,362.00. The difference appears to be from an error by COGEMA in entering a value instead of an equation in one column so the total did not increase when other values were increased.
- 2. In Section III, Wellfield, Page 2, the amounts in Part C, Spill Cleanup, were changed, apparently because again, instead of equations values were entered which did not update when the spreadsheet was updated. The totals changed only slightly, however.
- 3. In Section VI, Remedial Action, Page 3, the subtotals changed slightly in Revegetation, Section C., for an unknown reason.
- 4. The total for Topsoil and Revegetation changed to \$758,154.00, up slightly from COGEMA's total of \$757,774.00.

Worksheet No. 8, Miscellaneous Reclamation

1. Only slight differences were found here, attributable to differences in rounding. The total found was \$155,936.00, nearly the same as COGEMA's \$155,926.00 total.

Bond Estimate Summary

I. Groundwater Restoration

\$ 5,499,554

П.	Decommissioning	and Surface	Reclamation
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A.	Process plants equipment removal and disposal		\$	213,414				
B.	B. Plant buildings demolition and disposal							
<b>C</b> .	Process pond sludge and liner handling		\$	1,258,180				
D.	Well abandonment		\$	760,261				
E.	Wellfield equipment removal and disposal		\$	832,873				
F.	Topsoil replacement and revegetation		\$	758,154				
G.	Miscellaneous reclamation activities		\$	155,936				
:	Subtotal Decommissioning and Surface Reclamation		\$	4,566,436				
	Subtotal Restoration and Reclamation		\$	10,065,990				
Contingen	ıcy							
Pro	oject Design 2%			•				
Co	ontractor profit and mobilization 8%							
Pro	econstruction Investigation and Stabilization 1%							
Pro	oject management 5%							
Or	n-site monitoring 0.5%							
Sit	te security and liability insurance 1%							
Lo	ong-term admin. and accounting 2%	· ,	· .					
Ur	nknowns <u>15%</u>	· · ·						
	Total Contingency34.5%		\$	3,472,767				
		*	\$	13,538,757				
		Sav	<b>S</b> 1	13.539.000				

# The current bond totals \$13,575,224.00.

# Conclusions

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Review of the 2002 Annual Report for Permit No. 478 found that mining has ceased both at Irigaray Ranch and at Christensen Ranch.

Restoration of groundwater is in full swing at Christensen and has ended at Irigaray.

There has been no progress in clean up of the shallow zone aquifer at Irigaray where four monitor wells have been in long-term excursion status. The same is true of DM10, a deep zone monitor well which has also been in excursion status for an extended time.

Review of the bond estimate found the need for changes in a few areas. Significant cost increases for groundwater restoration have resulted from a requirement for a more realistic estimate for pump electric motor efficiency. This issue was discussed earlier during review of the 2001 bond estimate.

A list of assumptions and references for the bond costs is requested for the coming year's Annual Report.

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Attachments Computer Disk

478an02rv.3gm

# COGEMA Mining, Inc.

# SUMMARY OF RECLAMATION/RESTORATION BOND ESTIMATE WDEQ PERMIT NO. 478/USNRC LICENSE SUA-1341 TABLE 1

C:\Files\Files1\478IRCR\478bnd03WKTAB1.xls

1       DECOMMISSIONING AND SURFACE RECLAMATION:         A.       Process Plant(s) Equipment Removal and Disposal         Worksheet 2       \$213,414         B.       Plant Building(s) Demolition and Disposal       \$587,618         Worksheet 3       \$587,618         C.       Process Pond Sludge and Liner Handling       \$1,258,180         Worksheet 4       \$1,258,180       \$760,261         D.       Well Abandonment       \$760,261         Worksheet 5       \$832,873       \$832,873         E.       Wellfield Equipment Removal and Disposal       \$832,873         Worksheet 6       \$758,154         F.       Topsoil Replacement and Revegation       \$758,154         Worksheet 7       \$1155,936         G.       Miscellaneous Reclamation Activities       \$155,936         Worksheet 8       \$10,065,990         SUBTOTAL RESTORATION AND RECLAMATION       \$10,065,990	GROUNDWATER RESTORATION - Worksheet 1:	\$5,499,554
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<ul> <li>B. Plant Building(s) Demolition and Disposal \$587,618</li> <li>Worksheet 3</li> <li>C. Process Pond Sludge and Liner Handling \$1,258,180</li> <li>Worksheet 4</li> <li>D. Well Abandonment \$760,261</li> <li>Worksheet 5</li> <li>E. Wellfield Equipment Removal and Disposal \$832,873</li> <li>Worksheet 6</li> <li>F. Topsoil Replacement and Revegation \$758,154</li> <li>Worksheet 7</li> <li>G. Miscellaneous Reclamation Activities \$155,936</li> <li>Worksheet 8</li> <li>Sub Total - Decommissioning and Surface Reclamation \$4,566,436</li> <li>SUBTOTAL RESTORATION AND RECLAMATION \$10,065,990</li> </ul>	Worksheet 2	
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SUBTOTAL RESTORATION AND RECLAMATION     \$10.065.990	Sub Total - Decommissioning and Surface Reclamation	\$4 566 436
SUBTOTAL RESTORATION AND RECLAMATION \$10.065.990		<b>φ</b> 4,500,430
	SUBTOTAL RESTORATION AND RECLAMATION	\$10,065,990

**Costs Associated with Third Party Contractors** 

Project Design	2.0%
Contractor Profit & Mobilization	8.0%
Preconstruction Investigation	1.0%
Project Management	5.0%
On-site Monitoring	0.5%
Site Security & Liability Assurance	1.0%
Longterm Administration	2.0%
Contingency (Unknowns)	<u>15.0%</u>
TOTAL CONTINGENCY	34.5%

# **SUBTOTAL**

# TOTAL RESTORATION AND RECLAMATION

\$3,472,767





COGEMA Mining, Inc.

CCXPEMA Mining, Inc. Revioration and Reclamation Costs Wyoning Operations WORKSHEET 1 C:PieuePiee11478IRCR(478bnd03WYWKST1.XLSJWYW<u>KST1</u>

	Ingeray	Higaray	Christenson	Christenson	Christensen	Civiletanean	Christensen	Christenson	Christenes
OUNDWATER RESTORATION	Mne Unit(s)	Mine Unit(s)	Mine Unit	Mine Unit	Mine Unit	Mine Unit	Mine Unit	Mine Unit	Mine Uni
	#1 Thry #5	#5 Thru #5	#2	#3		15	<b>#6</b>	<b>.</b>	#8
hnical Assumptions:	ר								
Welffeld Area (Ft')	522720	784000	890000	798944	510088	1210968	2021243	1332938	160000
Welfield Area (Acres)	12.00	18.00	20.43	18.34	11.71	27.80	46.40	30.60	36.7
Affected Ore Zone Area (Pt*)	622720	784060	890000	798944	550193	1346004	2058344		
Avg Completed Thickness (Pt)	15.0	18.0	11.0	10.0	12.7	19,9	21.8		
Affected Volume:					ł				
Factor For Vertical Flare	20%	20%	20%	20%	20%	20%	20%		1 · · ·
Factor For Horizontal Flare	20%	20%	20%	20%	20%	20%	20%		
Total Volume (PP)	11290752	20323353.8	14097600	11504793.6	10061929.6	30571090.8	64615534.8		
Porosity	26.0%	26.0%	28.0%	28.0%	20.0%	28.0%	26.0%	ł .	· ·
Galtone Per Cubic Foot	7.48	7.49	7.48	7.48	7.48	7,48	7,48		
Gallons Per Pore Volume	21958254.5	39524858.08	27417012.5	22374522.6	19568440.7	75013057	125664292	1	
Number of Wells in Linites								1	
Benduction Walk	180	974	483	185	105	247	2002	165	
Intention Visite	340		479	1 177	100	277	244	170	
Admailter Wowe	310	300							]
Automo Mali Onanina II ^m	100	105	30	40					1
Average wer opecing (-1)	30	30				65	100	100	1
Average was Depar (P)	250	250	345	300	430	490	520		i
GROUNDWATER SWEEP	ר								
A. PLANT & OFFICE				1					
Operating Assumptions:	7					1		ł	
Flowmie (gpm)	200	200	200	200	200	200	200		
PV's Required	4			1	1		1	1	1
Total Gallona For Tradment	1 6	i i	i i		ه ا	1 .	125664292	i .	
Total KGais for Treatment			, a		ة ا	<u>،</u>	125054	1	
Cost Assumptions:	1 -	. ·	ľ		-	*		1	
Breat									
Ave Connected Me	61 30	61.90	40.00	40.00	40.00				
MubleAs	1.00		10.00		4.00	1 1 1 1 1			
	80.000	1.00	1.00	*****			1.00		
Private in the second sec	\$0.001	100.04	\$0,036	\$0.036	\$0.036	\$0.036	\$0.036	<b>!</b>	
Gallons Per Minute	200	200	200	200	200	200	100	1	
Gallona Per Hour	12000	12000	12000	12000	12000	12000	6000		
Cost Par Hour	2.62	2.62	1.52	1.52	1.52	1.52	1.52	1	{
Cost Per Gellon	0.00022	0.00022	0.00013	0.00013	0.00013	0.00013	0.00021		
Cost Per KGal (\$)	\$0.218	\$0.218	\$0.127	\$0.127	\$0.127	\$0.127	\$0.205	1	1
Chemicale						· ·			
Barlum Chloride (\$/KGale)	\$0.041	\$0.041	\$0.041	\$0,041	\$0.041	\$0.041	\$0.041		1
Antiecatent (\$/Kgats)			\$0.106	\$0.108	\$0.105	\$0,108	\$0.106		1
Elution (\$#(Gats)	\$0.099	\$0.000	\$0.096	\$0.000	\$0,099	\$0,099	\$0,099		1
Repair & Maintenance (\$/KGels)	\$0.061	\$0.061	\$0.061	\$0.061	\$0.061	\$0.061	\$0,061		1
Analysis (S/KGale)	\$0,184	\$0.091	\$0.091	\$0,161	\$0.092	\$0.094	\$0.094	1	
Total Cost Per KGal	\$0.583	\$0,510	\$0.527	\$0.597	\$0,528	\$0.530	\$0,008		
Total Treatment Cost	50	50	ŝn	\$0	50	\$n	\$78.404		1
Litities									
Brane (SSI-stb)	81 845	\$1.840	8200		\$200	6200	#200		
Persone /Salanth	\$1,000	\$1,000	8200		6000	6200	8200		
Time Sec Tradmast		a1,000	a200	¥200	90036	\$200	\$200	I	1
			I _	Ι.		۱.			ļ
Minutes For Treatment	1 2	P 9	•		0	0	628321	1	1
Hours For Treatment	0	0	0	•	0	j •	10472	í	í
Daye For Trestment	0	0	0.	i 0	0	1 0	436		
Average Days Per Month	30.4	30,4	50,4	30.4	30.4	30.4	30,4		
Months For Treatment	0.0	0.0	0.0	0.0	0.0	0.0	14,3		
Utilities Cost (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$5,730		
TOTAL BLANT & OFFICE COMP	1 \$0	\$0	\$0	\$0	\$0	\$0	\$82,142	\$0	1 1

4/2/2003

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		irigaray	ingaray Mina United	Christenson	Christensen	Christenson	Christensen	Christensen	Christenson	Christense
GPC	CUNDWATER RESIDRATION	#1 Thru #5	MR Three did.	100 Mile Unit	1980 UNK	144			117	1000 CT
	GROUNDWATER SWEEP (Continued)									
<b>H</b>	B. WELLFIELD			T T	[				1	
	Cost Assumptions:					[				
	Power									
	Ave Flow/Purio (gem)	3.86	3.86	20.00	20.00	20.00	20.00	20		
	Avg Hp/Pump	1.60	1.50	6.00	5.00	5.00	5.00	5.00		
	Avg # of Pumps Required	51.9	51.9	10.0	10.0	10.0	10.0	10.0		
	Avg Connected He	77.8	77.8	50.0	50.0	50.0	50.0	50.0		R
	Kwhishtp	1.000	1.000	1.000	1,000	1.000	1.000	1.000	- 0.0	h.c
	\$//\$wh	\$0.061	\$0.051	\$0.030	\$0.036	\$0.036	\$0.038	\$0.038	- 0.0	sus -
	Gallons Per Minute	200	200	200	200	200	200	200		
	Gallons Per Hour	12000	12000	12000	12000	12000	12000	12000		
	Cost Per Hour (\$)	\$3.97	\$3.97	\$1.90	\$1.90	\$1.90	\$1.90	\$1.90		
	Cost Per Gallon (\$)	\$0.0003	\$0.0003	\$0.0002	\$0.0002	\$0.0002	\$0.0002	\$0.0002		
	Cost Per KGat (\$)	0.331	0.331	0.158	0.158	0,156	0,158	0,158	1	
	Peopeir & Meintenance (\$4K3ats)	\$0.018	\$0.016	\$0.224	\$0.224	\$0,224	\$0.224	\$0.224		
	Total Cost Per KGal	\$0.347	\$0.347	\$0.382	\$0.382	\$0.382	\$0.382	\$0.382		
	TOTAL WELLFIELD COST	\$0	\$0	\$0	\$0	\$0	\$0	\$48,046	\$0	\$0
	TOTAL GROUND WATER SWEEP COST	\$0	\$0	\$0	\$0	\$0	\$0	\$130,188	\$0	\$0
H	REVERSE OSMOSIS		•							
	A. PLANT & OFFICE									
	Operating Assumptions:									
	Flowrate (gpm)	300	300	500	500	500	500	500	•	
	PV's Required	3.0	5.0	5.0	8.0	5.0	<b>5.</b> 0	5.0		
	Total Gellons For Treatment	65674763.5	197624290.4	137086082	111872613	97842203.3	375065285	626321461		
	Total KGals for Treatment	05875	197924	137065	111873	87842	375066	626321	i .	
	Feet to RO (gpm)	300	300	500	500	500	500	500	t :	
	Permeets Flow (gpm)	240	240	375	400	400	400	. 400		l
	Brine Flow (gpm)	60	60	125	100	100	. 100	100	1	
	Average RO Recovery	80.0%	80.0%	75.0%	75.0%	75.0%	75.0%	75.0%		
	Cost Assumptions:			•						

	Operating Assumptions:									
	Flowrate (gpm)	300	300	500	500	500	500	500		
1	PV's Required	3.0	5.0	5.0	8.0	5.0	5.0	6.0		
	Total Gallons For Treatment	65674763.5	197624290.4	137086082	111872613	97642203.3	376065265	020321401		
	Total KGals for Treatment	05875	197924	137005	111873	97842	375066	626321	i .	
	Feet to RO (gpm)	300	300	500	500	500	500	500	t :	1
	Permeets Flow (gpm)	240	240	375	400	400	400	400		
	Brine Flow (gpm)	· · 60	60	125	100	100	100	100	1 · · ·	1
	Average RO Recovery	80.0%	80.0%	75.0%	75.0%	75.0%	75.0%	75.0%		
	Cost Assumptions:	]								
	Power	1								
	Avg Connected Hp	120.00	120.00	560.00	500.00	560.00	560.00	500.00	_085	ŀ.
	Kwhatip	1.000	1.000	1.000	1.000	1.000	. 1.000	1,000		- I
	\$4Kwh	\$0.051	\$0.061		\$0.038	\$0.038	\$0.038	\$0.038	- 0.03	1.5
1	Gallons Per Minute	300	300	600	500	500	500	500		r ~
	Gallons Per Hour	. 18000	18000	30000	. 30000	30000	30000	30000		
	Cost Per Hour (\$)	\$6.12	\$8.12	\$21,26	\$21.28	\$21.28	\$21.28	\$21.28		
	Cost Per Gallon (\$)	\$0.00034	\$0.00034	\$0.00071	\$0.00071	\$0.00071	\$0.00071	\$0.00071		
	Cost Per KGal (\$)	\$0.340	\$0,340	\$0.709	\$0.709	\$0.709	\$0.709	\$0.709		
	Chemicals						1. A.			
	Sulfuric Acid (\$16Gats)	\$0.078	\$0.078	\$0.000	\$0.000	\$0.000	\$0.000	\$0,000		
	Caustic Soda (\$/KGsts)	\$0.111	\$0.111	\$0.015	\$0.015	\$0.015	\$0.015	\$0.015		
	Hydrochloric Aold (\$/KGats)	\$0.009	\$0.009	*\$0,000-	\$0.000	·· \$0.000	\$0.000	\$0.000	ł	
	Hydrogen Sullide (\$A(Gels)	\$0.304	\$0.304	-000.0 <del>0</del>	\$0.000	-5-c \$0.000	\$0.000	\$0.000	r.	
	Sodium sulfate (\$#(psl)		( · )	\$0.092	\$0.092	\$0.092	\$0.092	\$0.092	}	
	Antiscations (\$Akganis)			\$0.108	\$0.108	\$0,108	\$0.108	\$0,108		
	Elution (\$/Kgals)			\$0.099	\$0.099	\$0.099	\$0.099	\$0.099	1	
- 1	Repair & Meintenance (\$/KGats)	\$0.279	\$0.279	\$0,120	\$0.120	\$0.120	\$0,120	\$0.120	t ·	
- 1	Sampling & Analysis (\$/KGats)	\$0.164	\$0.091	\$0.091	\$0.161	\$0.092	\$0.094	\$0.094		
	Total Cost Per KGal (\$)	\$1,283	\$1.210	\$1,234	\$1,304	\$1.235	\$1.237	\$1.237	1.1	
- 1	Total Pumping Cost (\$)	\$84,517	\$239,125	\$169,209	\$145,919	\$120,868	\$464,061	\$777,443	ł	
1	Utilities					· ·	1. A.		1	
	Power (\$Month)	-\$1,840	\$1,840	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	1	
- 1	Propene (\$Month	\$1,000	\$1,000	\$900	\$800	\$900	\$800	\$800		
ł	Time For Treatment									
1	Minutes For Treatment	219583	658748	274170	223745	195684	750131	1256645		
1	Hours For Treatment	3000	10979	4570	3729	3261	12502	20944		ł
	Daya For Treatment	152	457	190	155	196	521	873		
	Average Days Per Month	30,4	30.4	30,4	30.4	50.4	30.4	30,4		
	Months For Treatment	5.0	16.0	6.3	5.1	4.5	17.1	28.7	1	
L	Utilities Cost (\$)	\$14,200	\$42,800	\$11,340	\$9,180	\$8,100	\$30,780	\$51,660		
	TOTAL PLANT & OFFICE COST	\$96,717	\$281,725	\$180,549	\$155,099	\$128,968	\$494,861	\$829,103	\$0	

		ingeray	Hgaray	Christensen	Christensen	Christensen	Christensen	Christensen	Christensen	Christenson
GR	OUNDWATER RESTORATION	Mine Unit(s)	Mine Unit(s)	Mine Unit						
		#1 Thru #5	#8 Thru #9	#2	#3	#4	#5			
	REVERSE OSMOSIS (Continued)									
	B. WELLFIELD									
	Cost Assumptions:									
	Power									
	Avg FlowPump (gpm)	3.86	3.86	20.00	20.00	20.00	20.00	- 20		
	Avg Hp/Pump	1.50	1.50	5.00	5.00	5.00	5.00	5.00	~ ~ .	
	Avg # of Pumpe Required	77.8	77.8	62.A	62.4	62.4	82.4	02.A	هم ا	
	Avg Connected Hp	116.7	118.7	, 187.1	187,1	187,1	187,1	187.1	0.00	
	Kwitahip	1.000	1.000	1.000	1.000	1.000	1.000	1.000 <	1	.<
	\$/Kwh	\$0.051	\$0.051		\$0.038	\$0.030	\$0.030	\$0.098*	0.0>	
	Gallons Per Minute	300	300	500	500	500	500	500	1	
	Gallons Per Hour	18000	18000	30000	30000	30000	30000	30000		
	Cost Per Hour (\$)	\$5.95	\$5.95	\$7.11	\$7.11	\$7.11	\$7.11	\$7.11		
	Cost Per Gallon (\$)	\$0.0003	\$0.0003	\$0.0002	\$0.0002	\$0,0002	\$0.0002	\$0.0002		
	Cost Per KGal (\$)	\$0.331	\$0,331	\$0.237	\$0.237	\$0.237	\$0.237	\$0,237	1	
	Repair & Mointenance (\$/KGate)	\$0.016	\$0.016	\$0,224	\$0.224	\$0.224	\$0.224	\$0.224		
	Total Cost Per KGal	\$0,347	\$0.347	\$0,461	\$0,461	\$0,461	\$0.461	\$0.461		
	TOTAL WELLFIELD COST	\$22,835	\$68,506	\$63,195	\$51,573	\$45,105	\$172,903	\$289,652	\$0	
	TOTAL REVERSE OSMOSIS COST	\$121,553	\$350,232	\$243,744	\$206,672	\$174,072	\$867,763	\$1,118,755	\$0	
		-								
	WASTE DISPOSAL WELL									
	Operating Assumptions:									
	Annual Eveporation Capacity (Gals)			1917611.9	1917611.9	1917611.9	1917611.9	1917811.9		1
	Avg. Monthly Evep. Capacity (Gats)			159801	159801	159801	159801	159601		
	Total Disposal Requirement			1.1						

	•											
Total Disposal Requirement			[								<b>N</b>	
RO Brine Total Gallone			34271205.0	27966153.2	24400550.8	93796321.3	157080385		i .		L.Y	تم
RO Brine Total KGallons			34271.3	27968,2	24460.6	93766.3	157080.4				-	
Brine Concentration Factor	· ·		60%	60%	· 00%	60%	60%					
Total Concentrated Brine (Gals)			20562759.4	16780691.9	14676330.5	56259792.8	94248219.1				- wi	مر
Months of RO Operation			6.3	5.1	4.5	17.1	28.7					
Average Monthly Pleam't (Gallone)			3263930	5483952	5435678	5483411	5473183					
Monthly Balance for DDW (Gala)			3104129	5324151	5275677	5323610	5313382					
Total WDW Disposal (Gallons)			19556013.1	27153106.2	23741448.4	91033724.3	152494077					
Total WDW Disposal (KGale)			19556	27153	23741	91034	162494					
Cost Assumptions:			· ·									
Power												
Avg Connected Hp			100.00	100.00	100.00	100.00	100.00			· ·	ta ta ka	
WDW Av. Connected Hp			180.00	180.00	100.00	180.00	180.00			i i		
Kwhiship			0.900	0.900	0.900	0.900	0.900					_
\$/Kwh				\$0.030	\$0.038	\$0.038	\$0.038			Z	10.036	S
Gelions Per Minute			150	180	150	150	150				•	
Gettons Per Hour			9000	9000	9000	9000	9000		· ·			
Cost Per Hour (\$)			\$9.58	\$9.58	\$9,58	\$9.58	\$9.56					
Cost Per Gallon (\$)			\$0.0011	\$0.0011	\$0.0011	\$0.0011	\$0.0011					
Cost Per KGal (\$)			\$1.064	\$1.084	\$1.064	\$1.064	\$1.084					
Chemicals (\$/Kgais)												
RO Antecalent (\$/Kgale)			0.192	0.192	0.192	0,192	0.192					
WDW Antiscalent (\$/Kgals)			0.226	0.226	0.226	0.226	0.226					
Sulfuric Acid (\$/Kgal)			0.28	0.26	0.26	0.26	0.29					
Corrosion Inhibitor		1	\$0.217	\$0.217	\$0.217	\$0.217	\$0.217					
Algacide			\$0.052	\$0,052	\$0.052	\$0.052	\$0.052					
Other			\$0.000	\$0.090	\$0.060	\$0.000	\$0.080					
Repair & Maint (\$/Kgals)			\$0,230	\$0.230	\$0.230	\$0,230	\$0.230			1		
Total Cost Per KGal			\$2.341	\$2,341	\$2.341	\$2.341	\$2.341					
TOTAL WASTE DISPOSAL WELL COST			\$45 784	202 600	\$45.570	\$242 440	8768 080	**		1		

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4/2/2003

	Mgaray	Meanay	Christensen	Christensen	Christensen	Christensen	Christensen	Christenson	Christene
OUNDWATER RESTORATION	Mine Unit(s)	Mine Unit(s)	Mine Unit	Mine Un					
	#1 Thru #5	#6 Thru #9	#2	<b>#3</b>	. 14	#5	#5	17	#8
STABILIZATION MONITORING									
Operating Assumptions:									
Time of Stabilization (mos)	9	9	9	9		9	9		
Frequency of Analysis (mos)	3	3	3	3	3	3	3		
Total Sole of Analysis	3	3	3	3	3	3	3		
Cost Assumptions:						1			
Power (\$/Month)	\$0	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000		
Total Power Cost	\$0	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000	\$9,000		
Sampling & Analysis (each set)	\$3,600	\$3,800	\$3,600	\$3,600	\$3,600	\$3,600	\$3,800		
Total Sampling & Analysis Cost (\$)	\$10,800	\$10,800	\$10,800	\$10,800	\$10,800	\$10,800	\$10,800		
Utilities (\$Month)	\$0	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000		
Total Utilities Cost (\$)	\$0	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000		
TOTAL STABILIZATION COST	\$10,800	\$37,800	\$37,800	\$37,800	\$37,800	\$37,800	\$37,800	\$0	

V LABOR (Higeray and Christenson Combined)	<u> </u>		
Cost Assumptions	Cost/Hour	Hours/Year	Cost
Crew;			
1 Supervisor	\$25.00	2060	\$52,000
4 Operators	\$20.00	2060	\$106,400
2 Maintenance	\$20.00	2060	\$83,200
2 Vehicles	\$12.00	2090	\$49,920
Cost per Year			\$351,520
Time Required - Years (See Figure 1)	2.8		
TOTAL RESTORATION LABOR COST	\$913 952		

Mgaray	Christensen	Total
Mine Unit(s)	Mine Unit	Christensen
#1 Thru #9	#2 Thru #4	& trigaray

VI RESTORATION CAPITAL REQUIREMENTS			
i Deep Discost Wall(s)		\$0	\$0
I Plug and Abandon DDW	1	\$200,000	\$200,000
III 500 GPM Reverse Cemcels Unit			\$0
Total	\$0	\$200,000	\$200,000
	ingenay	Christenson	Total
	Mine Unit(s)	Aline Linit	Christenses
	#1 Thru #9	#2 Thru #7	A Hyperny
VIL RESTORATION OF EXCURSION WELLS			
I Shallow Sand Well(s)			
Total Wells in Excursion	6	0	
Cast of Clean-Up	\$ 50,000	\$ 50,000	
Total Shaflow Sand Cleanup	\$ 300,000	\$0.00	\$ 300,000
II Ore Zone Wells	100 B		
Total Wells in Excursion	0	· 0	}
Cost of Clean-Up	\$ 50,000	\$ 50,000	
Total Ore Zone Cleanup	\$0.00	\$0.00	
# Deep Zone Wells			
Total Wells in Excursion	1	0	
Cost of Clean-Up	\$ 100,000	\$ 100,000	
Total Deep Zone Cleanup	\$100,000	\$0.00	\$ 100,000
Total Welfield Cost	\$ 400,000	0.00	\$ 400,000
TOTAL EXCURSION CLEANUP COST	\$ 400,000	0.00	\$ 400.000

SUMMARY:	Ingeray Mine Unit(s) #1 Thru #5	Higaray Mina Unit(s) #6 Thru #9	Christensen Mine Unit #2	Christenson Mine Unit #3	Christensen Mine Unit #4	Christoneon Mine Unit #5	Christenson Mine Unit #6	Christensen Mine Unit #7	Christensen Mine Unit #8	TOTAL
I GROUNDWATER SWEEP II REVERSE OSMOSIS III WASTE DISPOSAL WELL V STABLIZATION SUB TOTAL	\$0 \$121,553 \$0 \$10,800 \$132,353	\$0 \$350,232 \$0 \$37,800 \$386,032	\$0 \$243,744 \$46,781 \$37,800 \$327,325	\$0 \$206,672 \$63,566 \$37,800 \$306,037	\$0 \$174,072 \$55,579 \$37,800 \$267,451	\$0 \$867,763 \$213,110 \$37,800 \$918,673	\$130,188 \$1,118,755 \$356,999 \$37,800 \$1,843,731	\$0 \$0 \$0 \$0	\$0 \$0	\$3.985.602
V LABOR VI CAPITAL VII EXCURSION CLEANUP TOTAL GROUNDWATER RESTORATION COST								<u></u>		\$913,952 \$200,000 \$400,000 \$5,499,554

 $HP/well \times HWW \times \frac{R}{HP}$   $cont/Lr. = HP \times \frac{Kh}{HP} \times \frac{q}{Kh} = \frac{1.0}{34}$   $\frac{1.0}{34} \times \frac{1.0}{9} \times ROSI = \frac{9}{0.0383}/Lr.$ 

480 diesel

COGEMA Mining, Inc. Restoration and Reclamation Costs Wyoming Operations WORKSHEET 2 C:\Files\Files1\478IRCR\478bnd03WYWKST2.XLS

				Irigaray				Christensen					
	Maint Area &	Main Process	Expansion	Resin+Sand	Dry Pack	Restoration		Satellite	<b>Resin+Sand</b>	Restoration	Wellfield		
PLANT EQUIPMENT REMOVAL AND DISPOSAL	Laboratory_	Building	Building	Filter Media	Area	Building	Sub Total	Plant	Filter Media	Extension	Modules	Sub Total	
Nelime Arden	40	200	400	440		40		04	407	40	FF	· · · · · · · · · · · · · · · · · · ·	
Outpetite Des Truck Load Oddal)	40	200	100	110	40	40		81	19/	42	55		
Warming Per Huck Loed (105')	20	100	20	20	20	20		20	20	20	20		
Number of Truck Loeds	2.0	10.0	8.0	5.3	2.0	2.0		4.00	9.80	2.1	2.0		
I Decontamination Cost	****	<b>A</b> 550			A			A	A.5.5.0		Acro		
Decontamination Cost (\$/Load)	\$000	\$550	\$550	\$550	2000	0000		9000	\$550	\$550	\$550		
Percent Requiring Decontamination	20.0%	100.0%	100.0%	0.0%	100.0%	100.0%		100.0%	0.0%	100.0%	100.0%		
Total Cost	\$220	\$5,500	\$4,950	20	\$1,100	\$1,100	\$12,870	\$2,503	\$0	\$1,155	\$1,540	\$5,198	
II Dismantle and Loading Cost				ا مندم ا	<b>•</b>								
Cost Per Truck Load (\$)	\$715	\$715	\$715	\$715	\$715	\$715		\$715	\$715	\$715	\$715		
Total Cost	\$1,430	\$7,150	\$6,435	\$3,933	51,430	\$1,430	\$21,808	\$3,253	\$7,079	\$1,502	\$2,002	\$13,835	
III Oversize Charges													
Percent Requiring Permits	40.0%	40.0%	40.0%	0.0%	60.0%	40.0%		40.0%	0.0%	40.0%	0.0%		
Cost Per Truck Load (\$)	\$326	\$326	\$326	\$326	\$326	\$326		\$326	\$326	\$326	\$326		
Total Cost	\$261	\$1,304	<u>\$1,174</u>	\$0	5391	5261	\$3,390	\$593	\$0	\$274	<b>\$</b> 0	\$867	
IV Transportation & Disposal				1					· ·				
A. Landfill													
Percent To Be Shipped	80.0%	80.0%	80.0%	0.0%	50.0%	80.0%		80.0%	0.0%	80.0%	80.0%		
Distance (Miles)	48	48	48	48	48	48		48	48	48	48	1 1	
Cost Per Mile (\$)	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	\$2.58	\$2.58	\$2.58	\$2.58		
Transportation Cost	\$198	\$991	\$892	\$0	\$124	\$198		\$451	\$0	\$208	\$277		
Disposal Fee Per Cubic Yard	\$12.00	\$12.00	\$12.00	\$12.00	\$12.00	\$12.00		\$12.00	\$12.00	\$12.00	\$12.00		
Disposal Cost (\$)	\$384	\$1,920	\$1,728	\$0	\$240	\$384	- 1. The second s	\$874	\$0	\$403	\$538		
Total Cost	\$582	\$2,911	\$2,620	\$0	\$364	\$582		\$1,324	\$0	\$611	\$815		
B. Licensed Site			1	1			1.1		1 · · ·				
Percent To Be Shipped	20.0%	20.0%	20.0%	100.0%	50.0%	20.0%		20.0%	100.0%	20.0%	20.0%		
Distance (Miles)	150	150	150	150	150	150		150	150	150	150		
Cost Per Mile (\$)	\$2.58	\$2.58	\$2.58	· \$2.58	\$2.58	\$2.58		\$2.58	\$2.58	\$2.58	\$2.58		
Transportation Cost	\$155	\$774	\$697	\$2,129	\$387	\$155		\$352	\$3,831	\$163	\$217		
Disposal Cost Per Cubic Foot (\$)	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00		\$11.00	\$11.00	\$11.00	\$11.00		
Quantity Per Truck Load (Yds ^a )	20.0	20.0	20.0	20.0	20.0	20.0		20.0	20.0	20.0	20.0		
Quantity Per Truck Load (Ft ^e )	540	540	540	540	540	540		540	540	540	540		
Disposal Cost	\$2,376	\$11,880	\$10,692	\$32,670	\$5,940	\$2,376		\$5,405	\$58,806	\$2,495	\$3,326		
Totel Cost	\$2,531	\$12,654	\$11,389	\$34,799	\$8,327	\$2,531		\$5,758	\$62,637	\$2,657	\$3,543		
Total Cost	\$3,113	\$15,565	\$14,008	\$34,799	\$6,691	\$3,113	\$77,288	\$7,082	\$62,637	\$3,269	\$4,358	\$77,346	
TOTAL COST	\$5,024	\$29,519	\$26,567	\$38,731	59,612	\$5,904	\$115,356	<u>\$13,431</u>	\$69,716	\$6,547	\$8,364	\$98,058	
LIUTAL COST - IRIGARAY AND CHRISTENSEN												5213,414	

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#### COGEMA Mining, Inc. Restoration and Reclamation Costs Wyoming Operations WORKSHEET 3 C:\Files\Files\1478IRCR\478bnd03WYWKST3_xts

ingeray								Christensen							
Maint Area &	Warehouse	Main Process	Expansion	Dry Pack	Restoration		Satellite	Weilfield	Booster	Restoration	Office				
Laboratory	& Offices	Building	Building	Área	Building	Sub Total	Plant	Modules	Pump Bidgs.	Extension	Building	Warehouse	Sub Total		

				Ingeraly						Christensen				
SOIL REMOVAL & DISPOSAL	Maint Area &	warehouse	Main Process	Expansion	Dry Pack	Restoration		Satellite	Wellfield	Booster	Restoration	Office	1	
	Laboratory	a Offices	Building i	Building	Area	Building	Sub Total	Plant	Modules	Pump Bidgs.	Extension	Building	Warehouse	Sub Total
Assume removal of 3" of Contaminated Soll under														
Primary Areas, Disposal at a Licensed facility.								وحدادك تعارا والمحاص متشاعل والبر						
Removal, Front End Loader (\$50/hr)	\$0	\$0	\$815	\$852	\$259	\$167	\$2,093	\$444	\$0	\$0	\$0	\$0	\$0	\$444
Quantity to be Shipped (Ft*)	0	· · 0	4400	4000	1400	900		2400	0	0	0	0	0	
Distance (Miles)	150	150	150	150	150	150		150	150	150	150	150	150	
Cost Per Mile (\$)	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58		\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	
Transportation Cost (\$)	\$0	\$0	\$3,153	\$3,297	\$1,003	\$645	\$8,098	\$1,720	\$0	· \$0	\$0	\$0	\$0	\$1,720
Disposal fee Per Cubic Foot(\$)	\$3.70	\$3.70	\$3.70	\$3.70	\$3.70	\$3.70		\$3.70	\$3.70	\$3.70	\$3.70	\$3.70	\$3.70	
Quantity per Truckload (FP)	540	540	540	540	540	540		540	540	540	540	540	540	
Disposal Cost (\$)	\$0	\$0	\$16,280	\$17,020	\$5,180	\$3,330	\$41,810	\$8,880	\$0	\$0	\$0	\$0	\$0	\$8,690
Removal, NPDES Pts.											1			
Quantity to be Shipped (FI3)			659					5030			1 1			
Distance (Miles)	150	150	150	150	150	150		150	150	150	150	150	150	
Cost per Mile (\$)	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58		\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	
Transportation Cost (\$)	\$0.00	\$0.00	\$401	\$0.00	\$0.00	\$0.00	\$401	\$3,604,83	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Disposal fee per Cubic Foot (\$)	\$3,70	\$3,70	\$3,70	\$3.70	\$3.70	\$3.70	•	\$3.70	\$3.70	\$3.70	\$3.70	\$3.70	\$3.70	
Quantity per Truckload (Ft3)	540	540	540	540	540	540		540	540	540	540	540	540	
Disposal Cost (\$)	\$0	\$0	\$2,068	\$0	\$0	\$0	\$2,068	\$18,611	\$0	\$0	\$0	· · \$0	\$0	
Total Cost	\$0	\$0	\$22,717	\$21,169	\$6,442	\$4,142	\$54,470	\$33,260	\$0	50	50	\$0	\$0	\$33 280
TOTAL COST	\$0	\$0	\$22,717	\$21,169	\$8,442	\$4,142	\$54.470	\$33,260	\$0	\$0	50	\$0	\$0	\$33,260
TOTAL COST IRIGARAY AND CHRISTENSEN	]			7-1410-12					· · · · · · · · · · · · · · · · · · ·	¥.			φυ	\$87,730
RADIATION SURVEY		····	r <u> </u>		, 1994 1-01					r	· ·	· · · ·	r	
Area required (acres)	0.18	0.16	04	0.42	0.13	0.08		0.22	٥	0.03	0.08	•	0.02	
Survey Cost (S/acre)	\$580.00	\$580.00	\$590.00	\$580.00	\$580.00	\$580.00		\$580.00	\$590.00	0.00	\$590.00	4590 m	4580.00	
TOTAL SURVEY COST	\$104.40	\$92.80	\$232.00	\$243.60	\$75.40	\$46.40	\$795	\$127.60	\$0.00	\$17.40	\$46.40	00.00 \$0.00	\$11.60	\$203
							······································							
TOTAL COST	\$45,787	\$31,348	\$149,720	\$131,818	\$54,558	\$24,820	\$438,049	\$91,944	\$13.847	\$9,722	\$20,193	\$10,150	\$3,712	\$149,589
TOTAL COST IRIGARAY AND CHRISTENSEN	]								<del>, , , , , , , , , , , , , , , , ,</del>					\$587,618

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#### COGEMA Mining, Inc. Restoration and Reclamation Costs Wyoming Operations WORKSHEET 3 C:\Files\Files\1478IRCR\478bnd03WYWK\$T3.xts

				Iriganay				Christensen						
	Maint Area &	Warehouse	Main Process	Expansion	Dry Pack	Restoration		Satellite	Welfield	Booster	Restoration	Office		
· · · · · · · · · · · · · · · · · · ·	Laboratory	& Offices	Building	Building	Area	Building	Sub Total	Plant	Modules	Pump Bldgs.	Extension	Building	Warehouse	Sub Total
BUILDING DEMOLITION AND DISPOSAL	]													
Structural Character	1 Story	1 Story	1 Story	1 Story	3 Story	1 Story		2 Story	1 Story	1 Story	2 Story	1 Story	1 Story	
	Steel Frame	Steel Frame	Steel Frame	Steel Frame	Steel/Masonry	Steel Frame		Steel Frame	Pre Fab (22)	Pro Fab (4)	Steel Frame	Pre-Fab	Steel Frame	
Demolition Volume (Ft ^a )	179400	108720	430400	386400	126000	69640		192000	95040	46720	72000	64800	11000	
Cost of Demolition Per FP	\$0,131	\$0,131	\$0.131	\$0,131	\$0.131	\$0.131		\$0.131	\$0,131	\$0.131	\$0.131	\$0.131	\$0,131	
Demolition Cost (\$)	\$23,501	\$14,242	\$56,382	\$50,618	\$16,506	\$9,123	\$170.373	\$25,152	\$12,450	\$6,120	\$9,432	\$8,489	\$1,441	\$63.084
Factor For Gutting	15.0%	10.0%	30.0%	10.0%	20.0%	10.0%		20.0%	0.0%	0.0%	20.0%	10.0%	10.0%	
Cost For Gutting (\$)	\$3,525	\$1.424	\$16.915	\$5,082	\$3,301	\$912	\$31,139	\$5.030	\$0	\$0	\$1,886	\$849	\$144	\$7.910
Weight (pounds)	158761	96212	380885	341947	111504	61628		169912	66660	20032	63717	38802	9735	••••
Weight per Truckload	40000	40000	40000	40000	40000	40000		40000	40000	40000	40000	40000	40000	
Number of Truckloada	4.0	24	9.5	8.5	2.8	1.5		4.2	1.7	0.7	1.6	1.0	0.2	
Distance to Landfill	48	48	48	48	48	48		48	48	48	48	48	48	
Cost per Life	\$2.58	\$2.58	\$2.68	\$2.58	\$2.58	\$2.58		\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	
Transportation Cost	\$492	\$298	\$1.179	\$1.059	\$345	\$191	\$3 583	\$528	\$206	\$87	\$197	\$120	\$30	\$1,167
Discossi Cost per Tan	\$35.70	\$35.70	\$15 70	\$35.70	\$35.70	\$35.70		\$35.70	\$35.70	\$35.70	\$35.70	\$35.70	\$35.70	• • • • •
Disposal Cost	\$2 834	\$1 717	\$6 799	58 104	\$1 990	\$1 100	\$20 544	\$3 033	\$1 190	\$500	\$1 137	\$693	\$174	\$6 727
TOTAL COST	\$30 352	\$17 682	\$81 275	\$82 843	\$22 143	\$11 328	\$225 820	\$33 741	\$13.847	\$6 707	\$12,853	\$10 150	\$1 789	\$78 888
TOTAL COST IRIGARAY AND CHRISTENSEN	400,002	1		φσειστο			WELO OLO		φ10,011				<b>ψ1,100</b>	\$304 508
Torne ood anonori hab oranotenber	<b>.</b> .													
	1.1			· · · ·				1						
CONCRETE DECONTAMINATION DEMOLITION &	DISPOSAL	1										· ·		
		3		•		•	÷	;						
Area (Ft*)	8020	7100	17600	18400	5600	3600	I	9600	0	1440	3600	0	1000	
Average Thickness (Fi)	0.5	0.5	0.5	0.5	1	0.5	· . · ·	0.5	0.0	0.5	0.5	0.0	0.5	
Volume (Ft [*] )	4010	3550	0068	9200	5800	1800		4800	0	720	1800	0	500	
Percent Regulting Decontamination	0.0%	0.0%	100.0%	100.0%	100.0%	100.0%		100.0%	0.0%	100.0%	100.0%	0.0%	0.0%	
Percent Decontaminated	0.0%	0.0%	75.0%	75.0%	40.0%	75.0%		75.0%	0.0%	100.0%	100.0%	0.0%	0.0%	
Decontemination (\$/F1*)	\$0,170	\$0.170	\$0.170	\$0,170	\$0.170	\$0.170		\$0,170	\$0.170	\$0,170	\$0.170	\$0,170	\$0.170	
Decontamination Cost	\$0	\$0	\$2,244	\$2.346	\$381	\$459	\$5,430	\$1,224	\$0	\$245	\$612	\$0	\$0	\$2.081
Demolition (\$/Ft ^a )	\$1,887	\$1,887	\$1.887	\$1,887	\$1,887	\$1,887		\$1,887	\$1,887	\$1.887	\$1,897	\$1,887	\$1,887	• • - •
Demolition Cost	\$15,134	\$13,398	\$33,211	\$34,721	\$10,587	\$6,793	\$113.824	\$18.115	\$0	\$2.717	\$6,793	\$0	\$1,887	\$29.513
Transportation & Disposal				*****									• • • • •	•===
A Onsite Disposal	1		1				l			1	1 1			
Percent to be Disposed Onelte	100%	100%	75%	75%	40%	75%		75%	0%	100%	100%	0%	100%	
Transmotation Cost	\$0	\$0	50	\$0	\$0	50		\$0	50	\$0	50	\$0	50	
Disposal Cost per Cubic Foot	\$0.049	\$0.049	\$0.049	\$0.049	\$0.049	\$0.049	1	\$0.049	\$0.049	\$0.049	\$0.049	\$0.049	\$0.049	
Disposal Cost (\$)	\$198	\$174	\$323	\$338	\$110	\$RR	\$1 208	\$178	50	\$35	\$88	\$0	\$25	\$324
B. Licensed Site					•		<b>•</b> ••	•			0.5	•••	420	+01+
Percent to be Shipped	0%	0%	25%	25%	60%	25%		25%	100%	0%	0%	100%	0%	
Distance (Miles)	150	150	150	150	150	150		150	150	150	150	150	150	
Cost per Mile (\$)	\$2.58	\$2.58	\$2,58	\$2.58	\$2.58	\$2.58		\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	
Transnortation Cost	\$0	\$0	\$1.577	\$1.648	\$2,408	\$323	\$5,958	\$860	\$0	\$0	\$0	\$0	\$0	\$860
Disposal Cost per Cubic Foot	\$3,70	\$3,70	\$3.70	\$3,70	\$3 70	\$3.70	**,000	\$3,70	\$3.70	\$3.70	\$3,70	\$3,70	\$3,70	<b>4000</b>
Quantity Per Truck Load (Vds*)	200	20	20.70	0	20.70	20.70		20.10	20.70	20.00	201	20.70	20	
Quantity Per Truck Load (FP)	540	540	540	540	840	540		540	RAD	R40	540	640	640	
Disposal Cost (\$)	50	s fn	\$8,140	\$8,510	\$12,432	\$1.645	\$30.747	\$4.440	60	<b>6</b> 0	50	\$0	50	54 440
TOTAL COST	\$15,330	\$13.572	\$45.495	\$47.583	\$25 898	\$9.306	\$157.164	\$24,818		\$2.997	\$7.493	<u>50</u>	\$1912	\$37 248
BEN					440,000					·			V 110 12	\$194 382

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				Irigaray						517		Brine	Brine	Brine	Brine	Permeate	
POND RECLAMATION COST	Pond A	Pond B	Pond C	Pond D	Pond E	Pond RA	Pond RB	Pond 1	Pond 2A	Pond 28	Pond 2C	Pond 1	Pond 2	Pond 3	Pond 4	Pond	
	· · · · · ·																
POND SLUDGE:	1																
Average Sludge Depth (Ft)	0.188	0.155	0.123	0.135	0.227	0.188	0.156			i i		0.165	0.222	0.143	0.065	0.000	
Average Area of Studge (Ft*)	50645	50804	62291	62291	29583	50845	50804					20909	20909	20909	20909		
Volume of Sludge (Ft*)	9559	7894	7662	8409	6715	8559	7894					3471	4642	2990	1422		
Volume of Sludge (Yds")	354	292	284	311	249	354	292	0	0	0	0	129	172	111	53	0	
Volume of Sludge Per Truck Loed (Yds*)	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	
# of Truck Loeds of Sludge	17.7	14.6	14.2	15.6	12.5	17.7	14.6	0.0	0.0	0.0	0.0	6.5	8.6	5.6	2.7	0.0	
Studge Hendling Cost Per Load (\$)	\$238.00	\$238.00	\$238.00	\$238.00	\$238.00	\$238.00	\$238.00	\$238.00	\$238.00	\$238.00	\$238.00	\$238.00	\$238.00	\$238.00	\$238.00	\$238.00	
Total Studge Handling Cost (\$)	\$4,213	\$3,475	\$3,380	\$3,713	\$2,975	\$4,213	\$3,475	\$0	\$0	\$0	\$0	\$1,547	\$2,047	\$1,333	\$843	\$0	
Transportation & Disposal																	
Percent To Be Shipped	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Distance (Miles)	150	150	150	. 150	150	150	150	150	150	150	150	150	150	150	150	150	
Cost Per Mile (\$)	\$2.59	\$2.58	\$2.58	\$2.58	\$2.58	\$2,58	\$2.58	\$2,58	\$2.58	\$2.58	\$2.58	\$2.58	\$2,58	\$2.58	\$2.58	\$2.58	
Transportation Cost (\$)	\$6,850	\$5,650	\$5,495	\$6.037	\$4.835	\$6,850	\$5,650	\$0	\$0	50	\$0	\$2,518	\$3.328	\$2,167	\$1.045	\$0	
Disposal Cost Per Cubic Foot (\$)	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	
Quantity Per Truck Load (Yds ² )	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	
Quantity Per Truck Load (EP)	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	540	
Discosal Cost (\$)	\$105 138	\$98,724	\$84 34R	\$92 RR4	\$74 250	\$105 138	\$98 724	5	50	\$0	\$0	\$38 A10	851 084	\$33 264	\$18.038	ŝ	
Total Transportation & Diagonal (\$)	\$111 QAA	802 974	\$90 843	\$98 701	\$70 088	\$111 DER	802 974		້ຄິ	້ຄ	÷.	\$41 128	\$54 412	\$35 431	\$17 083	ŝ	
TOTAL SILINGE COST (N)	\$118,201	805 940	\$03,045	\$102 414	\$02,000	8448 204	\$05,074					\$42,973	\$59,450	830,431	847 700		COEE 400
	- 4110,201	040	400,220	-9 IUZ,4 I4		-9110,201	990,049					942,073	\$00,408	\$30,704	- <b>1</b> 1,120	40	\$000,420 ]
POND LINER-	T			· · · · · · · · · · · · · · · · · · ·		r										·	
Total Dood Area (Acres)	1 175	172	1 75	1 72	0.78	2 17	2 17					1 10	1 10	1 10	1 10	0.00	
Total Pond Area (FP)	78230	74023.2	78230	74023 2	13078 B	04525 2	04525.2					47016	47016	47046	47016	0.00	
Easter For Station Sides	20.0%	20.0%	20.0%	20.06	20.0%	20.00	20.0%	20.04		20.00	20.00	20.0%	20.00	20.0%	20.04	20.00	
Total Lines Ame (513)	20.07	20.07	20.078	20.076	40772	442420	449490	20.076	20.07	20.0%	20.0%	20.076	20.076	20.078	20.078	20.0%	
Lines Thisimper (1996)	914/0	00000	1014/0	00000	40/12	113430	113430					0/499	01499	01489	0/489	~	· · · · · · · · · · · · · · · · · · ·
	0 4 4 9 4	0.4494		0 4494					0 4 4 94	30	30	30	30	30		30	
	0.1101	0.1101	0.1101	0.1101	0.1101	0.1101	0.1101	0.1101	0.1101	0.1181	0.1181	0.1161	0.1101	0.1101	0.1181	0.1101	
Liner Inchess (Ft)	0.0096	0.0098	0.0000	0.0098	0.0098	0.0098	0.0096	0.0098	0.0098	0.0098	0.0098	0.0096	0.0098	0.0090	0.0096	0.0096	
Swell Factor	25.0%	20.076	20.0%	20.0%	20.0%	25.0%	26.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	
Liner Volume (FT)	1121	1101	1121	1101	499	1390	1390	. 0	0	0	0	704	704	704	704	0	
Truck Loads of Liner	2.1	2.0	2.1	2.0	0.9	2.6	2.6	0.0	0.0	0.0	0.0	1.3	1.3	1.3	1.3	0.0	
Liner Handling Cost (\$)	ا مربع					· · · · · · ·	<b>.</b>										
Labor Crew Cost per Hour (\$)	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	
Hours per Load	2.0	2.0	2.0	2.0	2.0	2.0	2,0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Liner Hendling Cost Per Loed (\$)	\$240.00	\$240.00	\$240.00	\$240.00	\$240.00	\$240.00	\$240.00	\$240.00	\$240.00	\$240.00	\$240.00	\$240.00	\$240.00	\$240.00	\$240.00	\$240.00	1
Total Liner Hendling Cost (\$)	\$504	\$480	\$504	\$480	\$216	\$624	\$624	\$0	\$0	\$0	\$0	\$312	\$312	\$312	\$312	\$0	
Transportation & Disposal	4																
Percent To Be Shipped	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	1
Distance (Miles)	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	
Cost Per Mile (\$)	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	
Transportation Cost (\$)	\$813	\$774	\$813	\$774	\$348	\$1,006	\$1,008	\$0	\$0	\$0	\$0	\$503	\$503	\$503	\$503	\$0	
Disposal Cost Per Cubic Foot (\$)	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	
Quantity Per Truck Loed (Ft [*] )	540	640	540	540	540	540	540	540	540	540	540	540	540	540	540	540	
Disposal Cost (\$)	\$12,474	\$11,880	\$12,474	\$11,880	\$5,346	\$15,444	\$15,444	\$0	\$0	\$0	\$0	\$7,722	\$7,722	\$7,722	\$7,722	\$0	
Total Transportation & Disposal (\$)	\$13,287	\$12,654	\$13,287	\$12,654	\$5,694	\$16,450	\$16,450	\$0	\$0	\$0	\$0	\$8,225	\$8,225	\$8,225	\$8,225	\$0	
TOTAL LINER COST (\$)	\$13,791	\$13,134	\$13,791	\$13,134	\$5,910	\$17,074	\$17,074	\$0	\$0	\$0	\$0	\$8,537	\$8,537	\$8,537	\$8,537	\$0	\$128,057
POND BACKFILL:																	
Backfill required (Yds ³ )	8740	8580	8740	8580	2517	14617	16319	2345	1837	1637	163	9048	9048	9048	9048	18070	
Backfill Cost (\$/Yd*)	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1,00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	
TOTAL BACKFILL COST (\$)	\$8,740	\$8,580	\$8,740	\$8,580	\$2,517	\$14,617	\$16,319	\$2,345	\$1,837	\$1,537	\$163	\$9,048	\$9,048	\$9,048	\$9,048	\$18,070	\$128,237

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														Christensen			
				Ingenay						517		Brine	Brine	Brine	Brine	Permeate	
POND RECLAMATION COST	Pond A	Pond B	Pond C	Pond D	Pond E	Pond RA	Pond RB	Pond 1	Pond 2A	Pond 2B	Pond 2C	Pond 1	Pond 2	Pond 3	Pond 4	Pond	
		······															
RADIATION SURVEY	<b>I</b>															4 · · · • •	
Areal Required (acres)	1.75	1.72	1.75	1.72	0.78	2.17	2.17	0.00	0.00	0.00	0.00	1.10	1.10	1.10	1.10	0.00	
Survey Cost (\$/acre)	\$580	\$580	\$580	\$580	\$580	\$580	\$580	\$580	\$580	\$580	\$580	\$580	\$580	\$580	\$580	\$580	
TOTAL SURVEY COST (\$)	\$1,015	\$998	\$1,015	\$998	\$452	\$1,259	\$1,259	\$0	\$0	\$0	\$0	\$838	\$638	\$638	\$638	\$0	\$9,547
	-																
LEAK DETECTION SYSTEM REMOVAL	1																
Volume of Gravel and Piping (Yd ^a ) (Assume 3")			14337	13851				\$0									
Quantity per Truckloed (Ft ^a )			540	540				\$540								i 1	
Quantity to be Shipped			26.6	25.7				0.0					1			1 1	
Distance (Miles)			150	150				150								1 1	
Cost per Mile (\$)			\$2.58	\$2.58				\$2,58								1	
Transportation Cost (\$)			\$10.275	\$9.927				\$0								i	
Handling Cost (\$238/Load)			\$6,319	\$8,105				\$0.							i	1 1	
Disposal Fee per Cubic Font (\$)			\$3.70	\$3.70				\$3 70								i I	
Disposel Cost (\$)			\$53.047	\$51,249				\$0						·		1 1	
TOTAL LEAK DETECTION SYSTEM REMOVAL	\$0	\$0	\$69,641	\$67,280	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$136,921
TOTAL POND RECLAMATION COST	\$139,746	\$118,561	\$186,409	\$192,408	\$90,942	\$149,150	\$130,501	\$2,345	\$1,837	\$1,537	\$163	\$60,896	\$74,682	\$54,987	\$35,949	\$18,070	\$1,258,180

#### SUMMARY - IRIGARAY:

# \$701,799

TOTAL SLUDGE COST (\$) TOTAL LINER COST (\$) TOTAL BACKFILL COST (\$) TOTAL RADIATION SURVEY COST (\$) LEAK DETECTION SYSTEM REMOVAL TOTAL POND RECLAMATION COST

\$701,799 \$93,906 \$73,975 \$6,995 \$136,921 \$1,013,597

TOTAL SLUDGE COST (\$) TOTAL LINER COST (\$) TOTAL BACKFILL COST (\$) TOTAL RADIATION SURVEY COST (\$) LEAK DETECTION SYSTEM REMOVAL TOTAL POND RECLAMATION COST

SUMMARY - CHRISTENSEN:

\$153,621 \$153,521 \$34,148 \$54,262 \$2,562 \$0 \$244,583

TOTAL PROJECT COST - CR and IR (\$)

\$1,258,180

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COGEMA Mining, Inc. Restoration and Reclamation Costs

Wyoming Operations WORKSHEET 5

C:\Files\Files1\478IRCR\478bnd03WKST5.xls		Irigaray				Christ	ensen	
	Mine Units	517 USMT	Monitor/		Mine Units	Monitor/	Misc.	
	#1 Thru #9	Test Sites	Trend	Sub Total	#2 Thru #7	Trend	Regional	Sub Total
Number of Wolle	1064	44	244	4290	2062	207	407	0506
Average Depth	1004	250	314	1309	2002	321	137	2520
Average Depth	250	200	200		410	410	410	
Average Diameter	4.5	4.0	4.5		4.5	4.5	4.5	
Materials	T							
Bentonite Chips Required (Ft ³ /Well)	11.6	11.6	11.6		11.6	11.6	11.6	
Bags of Chips Required/Well	15.0	15.0	15.0		15.0	15.0	15.0	
Cost Per Bag (\$)	\$4.50	\$4.50	\$4.50		\$4.50	\$4.50	\$4.50	
Cost/Well Bentonite Chips (\$)	\$67.50	\$67.50	\$67.50		\$67.50	\$67.50	\$67.50	
Gravel Fill Required (Ft*/Well)	15.7	15.7	15.7		33.6	33.6	33.6	
Gravel Fill Required (Yd³/Well)	0.6	0.6	0.6		1.2	1.2	1.2	
Cost of Grave!/Yd³ (\$)	\$17.53	\$17.53	\$17.53		\$17.53	\$17.53	\$17.53	
Cost/Well Gravel Fill (\$)	\$10.19	\$10.19	\$10.19		\$21.82	\$21.82	\$21.82	· ·
Cement Cone/Markers Req'd/Well	1.0	1.0	1.0		1.0	1.0	1.0	
Cost of Cement Cones/Markers (\$)	\$4.00	\$4.00	\$4.00		\$4.00	\$4.00	\$4.00	
Total Materials Cost per Well	\$81.69	\$81.69	\$81.69		\$93.32	\$93.32	\$93.32	
Labor								
Hours Required per Well	1.0	1.0	1.0		1.0	1.0	1.0	
Labor Cost per Hour	\$70.00	\$70.00	\$70.00	•	\$70.00	\$70.00	\$70.00	
Total Labor Cost per Well (\$)	\$70.00	\$70.00	\$70.00		\$70.00	\$70.00	\$70.00	-
Equipment Rental	· · ·							
Hours Required per Well	1.0	1.0	. 1.0		1.0	1.0	1.0	
Backhoe w/Operator Cost/Hr (\$)	\$35.00	\$35.00	\$35.00		\$35.00	\$35.00	\$35.00	
Total Equipment Cost per Well (\$)	\$35.00	\$35.00	\$35.00	1	\$35.00	\$35.00	\$35.00	
Total Cost per Well (\$)	\$186.69	\$186.69	\$186.69		\$198.32	\$198.32	\$198.32	
TOTAL WELL ABANDONMENT COST (\$)	\$198,642	\$2,054	\$58,622	\$259,317	\$408,926	\$64,849	\$27,169	\$500,944

GRAND TOTAL IRIGARAY AND CHRISTENSEN

\$760,261

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C:\Files\Files1\478IRCR\478bnd03WKST6.xls	Irigaray	Christensen	Christensen	Christensen	Christensen	Christensen	Total
	Mine Unit(s)	Mine Units	Mine Unit	Mine Unit	Mine Unit	Mine Unit	Christensen
WELLFIELD EQUIPMENT REMOVAL & DISPOSAL	#1 Thru #9	<b>#2 Thru #4</b>	#5	#6	#7	#8	& Irigaray

A. Removal         100         300         300         300           Total Number of Wells         1064         1021         454         446           Total Number of Wells         10640         1021         454         446           Cost of Removal (\$Ft)         \$01630         3003500         148200         133800           Cost of Removal (\$Ft)         \$0193         \$0.193         \$0.193         \$0.193           Cost of Removal (\$Ft)         0.016         0.016         0.016         0.016           Chipped Volume Reduction (Ft/Ft)         0.016         0.016         0.016         0.016           Quantity Per Truck Loads         3.2         9.1         4.4         4.0         4.0           B. Survey & Decontamination         0%         0%         0%         0%         0%           Cost of Decontamination         0%         0%         0.0         0.0         0.0           Cost for Decontamination (\$)         \$50         \$50         \$50         \$50         \$50         \$50           1.1         Loads To Be Shipped         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         100.0%         \$00         \$0         \$0         \$0<	I Wellfield Piping							
Length/Well (Ft)         100         300         300         300           Total Quantity (Ft)         10640         306300         148200         133800           Cost of Removal (SFt)         \$0183         \$20,535         \$59,116         \$28,603         \$25,823         \$134,077           Average D0 (inches)         3.0         3.0         0.165         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016	A. Removal							ł
Total Number of Wells         1064         1021         444         446           Total Quanity (F1)         106400         306300         148200         133800           Cost of Removal (\$F1)         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193           Cost of Removal (\$F1)         0.016         0.016         0.016         0.016         0.016           Chipped Valume (F1)         0.016         0.016         0.016         0.016         0.016           Chipped Valume (F1)         1.702         4.901         2.371         2.141         0           Quanity Per Track Load (F1)         540         540         540         540         540           Percent Requiring Decontamination         0%         0%         0%         0%         0%           Loads for Decontamination (\$0.0         0.0         0.0         0.0         0.0         0.0           Cost for Decontamination (\$15)         \$0         \$0         \$0         \$0         \$0         \$0           1.1         Leads for Decontamination (\$16)         \$0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%<	Length/Well (Ft)	100	300	300	300			1
Total Quantity (FI)         106400         306300         148200         133800           Cost of Removal (S)         \$20,535         \$59,116         \$28,633         \$25,823         \$134,077           Average OD (Inches)         3.0         3.0         3.0         3.0         3.0         3.0           Chipped Volume Reduction (FtVFt)         0.016         0.016         0.016         0.016         0.016           Chipped Volume (FT)         1,702         4,901         2,371         2,141         1.000           Quantity Per Truck Loads         3.2         9.1         4.4         4.0         540           Survey & Decontamination         0.0         0.0         0.0         0.0         0.0         0.0           Cost for Decontamination (\$1.0ad)         \$550.00         \$550.00         \$500.00         \$50         \$0           Cost for Decontamination (\$2.0ad)         \$2.05         \$0         \$0         \$0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0	Total Number of Wells	1064	1021	494	446			
Cost of Removal (\$F1)         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193         \$0.193	Total Quantity (Ft)	106400	306300	148200	133800			
Cost of Removal (\$)         \$20,535         \$59,116         \$226,633         \$256,233         \$134,077           Average OD (Inches)         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0         3.0	Cost of Removal (\$/Ft)	\$0,193	\$0,193	\$0,193	\$0,193			
Average OD (nothes)         0.30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30         30 </td <td>Cost of Removal (\$)</td> <td>\$20,535</td> <td>\$59,116</td> <td>\$28,603</td> <td>\$25,823</td> <td></td> <td></td> <td>\$134.077</td>	Cost of Removal (\$)	\$20,535	\$59,116	\$28,603	\$25,823			\$134.077
Chipped Volume Reduction (FV/Ft)         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016         0.016	Average OD (Inches)	3.0	3.0	3.0	3.0			
Chipped Volume (FP)         1,702         4,901         2,371         2,141           Quantity Per Truck Load (FP)         540         540         540         540           Total Number of Truck Loads         3.2         9.1         4.4         4.0           B. Survey & Decontamination         0%         0%         0%         0%           Loads for Decontamination         0.0         0.0         0.0         0.0           Cost for Decontamination (\$/Load)         \$550.00         \$550.00         \$500.00         \$500.00           Cost for Decontamination (\$/Load)         \$550.00         \$500.00         \$500.00         \$50           C. Transport & Disposal         30         \$0         \$0         0.0         0.0           1. Landfill         -         -         -         -         \$0         \$0           C. Transportation Cost (\$/mile)         \$2.26         \$2.56         \$2.56         \$2.56         \$2.56         \$2.56         \$2.56         \$2.56         \$2.56         \$2.56         \$2.56         \$2.56         \$2.56         \$2.56         \$2.56         \$2.56         \$2.56         \$2.56         \$2.56         \$2.56         \$2.56         \$2.56         \$2.56         \$2.56         \$2.56         \$2	Chipped Volume Reduction (Ft*/Ft)	0.016	0.016	0.016	0.016			
Claimitry Per Truck Load (FF)         540         540         540         540           Total Number of Truck Loads         3.2         9.1         4.4         4.0           B. Survey & Decontamination         %REFI         %         0%         0%           Percent Requiring Decontamination         0.0         0.0         0.0         0.0         0.0           Cost for Decontamination (\$Load)         \$550.00         \$550.00         \$500.00         \$500.00         \$500.00           Cost for Decontamination (\$Load)         \$550.00         \$500.00         \$500.00         \$500.00         \$50           C. Transport & Disposal         3.0         \$0         \$0         0.0         0.0         \$50           1.1 Landfill         .         .         Transportation Cost (\$mile)         \$2.58         \$2.58         \$2.58         \$2.58           Transportation Cost (\$mile)         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58	Chipped Volume (Ft ^s )	1,702	4.901	2.371	2.141			
Total Number of Truck Loads         3.2         8.1         4.4         4.0           B. Survey & Decontamination         9%         0%         0%         0%         0%           Percent Requiring Decontamination         0.0         0.0         0.0         0.0         0.0           Cost for Decontamination (\$1/Load)         \$550.00         \$550.00         \$550.00         \$550.00         \$50         \$0         \$0           C. Transport & Disposal         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1         1.1	Quantity Per Truck Load (Ft ^a )	540	540	540	540			
B. Survey & Decontamination         #REFI         #REFI         #REFI           Percent Requiring Decontamination         0,0         0,0         0,0         0,0         0,0           Costs for Decontamination         \$50,00         \$550,00         \$500,00         \$500,00         \$500,00           Cost for Decontamination (\$)         \$500,00         \$500,00         \$500,00         \$500,00         \$500,00           Cost for Decontamination (\$)         \$500,00         \$500,00         \$500,00         \$500,00         \$500,00           Cost for Decontamination (\$)         \$500,00         \$500,00         \$500,00         \$500,00         \$500,00           Cost for Decontamination (\$)         \$500,00         \$500,00         \$500,00         \$500,00         \$500,00           Cost for Decontamination (\$)         \$500,00         \$500,00         \$500,00         \$500,00         \$500,00           I Landfill         a. Transportation Cost (\$/mile)         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58	Total Number of Truck Loads	3.2	9.1	4.4	4.0			
Percent Requiring Decontamination         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%	B. Survey & Decontamination						1	
Percent Requiring Decontamination         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0%         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         <			1	#REF!			i i	
Loads for Decontamination         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0 <td>Percent Requiring Decontamination</td> <td>0%</td> <td>0%</td> <td>0%</td> <td>0%</td> <td></td> <td></td> <td></td>	Percent Requiring Decontamination	0%	0%	0%	0%			
Cost for Decontamination (\$/Load)         \$550.00         \$550.00         \$550.00         \$500.00         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0	Loads for Decontamination	0.0	0.0	0.0	0.0			
Cost for Decontamination (\$)         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         <	Cost for Decontamination (\$/Load)	\$550.00	\$550.00	\$550.00	\$500.00			1 .
C. Transport & Disposal       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0 <td>Cost for Decontamination (\$)</td> <td>\$0</td> <td>\$0</td> <td>\$0</td> <td>\$0</td> <td></td> <td></td> <td>SO SO</td>	Cost for Decontamination (\$)	\$0	\$0	\$0	\$0			SO SO
1.) Landfill       a. Transportation       0.0%       0.0%       0.0%       0.0%         Percent To Be Shipped       0.0       0.0       0.0       0.0       0.0         Distance (Miles)       48       48       48       48       48         Transportation Cost (\$/mile)       \$2.58       \$2.58       \$2.58       \$2.58       \$2.58         Transportation Cost (\$)       \$0       \$0       \$0       \$0       \$0       \$0         Disposal       0.0       \$12.00       \$12.00       \$12.00       \$12.00       \$0       \$0         Visposal Fee Per Yd*       \$12.00       \$12.00       \$12.00       \$0       \$0       \$0         Disposal Cost (\$)       \$0       \$0       \$0       \$0       \$0       \$0       \$0         2) Licensed Site	C. Transport & Disposal							1 **
a. Transportation         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         0.0%         50         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0	1.) Landfill	1					1	
Percent To Be Shipped         0.0%         0.0%         0.0%         0.0%         0.0%           Loads To Be Shipped         0.0         0.0         0.0         0.0         0.0           Distance (Miles)         48         48         48         48           Transportation Cost (\$/mile)         \$2.58         \$2.58         \$2.58         \$2.58           Transportation Cost (\$)         \$0         \$0         \$0         \$0         \$0           b. Disposal Fee Per Yd ³ \$12.00         \$12.00         \$12.00         \$12.00         \$12.00           Yds ³ Per Load         20         20         20         20         20         20           Disposal Cost (\$)         \$0         \$0         \$0         \$0         \$0         \$0         \$0           Total Cost - Landfill         \$0         \$0         \$0         \$0         \$0         \$0           2.) Licensed Site         0         \$0         \$0         \$0         \$0         \$0           a. Transportation         150         150         150         150         150         150           Distance (Miles)         152.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58	a. Transportation						1	
Loads To Be Shipped         0.0         0.0         0.0         0.0         0.0           Distance (Miles)         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48	Percent To Be Shipped	0.0%	0.0%	0.0%	0.0%		1	
Distance (Miles)         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48         48	Loads To Be Shipped	0.0	0.0	0.0	0.0			
Transportation Cost (\$/mile)         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58 <th< td=""><td>Distance (Miles)</td><td>48</td><td>48</td><td>48</td><td>48</td><td></td><td></td><td></td></th<>	Distance (Miles)	48	48	48	48			
Transportation Cost (\$)         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0	Transportation Cost (\$/mile)	\$2.58	\$2.58	\$2.58	\$2,58			1.
b. Disposal Disposal Fee Per Yd³       \$12.00       \$12.00       \$12.00       \$12.00         Yds³ Per Load       20       20       20       20       20         Disposal Cost (\$)       \$0       \$0       \$0       \$0       \$0         Total Cost - Landfill       \$0       \$0       \$0       \$0       \$0         2.) Licensed Site	Transportation Cost (\$)	SO	\$0	\$0	\$0			<b>\$0</b>
Disposal Fee Per Yd³         \$12.00         \$12.00         \$12.00         \$12.00           Yds³ Per Load         20         20         20         20         20           Disposal Cost (\$)         \$0         \$0         \$0         \$0         \$0         \$0           Total Cost - Landfill         \$0         \$0         \$0         \$0         \$0         \$0         \$0           2.) Licensed Site         ************************************	b. Disposal						1	
Yds ³ Per Load       20       20       20       20       20         Disposal Cost (\$)       \$0       \$0       \$0       \$0       \$0       \$0       \$0         Total Cost - Landfill       \$0       \$0       \$0       \$0       \$0       \$0       \$0         2.) Licensed Site       a. Transportation       percent To Be Shipped       100.0%       100.0%       100.0%       100.0%       \$0       \$0         Loads To Be Shipped       3.2       9.1       4.4       4.0       \$0       \$0         Distance (Miles)       150       150       150       150       \$0       \$0         Cost Per Mile (\$/mile)       \$2.58       \$2.58       \$2.58       \$2.58       \$2.58       \$2.58         Transportation Cost (\$)       \$11.238       \$3,522       \$1,703       \$11,548       \$8,011         b. Disposal Cost Per Ft ³ \$11.00       \$11.00       \$11.00       \$11.00       \$11.00       \$11.00       \$11.00       \$11.00       \$11.00       \$11.00       \$11.00       \$11.00       \$11.00       \$11.00       \$11.00       \$11.00       \$11.00       \$11.00       \$11.00       \$11.00       \$11.00       \$11.00       \$11.00       \$11.00       \$11.00	Disposal Fee Per Yd ³	\$12.00	\$12.00	\$12.00	\$12.00		1	
Disposal Cost (\$)         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0	Yds ³ Per Load	20	20	20	20			
Total Cost - Landfill       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0       \$0 <t< td=""><td>Disposal Cost (\$)</td><td>\$0</td><td>\$0</td><td>\$0</td><td>50</td><td></td><td>Į</td><td></td></t<>	Disposal Cost (\$)	\$0	\$0	\$0	50		Į	
2.) Licensed Site       100.0%       100.0%       100.0%       100.0%         a. Transportation       Percent To Be Shipped       100.0%       100.0%       100.0%       100.0%         Loads To Be Shipped       3.2       9.1       4.4       4.0       150       150         Distance (Miles)       150       150       150       150       150       150         Cost Per Mile (\$/mile)       \$2.58       \$2.58       \$2.58       \$2.58       \$2.58         Transportation Cost (\$)       \$11.238       \$3,522       \$1,703       \$1,548       \$8,011         b. Disposal       Disposal Cost Per Ft³       \$11.00       \$11.00       \$11.00       \$11.00         Disposal Cost Per Ft³       \$11.00       \$11.00       \$11.00       \$11.00       \$11.00         Quantity Per Truck Load (Yds³)       20       20       20       20       20       20       \$122,958         Total Cost - Licensed Site       \$20,246       \$57,576       \$27,839       \$25,308       \$130,969       \$130,969       \$130,969       \$130,969       \$130,969       \$130,969       \$130,969       \$130,969       \$130,969       \$130,969       \$130,969       \$130,969       \$130,969       \$130,969       \$130,969       \$130,9	Total Cost - Landfill	sol	sol	so l	sol			so so
a. Transportation       100.0%       100.0%       100.0%       100.0%         Percent To Be Shipped       3.2       9.1       4.4       4.0         Distance (Miles)       150       150       150       150         Cost Per Mile (\$/mile)       \$2.58       \$2.58       \$2.58       \$2.58         Transportation Cost (\$)       \$1,238       \$3,522       \$1,703       \$1,548       \$8,011         b. Disposal       Disposal Cost Per Ft ^a \$11.00       \$11.00       \$11.00       \$11.00       \$11.00       \$11.00         Disposal Cost Per Ft ^a \$11.00       \$11.00       \$11.00       \$11.00       \$11.00       \$11.00       \$11.00         Disposal Cost Cost Cost (\$)       \$19,008       \$54,054       \$26,136       \$23,760       \$122,958         Total Cost - Licensed Site       \$20,246       \$57,576       \$27,839       \$25,308       \$130,969         Total Cost - Transport & Disposal       \$20,246       \$57,576       \$27,839       \$25,308       \$130,969         Total Cost - Transport & Disposal       \$20,246       \$57,576       \$27,839       \$25,308       \$130,969         Total Cost - Transport & Disposal       \$20,246       \$57,576       \$27,839       \$25,308       \$130,969	2.) Licensed Site		**		••			
Percent To Be Shipped         100.0%         100.0%         100.0%         100.0%         100.0%           Loads To Be Shipped         3.2         9.1         4.4         4.0         4.0           Distance (Miles)         150         150         150         150         150           Cost Per Mile (\$/mile)         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58           Transportation Cost (\$)         \$1,238         \$3,522         \$1,703         \$1,548         \$8,011           b. Disposal         Disposal Cost Per Ft ^a \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00 <t< td=""><td>a. Transportation</td><td></td><td>· _</td><td></td><td></td><td></td><td></td><td> </td></t<>	a. Transportation		· _					
Loads To Be Shipped         3.2         9.1         4.4         4.0           Distance (Miles)         150         150         150         150           Cost Per Mile (\$/mile)         \$2.58         \$2.58         \$2.58         \$2.58           Transportation Cost (\$)         \$1,238         \$3,522         \$1,703         \$1,548         \$8,011           b. Disposal         Disposal Cost Per Ft ³ \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$122,958           Outantity Per Truck Load (Yds ³ )         20         20         20         20         20         \$122,958           Total Cost - Licensed Site         \$20,246         \$57,576         \$27,839         \$25,308         \$130,969           Total Cost - Transport & Disposal         \$20,246         \$57,576         \$27,839         \$25,308         \$130,969           Total Cost - Transport & Disposal         \$20,246         \$57,576         \$27,839         \$25,308         \$130,969	Percent To Be Shipped	100.0%	100.0%	100.0%	100.0%			1
Distance (Miles)         150         150         150         150           Cost Per Mile (\$/mile)         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58           Transportation Cost (\$)         \$1,238         \$3,522         \$1,703         \$1,548         \$8,011           b. Disposal         Disposal Cost Per Ft ³ \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00         \$11.00 <t< td=""><td>Loads To Be Shipped</td><td>3.2</td><td>9.1</td><td>4.4</td><td>4.0</td><td></td><td></td><td>1</td></t<>	Loads To Be Shipped	3.2	9.1	4.4	4.0			1
Cost Per Mile (\$/mile)         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.58         \$2.59         \$2.57.00         \$2.97.00         \$2.97.00         \$2.97.00         \$2.97.00         \$2.97.00         \$2.97.00         \$2.97.00         \$2.97.00         \$2.97.00         \$2.97.00         \$2.97.00         \$2.97.00         \$2.97.00         \$2.97.00         \$2.97.00         \$2.97.00         \$2.97.00         \$2.97.00         \$2.97.00	Distance (Miles)	150	150	150	150			· ·
Transportation Cost (\$)       \$1,238       \$3,522       \$1,703       \$1,548       \$8,011         b. Disposal       Disposal Cost Per Fl³       \$11.00       \$11.00       \$11.00       \$11.00       \$11.00         Disposal Cost Per Fl³       \$11.00       \$11.00       \$11.00       \$11.00       \$11.00       \$11.00         Disposal Cost Per Fl³       \$11.00       \$11.00       \$11.00       \$11.00       \$11.00         Disposal Cost Per Yd³       \$297.00       \$297.00       \$297.00       \$297.00       \$297.00         Quantity Per Truck Load (Yds³)       20       20       20       20       20       \$122,958         Total Cost - Licensed Site       \$20,246       \$57,576       \$27,839       \$25,308       \$130,969         Total Cost - Transport & Disposal       \$20,246       \$57,576       \$27,839       \$25,308       \$130,969         Total Cost - Transport & Disposal       \$20,246       \$57,576       \$27,839       \$25,308       \$130,969         Total Cost - Transport & Disposal       \$20,246       \$57,576       \$27,839       \$25,308       \$130,969	Cost Per Mile (\$/mile)	\$2.58	\$2.58	\$2.58	\$2.58			j.
b. Disposal       \$11.00       \$11.00       \$11.00       \$11.00         Disposal Cost Per Ft³       \$11.00       \$11.00       \$11.00       \$11.00         Disposal Cost Per Ft³       \$11.00       \$11.00       \$11.00       \$11.00         Disposal Cost Per Ft³       \$297.00       \$297.00       \$297.00       \$297.00         Quantity Per Truck Load (Yds³)       20       20       20       20         Disposal Cost (\$)       \$19,008       \$54,054       \$26,136       \$23,760         Total Cost - Licensed Site       \$20,246       \$57,576       \$27,839       \$25,308       \$130,969         Total Cost - Transport & Disposal       \$20,246       \$57,576       \$27,839       \$25,308       \$130,969         Total Cost - Transport & Disposal       \$20,246       \$57,576       \$27,839       \$25,308       \$130,969         Total Cost - Transport & Disposal       \$20,246       \$57,576       \$27,839       \$25,308       \$130,969         Total Cost - Transport & Disposal       \$20,246       \$57,576       \$27,839       \$25,308       \$130,969	Transportation Cost (\$)	\$1 238	\$3.522	\$1 703	\$1 548			\$8.011
Disposal Cost Per Ft³         \$11.00         \$11.00         \$11.00         \$11.00           Disposal Fee Per Yd³         \$297.00         \$297.00         \$297.00         \$297.00           Quantity Per Truck Load (Yds³)         20         20         20         20           Disposal Cost (\$)         \$19,008         \$54,054         \$26,136         \$23,760         \$122,958           Total Cost - Licensed Site         \$20,246         \$57,576         \$27,839         \$25,308         \$130,969           Total Cost - Transport & Disposal         \$20,246         \$57,576         \$27,839         \$25,308         \$130,969           Total Cost - Transport & Disposal         \$20,246         \$57,576         \$27,839         \$25,308         \$130,969	b. Disposal	<b>,</b> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	+0,011		<b>•</b> 1,010			<b>4</b> 0,011
Disposal Fee Per Yd³         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$297.00         \$207.00         \$200         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         212,958         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$145,600         \$5144,24         \$50         \$50	Disposal Cost Per Et*	\$11.00	\$11.00	\$11.00	\$11.00			
Quantity Per Truck Load (Yds³)         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         20         21         5130,969         \$130,969         \$130,969         \$130,969         \$145,600         \$514,600         \$55,414         \$51,421         \$0         \$10         \$0         \$10         \$0         \$10         \$0         \$10,969         \$10,969         \$10,969         \$10,969         \$10         \$10         \$10         \$10	Disposal Fee Per Yd ³	\$297.00	\$297.00	\$297.00	\$297.00			1
Disposal Cost (\$)         \$19,008         \$54,054         \$26,136         \$23,760         \$122,958           Total Cost - Licensed Site         \$20,246         \$57,576         \$22,7839         \$25,308         \$130,969           Total Cost - Transport & Disposal         \$20,246         \$57,576         \$27,839         \$25,308         \$130,969           Total Cost - Transport & Disposal         \$145,600         \$56,441         \$57,576         \$25,308         \$130,969	Quantity Per Truck Load (Vds ^a )	20	20	20	201.00			]
Total Cost - Transport & Disposal         \$20,246         \$57,576         \$22,839         \$25,308         \$130,969           Total Cost - Transport & Disposal         \$20,246         \$57,576         \$27,839         \$25,308         \$130,969           Total Cost - Transport & Disposal         \$445,600         \$56,441         \$0         \$0         \$00,000	Disposal Cost (\$)	\$10 008	\$54.054	\$26 136	\$23 760			\$122 069
Total Cost - Transport & Disposal         \$20,246         \$57,576         \$22,839         \$25,308         \$130,969           Total Cost - Transport & Disposal         \$445,600         \$644,800         \$644,800         \$644,800         \$644,800         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$130,969         \$100,969         \$100,969	Total Cost - Licensed Site	\$20.246	\$57 576	\$27 830	\$25 308			\$130 969
	Total Cost - Transport & Disposal	\$20 246	\$57 576	\$27 830	\$25 308		· ·	\$130 969
1000000000000000000000000000000000000	Total Cost - WF Piping Removal & Disposal	\$40,782	\$116.692	\$56.441	\$51,131	\$0	S0	\$265,046

## COGEMA Mining, Inc.

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Restoration and Reclamation Costs Wyoming Operations

WORKSHEET 6 Christensen C:\Files\Files1\478IRCR\478bnd03WKST6.xls Irigaray Christensen Tota! Christensen Christensen Christensen Mine Unit(s) Christensen Mine Units Mine Unit Mine Unit Mine Unit **Mine Unit** & Irigaray WELLFIELD EQUIPMENT REMOVAL & DISPOSAL #1 Thru #9 #2 Thru #4 #5 #6 #7 #8 II Production Well Pumps A. Pump and Tubing Removal Number of Production Wells 424 443 217 202 \$21.44 \$21.44 \$21.44 Cost of Removal (\$/well) \$21.44 Cost of Removal (\$) \$9.091 \$9.498 \$4.652 \$4.331 \$27,572 Number of Pumps Per Truck Load 180 180 180 180 Number of Truck Loads (Pumps) 2.5 1.2 2.4 1.1 B. Survey & Decontamination (Pumps) 50.0% Percent Requiring Decontamination 50.0% 50.0% 50.0% Loads for Decontamination 1.2 1.3 0.6 0.6 Cost for Decontamination (\$/Load) \$550.00 \$550.00 \$550.00 \$550.00 Cost for Decontamination (\$) \$2,035 \$660 \$715 \$330 \$330 C. Tubing Volume Reduction & Loading Length per Well (Ft) 100 300 300 450 Total Quantity (Ft) 132.900 42.400 65.100 90,900 Cost of Removal (\$/Ft) \$0.02 \$0.02 \$0.02 \$0.02 Cost of Removal (\$) \$1.018 \$3,190 \$1.562 \$2,182 \$7,951 Average OD (Inches) 3.0 3.0 3.0 3.0 Chipped Volume Reduction (Ft^{*}/Ft) 0.016 0.016 0.016 0.016 Chipped Volume (Ft^a) 678 1,042 1,454 2,126 Quantity per Truckload (FP) 540 540 540 540 1.9 Number of Truck Loads 3.9 2.7 1.3 D. Transport & Disposal 1.) Landfill a. Transportation Percent To Be Shipped (Pumps) 50.0% 50.0% 50.0% 50.0% Loads To Be Shipped 1.2 1.3 0.6 0.6 Distance (Miles) 48 48 48 48 Cost Per Mile (\$/mile) \$2.58 \$2.58 \$2.58 \$2.58 Transportation Cost (\$) \$149 \$161 \$74 \$74 \$458 b. Disposal Disposal Fee Per Yd³ \$12.00 \$12.00 \$12.00 \$12.00 Yds³ Per Load 20 20 20 20 \$888 Disposal Cost (\$) \$288 \$312 \$144 \$144 Total Cost - Landfill \$1.346 \$437 \$473 \$218 \$218 2.) Licensed Site a. Transportation Percent To Be Shipped (Pumps) 50.0% 50.0% 50.0% 50.0% Percent To Be Shipped (Tubing) 100.0% 100.0% 100.0% 100.0% Loads To Be Shipped 2.5 5.2 2.5 3.2 Distance (Miles) 150 150 150 150 Cost Per Mile (\$/mile) \$2.58 \$2.58 \$2.58 \$2.58 Transportation Cost (\$) \$1,255 \$5,192 \$951 \$2,008 \$979 b. Disposal Disposal Cost Per Ft^a \$11.00 \$11.00 \$11.00 \$11.00 Disposal Fee Per Yd³ \$297.00 \$297.00 \$297.00 \$297.00 Quantity Per Truck Load (Yds*) 20 20 20 20 Disposal Cost (\$) \$14,590 \$30,815 \$15,022 \$19,265 \$79,693 Total Cost - Licensed Site \$15,541 \$32,823 \$16,000 \$20,521 \$84,885 Total Cost - Transport & Disposal <u>\$16,219</u> \$86,231 \$15,978 \$33,296 \$20,739 Total Cost - Pump Removal & Disposal \$26,746 \$46,699 \$22,763 \$27,581 \$0 \$0 \$123,789

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C:\Files\Files1\478IRCR\478bnd03WKST6.xls	Irigaray	Christensen	Christensen	Christensen	Christensen	Christensen	Total
	Mine Unit(s)	Mine Units	Mine Unit	Mine Unit	Mine Unit	Mine Unit	Christensen
WELLFIELD EQUIPMENT REMOVAL & DISPOSAL	<b>#1 Thru #9</b>	#2 Thru #4	#5	#6	#7	#8	& Irigaray
III Surface Trunkline Piping							
A. Removal							
Total Quantity (Ft)	44700	<b>0</b>	0	0			~
Cost of Removal (\$/Ft)	\$0.143	\$0.143	\$0.143	\$0.143			1
Cost of Removal (\$)	\$6,392	\$0	\$0	\$0			\$6,392
Average OD (Inches)	8.750	8.750	0.000	0.000			
Chipped Volume Reduction (Ft ⁴ /Ft)	0.088	0.088	0.088	0.088			
Chipped Volume (Ft ^a )	3934	0	0	0			
Quantity Per Truck Load (Ft ^a )	540	540	540	540			
Total Number of Truck Loads	7.3	0.0	0.0	0.0			
B. Survey & Decontamination							
Percent Requiring Decontamination	0.0%	0.0%	0.0%	0.0%			
Loads for Decontamination	0.0	0.0	0.0	0.0			
Cost for Decontamination (\$/Load)	\$550.00	\$550.00	\$550.00	\$550.00			· ·
Cost for Decontamination (\$)	\$0	\$0	\$0	\$0			\$0
C. Transport & Disposal							
1.) Landfill							1
a. Transportation		11 A. 19	•				
Percent To Be Shipped	0.0%	0.0%	0.0%	0.0%			
Loads To Be Shipped	0.0	0.0	0.0	0.0			
Distance (Miles)	48	48	48	48			
Cost Per Mile (\$/mile)	\$2.58	\$2.58	\$2.58	\$2.58			
Transportation Cost (\$)	\$0	\$0	\$0	<b>\$</b> 0			\$0
b. Disposal	1	·	• • • • • •	• • • • • •			
Disposal Fee Per Yd ^a	\$12.00	\$12.00	\$12.00	\$12.00			
Yds ³ Per Load	20	20	20	20			
Disposal Cost (\$)	\$0	\$0	· \$0	<b>\$</b> 0			\$0
Total Cost - Landfill	\$0	\$0	\$0	<b>\$</b> 0			
2.) Licensed Site							
a. Transportation				400.00			
Percent To Be Shipped	100.0%	100.0%	100.0%	100.0%			
Loads To Be Shipped	7.3	0.0	0.0	0.0			
Distance (Miles)	150	150	150	150			
Cost Per Mile (\$/mile)	\$2.58	\$2.58	\$2.58	\$2.58			60.040
Transportation Cost (\$)	\$2,819	- 20		<b>\$</b> 0			\$2,018
b. Disposal				<b>e</b> 44.00			
Disposal Cost Per FP	\$11.00	\$11.00	\$11.00	\$11.00			
Uisposal Fee Per Yd*	\$297.00	\$297.00	\$297.00	\$Z97.00			
Quanuty Per Truck Load (Yos')	20	20	20	20			842 270
Uisposal Cost (\$)	\$43,270	\$0	\$U #0	\$U			\$45,270
Total Cost - Licensed Site	\$40,089	\$0	\$U \$0	\$U #0			\$46,009
Total Cost - Hansport & Disposal	040,009 653.404			40 C0	to.	¢n.	\$52 494
Liorar Cost - Sunace Trunkline Removar & Disposal	1 @02,401	୍ ଏହି	- and				WUZ,701

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C:\Files\Files1\478IRCR\478bnd03WKST6.xls	Irigaray	Christensen	Christensen	Christensen	Christensen	Christensen	Total
	Mine Unit(s)	Mine Units	Mine Unit	Mine Unit	Mine Unit	Mine Unit	Christensen
WELLFIELD EQUIPMENT REMOVAL & DISPOSAL	#1 Thru #9	#2 Thru #4	#5	#6	#7	#8	& Irigaray
IV Burled Trunkline				_			
A. Removal							
Total Quantity (Ft)	7300	11565	24500	47000			Į .
Cost of Removal (\$/Ft)	\$2.80	\$2.80	\$2.80	\$2.80			
Cost of Removal (\$)	\$20,440	\$32,382	\$68,600	\$131,600			\$253,022
Average OD (Inches)	8.750	8.750	8.750	12.000			
Chipped Volume Reduction (Ft [*] /Ft)	0.088	0.088	.0.088	0.130			
Chipped Volume (Ft [*] )	642	1018	2156	6110			
Quantity Per Truck Load (Ft ^a )	540	540	540	540			
Number of Truck Loads	1.2	1.9	4.0	11.3			
B. Survey & Decontamination							·
Percent Requiring Decontamination	0.0%	0.0%	0.0%	0.0%			
Loads for Decontamination	0.0	0.0	0.0	0.0			
Cost for Decontamination, (\$/Load)	\$550.00	\$550.00	\$550.00	\$550.00			
Cost for Decontamination. (\$)	\$0	\$0	<b>\$</b> 0	\$0			\$0
C. Transport & Disposal			······				
1.) Landfill							
a. Transportation							
Percent To Be Shipped	0.0%	0.0%	0.0%	0.0%			
Loads To Be Shipped	0.0	0.0	0.0	0.0			1
Distance (Miles)	48	48	48	48			1
Cost Per Mile (S/mile)	\$2.58	\$2.58	\$2.58	\$2.58			
Transportation Cost (\$)	\$0	\$0	<b>S</b> 0	\$0			SO SO
h Disposal						+	
Disposal Fee Per Yd ³	\$12.00	\$12.00	\$12.00	\$12.00			1
Yds ³ Per I oad	20	20	20	20			
Disposal Cost (\$)	50	\$0	\$0	\$0			so
Total Cost - Lendfill	50	50	\$0	\$0			1
2) Licensed Site			<b>*</b> *				1
a Transportation	1						
Percent To Be Shinned	100.0%	100.0%	100.0%	100.0%			
Loads To Be Shipped	12	1 9	4.0	11.3			
Distance (Miles)	150	150	150	150			
Cost Per Mile (\$/mile)	\$2.58	\$2.58	\$2.58	\$2.58			
Transportation Cost (\$)	\$464	\$735	\$1 548	\$4 373			\$7 121
h Disposal			ф., <b>0</b> .ю	<b>\$1,010</b>			
Disposal Disposal Cast Per 519	611.00	£11 00	\$11.00	\$11.00			
Dispusal Gust Fei Ti	\$207.00	\$207.00	\$297.00	\$207.00			
Oughting Der Truck Lood (Vde3)	201.00	90	91.00	90			1
Disnest Cost (\$)	\$7 129	\$11 295	\$23.760	\$67 122			\$109 206
Total Cast - Licensed Site	\$7 502	\$12,024	\$25,700	\$71 405			\$116 417
Total Cost - Transport & Disposal	¢7,092	\$12,021	\$25,300	\$71 405			\$116 417
Total Cost - Buried Trunkling Removal & Disposal	\$28,022	\$44 402	\$03.000	\$203.005			\$369 439
Total Cost - Duneu Trunkline Removal & Disposal	1 420,032	L 4777,703	433,500				1 4000,400

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	Mine Unit(s)	Mine Units	Mine Unit	Mine Unit	Mine Unit	Mine Unit	Christenser
WELLFIELD EQUIPMENT REMOVAL & DISPOSAL	#1 Thru #9	#2 Thru #4	#5	#6	#7	#8	& Irigaray
V Manholes		·					
A. Removal							
Total Quantity	5	8	5	11			
Cost of Removal (\$ Each)	\$130.00	\$130.00	\$130.00	\$130.00			1
Cost of Removal (\$)	\$650	\$1,040	\$650	\$1,430			\$3,770
Quantity Per Truck Load	10	10	10	10			
Number of Truck Loads	0.5	0.8	0.5	1.1			
B. Survey & Decontamination							
Percent Requiring Decontamination	0.0%	0.0%	0.0%	0.0%			<b>[</b>
Loads for Decontamination	0.0	0.0	0.0	0.0			ł
Cost for Decontamination (\$/Load)	\$550.00	\$550.00	\$550.00	\$550.00			
Cost for Decontamination (\$)	\$0	\$0	\$0	\$0			<u>\$0</u>
C. Transport & Disposal							1
1.) Landfill			-	•			ł
a. Transportation							1
Percent To Be Shipped	0.0%	0.0%	0.0%	0.0%			[
Loads To Be Shipped	0.0	0.0	0.0	0.0			Į
Distance (Miles)	48	48	- 48	48			
Cost Per Mile (\$/mile)	\$2.58	\$2.58	\$2.58	\$2.58			
Transportation Cost (\$)	\$0	s0 -	\$0	\$0			\$0
b. Disposal							1
Disposal Fee Per Yd ³ (\$)	\$12.00	\$12.00	\$12.00	\$12.00			
Yds ^a Per Load	20	20	20	20			
Disposal Cost (\$)	\$0	\$0	\$0	\$0			\$0
Total Cost - Landfili	\$0	\$0	\$0	. <b>\$</b> 0			1
2.) Licensed Site							1
a. Transportation							
Percent To Be Shipped	100.0%	100.0%	100.0%	100.0%			
Loads To Be Shipped	0.5	0.8	0.5	1.1			
Distance (Miles)	150	150	150	150			
Cost Per Mile (\$/mile)	\$2.58	\$2.58	\$2.58	\$2.58			
Transportation Cost (\$)	\$194	\$310	\$194	\$426			\$1,122
b. Disposal							
Disposal Cost Per Ft ^a	\$11.00	\$11.00	\$11.00	\$11.00			
Disposal Fee Per Yd ^a	\$297.00	\$297.00	\$297.00	\$297.00			
Quantity Per Truck Load (Yds ^a )	20	20	20	20			· ·
Disposal Cost (\$)	\$2,970	\$4,752	\$2,970	\$6,534			\$17,226
Total Cost - Licensed Site	\$3,164	\$5,062	\$3,164	\$6, <del>9</del> 60			\$18,348
Total Cost - Transport & Disposal	\$3,164	\$5,062	\$3,164	\$6,960			\$18,348
Total Cost Manhole Removal & Disposal	\$3,814	\$6,102	\$3,814	\$8,390	\$0	\$0	\$22,118
ITOTAL COST - WELLFIELD EQUIP REMOVAL & DISP	\$151,854	\$213,895	\$176,926	\$290,198	\$0	\$0	\$832,873

Mine Units         Mine Un	Christensen & Irigeray
TOPSOIL REPLACEMENT & REVEGETATION       #1 Thru #9       #2 Thru #4       #5       #6       #7       #8         1       Process Plant and Office Building	& Irigaray
I         Process Plant and Office Building           A. Topsoil Hendling & Grading Affected Area (Acres)         5.0         2.5         0.0         0.0         0.0           Average Affected Thickness (Ins)         12.0         12.0         0.0         0.0         0.0         0.0           Average Affected Thickness (Ins)         12.0         12.0         0.0         0.0         0.0         0.0           Unit Cost - Hau/Place (\$Y/d*)         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00	
A. Topsoli Hending & Grading Affected Area (Acres)         5.0         2.5         0.0         0.0         0.0           A. Verage Affected Thickness (Ins)         12.0         12.0         0.0         0.0         0.0         0.0           A verage Affected Thickness (Ins)         12.0         12.0         0.0         0.0         0.0         0.0           Topsoli Volume (Yds*)         8087         4033         0         0         0         0         0           Unit Cost - Haul/Place (\$Yd*)         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00	
Affected Area (Acres)         5.0         2.5         0.0         0.0         0.0         0.0           Average Affected Thickness (Ins)         12.0         12.0         0.0         0.0         0.0         0.0           Topsoll Volume (Yds*)         8067         4033         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	
Average Affected Thickness (Ins)         12.0         12.0         12.0         0.0         0.0         0.0         0.0           Topsoil Volume (Yds*)         8067         4033         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	
Topsol Volume (Yds)         125         125         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5         0.5	
Init Cost - Haul/Piace (\$/Yd*)         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         <	
Topsoil Hendling Cost (\$)         \$1,067         \$4,033         \$0         \$0         \$0         \$0           Unit Cost - Grading (\$/Ac)         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00         \$50,00	
Unit Cost - Grading (\$/Ac)         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00         \$50.00	
Grading Cost (\$)         \$250         \$125         \$0         \$0         \$0         \$0           Sub Total - Topsoil         \$8,317         \$4,158         \$0         \$0         \$0         \$0           B. Radiation Survey & Soil Anelysis         unit Cost (\$/Ac)         \$560.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$50         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0 </td <td></td>	
Stub Total - Topsoli         \$4,158         \$0         \$0         \$0         \$0           B. Rediation Survey & Soil Anelysis         Junit Cost (\$/Ac)         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$50         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0<	
B. Rediction Survey & Soil Anelysis         40,100         40,100         40         40         40         40         40         40         40         40         40         40         40         40         40         40         40         40         40         40         40         40         40         40         40         40         40         40         40         40         40         40         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50         50	\$12 475
D.         Neutron Structure (\$/Ac)         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$580.00         \$50         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0	
Sub Total         Sub Total <t< td=""><td></td></t<>	
Construction         Construction<	\$4 350
C.         Norogenation Fertilizer (\$/Ac)         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49         \$46.49	
Arrow         Orona         Orona <th< td=""><td></td></th<>	
Bub Cotal g (urb)         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00         \$100.00	
Noticing a control of the local cost of the	
Sub Total - Revegation         \$2,459         \$1,229         \$0         \$0         \$0         \$0           Sub Total - Process Plant and Office Bidg.         \$13,675         \$6,638         \$0         \$0         \$0         \$0           Sub Total - Process Plant and Office Bidg.         \$13,675         \$6,838         \$0         \$0         \$0         \$0           II Ponds         A. Topsoil Handling & Grading Affected Area (Acres)         20.0         12.0         0.0         0.0         0.0         0.0           Average Affected Thickness (Ins)         12         12         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 <td></td>	
Sub Total - Process Plant and Office Bidg.         \$13,675         \$6,638         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0	\$3 688
II         Ponds           A. Topsoll Handling & Grading Affected Area (Acres)         20.0         12.0         0.0         0.0         0.0           Average Affected Thickness (Ins)         12         12         0         0         0         0           Topsoll Volume (Yds*)         32267         19360         0         0         0         0           Unit Cost - Haul/Place (\$/Yd*)         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00	\$20,513
A. Topsoil Handling & Grading Affected Area (Acres)         20.0         12.0         0.0         0.0         0.0         0.0           Average Affected Thickness (ins)         12         12         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	
Affected Area (Acres)         20.0         12.0         0.0         0.0         0.0           Average Affected Thickness (ins)         12         12         0         0         0         0           Topsoil Volume (Yds")         32287         19360         0         0         0         0           Unit Cost - Haul/Plece (\$/Yd")         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00	
Average Affected Thickness (Ins)         12         12         0         0         0         0           Topsoll Volume (Yds*)         32287         19360         0         0         0         0         0           Unit Cost - Haul/Place (\$/Yd*)         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00         \$1.00           Topsoll Hendling Cost (\$)         \$32.287         \$10.380         \$0         \$0         \$0         \$0	
Topsoll Volume (Yds*)         32287         19360         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	
Unit Cost - Haul/Place (\$/Yd ² ) \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.	
Unit Cost - Greding (\$/Ac) \$50.00 \$50.00 \$50.00 \$50.00 \$50.00 \$50.00	
Grading Cast (\$) \$1,000 \$600 \$0 \$0 \$0 \$0 \$0	
Sub Total - Toosoil \$33,267 \$19,860 \$0 \$0 \$0 \$0 \$0	\$53,227
B. Redistion Survey & Soil Anelysis	
Unit Cost (\$/Ac) \$580.00 \$580.00 \$580.00 \$580.00 \$580.00 \$580.00	
Sub Total - Survey & Analysis         \$11,600         \$6,960         \$0         \$0         \$0         \$0	\$18,560
C. Revegetion	
Fertilizer (\$/Ac) \$46,49 \$46,49 \$46,49 \$46,49 \$46,49 \$46,49	
Seeding Prep & Seeding (\$/Ac) \$168,68 \$168,68 \$168,68 \$168,68 \$168,68 \$168,68	
Mulching & Crimping (\$Ac) \$276.54 \$276.54 \$276.54 \$276.54 \$276.54	
Sub Total Cost/Acre \$491.71 \$491.71 \$491.71 \$491.71 \$491.71	
Sub Total - Revegation \$9,834 \$5,901 \$0 \$0 \$0 \$0	\$15,735
Sub Total - Ponds \$54.701 \$32.821 \$0 \$0 \$0 \$0	\$87 521

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Files/Files1478IRCR478bnd03WYWKST7.XL	Irigaray Mine Unit(s)	Christensen Mine Units	Christensen Mine Unit	Christensen Mine Unit	Christensen Mine Unit	Christensen Mine Unit	Total Christensen
SUL REPLACEMENT & REVEGETATION	#111111#9	#2 1780 #4	#0	#0	#/	#0	<u>c ingaray</u>
Wellfields							
A. Topsoil Handling & Grading				,			[
Affected Area (Acres)	40.0	55.0	30.0	50.0	35.0	40.0	
Average Affected Thickness (Ins)	35	00	0.0	0.0	00	0.0	
Tonsoil Volume (Vds ² )	18822	0.0	0.0	0.0		0.0	
Linit Cost - Haul/Place (\$V/#)	\$1.00	¢1 m	\$1.00	\$1 m	¢1.00	±1 m	
Tonneoil Headling Cost (\$)	¢1.00	#1.00	\$1.00 ¢0	\$1.00 \$0	\$1.00 ¢0	· • • 1.00	
Linit Cost - Condian (\$(Aa)	\$10,022 \$50.00	<b>650 00</b>	<b>6</b> 50,00	05 650.00	\$50 00	\$0 \$0	
Condina Cost (t)	\$00.00	\$50.00	\$50.00	\$0.00	\$50.00	\$0,00	
Sub Total Tangall	\$2,000	\$2,700	\$1,000	\$2,500	\$1,750	. 00	e
B Dediction Summer & Seil Apphysic			\$1,000	\$Z,500	\$1,750	<u>\$0</u>	\$29,322
B. Rediation Survey & Soil Analysis	Arno 00		Arna aa				
Unit Cost (\$/Ac)	\$550.00	\$550.00	\$580.00	\$560.00	\$0.00	\$0.00	· · · · · · · · · · · ·
Sub I otal - Survey & Analysis	\$23,200	\$31,900	\$17,400	\$29,000	\$0	\$0	\$101,500
C. Spill Cleanup							
ATTOCIOU AFOR (ACTOS)	0.054	0.036	0	. 0	0	0	1
Affected Area (ft2)	2352	1568	· 0	0	0	0	
Affected Area Thickness (ft)	0.25	0.25	0.25	0.25	0.25	0.25	
Affected Volume (ft3)	588	392	. 0	0	0	0	
Quantity per Truckload (f13)	540	540	540	. 540	540	540	
Quantity to be Shipped (Loads)	1.1	0.7	0.0	0.0	0.0	0.0	
Distance (miles)	150	150	150	150	150	150	
Cost per Mile (\$)	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	\$2.58	
Transportation Cost (\$)	\$425.70	\$270.90	\$0.00	\$0.00	\$0.00	\$0.00	
Handling Cost (\$200/Load)	\$220.00	\$140.00	\$0.00	\$0.00	\$0.00	\$0.00	
Disposal Fee per Cubic Foot (\$)	\$3.70	\$3.70	\$3.70	\$3.70	\$3.70	\$3.70	
Disposal Cost	\$2,175.82	\$1,450.55	\$0.000	\$0.00	\$0.00	\$0.00	
Subtotal -Spill Cleanup	\$2,821.52	\$1,861.45	\$0.00	\$0.00	\$0.00	\$0.00	\$4.683
D Revegation					••••••••••••••••••••••••••••••		
Fertilizer (\$/Ac)	\$46.49	\$46.49	\$46.49	\$46.49	\$46.49	\$46,49	
Seeding Prep & Seeding (\$/Ac)	\$168.68	\$168.68	\$168.68	\$168.68	\$168.68	\$168.68	1
Mulching & Crimping (\$/Ac)	\$276.54	\$276.54	\$276.54	\$276.54	\$276.54	\$278.54	
Sub Total Cost/Acre	\$491.71	\$491.71	\$491.71	\$491.71	\$491.71	\$491.71	
Sub Total - Revegation	\$19,668	\$27.044	\$14,751	\$24 586	\$17 210	\$19 668	\$122 02
Sub Total - Welifields (\$)	\$66,512	\$63,555	\$33,651	\$56,086	\$18,980	\$19,669	\$258 433
Roads		400,000	400,001		<b>410,000</b>	<b>410</b> ,000	92.00,400
A. Topsoil Handling & Grading			· · · · · · · · · · · · · · · · · · ·		F		[
Affected Area (Acres)	25.0	20.0	15.0	21.0	00	0.0	
Average Affected Thickness (Ins)	12	12	12	12	12	42	
Tonsoil Volume (Yds ² )	40333	32287	24200	33880		12	
Linit Cost - Haul/Place (\$/\dl)	\$1.00	\$1.00	242.00	\$1.00	e	e1 00	
Tontail Handling Cost (\$)	¢1.00	\$1.00 \$20.087	\$1,00 \$24,000	\$1.00	31.00	\$1.00	
Linit Cost Grading (\$/As)	\$50,000 \$50,000		729,200	\$33,000	06 PT	90 06	
Cradian Cost (\$)	\$00.00	- \$50.00	\$30.00	\$00.00	00.00	\$50.00	
	₹1,200 844,500	\$1,000	\$75U	31,050	\$0	\$0	
D Dediction Commun. Coll Apph pic	\$41,253	\$33,207	\$24,950	\$34,930	\$0	\$0	\$134,730
D. REVIEWON SURVEY & SOIL ANERYSIS			<b>A T A A A</b>				
Unit Cost (\$/AC)	500.06	\$580.00	\$580.00	\$580.00	\$0.00	\$0.00	
SUD I OTAL - SULVAY & ANALYSIS	\$14,500	\$11,600	\$8,700	\$12,180	\$0	\$0	\$46,980
C. Revegation	<b>.</b>						
Ferrinzer (\$/AC)	\$46.49	\$46.49	\$46.49	\$46.49			
Seeding Prep & Seeding (\$/Ac)	\$168.68	\$168.68	\$168.68	\$168.68			1
Mulching & Crimping (\$/Ac)	\$276.54	\$276.54	\$276.54	\$278.54			
Sub Total Cost/Acre	\$491.71	\$491.71	\$491.71	\$491.71			
Sub Total - Revegation	\$12,293	\$9,834	\$7,378	\$10,328	\$0	\$0	\$39.829
Sara 172003 Roads (\$)	\$68,376	\$54,701	\$41,026	\$57,436	\$0	\$0	\$221,539

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5.

SOIL REPLACEMENT & REVEGETATION	Ingaray Mine Unit(s) #1 Thru #9	Mine Units #2 Thru #4	Christensen Mine Unit #5	Mine Unit #6	Christensen Mine Unit #7	Mine Unit #8	Total Christense & Irigaray
A Topsoil Handling & Grading							
Affected Area (Acres)	410	10.0	50	50	00	0.0	
Averana Affected Thickness (Inc)	-1.0	18.0	0.0	0.0	0.0	0.0	
Toppoil Volume (Vde?)	0.0	0.0	0	ő	0	0	
Linit Cost - Heul/Place (\$/V/P)	\$1.00	\$1.00	\$1.00	· • • • • • • •	\$1.00	\$1.00	
Toosoil Handling Cost (\$)	\$0	\$0	\$0.00	\$0	¢1.00	\$1.00 \$0	
Unit Cost - Grading (\$/Ac)	\$50.00	\$50.00	\$50.00	\$50.00	\$0.00	\$0.00	
Grading Cost (\$)	\$2 050	\$950	\$250	\$250	\$0	\$0.00	
Sub Total - Topsoil	\$2,050	\$950	\$250	\$250	\$0	ŝ	\$3.5
B Rediction Survey & Soil Analysis	ψ2,000	\$300		\$200		<del>vv</del>	
Unit Cost (\$/Ac)	\$580.00	\$580.00	\$580.00	\$580.00	\$0.00	\$0.00	
Sub Total - Survey & Analysis	\$23,780	\$11 020	\$2,900	\$2,900	\$0.00	\$0.00	\$40.6
C Reversion	420,700	ψ11,020	42,000		ψΨ.		<b>\$</b> 10,0
Fertilizer (\$/Ac)	\$46.49	\$46.49	\$46.49	\$46.49	\$0.00	\$0.00	
Seeding Prep & Seeding (\$/Ac)	\$168 68	\$168.68	\$168 68	\$168.68	\$0.00	\$0.00	
Mulching & Crimping (S/Ac)	\$278 54	\$278.54	\$278 54	\$278 54	\$0.00	\$0.00	
Sub Total Cost/Acre	\$491 71	\$491 71	\$491 71	\$491 71	\$0.00	\$0.00	
Sub Total - Reveation	\$20 160	\$9 343	\$2.459	\$2 459	\$0.00	\$0.00	\$34.4
Sub Total - Other	\$45,990	\$21,313	\$5,609	\$5,609	\$0	\$0	\$78.5
Remedial Action	* 10,000		, , , , , , , , , , , , , , , , , , ,	401202			0.010
A. Topsoil Handling & Grading							
Affected Area (Acres)	65.5	54.3	25.0	38.0	17.5	20.0	
Average Affected Thickness (ins)	0.0	0.0	0.0	0.0	0.0	0.0	1. A. A.
Topsoli Volume (Yds ³ )	0	0	0	0	0	0	
Unit Cost - Haul/Place (\$/YdP)	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00	
Toosoll Handling Cost (\$)	\$0	\$0	\$0	\$0	50	\$0	
Unit Cost - Grading (\$/Ac)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Grading Cost (\$)	\$0	\$0	\$0	\$0	50	\$0	
Sub Total - Topsoil	\$0	\$0	\$0	\$0	\$0	\$0	
B. Rediction Survey & Soil Analysis		· · · ·			· · · · ·		
Unit Cost (\$/Ac)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Sub Total - Survey & Analysis	\$0	\$0	\$0	\$0	\$0	\$0	
C. Revegetation							
Fertilizer (\$/Ac)	\$46.49	\$46.49	\$46.49	\$46.49	\$46.49	\$46.49	
Seeding Prep & Seeding (\$/Ac)	\$168.68	\$168.68	\$168.68	\$168.68	\$0.00	\$0.00	
Mulching & Crimping (\$/Ac)	\$278.54	\$276.54	\$278.54	\$276.54	\$0.00	\$0.00	
Sub Total Cost/Acre	\$491.71	\$491,71	\$491.71	\$491,71	\$48.49	\$46.49	
Sub Total - Revegation	\$32,207	\$26,700	\$12,293	\$18,685	\$814	\$930	\$91 A
Sub Total - Remedial Action	\$32 207	\$28,700	\$12 293	\$18 685	\$814	\$930	\$01.0

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MiscellaneOUS RECLAMATION         Mine Units #1 Thru #9         Mine Units #2 Thru #4         Mine Units #5         Mine Units #6         Mine Units #7         Mine Units #8         Mine Units #8         Mine Units #8         Mine Units #8         Mine Units #8         Mine Units #7         Mine Units #8         Mine Units #8         Mine Units #7         Mine Units	C:\Files\Files1\478IRCR\[478bnd03WYWK	Irigaray	Christensen	Christensen	Christensen	Christensen	Christensen	Total
MISCELLANEOUS RECLAMATION         #1 Thru #9         #2 Thru #4         #5         #6         #7         #8         & Irigarey           Quantity (Fet)         15240         35260         20000         9000         0         0           Cost of Removal/Disposal (\$/Ft)         50.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.60         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.0		Mine Unit(s)	Mine Units	Mine Unit	Mine Unit	Mine Unit	Mine Unit	Christensen
I Fence Removal & Disposal         15240         35260         20000         6000         0         0           Cost of Removal/Disposal (\$/Ft)         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.60         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.0	MISCELLANEOUS RECLAMATION	#1 Thru #9	#2 Thru #4	#5	#6	#7	#8	& Irigaray
I Fence Removal & Disposal         15240         35280         20000         9000         0         0           Cust of Removal/Disposal (\$/FI)         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.60         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00		•						
Quantity (Feet)         15240         35280         20000         9000         0         0         0           Cost of Removal/Disposal (\$/Ft)         \$0.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68         \$50.68 <td< td=""><td>I Fence Removal &amp; Disposal</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	I Fence Removal & Disposal							
Cost of Remove/Disposel (S/Ft)         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.68         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         <	Quantity (Feet)	15240	35260	20000	9000	0	0	1 . 1
Cost of Removal/Disposal (\$)         \$10,363         \$23,977         \$13,600         \$6,120         \$0         \$54,060           II Powerline Removal & Disposal         9450         10565         18000         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00         \$0,00	Cost of Removal/Disposal (\$/Ft)	\$0.68	\$0.68	\$0.68	\$0.68	\$0.68	\$0.68	
III Powerline Removal & Disposal         9450         10565         18000         18000         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00	Cost of Removal/Disposal (\$)	\$10,363	\$23,977	\$13,600	\$6,120	\$0	\$0	\$54,060
Quantity (Feet)         9450         10565         18000         16000         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.0         \$0.0         \$0.00	II Powerline Removal & Disposal	-						
Cost of Removal/Disposal (\$/Ft)         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00	Quantity (Feet)	9450	10565	18000	18000			
Cost of Removel/Disposal (\$)         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         <	Cost of Removal/Disposal (\$/Ft)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
III Powerpole Removal & Disposal           Quantity         25         30         60         60         0         0           Cost of Removal/Disposal (\$/Each)         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00	Cost of Removal/Disposal (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Quantity         25         30         60         60         0         0           Cost of Removal/Disposal (\$/Each)         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0	III Powerpole Removal & Disposal							
Cost of Removal/Disposel (\$/Each)         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.0         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00         \$0.00	Quantity	25	30	60	60	0	0	
Cost of Removal/Disposal (\$)         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         <	Cost of Removal/Disposal (\$/Each)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
IV         Transformer Removal & Disposal           Quantity         3         1         0         18         0         0           Cost of Removal/Disposal (\$/Each)         \$2,428         \$2,428         \$2,428         \$505         \$505         \$505         \$20,422           V         Booster Pump Assembly Removal & Disposal         0         6         5         5         0         0         \$20,422           V         Booster Pump Assembly Removal & Disposal         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298 <td< td=""><td>Cost of Removal/Disposal (\$)</td><td>\$0</td><td>\$0</td><td>\$0</td><td>\$0</td><td>\$0</td><td>\$0</td><td>\$0</td></td<>	Cost of Removal/Disposal (\$)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Quantity         3         1         0         18         0         0           Cost of Removal/Disposal (\$/Each)         \$2,428         \$2,428         \$595         \$595         \$595           Cost of Removal/Disposal (\$)         \$7,284         \$2,428         \$0         \$10,710         \$0         \$0         \$20,422           V Booster Pump Assembly Removal & Disposal         0         6         5         5         0         0         \$20,422           Quantity         0         6         5         5         0         0         0         \$20,422           Quantity (Feet)         0         6         5         5         0         0         0         \$20,83,48         \$3,480         \$3,480         \$3,480         \$3,480         \$3,480         \$3,480         \$3,480         \$3,480         \$3,480         \$3,480         \$3,480         \$3,480         \$3	IV Transformer Removal & Disposal					and the second second	1	
Cost of Removal/Disposal (\$/Each)         \$2,428         \$2,428         \$595         \$595         \$595         \$595           Cost of Removal/Disposal (\$)         \$7,284         \$2,428         \$0         \$10,710         \$0         \$0         \$20,422           V Booster Pump Assembly Removal & Disposal         0         6         5         5         0         0           Quantity         0         6         5         5         0         0         \$20,422           V Booster Pump Assembly Removal & Disposal         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298	Quantity	3	<b>- 1</b>	0	18	0	0	
Cost of Removal/Disposal (\$)         \$7,234         \$2,428         \$0         \$10,710         \$0         \$0         \$20,422           V Booster Pump Assembly Removal & Disposal         0         6         5         5         0         0         0           Quantity         0         6         5         5         0         0         0           Cost of Removal/Disposal (\$/Each)         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298	Cost of Removal/Disposal (\$/Each)	\$2,428	\$2,428	\$2,428	\$595	\$595	\$595	
V         Booster Pump Assembly Removal & Disposal           Quentity         0         6         5         5         0         0           Cost of Removal/Disposal (\$/Each)         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$	Cost of Removal/Disposal (\$)	\$7,284	\$2,428	\$0	\$10,710	\$0	· \$0	\$20,422
Quentity         0         6         5         5         0         0           Cost of Removal/Disposal (\$/Each)         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298	V Booster Pump Assembly Removal 8	Disposal						
Cost of Removal/Disposal (\$/Each)         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298         \$298	Quantity	0	6	5	5	0	. 0	
Cost of Removal/Disposal (\$)         \$0         \$1,788         \$1,490         \$0         \$0         \$4,768           VI Culvert Removal & Disposal         150         1200         1000         1000         0         0         \$4,768           Quantity (Feet)         150         1200         1000         1000         0         0         0           Cost of Removal/Disposal (\$/Ft)         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.480         \$50         \$50         \$11,658           VII Guardrail Removal         200         3000         0         0         0         0         \$11,658         \$11,658         \$11,658         \$11,658         \$11,658         \$11,658         \$11,658         \$11,650         \$11,650         \$11,650         <	Cost of Removal/Disposal (\$/Each)	\$298	\$298	\$298	\$298	\$298	\$298	
VI         Culvert Removal & Disposal           Quantity (Feet)         150         1200         1000         1000         0         0           Cost of Removal/Disposel (\$/Ft)         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.0         \$5.0	Cost of Removal/Disposal (\$)	\$0	\$1,788	\$1,490	\$1,490	\$0	\$0	\$4,768
Quantity (Feet)         150         1200         1000         1000         0         0           Cost of Removal/Disposal (\$/Ft)         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$4.19         \$6.	VI Culvert Removal & Disposal					· · · · · · · · · · · · · · · · · · ·		
Cost of Removal/Disposal (\$/Ft)         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48         \$3.48	Quantity (Feet)	150	1200	1000	1000	0	0	
Cost of Removal/Disposal (\$)         \$522         \$4,176         \$3,480         \$3,480         \$0         \$0         \$11,658           VII Guardrail Removal         Quantity (Feet)         200         3000         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         \$0         \$0         \$0         \$0         \$0         \$19,808         \$19,808         \$19,808         \$19,808         \$19,808         \$19,808         \$19,808         \$19,808         \$19,808         \$19,808         \$19,808         \$19,808         \$19,808         \$19,808         \$19,808         \$19,808         \$19,808         \$19,808         \$19,808         \$19,808         \$10         \$19,808         \$19,808         \$19,808         \$10         \$19,808         \$10         \$19,808         \$10         \$19,808         \$10         \$11,660         \$10         \$11,660         \$10         \$11,660         \$10         \$11,660	Cost of Removal/Disposal (\$/Ft)	\$3.48	\$3.48	\$3.48	\$3.48	\$3.48	\$3.48	
VII         Guardrail Removal           Quantity (Feet)         200         3000         0         0           Cost of Removal/Disposal (\$/Ft)         \$6.19         \$6.19         \$6.19         \$6.19           Cost of Removal/Disposal (\$)         \$1,238         \$18,570         \$0         \$0         \$0           Cost of Removal/Disposal (\$)         \$1,238         \$18,570         \$0         \$0         \$0         \$0         \$19,808           VIII         Low Water Stream Crossing         0         1         1         0         0         0         \$19,808           Quantity         0         1         1         0         0         0         \$19,808           VIII         Low Water Stream Crossing         0         1         1         0         0         0         \$19,808           Quantity         0         1         1         0         0         0         \$19,808           IX         Utilities Cost         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$16,660           IX         Utilities Cost         4         8         4         4         0         0         \$11,90         \$1,190	Cost of Removal/Disposal (\$)	\$522	\$4,176	\$3,480	\$3,480	\$0	\$0	\$11.658
Quantity (Feet)         200         3000         0         0           Cost of Removal/Disposal (\$/Ft)         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$	VII Guardrail Removal							المتنقط فيشتنا
Cost of Removal/Disposal (\$/Ft)         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19         \$6.19	Quantity (Feet)	200	3000	0	0			
Cost of Removal/Disposal (\$)         \$1,238         \$18,570         \$0         \$0         \$0         \$0         \$19,808           VIII         Low Water Stream Crossing         0         1         1         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	Cost of Removal/Disposal (\$/Ft)	\$6,19	\$6,19	\$6,19	\$6,19	\$6,19	\$6,19	
VIII         Low Water Stream Crossing         0         1         1         0         0         0         0         0         0         1         1         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	Cost of Removal/Disposal (\$)	\$1,238	\$18,570	\$0	\$0	\$0	\$0	\$19,808
Quantity         0         1         1         0         0         0           Cost of Removal/Disposal (\$/Each)         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$8,330         \$16,660         \$16,660         \$16,660         \$16,660         \$16,660         \$16,660         \$16,660         \$16,660         \$16,660         \$16,660         \$16,660         \$1	VIII Low Water Stream Crossing						¥¥	+10,000
Cost of Removal/Disposal (\$/Each)       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,330       \$8,31,190       \$1,190       \$1,19	Quantity	0	1	1	<u> </u>	0	0	
Cost of Removal/Disposal (\$)         \$0         \$8,330         \$0,550         \$0,550         \$0,550         \$0,550         \$0,550         \$0,550         \$0,550         \$0,550         \$0,550         \$0,550         \$0,550         \$0,550         \$0,550         \$0,550         \$0,550         \$0,550         \$0,550         \$0,550         \$0,550         \$0,550         \$0,550         \$0,550         \$0,550         \$0,550         \$0,550         \$0,550         \$0,550         \$0,550         \$0,550         \$0,550         \$16,660         \$16,660         \$10,560         \$16,660         \$10,560         \$16,660         \$10,560         \$16,660         \$10,500         \$16,660         \$10,500         \$10,500         \$10,500         \$10,500         \$10,500         \$10,500         \$10,500         \$10,500         \$11,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,00         \$1,00         \$28,560         \$0         \$20,560         \$0         \$20,5936         \$155,936         \$155,936	Cost of Removal/Disposal (\$/Fach)	\$8,330	\$8 330	\$8.330	\$8.330	\$8.330	\$9.330	
IX Utilities Cost         4         8         4         4         0         0           Quantity (Mos)         4         8         4         4         0         0           Cost Per Month (\$/Month)         \$2,380         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,50         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000         \$1,000	Cost of Removal/Disposal (\$)	\$0	\$8,330	\$8,330	\$0,000	0.000	¢0,000 ¢0	\$16.660
Quantity (Mos)         4         8         4         4         0         0           Cost Per Month (\$/Month)         \$2,380         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190	IX Utilities Cost		+0,000	\$0,000	<u> </u>	ψŬ	ψυ	φ10,000 j
Cost Per Month (\$/Month)         \$2,380         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,190         \$1,28,00         \$1,190         \$1,190         \$1,190         \$1,28,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00         \$1,00	Quantity (Mos)	Δ	8	Α	Α	0		
Total Cost (\$)         \$9,520         \$9,520         \$4,760         \$4,760         \$0         \$28,560           TOTAL MISCELLANEOUS COST         \$28,927         \$68,789         \$31,660         \$26,560         \$0         \$155,936	Cost Per Month (\$/Month)	\$2 380	\$1 100	\$1 100	\$1 100	\$1 100	¢1 100	
TOTAL MISCELLANEOUS COST       \$28,927       \$68,789       \$31,660       \$26,560       \$0       \$0       \$155,936	Total Cost (\$)	\$9.520	\$9.520	\$4 780	\$4 780	ψ1,180 • <b>¢</b> Λ	¢1,180 €∩	\$28 FED
TOTAL MISCELLANEOUS COST \$28,927 \$68,789 \$31,660 \$26,560 \$0 \$0 \$155,936		<del>\</del> \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	ψ0,020	ψ-7,100	φ <del>1</del> ,100	<u>۵</u> ۵		\$20,000
	TOTAL MISCELLANFOUS COST	\$28 027	\$68 780	\$21 660	\$28 560	én	60	\$155 026
1/2/2002	4/9/2002		φυ0,709	ψ <b>υ 1</b> ,000	φ20,000		<u> </u>	_#100,830

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