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LOST CREEK ISR, LLC

February 10, 2012

Mr. Mark Satorius, Director
Office of Federal and State Materials and Environmental Management Programs
U.S. Nuclear Regulatory Commission
Two White Flint North, Mail Stop T8D22
11545 Rockville Pike
Rockville, MD 20852

Re: Follow-up on License Condition 9.5
License Number SUA-1598, Docket 40-9068

Dear Mr. Satorius,

This letter serves as follow-up to Lost Creek ISR, LLC's October 31, 2011 conversation with Dr. Tanya Oxenberg and the October 7, 2011 submittal of the initial surety estimate in compliance with License Condition 9.5. Please note that the surety estimate of $1,747,878 includes a total contingency of 25% in compliance with Wyoming Department of Environmental Quality (WDEQ) Guidance. This contingency is above and beyond the third party costs used to calculate the "SUBTOTAL RESTORATION AND RECLAMATION" line on page 1 of 37 of Table RP-4 Supplement. The third party costs in the estimate come from the WDEQ Land Quality Division Guideline 12 "Standardized Reclamation Performance Bond Format and Cost Calculation Methods" when applicable. Guideline 12, which includes profits for third party contractors, is updated by the State of Wyoming on a regular basis and therefore represents reasonable third party costs for decommissioning efforts in the state of Wyoming. In cases where Guideline 12 did not address a specific cost that is relevant to decommissioning an in situ facility, actual costs were determined from vendors/contractors or an estimate was made based on experience. The basis for these values is included within the spreadsheet.

The surety estimate represents the reclamation liability that will be incurred during the first year following issuance of the Permit to Mine from the WDEQ and issuance of the License by the NRC. Construction of the Lost Creek facility cannot begin until the Bureau of Land Management concludes a NEPA review which is estimated to be in the summer of 2012. Due to this delay, very little work will occur at the Project during the first year and as a result the surety estimate is relatively small. Since no source or byproduct material will be generated during the first year there is no need to calculate costs for groundwater restoration, disposal of 11(e)2, or soil clean-up. Nonetheless, the spreadsheet includes the formulas for these activities but the fields are left blank since there will be no activity.

FSME20

Lost Creek ISR, LLC
February 10, 2012
Re: Follow-up on License Condition 9.5

The most significant costs for reclaiming the site at the end of the first year are abandonment of the Class I UIC well, plugging of wells, and demolition of the processing plant. There will be no true groundwater restoration since there will no injection during the first year of operations. The Groundwater Restoration category includes the cost for plugging the Class I UIC well in the southwest corner of the project. The cost estimate for plugging this well was provided by third party contractor Petrotek Inc. The cost estimates for plugging the existing and planned wells and revegetation were derived from WDEQ Guideline 12 (Appendix L). Manpower costs, including employee benefits, were arrived at jointly between the WDEQ and Lost Creek ISR, LLC. Cost estimates for plant demolition are broken down into several sub-categories. The estimates for disposal of the non-contaminated waste are based on recent experience.

The Bureau of Land Management has yet to approve the Project so there are no cost assumptions for BLM requirements. The reclamation and restoration requirements of the WDEQ and NRC are for all intents and purposes the same. Therefore, the surety calculation has not been broken out by agency.

The surety estimate was generated in compliance with the methods enumerated in 10 CFR 40 Criterion 9 and NUREG-1569. The surety estimate assumes no salvage value despite the fact that during the time period covered by the estimate there will be no generation of source or byproduct material and therefore no contamination of materials/equipment.

For ease of review, please find behind this cover letter the previously submitted Supplement Tables RP-4 and RP-5, a summary of the supplement tables, and a construction schedule.

If you have any questions regarding this letter or require additional information please feel free to contact me at (307) 265-2373.

Regards,

John W. Cash, V.P. of Regulatory Affairs, Exploration and Geology

Cc: ✓NRC Document Control Desk
Theresa Horne, Ur-Energy, Littleton
Tanya Oxenberg, PhD, NRC, Rockville, via e-mail

Lost Creek Project, Surety Estimate Assumptions in Conjunction With

The Surety Estimate in Tables RP-4 Supplement and RP-5 Supplement

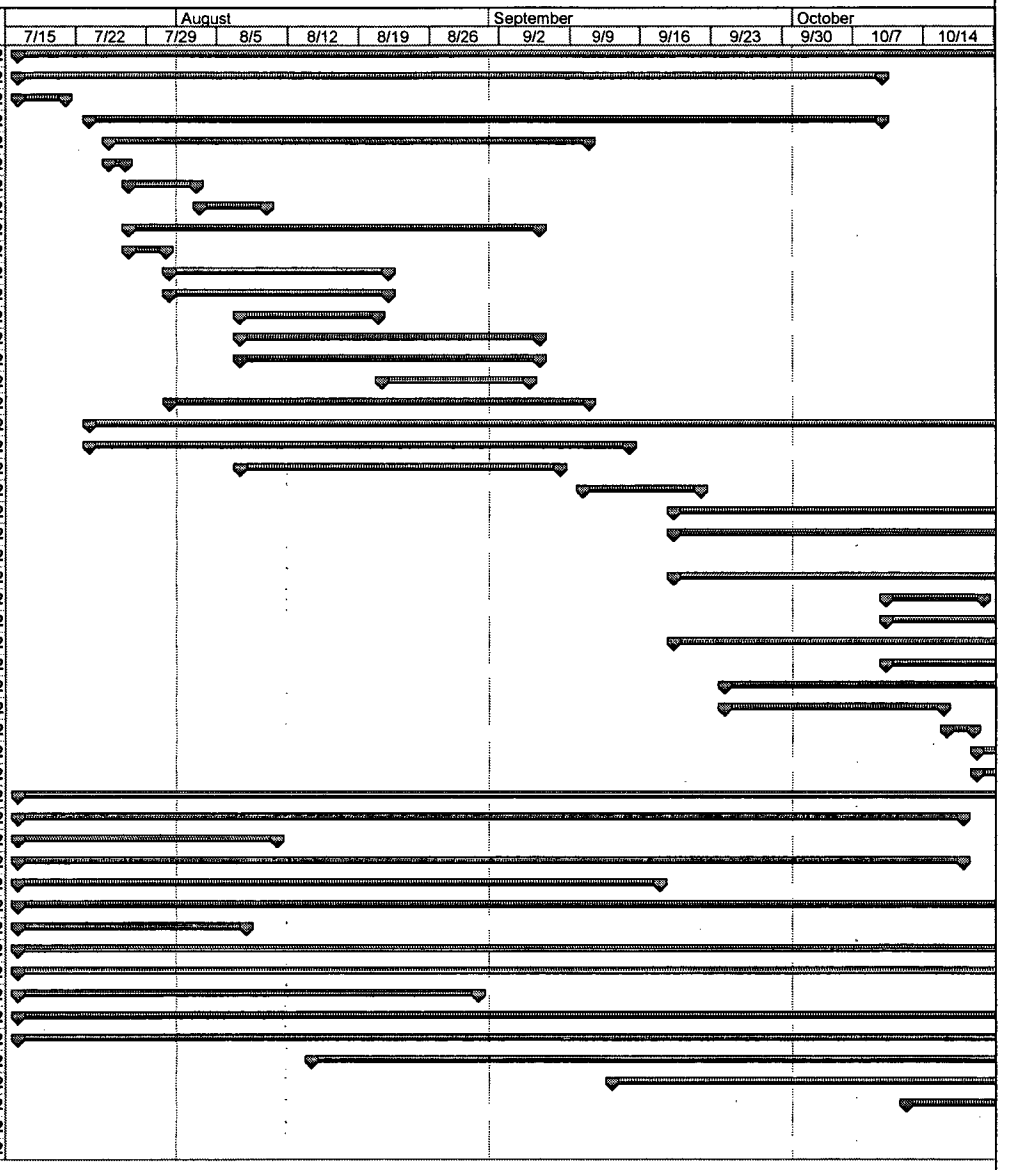
The following Tables RP-4 Supplement and RP-5 Supplement are intended to supplement the Surety Estimate provided in Tables RP-4 and RP-5. The original Surety Estimate ($6.2 million, November 2010) assumed concurrent receipt of the WDEQ Permit to Mine, The NRC Source Material License and the BLM Plan of Operations. The original Estimate allowed for installation of the Plant, construction of half of Mine Unit 1 as well as operation of the same all during a one year period. The Supplemental Surety Estimate is based on receipt of the NRC Source Material License on August 17, 2011, the WDEQ Permit to Mine on October 15, 2011 and the BLM Plan of Operations prior to July 16, 2012. The supplemental basis allows for only 3 months of construction and no production operations as detailed in the attached Figure "Surety Estimate Schedule". Therefore, the resultant Supplemental Surety Estimate is $1.75 million. The assumptions used in generating this Supplemental Surety Estimate are as follows:

- WDEQ Permit to Mine Receipt – October 15, 2011
- WDEQ Surety Estimate Timeframe – October 15, 2011 through October 14, 2012
- Lost Creek Start of Construction – July 16, 2012 (following Sage Grouse restrictions)
- Existing Reclamation Requirements as of Permit to Mine Receipt (to be removed from DN-334):
    - 188 Monitor / Water Wells: See Table RP-4 Supplement, Worksheet 5, "Site Wells"
    - 1 Waste Disposal Well: See Table RP-4 Supplement, Worksheet 1, "Restoration Capital Requirements"
    - Reclamation on 41 Well and Drill Hole Sites: See Table RP-4 Supplement, Worksheet 7, "Other"
    - Revegetation Retainer for Existing Drill Sites: 990 drill sites (between 2005 and 2010) less the 90 drill sites under the patterns to be installed between July 16, 2012 and October 14, 2012 = 900 drill sites. Table RP-4 Supplement, Worksheet 7, "Section III Wellfields" accounts for the 90 holes within the 9 acres allotted for revegetation. See Table RP-4 Supplement, Worksheet 8, "Revegetation Retainer for Prior Year's Drilling"
    - See Table RP-4 Supplement, Worksheet 8, "Revegetation Retainer for Prior Year's Drilling"
    - Reclamation on Drill Access Roads, Office Trailer Site, Met Station and Microwave Tower: See Table RP-4 Supplement, Worksheet 7, "Other"
- Anticipated Construction Activities (July 16, 2012 through October 14, 2012):
    - Site Access Roads
    - Powerline to Plant and Mine Unit 1
    - Waste Disposal Wells 1 and 2
    - Trunklines from Plant to Mine Unit 1

- Drill Shed
- Plant Area
  - Segregate topsoil and grade
  - Install Storage Ponds 1 and 2
  - Install Fence
  - Pour Concrete Foundation
  - Set Tanks and Pressure Vessels
  - Install Structural Steel and Building Outer Shell
- Shop
  - Pour Concrete Foundation
  - Install Structural Steel and Building Outer Shell
- Mine Unit 1
  - Drill 25 Delineation Holes
  - Install 177 Wells
  - Install 1 Header House Building and Begin Piping to Wells
- Other Mining Areas
  - No additional drilling planned outside of Mine Unit 1 during the period in question.

Lost Creek ISR, LLC - Lost Creek Project
Construction Schedule for Bond Year-October 2011 to October 2012

ID	Task Name	Duration	Start	Finish
1	LC WDEQ Bond Timeline Oct 11 to Oct 12	106 days	Mon 7/16/12	Thu 12/13/12
2	Access Road	61 days	Mon 7/16/12	Tue 10/9/12
3	Survey	5 days	Mon 7/16/12	Fri 7/20/12
5	Phase 1	56 days	Mon 7/23/12	Tue 10/9/12
9	Site - Phase 1	33 days	Wed 7/25/12	Mon 9/10/12
10	Survey	2 days	Wed 7/25/12	Thu 7/26/12
12	Grading	5 days	Fri 7/27/12	Thu 8/2/12
15	Utilities	5 days	Fri 8/3/12	Thu 8/9/12
18	Storage Ponds	28 days	Fri 7/27/12	Wed 9/5/12
19	Survey	2 days	Fri 7/27/12	Mon 7/30/12
21	Storage Pond 1	16 days	Tue 7/31/12	Tue 8/21/12
22	Grading	16 days	Tue 7/31/12	Tue 8/21/12
25	Liner System	10 days	Tue 8/7/12	Mon 8/20/12
27	Storage Pond 2	21 days	Tue 8/7/12	Wed 9/5/12
28	Grading	21 days	Tue 8/7/12	Wed 9/5/12
31	Liner System	10 days	Tue 8/21/12	Tue 9/4/12
33	Fencing	29 days	Tue 7/31/12	Mon 9/10/12
37	Process Building	101 days	Mon 7/23/12	Thu 12/13/12
38	Foundations	39 days	Mon 7/23/12	Fri 9/14/12
52	Liner System	23 days	Tue 8/7/12	Fri 9/7/12
55	Slab On Grade	10 days	Mon 9/10/12	Fri 9/21/12
61	Pre-Engineered Building - Process	60 days	Wed 9/19/12	Thu 12/13/12
62	Structural Steel	36 days	Wed 9/19/12	Wed 11/7/12
67	Masonry	5 days	Thu 10/25/12	Wed 10/31/12
69	Process Equipment	60 days	Wed 9/19/12	Thu 12/13/12
70	Structural Steel	8 days	Wed 10/10/12	Fri 10/19/12
73	Piping	35 days	Wed 10/10/12	Thu 11/29/12
75	Mechanical	30 days	Wed 9/19/12	Tue 10/30/12
78	Electrical	45 days	Wed 10/10/12	Thu 12/13/12
80	Shop Building	31 days	Mon 9/24/12	Mon 11/5/12
81	Foundations	16 days	Mon 9/24/12	Mon 10/15/12
89	Slab On Grade	3 days	Tue 10/16/12	Thu 10/18/12
92	Pre-Engineered Building - Shop	12 days	Fri 10/19/12	Mon 11/5/12
93	Structural Steel	12 days	Fri 10/19/12	Mon 11/5/12
97	Field Activities	86 days	Mon 7/16/12	Tue 11/13/12
98	Waste Disposal Wells	67 days	Mon 7/16/12	Wed 10/17/12
99	WDW-1	20 days	Mon 7/16/12	Fri 8/10/12
111	WDW-2	67 days	Mon 7/16/12	Wed 10/17/12
130	Powerline	45 days	Mon 7/16/12	Mon 9/17/12
138	Pipeline	70 days	Mon 7/16/12	Mon 10/22/12
146	Drilling Shed	17 days	Mon 7/16/12	Tue 8/7/12
152	Drilling	86 days	Mon 7/16/12	Tue 11/13/12
153	Mine Unit 1	86 days	Mon 7/16/12	Tue 11/13/12
154	Delineation	34 days	Mon 7/16/12	Thu 8/30/12
159	Production Drilling	86 days	Mon 7/16/12	Tue 11/13/12
160	Header House 1-2	71 days	Mon 7/16/12	Tue 10/23/12
168	Header House 1-3	63 days	Tue 8/14/12	Fri 11/9/12
174	Header House 1-1	43 days	Thu 9/13/12	Mon 11/12/12
179	Header House 1-4	23 days	Fri 10/12/12	Tue 11/13/12
183	Production Construction	7 days	Tue 10/23/12	Wed 10/31/12
184	Header House 1-2	7 days	Tue 10/23/12	Wed 10/31/12



LOST CREEK ISR, LLC SUMMARY OF RECLAMATION/RESTORATION BOND ESTIMATE

I	GROUNDWATER RESTORATION - Worksheet 1	$388,580
II	DECOMMISSIONING AND SURFACE RECLAMATION	$966,364
A.	Plant Equipment Removal and Disposal - Worksheet 2	$10,169
B.	Plant Building Demolition and Disposal - Worksheet 3	$527,913
C.	Storage Pond Sludge and Liner Handling - Worksheet 4	$26,418
D.	Well Abandonment - Worksheet 5	$229,840
E.	Wellfield Equipment Removal and Disposal - Worksheet 6	$28,921
F.	Topsoil Replacement and Revegetation - Worksheet 7	$80,692
G.	Miscellaneous Reclamation Activities - Worksheet 8	$62,412
SUBTOTAL RESTORATION AND RECLAMATION		**$1,354,944**
III	TOTAL CONTINGENCY	$392,934
Miscellaneous Items (*Footnote 1*)	25% =	$338,736
	Project Design	
	Contractor Profit & Mobilization	
	Pre-Construction Investigation	
	Project Management	
	On-Site Monitoring	
	Site Security & Liability Assurance	
	Longterm Administration	
Contingency (*Footnote 2*)	4% =	$54,198
TOTAL RESTORATION AND RECLAMATION		**$1,747,878**

Footnote 1: In accordance with WDEQ-LQD Guideline 12, Section II, B, 12.
Footnote 2: In accordance with WDEQ-LQD Guideline 12, Section II, B, 13.

LOST CREEK ISR, LLC GROUNDWATER RESTORATION - WORKSHEET 1

Assumptions/Items	Mine Unit No. 1	Explanation	Source
Technical Assumptions:			
Wellfield Area (Square Feet)	442,489	Proposed area	Data
Wellfield Area (Acres)	10.16		Calculated
Affected Ore Zone Area (Square Feet)	442,489	Proposed area affected	Data
Average Completed Thickness (Feet)	12.0	Proposed thickness	Data
Affected Volume:			
Factor For Vertical Flare	20%	Vertical flare estimate	Estimated
Factor For Horizontal Flare	20%	Horizontal flare estimate	Estimated
Total Volume (Cubic Feet)	7,646,210	= Area * Thickness * Vertical flare * Horizontal flare	Calculated
Porosity	26.0%	Typical value for host sand	Data
Gallons Per Cubic Foot	7.48	Conversion factor	Constant
Gallons Per Pore Volume	14,870,349		Calculated
Number of Wells in Unit(s)			
Production Wells	59	Proposed well count	Data
Injection Wells	118	Proposed well count	Data
Average Well Spacing (Feet)	95	Proposed well spacing	Data
Average Well Depth (Feet)	425	Proposed well depth	Data

LOST CREEK ISR, LLC GROUNDWATER RESTORATION - WORKSHEET 1

Assumptions/Items	Mine Unit No. 1	Explanation	Source
I GROUNDWATER SWEEP			
A. PLANT & OFFICE			
Operating Assumptions:			
Flow Rate (Gallons per Minute)	120	Planned flow	Data
Pore Volumes Required	0.0	No Restoration Required	Data
Total Gallons For Treatment	0	= Gallons per Pore Volume * Number of Pore Volumes	Calculated
Total Kilogallons for Treatment	0	Not Applicable, No restoration required	Calculated
Cost Assumptions:			
Power			
Average Connected Horsepower	20	Proposed pump horsepower	Data
Kilowatt-hours per Horsepower	0.746		Conversion Factor
Cost per Kilowatt-hour	$0.060	Estimate based on supplier	Unit Rate
Gallons per Minute	120	Planned rate	Data
Gallons per Hour	7200		Calculated
Cost per Hour	$0.90		Calculated
Cost per Gallon	$0.00012		Calculated
Cost per Kilogallon	$0.124		Calculated
Chemicals			
Antiscalent (Cost per Kilogallon)	$0.120	Based on required dosage/estimated cost	Unit Rate
Repair & Maintenance (Cost per Kilogallon)	$0.035	Estimate	Unit Rate
Analysis (Cost per Kilogallon)	$1.782	From Table RP-5	Unit Rate

LOST CREEK ISR, LLC GROUNDWATER RESTORATION - WORKSHEET 1

Assumptions/Items	Mine Unit No. 1	Explanation	Source
I GROUNDWATER SWEEP (continued)			
A. PLANT & OFFICE (continued)			
Total Cost per Kilogallon	$2.061		Calculated
Total Treatment Cost	$0		Calculated
Utilities			
Power (Cost per Month)	$225	Estimate	Unit Rate
Propane (Cost per Month)	$225	Estimate	Unit Rate
Time for Treatment			
Minutes for Treatment	0	=Total Gallons for Treatment Divided by Flow Rate (gpm)	Calculated
Hours for Treatment	0		Calculated
Days for Treatment	0		Calculated
Average Days per Month	30.4		Calculated
Months for Treatment	0.0		Calculated
Utilities Cost	$0		Calculated
TOTAL PLANT & OFFICE COST	$0	Not Applicable, No restoration required	

LOST CREEK ISR, LLC GROUNDWATER RESTORATION - WORKSHEET 1

Assumptions/Items	Mine Unit No. 1	Explanation	Source
I GROUNDWATER SWEEP (continued)			
B. WELLFIELD			
Cost Assumptions:			
Power			
Average Flow per Pump (Gallons per Minute	32	Estimate from pumping	Data
Average Horsepower per Pump	7.50	Estimate from pumping	Data
Average Number of Pumps Required	3.8	Estimate from pumping	Data
Average Connected Horsepower	33.1	Pumps plus 5 horsepower for HH	Data
Kilowatt-hours per Horsepower	0.746		Conversion Factor
Cost per Kilowatt-hour	$0.060	Estimate based on supplier	Unit Rate
Gallons per Minute	120	Planned flow	Data
Gallons per Hour	7200		Calculated
Cost per Hour	$1.48		Calculated
Cost per Gallon	$0.0002		Calculated
Cost per Kilogallon	0.206		Calculated
Repair & Maintenance (Cost per Kilogallon)	$0.115	Estimate	Unit Rate
Total Cost per Kilogallon	$0.321		Calculated
TOTAL WELLFIELD COST	$0	Not Applicable, No restoration required	Calculated
TOTAL GROUNDWATER SWEEP COST	$0	Not Applicable, No restoration required	Calculated

LOST CREEK ISR, LLC GROUNDWATER RESTORATION - WORKSHEET 1

Assumptions/Items	Mine Unit No. 1	Explanation	Source
II REVERSE OSMOSIS			
A. PLANT & OFFICE			
Operating Assumptions:			
Flow Rate (Gallons per Minute)	760	Estimate from pumping	Data
Pore Volumes Required	0.0	Not Applicable, No Restoration at this Time	Data
Total Gallons for Treatment	0	= Gallons per Pore Volume * Number of Pore Volumes	Calculated
Total Kilogallons for Treatment	0		Calculated
Feed to Reverse Osmosis Unit (Gallons per Minute)	760	Planned flow	Data
Permeate Flow (Gallons per Minute)	570	= Planned Flow * Average Reverse Osmosis Recovery	Calculated
Brine Flow (Gallons per Minute)	190	= Planned Flow - Permeate Flow	Calculated
Average Reverse Osmosis Recovery	75.0%	Reverse Osmosis Design	Data
Cost Assumptions:			
Power			
Average Connected Horsepower	300.00	Average value for each area	Data
Kilowatt-hours per Horsepower	0.746		Conversion Factor
Cost per Kilowatt-hour	$0.060	Estimate based on supplier	Unit Rate
Gallons per Minute	760	Planned flow	Data
Gallons per Hour	45600		Calculated
Cost per Hour	$13.43		Calculated
Cost per Gallon	$0.00029		Calculated
Cost per Kilogallon	$0.294		Calculated
Chemicals			
Sulfuric Acid (Cost per Kilogallon)	$0.090	Estimate	Unit Rate
Caustic Soda (Cost per Kilogallon)	$0.023	Estimate	Unit Rate
Reductant (Cost per Kilogallon)	$0.113	Estimate	Unit Rate
Antiscalent (Cost per Kilogallon)	$0.124	Based on required dosage/estimated cost	Unit Rate
Repair & Maintenance (Cost per Kilogallon)	$0.068	Estimate	Unit Rate
Sampling & Analysis (Cost per Kilogallon)	$0.474	From Table RP-5	Unit Rate

LOST CREEK ISR, LLC GROUNDWATER RESTORATION - WORKSHEET 1

Assumptions/Items	Mine Unit No. 1	Explanation	Source
II REVERSE OSMOSIS (continued)			
A. PLANT & OFFICE (continued)			
Total Cost per Kilogallon	$1.186		Calculated
Total Pumping Cost	$0	Not Applicable, No restoration required	Calculated
Utilities			
Power (Cost per Month)	$560	Estimate	Unit Rate
Propane (Cost per Month)	$225	Estimate	Unit Rate
Time for Treatment			
Minutes for Treatment	0		Calculated
Hours for Treatment	0		Calculated
Days for Treatment	0		Calculated
Average Days per Month	30.4		Calculated
Months for Treatment	0.0		Calculated
Utilities Cost	$0		Calculated
TOTAL PLANT & OFFICE COST	$0	Not Applicable, No restoration required	Calculated

LOST CREEK ISR, LLC GROUNDWATER RESTORATION - WORKSHEET 1

Assumptions/Items	Mine Unit No. 1	Explanation	Source
II REVERSE OSMOSIS (continued)			
B. WELLFIELD			
Cost Assumptions:			
Power			
Average Flow per Pump (Gallons per Minute)	32.00	Average value for each area	Data
Average Horsepower per Pump	7.50	Average value for each area	Data
Average Number of Pumps Required	23.8	Average value for each area	Data
Average Connected Horsepower	188.1	Pump horsepower plus 10 horsepower	Calculated
Kilowatt-hours per Horsepower	0.746		Conversion Factor
Cost per Kilowatt-hour	$0.060	Estimate based on supplier	Unit Rate
Gallons per Minute	760	Planned flow	Data
Gallons per Hour	45,600		Calculated
Cost per Hour	$8.42		Calculated
Cost per Gallon	$0.0002		Calculated
Cost per Kilogallon	$0.185		Calculated
Repair & Maintenance (Cost per Kilogallon)	$0.115	Estimate	Unit Rate
Total Cost per Kilogallon	$0.300		Calculated
TOTAL WELLFIELD COST	$0		Calculated
TOTAL REVERSE OSMOSIS COST	$0	Not Applicable, No restoration required	Calculated

LOST CREEK ISR, LLC GROUNDWATER RESTORATION - WORKSHEET 1

Assumptions/Items	Mine Unit No. 1	Explanation	Source
III RECIRCULATION			
A. WELLFIELD			
Cost Assumptions:			
Power			
Average Flow per Pump (Gallons per Minute	32	Estimate from pumping	Data
Average Horsepower per Pump	7.50	Estimate from pumping	Data
Average Number of Pumps Required	59.0	Estimate from pumping	Data
Average Connected Horsepower	447.5	Pumps plus 5 horsepower for HH	Data
Kilowatt-hours per Horsepower	0.746		Conversion Factor
Cost per Kilowatt-hour	0.060	Estimate based on supplier	Unit Rate
Gallons per Minute	1888	Planned flow	Data
Gallons per Hour	113280		Calculated
Cost per Hour	$20.03		Calculated
Cost per Gallon	$0.0002		Calculated
Cost per Kilogallon	0.177		Calculated
Repair & Maintenance (Cost per Kilogallon)	$0.115	Estimate	Unit Rate
Analysis (Cost per Kilogallon)	$0.000	From Table RP-5	Unit Rate
Total Cost per Kilogallon	$0.292		Calculated
TOTAL WELLFIELD RECIRCULATION COST	$0	Not Applicable, No restoration required	Calculated

LOST CREEK ISR, LLC GROUNDWATER RESTORATION - WORKSHEET 1

Assumptions/Items	Mine Unit No. 1	Explanation	Source
IV WASTE DISPOSAL WELL			
Operating Assumptions:			
Annual Evaporation Capacity (Gallons)	0		Data
Average Monthly Evaporation Capacity (Gallons)	0		Calculated
Total Disposal Requirement			
RO Brine and GWS (Total Gallons)	0	=Treatment Gallons * (1- Reverse Osmosis Recovery) + GWS	Calculated
RO Brine and GWS (Total Kilogallons)	0		Calculated
Brine Concentration Factor	50%	Reverse Osmosis Design	Data
Total Concentrated Brine (Gallons)	0	= Reverse Osmosis Brine Gallons * Brine Concentration Factor	Calculated
Months of RO and GWS Operation	0.0		Calculated
Average Monthly Requirement (Gallons)	0	=Total Concentrated Brine / Months of Reverse Osmosis Operation	Calculated
Monthly Balance for DDW (Gallons)	0	=Average Monthly Requirement - Average Monthly Evaporation	Calculated
Total WDW Disposal (Gallons)	0		Calculated
Total WDW Disposal (Kilogallons)	0	Not Applicable, No restoration required	Calculated
Cost Assumptions:			
Power			
Average Connected Horsepower	100.0	Estimate	Data
WDW Average Connected Horsepower	300.0	Estimate	Data
Kilowatt-hours per Horsepower	0.746		Conversion Factor
Cost per Kilowatt-hour	$0.060	Estimate based on supplier	Unit Rate
Gallons per Minute	115.0	Planned flow	Data
Gallons per Hour	6900		Calculated
Cost per Hour	$17.90		Calculated
Cost per Gallon	$0.0026		Calculated
Cost per Kilogallon	$2.595		Calculated

LOST CREEK ISR, LLC GROUNDWATER RESTORATION - WORKSHEET 1

Assumptions/Items	Mine Unit No. 1	Explanation	Source
IV WASTE DISPOSAL WELL (continued)			
Chemicals			
Reverse Osmosis Antiscalent (Cost per Kilogallon)	$0.225	Based on required dosage and cost	Unit Rate
WDW Antiscalent (Cost per Kilogallon)	$0.254	Based on required dosage and cost	Unit Rate
Sulfuric Acid (Cost per Kilogallon)	$0.315	Estimate	Unit Rate
Corrosion Inhibitor	$0.244	Estimate	Unit Rate
Repair & Maintenance (Cost per Kilogallon)	$0.130	Estimate	Unit Rate
Total Cost per Kilogallon	$3.762		Calculated
TOTAL WASTE DISPOSAL WELL COST	$0	Not Applicable, No restoration required	Calculated
V STABILIZATION MONITORING			
Operating Assumptions:			
Time of Stabilization (Months)	0	Time frame required	Data
Frequency of Analysis (Months)	0	Required sampling	Data
Total Sets of Analysis	0	Required sampling	Data
Cost Assumptions:			
Power (Cost per Month)	$1,125	Estimate	Unit Rate
Total Power Cost	$0		Calculated
Sampling & Analysis (Cost per Set)	$8,178	From Table RP-5	Unit Rate
Total Sampling & Analysis Cost	$0	From Table RP-5	Calculated
Utilities (Cost per Month)	$2,250	Estimate	Unit Rate
Total Utilities Cost	$0		Calculated
TOTAL STABILIZATION COST	$0	Not Applicable, No restoration required	Calculated

LOST CREEK ISR, LLC GROUNDWATER RESTORATION - WORKSHEET 1

Assumptions/Items	Mine Unit No. 1	Explanation	Source
VI LABOR			
Cost Assumptions			

	Crew Numbers	Cost per Hour	Hours	Crew	Cost		
	1	$50.00	700	Project Manager	$35,000	Anticipated operations crew	Data
	1	$40.00	0	Supervisor/RSO	$0	na	Data
	1	$30.00	0	EHS Tech	$0	na	Data
	1	$30.00	0	Sampler	$0	na	Data
	8	$30.00	0	Plant and Field Operators	$0	na	Data
	1	$30.00	700	Maintenance	$21,000	Anticipated operations crew	Data
	1	$30.00	700	Office Support	$21,000	Anticipated operations crew	Data
	1	$30.00	700	Equipment Operator	$21,000	Anticipated operations crew	Data
	2	$30.00	700	Reclamation Laborer	$42,000	Anticipated operations crew	Data
	1	$35.00	700	Foreman	$24,500	Anticipated operations crew	Data
	1	$40.00	0	Lab Chemist	$0	na	Data
	2	$13.50	700	Vehicles	$18,900		Data
TOTAL RESTORATION LABOR COST					$183,400		

VII RESTORATION CAPITAL REQUIREMENTS			
I Plug and Abandon DDW (2)	$205,180	$104,090 for well 1 and $101,090 for well 2	Data
TOTAL	$205,180		

LOST CREEK ISR, LLC GROUNDWATER RESTORATION - WORKSHEET 1

Assumptions/Items	Mine Unit No. 1	Explanation	Source
SUMMARY:			
I GROUNDWATER SWEEP	$0		
II REVERSE OSMOSIS	$0		
III RECIRCULATION	$0		
IV WASTE DISPOSAL WELL	$0		
V STABILIZATION	$0		
VI LABOR	$183,400		
VII CAPITAL	$205,180		
TOTAL GROUNDWATER RESTORATION COST	**$388,580**		

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: A. Plant Equipment Removal and Disposal - WORKSHEET 2

Assumptions/Items	Shop / Lab / Office	Precipitation Section	Chemical Section	Ion Exchange Section	Restoration Section	Total	Explanation	Source
Volume (Cubic Yards)	15	32	17	93	6	163	Estimate of equipment to be removed	Data
Volume per Truck Load (Cubic Yards)	20	20	20	20	20		Typical load for shipping	Data
Number of Truck Loads	0.8	1.6	0.8	4.6	0.3	8.2		Calculated
I DECONTAMINATION								
Decontamination Cost per Truck Load	$620	$620	$620	$620	$620		Estimated average decontaminate	Unit Rate
Percent Requiring Decontamination	0.0%	0.0%	0.0%	0.0%	0.0%		Percent expected	Data
TOTAL DECONTAMINATION COST	$0	$0	$0	$0	$0	$0		Calculated
II DISMANTLING & LOADING								
Cost per Truck Load	$805	$805	$805	$805	$805		Estimated average dismantle cost	Unit Rate
TOTAL DISMANTLING & LOADING COST	$620	$1,290	$676	$3,735	$242	$6,562		Calculated
III OVERSIZE								
Percent Requiring Permits	0.0%	10.0%	10.0%	10.0%	10.0%			Data
Cost per Truck Load	$367	$367	$367	$367	$367			Unit Rate
TOTAL OVERSIZE COST	$0	$59	$31	$170	$11	$271		Calculated
IV TRANSPORTATION & DISPOSAL								
A. Landfill								
Percent to be Shipped	100.0%	100.0%	100.0%	100.0%	100.0%		Percent acceptable at landfill	Data
Distance (Miles)	48	48	48	48	48		Distance to landfill	Data
Cost per Mile	$2.90	$2.90	$2.90	$2.90	$2.90		Current transport rate	Unit Rate
Transportation Cost	$107	$223	$117	$646	$42			Calculated
Disposal Fee per Cubic Yard	$13.50	$13.50	$13.50	$13.50	$13.50		Landfill fee	Unit Rate
Disposal Cost	$208	$433	$227	$1,253	$81			Calculated
Total Cost	$315	$656	$344	$1,898	$123			Calculated
B. Licensed Site								
Percent to be Shipped	0.0%	0.0%	0.0%	0.0%	0.0%		Percent requiring disposal at licensed site	Calculated
Distance (Miles)	105	105	105	105	105		Distance to Shirley Basin	Data
Cost per Mile	$2.90	$2.90	$2.90	$2.90	$2.90		Current transport rate	Unit Rate
Transportation Cost	$0	$0	$0	$0	$0			Calculated
Disposal Cost per Cubic Foot	$12.38	$12.38	$12.38	$12.38	$12.38		Licensed site fee	Unit Rate
Volume per Truck Load (Cubic Yards)	20.0	20.0	20.0	20.0	20.0		Typical load for shipping	Data
Volume per Truck Load (Cubic Feet)	540	540	540	540	540			Calculated
Disposal Cost	$0	$0	$0	$0	$0			Calculated
Total Cost Licensed Site	$0	$0	$0	$0	$0			Calculated
TOTAL TRANSPORTATION & DISPOSAL COST	$315	$656	$344	$1,898	$123	$3,336		Calculated
TOTAL PLANT EQUIPMENT REMOVAL AND DISPOSAL COST	**$935**	**$2,005**	**$1,050**	**$5,803**	**$376**	**$10,169**		Calculated

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: B. Plant Building Demolition and Disposal - WORKSHEET 3

Assumptions/Items	Plant	Header Houses	Drill Shed	Total	Explanation	Source
I STRUCTURE DEMOLITION & DISPOSAL						
Structural Character	2-Story Steel Frame	1-Story Pre-Fab. (1)	1-Story Pole Barn			
Demolition Volume (Cubic Feet)	1,248,000	3,270	22,400		Estimated volume of structures	Data
Demolition Cost per Cubic Foot	$0.2500	$0.2500	$0.2500			Unit Rate
Demolition Cost	$312,000	$818	$5,600	$318,418		Calculation
Factor For Gutting	10.0%	10.0%	10.0%			Data
Gutting Cost	$31,200	$82	$560	$31,842		Calculation
Weight (Pounds)	196,750	16,500	15,000		Estimated weight of building components	Data

	Quantity	Height (Feet)	Length (Feet)	Area (Square Feet)	Density (Pounds per Square Foot)	Building Weight (Pounds)
Ends	2	1	4800	9600	2.5	24000
Roof	2	82.5	260	42900	2.5	107250
Sidewall	2	20	260	10400	2.5	26000
Internal Wall	1	20	460	9200	2.5	23000
Internal Wall	1	30	220	6600	2.5	16500
Total 2-Story Steel Frame Weight						**196750**

Weight per Truck Load	40,000	40,000	40,000		Typical load for shipping	Data
Number of Truck Loads	4.9	0.4	0.4			Calculation
Distance to Landfill	48	48	48		Distance to landfill	Data
Cost per Mile	$2.90	$2.90	$2.90		Current transport rate	Unit Rate
Transportation Cost	$685	$57	$52	$794		
Disposal Cost per Ton	$40.20	$40.20	$40.20		Landfill fee	Unit Rate
Disposal Cost	$3,955	$332	$302	$4,588		Calculation
TOTAL STRUCTURE DEMOLITION & DISPOSAL COST	$347,839	$1,288	$6,514	$355,641		Calculation

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: B. Plant Building Demolition and Disposal - WORKSHEET 3

Assumptions/Items	Plant	Header Houses	Drill Shed	Total	Explanation	Source
II CONCRETE DECONTAMINATION, DEMOLITION & DISPOSAL						
Area (Square Feet)	30,050	283	565		Building concrete area	Data
Average Thickness (Feet)	1	1.0	0.3			Data
Volume (Cubic Feet)	30,050	283	141			Calculation
Percent Requiring Decontamination	0.0%	0.0%	0.0%			Data
Percent Decontaminated	0.0%	0.0%	0.0%			Data
Decontamination (Cost per Square Foot)	$0.191	$0.191	$0.191			Unit Rate
Decontamination Cost	$0	$0	$0	$0		Calculation
Demolition (Cost per Square Foot)	$2.124	$2.124	$0.100			Unit Rate
Demolition Cost	$63,826	$601	$57	$64,484		Calculation
Transportation & Disposal						
A. Landfill Disposal						
Percent to be Disposed at Landfill	100%	100%	100%			Data
Concrete Weight (Pounds per Cubic Foot)	150	150	150			Data
Concrete Weight (Pounds)	4,507,500	42,450	21,188			
Weight per Truck Load (Pounds)	40,000	40,000	40,000			
Number of Truck Loads	112.7	1.1	0.5			
Distance to Landfill (Miles)	48	48	48			
Cost per Mile	$2.90	$2.90	$2.90		Current transport rate	
Transportation Cost	$15,686	$148	$74	$15,908		Data
Disposal Cost per Ton	$40.20	$40.20	$40.20			Unit Rate
Disposal Cost	$90,601	$853	$426	$91,880		Calculation
B. Licensed Site						
Percent to be Shipped	0%	0%	0%			Calculation
Distance (Miles)	105	105	105			Data
Cost per Mile	$2.90	$2.90	$2.90		Current transport rate	Unit Rate
Transportation Cost	$0	$0	$0	$0		Calculation
Disposal Cost per Cubic Foot	$4.16	$4.16	$4.16			Unit Rate
Volume per Truck Load (Cubic Yards)	20	20	20			Data
Volume per Truck Load (Cubic Feet)	540	540	540			Calculation
Disposal Cost	$0	$0	$0	$0		Calculation
TOTAL CONCRETE DECONTAMINATION, DEMOLITION & DISPOSAL COST	$170,113	$1,602	$556	$172,271		Calculation

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: B. Plant Building Demolition and Disposal - WORKSHEET 3

Assumptions/Items	Plant	Header Houses	Drill Shed	Total	Explanation	Source
III SOIL REMOVAL & DISPOSAL						
Front End Loader Cost per Hour	$50	$50	$50	$50		
Time with Front End Loader (Hours)	0	0	0	0		
Cost of Front End Loader	$0	$0	$0	$0	Assume removal of 3" of Contaminated	Data
Volume to be Shipped (Cubic Feet)	0	0	0		Soil Under Headers, 1" under Plant,	Data
Distance (Miles)	105	105	105		Disposal at a Licensed Facility	Data
Cost per Mile	$2.90	$2.90	$2.90			Unit Rate
Transportation Cost	$0	$0	$0	$0		Calculation
Disposal Fee per Cubic Foot	$4.16	$4.16	$4.16			Unit Rate
Quantity per Truck Load (Cubic Feet)	540	540	540			Data
Disposal Cost	$0	$0	$0	$0		Calculation
TOTAL SOIL REMOVAL & DISPOSAL COST	$0	$0	$0	$0		Calculation
IV RADIATION SURVEY						
Area Required (Acres)	0.00	0.00	0.00			Data
Survey Cost per Acre	$653.00	$653.00	$653.00			Unit Rate
TOTAL RADIATION SURVEY COST	$0	$0	$0	$0		Calculation
TOTAL PLANT BUILDING DEMOLITION AND DISPOSAL COST	**$517,952**	**$2,890**	**$7,070**	**$527,913**		Calculation

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: C. Storage Pond Sludge and Liner Handling - WORKSHEET 4

Assumptions/Items	Pond 1 Storage	Pond 2 Storage	Total	Explanation	Source
I POND SLUDGE					
Average Sludge Depth (Feet)	0.000	0.000			Data
Average Sludge Area (Square Feet)	40,300	40,300			Data
Sludge Volume (Cubic Feet)	-	-			Calculated
Sludge Volume (Cubic Yards)	0	0			Calculated
Sludge Volume per Truck Load (Cubic Yards)	20.0	20.0			Data
Number of Sludge Truck Loads	0.0	0.0			Calculated
Sludge Handling Cost Per Load	$268.00	$268.00			Unit Rate
Total Sludge Handling Cost	$0	$0	$0		Calculated
Transportation & Disposal					
Percent to be Shipped	100.0%	100.0%			Data
Distance (Miles)	105	105			Data
Cost per Mile	$2.90	$2.90			Unit Rate
Transportation Cost	$0	$0			Calculated
Disposal Cost per Cubic Foot	$12.38	$12.38			Unit Rate
Volume per Truck Load (Cubic Yards)	20.0	20.0			Data
Volume per Truck Load (Cubic Feet)	540	540			Calculated
Disposal Cost	$0	$0			Calculated
Total Transportation & Disposal Cost	$0	$0	$0		Calculated
TOTAL POND SLUDGE COST	$0	$0	$0		Calculated

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: C. Storage Pond Sludge and Liner Handling - WORKSHEET 4

Assumptions/Items	Pond 1 Storage	Pond 2 Storage	Total	Explanation	Source
II POND LINER					
Total Pond Area (Acres)	0.93	0.93			Data
Total Pond Area (Square Feet)	40,300	40,300			Calculated
Factor For Sloping Sides	20.0%	20.0%			Data
Total Liner Area (Square Feet)	48360	48360			Calculated
Liner Thickness (Mils)	30	30			Data
Liner Thickness (Inches)	0.0300	0.0300			Calculated
Liner Thickness (Feet)	0.0025	0.0025			Calculated
"Swell" Factor	0.0%	0.0%			Data
Liner Volume (Cubic Feet)	121	121			Calculated
Truck Loads of Liner	0.2	0.2			Calculated
Liner Handling Cost					
Labor Crew Cost per Hour	$135	$135			Unit Rate
Hours per Load	2.0	2.0			Unit Rate
Liner Handling Cost per Load	$270.00	$270.00			Calculated
Total Liner Handling Cost	$54	$54	$108		Calculated
Transportation & Disposal					
Percent to be Shipped	100.0%	100.0%			Data
Distance (Miles)	48	48			Data
Cost per Mile	$2.90	$2.90			Unit Rate
Transportation Cost	$28	$28			Calculated
Disposal Cost per Cubic Foot	$0.50	$0.50			Unit Rate
Volume per Truck Load (Cubic Feet)	540	540			Data
Disposal Cost	$54	$54			Calculated
Total Transportation & Disposal	$82	$82	$164		Calculated
TOTAL POND LINER COST	$136	$136	$272		Calculated

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: C. Storage Pond Sludge and Liner Handling - WORKSHEET 4

Assumptions/Items	Pond 1 Storage	Pond 2 Storage	Total	Explanation	Source
III POND BACKFILL					
Backfill Required (Cubic Yards)	10,448	10,448			Data
Backfill Cost per Cubic Yard	$1.13	$1.13			Unit Rate
TOTAL POND BACKFILL COST	$11,806	$11,806	$23,612		Calculated
IV RADIATION SURVEY					
Areal required (Acres)	0.00	0.00			Data
Survey Cost per Acre	$653.00	$653.00			Unit Rate
TOTAL RADIATION SURVEY COST	$0	$0	$0		Calculated
V LEAK DETECTION SYSTEM REMOVAL					
Gravel and Piping Volume (Cubic Feet)	1008	1008		Assume 3 inches	Data
Volume per Truck Load (Cubic Feet)	540	540			Data
Loads to be Shipped	1.9	1.9			Calculated
Distance (Miles)	48	48			Data
Cost per Mile	$2.90	$2.90			Unit Rate
Transportation Cost	$260	$260			Calculated
Handling Cost	$504	$504			Unit Rate (Imbedded)
Disposal Fee per Cubic Foot	$0.50	$0.50			Unit Rate
Disposal Cost	$504	$504			Calculated
TOTAL LEAK DETECTION SYSTEM REMOVAL COST	$1,267	$1,267	$2,534		Calculated
TOTAL POND RECLAMATION COST	**$13,209**	**$13,209**	**$26,418**		Calculated

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: D. Well Abandonment - WORKSHEET 5

Assumptions/Items	Mine Unit No. 1	Site Wells	Explanation	Source
Number of Wells	177	188		Data
Average Depth (Feet)	425	533		Data
Average Diameter (Inches)	4.328	4.328		Data
I MATERIALS				
Class G Neat Cement Required (Cubic Feet per Well)	43.4	54.5		Data
Cement Sacks Required per Well	33.9	42.5	15 ppg Class G cement requires 6 gallons water per sack cement and 1-1/2% bentonite by weight	Data
Cement Sack Cost	$14.43	$14.43		Unit Rate
Cement Cost per Well	$489.49	$613.88		Calculated
Bentonite Sacks Required per Well	1.0	1.2		Data
Bentonite Bag Cost	$2.90	$2.90		Unit Rate
Bentonite Cost per Well	$2.77	$3.48		Calculated
TOTAL MATERIALS COST PER WELL	$492.27	$617.36		Calculated
II LABOR (INCLUDED IN WORKSHEET 1)				
Hours Required per Well	0.0	0.0		Data
Labor Cost per Hour	$0.00	$0.00		Unit Rate
TOTAL LABOR COST PER WELL	$0.00	$0.00		Calculated
III EQUIPMENT RENTAL				
Hours Required per Well	1.0	1.0		Data
Backhoe with Operator Cost per Hour	$48.00	$48.00		Unit Rate
Cementer Cost per Hour	$25.00	$25.00		Unit Rate
Total Equipment Cost per Well	$73.00	$73.00		Calculated
TOTAL ABANDONMENT COST PER WELL	$565.27	$690.36		Calculated
SUBTOTAL WELL ABANDONMENT COST	$ 100,052	$ 129,788		
TOTAL WELL ABANDONMENT COST	**$ 229,840**			Calculated

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: E. Wellfield Equipment Removal and Disposal - WORKSHEET 6

Assumptions/Items	MU-1	Site Wells	Source
I WELLFIELD PIPING			
A. Removal			
Surface Length per Well (Feet)	250	0	
Downhole Length per Well (Feet)	350	0	
Total Number of Wells	0	100	
Total Length (Feet)	0	0	Calculated
Cost of Removal per Foot	$0.109	$0.109	Unit Rate
Cost of Removal	$0	$0	Calculated
Chipping Rate (feet per hour)	1500	1500	Estimate
Chipper Cost per Hour	$30	$30	Unit Rate
Chipping Cost	$0	$0	Calculated
Average OD (Inches)	1.6	1.6	
Chipped Volume Reduction (Cubic Feet per Foot)	0.008	0.008	Unit Rate
Chipped Volume (Cubic Feet)	0	0	Calculated
Volume per Truck Load (Cubic Feet)	540	540	
Total Number of Truck Loads	0.0	0.0	Calculated
B. Survey & Decontamination			
Percent Requiring Decontamination	0%	0%	
Number of Decontamination Loads	0.0	0.0	Calculated
Decontamination Cost per Load	$620.00	$620.00	Unit Rate
Decontamination Cost	$0	$0	Calculated
C. Transport & Disposal			
Landfill Transportation			
Percent to be Shipped	0.0%	100.0%	
Loads to be Shipped	0.0	0.0	Calculated
Distance (Miles)	48	48	
Transportation Cost per Mile	$2.90	$2.90	Unit Rate
Transportation Cost	$0	$0	Calculated
Landfill Disposal			
Disposal Fee per Cubic Yard	$13.50	$13.50	Unit Rate
Load Volume (Cubic Yards)	0	0	
Disposal Cost	$0	$0	Calculated
Total Landfill Cost	$0	$0	Calculated

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: E. Wellfield Equipment Removal and Disposal - WORKSHEET 6

Assumptions/Items	MU-1	Site Wells	Source
I WELLFIELD PIPING (continued)			
C. Transport & Disposal (continued)			
Licensed Site			
Transportation			
Percent to be Shipped	0.0%	0.0%	Calculated
Loads to be Shipped	0.0	0.0	Calculated
Distance (Miles)	105	105	
Transportation Cost per Mile	$2.90	$2.90	Unit Rate
Transportation Cost	$0	$0	Calculated
Disposal			
Disposal Fee per Cubic Foot	$12.38	$12.38	Unit Rate
Disposal Fee per Cubic Yard	$334.26	$334.26	Calculated
Load Volume (Cubic Yards)	0	0	
Disposal Cost	$0	$0	Calculated
Total Licensed Site Cost	$0	$0	Calculated
Total Transport & Disposal Cost	$0	$0	Calculated
TOTAL WELLFIELD PIPING REMOVAL & DISPOSAL COST	$0	$0	Calculated
II WELL PUMPS			
A. Pump and Tubing Removal			
Number of Wells with Pumps	0	100	
Removal Cost per Well	$12.07	$12.07	Unit Rate
Removal Cost	$0	$1,207	Calculated
Number of Pumps per Truck Load	180	180	
Number of Truck Loads (Pumps)	0.0	0.6	Calculated
B. Survey & Decontamination (Pumps)			
Percent Requiring Decontamination	0.0%	0.0%	
Number of Decontamination Truck Loads	0.0	0.0	Calculated
Decontamination Cost per Load	$0.00	$0.00	Unit Rate
Decontamination Cost	$0	$0	Calculated

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: E. Wellfield Equipment Removal and Disposal - WORKSHEET 6

Assumptions/Items	MU-1	Site Wells	Source
II WELL PUMPS (continued)			
C. Tubing Volume Reduction & Loading			
Length per Well (Feet)	375	450	
Total Length (Feet)	0	45,000	Calculated
Removal Cost per Foot	$0.014	$0.014	Unit Rate
Removal Cost	$0	$608	Calculated
Average OD (Inches)	2.0	2.0	
Chipped Volume Reduction (Cubic Feet per Foot)	0.012	0.012	
Chipped Volume (Cubic Feet)	0	540	Calculated
Volume per Truck Load (Cubic Feet)	540	540	
Number of Truck Loads	0.0	1.0	Calculated
D. Transport & Disposal			
Landfill			
Transportation			
Percent to be Shipped (Pumps)	100.0%	100.0%	
Loads to be Shipped	0.0	0.6	Calculated
Distance (Miles)	48	48	
Cost per Mile	$2.90	$2.90	Unit Rate
Transportation Cost	$0	$84	Calculated
Disposal			
Disposal Fee per Cubic Yard	$13.50	$13.50	Unit Rate
Load Volume (Cubic Yards)	0	0	
Disposal Cost	$0	$0	Calculated
Total Landfill Cost	$0	$84	Calculated
Licensed Site			
Transportation			
Percent to be Shipped (Pumps)	0.0%	0.0%	
Percent to be Shipped (Tubing)	0.0%	0.0%	
Loads to be Shipped	0.0	1.0	Calculated
Distance (Miles)	105	105	
Cost per Mile	$2.90	$2.90	Unit Rate
Transportation Cost	$0	$305	Calculated

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: E. Wellfield Equipment Removal and Disposal - WORKSHEET 6

Assumptions/Items	MU-1	Site Wells	Source
II WELL PUMPS (continued)			
D. Transport & Disposal (continued)			
Licensed Site (continued)			
Disposal			
Disposal Cost per Cubic Foot	$12.38	$12.38	Unit Rate
Disposal Fee per Cubic Yard	$334.26	$334.26	Calculated
Load Volume (Cubic Yards)	0	0	
Disposal Cost	$0	$0	Calculated
Total Licensed Site Cost	$0	$305	Calculated
Total Transport & Disposal Cost	$0	$388	Calculated
TOTAL WELL PUMP REMOVAL & DISPOSAL COST	$0	$2,202	Calculated
III SURFACE TRUNKLINE PIPING			
A. Removal			
Total Length (Feet)	0	0	
Removal Cost per Foot	$0.081	$0.081	Unit Rate
Removal Cost	$0	$0	Calculated
Average OD (Inches)	8.750	0.000	
Chipped Volume Reduction (Cubic Feet per Foot)	0.088	0.088	Unit Rate
Chipped Volume (Cubic Feet)	0	0	Calculated
Volume per Truck Load (Cubic Feet)	540	540	
Total Number of Truck Loads	0.0	0.0	Calculated
B. Survey & Decontamination			
Percent Requiring Decontamination	0.0%	0.0%	
Number of Decontamination Truck Loads	0.0	0.0	Calculated
Decontamination Cost per Load	$0.00	$0.00	Unit Rate
Decontamination Cost	$0	$0	Calculated

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: E. Wellfield Equipment Removal and Disposal - WORKSHEET 6

Assumptions/Items	MU-1	Site Wells	Source
III SURFACE TRUNKLINE PIPING (continued)			
C. Transport & Disposal			
Landfill			
Transportation			
Percent to be Shipped	100.0%	100.0%	
Loads to be Shipped	0.0	0.0	Calculated
Distance (Miles)	48	48	
Cost per Mile	$2.90	$2.90	Unit Rate
Transportation Cost	$0	$0	Calculated
Disposal			
Disposal Fee per Cubic Yard	$13.50	$13.50	Unit Rate
Load Volume (Cubic Yards)	0	0	
Disposal Cost	$0	$0	Calculated
Total Landfill Cost	$0	$0	Calculated
Licensed Site			
Transportation			
Percent to be Shipped	0.0%	0.0%	Calculated
Loads to be Shipped	0.0	0.0	Calculated
Distance (Miles)	105	105	
Cost per Mile	$2.90	$2.90	Unit Rate
Transportation Cost	$0	$0	Calculated
Disposal			
Disposal Cost per Cubic Foot	$12.38	$12.38	Unit Rate
Disposal Fee per Cubic Yard	$334.26	$334.26	Calculated
Load Volume (Cubic Yards)	0	0	
Disposal Cost	$0	$0	Calculated
Total Licensed Site Cost	$0	$0	Calculated
Total Transport & Disposal Cost	$0	$0	Calculated
TOTAL SURFACE TRUNKLINE PIPING REMOVAL & DISPOSAL COST	$0	$0	Calculated

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: E. Wellfield Equipment Removal and Disposal - WORKSHEET 6

Assumptions/Items	MU-1	Site Wells	Source
IV BURIED TRUNKLINE			
A. Removal			
Total Length (Feet)	24,304	0	
Removal Cost per Buried Foot	$1.58	$1.58	Unit Rate
Removal Cost	$19,139	$0	Calculated
Chipping Rate (feet per hour)	150	150	Estimate
Chipper Cost per Hour	$30	$30	Unit Rate
Chipping Cost	$4,861	$0	Calculated
Average OD (Inches)	9.635	9.635	
Chipped Volume Reduction (Cubic Feet per Foot)	0.309	0.309	Unit Rate
Chipped Volume (Cubic Feet)	7,510	0	Calculated
Volume per Truck Load (Cubic Feet)	540	540	
Number of Truck Loads	13.9	0.0	Calculated
B. Survey & Decontamination			
Percent Requiring Decontamination	0.0%	0.0%	
Number of Decontamination Truck Loads	0.0	0.0	Calculated
Decontamination Cost per Load	$0.00	$0.00	Unit Rate
Decontamination Cost	$0	$0	Calculated
C. Transport & Disposal			
Landfill			
Transportation			
Percent to be Shipped	100.0%	100.0%	
Loads to be Shipped	13.9	0.0	Calculated
Distance (Miles)	48	48	
Cost per Mile	$2.90	$2.90	Unit Rate
Transportation Cost	$1,935	$0	Calculated
Disposal			
Disposal Fee per Cubic Yard	$13.50	$13.50	Unit Rate
Load Volume (Cubic Yards)	0	0	
Disposal Cost	$0	$0	Calculated
Total Landfill Cost	$1,935	$0	Calculated

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: E. Wellfield Equipment Removal and Disposal - WORKSHEET 6

Assumptions/Items	MU-1	Site Wells	Source
IV BURIED TRUNKLINE (continued)			
C. Transport & Disposal (continued)			
Licensed Site			
Transportation			
Percent to be Shipped	0.0%	0.0%	Calculated
Loads to be Shipped	0.0	0.0	Calculated
Distance (Miles)	105	105	
Cost per Mile	$2.90	$2.90	Unit Rate
Transportation Cost	$0	$0	Calculated
Disposal			
Disposal Cost per Cubic Foot	$12.38	$12.38	Unit Rate
Disposal Fee per Cubic Yard	$334.26	$334.26	Calculated
Load Volume (Cubic Yards)	0	0	
Disposal Cost	$0	$0	Calculated
Total Licensed Site Cost	$0	$0	Calculated
Total Transport & Disposal Cost	$1,935	$0	Calculated
TOTAL BURIED TRUNKLINE REMOVAL & DISPOSAL COST	$25,935	$0	Calculated
V MANHOLES			
A. Removal			
Total Quantity	9	0	
Removal Cost per Manhole	$73.16	$73.16	Unit Rate
Removal Cost	$658	$0	Calculated
Quantity per Truck Load	10	10	
Number of Truck Loads	0.9	0.0	Calculated
B. Survey & Decontamination			
Percent Requiring Decontamination	0.0%	0.0%	
Number of Decontamination Truck Loads	0.0	0.0	Calculated
Decontamination Cost per Load	$0.00	$0.00	Unit Rate
Decontamination Cost	$0	$0	Calculated

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: E. Wellfield Equipment Removal and Disposal - WORKSHEET 6

Assumptions/Items	MU-1	Site Wells	Source
V MANHOLES (continued)			
C. Transport & Disposal			
Landfill			
Transportation			
Percent to be Shipped	100.0%	100.0%	
Loads to be Shipped	0.9	0.0	Calculated
Distance (Miles)	48	48	Unit Rate
Cost per Mile	$2.90	$2.90	Calculated
Transportation Cost	$125	$0	
Disposal			
Disposal Fee per Cubic Yard	$13.50	$13.50	Unit Rate
Load Volume (Cubic Yards)	0	0	
Disposal Cost	$0	$0	Calculated
Total Landfill Cost	$125	$0	Calculated
Licensed Site			
Transportation			
Percent to be Shipped	0.0%	0.0%	Calculated
Loads to be Shipped	0.0	0.0	Calculated
Distance (Miles)	105	105	
Cost per Mile	$2.90	$2.90	Unit Rate
Transportation Cost	$0	$0	Calculated
Disposal			
Disposal Cost per Cubic Foot	$12.38	$12.38	Unit Rate
Disposal Fee per Cubic Yard	$334.26	$334.26	Calculated
Load Volume (Cubic Yards)	0	0	
Disposal Cost	$0	$0	Calculated
Total Licensed Site Cost	$0	$0	Calculated
Total Transport & Disposal Cost	$125	$0	Calculated
TOTAL MANHOLE REMOVAL & DISPOSAL COST	$784	$0	Calculated
SUBTOTAL WELLFIELD EQUIPMENT REMOVAL AND DISPOSAL COST	**$26,719**	**$2,202**	
TOTAL WELLFIELD EQUIPMENT REMOVAL AND DISPOSAL COST	**$28,921**		Calculated

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: F. Topsoil Replacement and Revegetation - WORKSHEET 7

Assumptions/Items	Plant Site and Mine Unit No. 1	Site Wells	Source
I PLANT			
A. Topsoil Handling & Grading			
Affected Area (Acres)	5.0	0.0	
Average Affected Thickness (Inches)	12.0	12.0	
Topsoil Volume (Cubic Yards)	8,067	0	Calculated
Hauling/Placement Cost per Cubic Yard	$1.13	$1.13	Unit Cost
Topsoil Handling Cost	$9,115	$0	Calculated
Grading Cost per Acre	$56.28	$56.28	Unit Cost
Grading Cost	$281	$0	Calculated
Total Topsoil Handling & Grading Cost	$9,397	$0	Calculated
B. Radiation Survey & Soil Analysis			
Survey & Analysis Cost per Acre	$0.00	$0.00	Unit Cost
Total Survey & Analysis Cost	$0	$0	Calculated
C. Revegetation			
Fertilizer Cost per Acre	$52.33	$52.33	Unit Cost
Seeding Preparation & Seeding Cost per Acre	$189.85	$189.85	Unit Cost
Mulching & Crimping Cost per Acre	$311.25	$311.25	Unit Cost
Total Revegetation Cost per Acre	$553.43	$553.43	Calculated
Total Revegetation Cost	$2,767	$0	Calculated
TOTAL PLANT COST	$12,164	$0	Calculated

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: F. Topsoil Replacement and Revegetation - WORKSHEET 7

Assumptions/Items	Plant Site and Mine Unit No. 1	Site Wells	Source
II PONDS			
A. Topsoil Handling & Grading			
Affected Area (Acres)	5.0	0.0	
Average Affected Thickness (Inches)	20	20	
Topsoil Volume (Cubic Yards)	13,444	0	Calculated
Hauling/Placement Cost per Cubic Yard	$1.13	$1.13	Unit Cost
Topsoil Handling Cost	$15,192	$0	Calculated
Grading Cost per Acre	$56.28	$56.28	Unit Cost
Grading Cost	$281	$0	Calculated
Total Topsoil Handling & Grading Cost	$15,474	$0	Calculated
B. Radiation Survey & Soil Analysis			
Survey & Analysis Cost per Acre	$0.00	$0.00	Unit Cost
Total Survey & Analysis Cost	$0	$0	Calculated
C. Revegetation			
Fertilizer Cost per Acre	$52.33	$52.33	Unit Cost
Seeding Preparation & Seeding Cost per Acre	$189.85	$189.85	Unit Cost
Mulching & Crimping Cost per Acre	$311.25	$311.25	Unit Cost
Total Revegetation Cost per Acre	$553.43	$553.43	Calculated
Total Revegetation Cost	$2,767	$0	Calculated
TOTAL POND COST	$18,241	$0	Calculated

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: F. Topsoil Replacement and Revegetation - WORKSHEET 7

Assumptions/Items	Plant Site and Mine Unit No. 1	Site Wells	Source
III WELLFIELDS			
A. Topsoil Handling & Grading			
Affected Area (Acres)	8.0	0.0	
Average Affected Thickness (Inches)	0.0	0.0	
Topsoil Volume (Cubic Yards)	0	0	Calculated
Hauling/Placement Cost per Cubic Yard	$1.13	$1.13	Unit Cost
Topsoil Handling Cost	$0	$0	Calculated
Grading Cost per Acre	$56.28	$56.28	Unit Cost
Grading Cost	$450	$0	Calculated
Total Topsoil Handling & Grading Cost	$450	$0	Calculated
B. Radiation Survey & Soil Analysis			
Survey & Analysis Cost per Acre	$0.00	$0.00	Unit Cost
Total Survey & Analysis Cost	$0	$0	Calculated
C: Spill Cleanup			
Affected Area (Acres)	-	-	Calculated
Affected Area (Square Feet)	-	-	
Average Affected Thickness (Feet)	0.25	0.25	
Affected Volume (Cubic Feet)	-	-	Calculated
Volume per Truck Load (Cubic Feet)	540	540	
Number of Truck Loads	0.0	0.0	Calculated
Distance (Miles)	105	105	
Cost per Mile	$2.90	$2.90	Unit Cost
Transportation Cost	$0	$0	Calculated
Handling Cost per Truck Load	$238	$238	Unit Cost
Handling Cost	$0	$0	Calculated
Disposal Fee per Cubic Foot	$4.16	$4.16	Unit Cost
Disposal Cost	$0	$0	Calculated
Total Spill Cleanup Cost	$0	$0	Calculated

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: F. Topsoil Replacement and Revegetation - WORKSHEET 7

Assumptions/Items	Plant Site and Mine Unit No. 1	Site Wells	Source
III WELLFIELDS (continued)			
D. Revegetation			
Fertilizer Cost per Acre	$52.33	$52.33	Unit Cost
Seeding Preparation & Seeding Cost per Acre	$189.85	$189.85	Unit Cost
Mulching & Crimping Cost per Acre	$311.25	$311.25	Unit Cost
Total Revegetation Cost per Acre	$553.43	$553.43	Calculated
Total Revegetation Cost	$4,427	$0	Calculated
TOTAL WELLFIELDS COST	$4,878	$0	Calculated
IV ROADS			
A. Topsoil Handling & Grading			
Affected Area (Acres)	10.6	0.0	

Main Road Lengths (ft)	Secondary Road Lengths (ft)	
1,556		
594		
228		
356		
362		
211		
2,309		
1,260		
244		
1,029		
5,049		
13,198	1,900	Total Road Lengths (Feet)
20	12	Road Width (Feet)
12	8	Road Borrow (Feet)
32	20	Road Width and Borrow (Feet)
9.7	0.9	Road Area (Acres)
10.6		**Total Road Area (Acres)**

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: F. Topsoil Replacement and Revegetation - WORKSHEET 7

Assumptions/Items	Plant Site and Mine Unit No. 1	Site Wells	Source
IV ROADS (continued)			
A. Topsoil Handling & Grading (continued)			
Average Affected Thickness (Inches)	15	0	
Topsoil Volume (Cubic Yards)	21,312	0	Calculated
Hauling/Placement Cost per Cubic Yard	$1.13	$1.13	Unit Cost
Topsoil Handling Cost	$24,082	$0	Calculated
Grading Cost per Acre	$56.28	$56.28	Unit Cost
Grading Cost	$595	$0	Calculated
Scarify Compacted Area per Acre	$53.83	$53.83	Unit Cost
Scarify Cost	$569	$0	Calculated
Total Topsoil Handling & Grading Cost	$25,246	$0	Calculated
B. Radiation Survey & Soil Analysis			
Survey & Analysis Cost per Acre	$0.00	$0.00	Unit Cost
Total Survey & Analysis Cost	$0	$0	Calculated
C. Revegetation			
Fertilizer Cost per Acre	$52.33	$52.33	Unit Cost
Seeding Preparation & Seeding Cost per Acre	$189.85	$189.85	Unit Cost
Mulching & Crimping Cost per Acre	$311.25	$311.25	Unit Cost
Total Revegetation Cost per Acre	$553.43	$553.43	Calculated
Total Revegetation Cost	$5,849	$0	Calculated
TOTAL ROADS COST	$31,095	$0	Calculated

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: F. Topsoil Replacement and Revegetation - WORKSHEET 7

Assumptions/Items	Plant Site and Mine Unit No. 1	Site Wells	Source
V OTHER			
A. Topsoil Handling & Grading			
Affected Area (Acres)	1.0	1.0	
Average Affected Thickness (Inches)	15.0	15.0	
Topsoil Volume (Cubic Yards)	2016.67	2067.08	Calculated
Hauling/Placement Cost per Cubic Yard	$1.13	$1.13	Unit Cost
Topsoil Handling Cost	$2,279	$2,336	Calculated
Grading Cost per Acre	$56.28	$56.28	Unit Cost
Grading Cost	$56	$58	Calculated
Total Topsoil Handling & Grading Cost	$2,335	$2,393	Calculated
B. Radiation Survey & Soil Analysis			
Survey & Analysis Cost per Acre	$0.00	$0.00	Unit Cost
Total Survey & Analysis Cost	$0	$0	Calculated
C. Revegetation			
Fertilizer Cost per Acre	$52.33	$52.33	Unit Cost
Seeding Preparation & Seeding Cost per Acre	$189.85	$189.85	Unit Cost
Mulching & Crimping Cost per Acre	$311.25	$311.25	Unit Cost
Total Revegetation Cost per Acre	$553.43	$553.43	Calculated
Total Revegetation Cost	$553	$567	Calculated
TOTAL OTHER COST	$2,889	$2,961	Calculated

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: F. Topsoil Replacement and Revegetation - WORKSHEET 7

Assumptions/Items	Plant Site and Mine Unit No. 1	Site Wells	Source
VI REMEDIAL ACTION			
A. Topsoil Handling & Grading			
Affected Area (Acres)	14.8	0.5	
Average Affected Thickness (Inches)	0.0	0.0	
Topsoil Volume (Cubic Yards)	0	0	Calculated
Hauling/Placement Cost per Cubic Yard	$1.13	$1.13	Unit Cost
Topsoil Handling Cost	$0	$0	Calculated
Grading Cost per Acre	$0.00	$0.00	Unit Cost
Grading Cost	$0	$0	Calculated
Total Topsoil Handling & Grading Cost	$0	$0	Calculated
B. Radiation Survey & Soil Analysis			
Survey & Analysis Cost per Acre	$0.00	$0.00	Unit Cost
Total Survey & Analysis Cost	$0	$0	Calculated
C. Revegetation			
Fertilizer Cost per Acre	$52.33	$52.33	Unit Cost
Seeding Preparation & Seeding Cost per Acre	$189.85	$189.85	Unit Cost
Mulching & Crimping Cost per Acre	$311.25	$311.25	Unit Cost
Total Revegetation Cost per Acre	$553.43	$553.43	Calculated
Total Revegetation Cost	$8,182	$284	Calculated
TOTAL REMEDIAL ACTION COST	$8,182	$284	Calculated
SUBTOTAL TOPSOIL REPLACEMENT AND REVEGETATIO	$77,447	$3,244	
TOTAL TOPSOIL REPLACEMENT AND REVEGETATION COS	**$80,692**		

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: G. Miscellaneoues Reclamation Activities - WORKSHEET 8

Assumptions/Items	Quantity	Source
I FENCE REMOVAL & DISPOSAL		
Length (Feet)	9,500	
Removal & Disposal Cost per Foot	$0.34	Unit Cost
TOTAL FENCE REMOVAL AND DISPOSAL COST	$3,230	Calculated
II CULVERT REMOVAL & DISPOSAL		
Length (Feet)	200	
Removal & Disposal Cost per Foot	$1.74	Unit Cost
TOTAL CULVERT REMOVAL & DISPOSAL COST	$348	Calculated
III UTILITIES		
Number of Months	3	
Cost per Month	$2,380	Unit Cost
TOTAL UTILITIES COST	$7,140	Calculated
IV DDW PIPELINE REMOVAL AND DISPOSAL		
Length (Feet)	13,080	
Removal & Disposal Cost per Foot	$0.86	Unit Cost
TOTAL DDW PIPELINE REMOVAL & DISPOSAL COST	$11,194	Calculated
V REVEGETATION RETAINER FOR PRIOR YEAR'S DRILLING		
Drill Holes Requiring Retainer	900	yrs 2005 - 2010
Revegetation Retainer	$45.00	Unit Cost
TOTAL REVEGETATION RETAINER FOR PRIOR YEAR'S DRILLING	$40,500	Calculated
TOTAL MISCELLANEOUS RECLAMATION ACTIVITIES COST	**$62,412**	Calculated

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: Restoration Analytical Costs

Sample Type	Groundwater Sweep					
	# of Sample Points	Frequency (Rounds/ Year)	Length of Time (years)	Analytes	Cost per Sample	Total
UCL Monitoring (Monitor Well Ring)	0	24	0.17	Cl, HCO_3, Conductivity [1]	$30.00	$0.00
Monitoring of Pattern Area including Production & MP Wells	–	–	–	–	–	–
Production Composite [2]	–	–	–	–	–	–
Disposal Stream to Deep Well(s) and Local Water Supply Well	0	12	0.17	TDS, U, Ra	$115.00	$0.00
Storage Ponds	0	4	0.17	See Table RP-1b.	$337.00	$0.00
Storage Pond Wells	0	12	0.17	Cl, HCO_3, Conductivity, U	$55.00	$0.00
						$0.00

Sample Type	Reverse Osmosis					
	# of Sample Points	Frequency (Rounds/ Year)	Length of Time (years)	Analytes	Cost per Sample	Total
UCL Monitoring (Monitor Well Ring)	0	24	0.53	Cl, HCO_3, Conductivity	$33.00	$0.00
Monitoring of Pattern Area including Production & MP Wells	0	52	0.53	U, Conductivity	$35.00	$0.00
Production Composite	0	12	0.53	See Table RP-1b.	$337.00	$0.00
Disposal Stream to Deep Well(s) and Local Water Supply Well	0	12	0.53	TDS, U, Ra	$115.00	$0.00
Storage Ponds	0	4	0.53	See Table RP-1b.	$337.00	$0.00
Storage Pond Wells	0	12	0.53	Cl, HCO_3, Conductivity, U	$55.00	$0.00
						$0.00

Sample Type	Recirculation					
	# of Sample Points	Frequency (Rounds/ Year)	Length of Time (years)	Analytes	Cost per Sample	Total
UCL Monitoring (Monitor Well Ring)	0	24	0.08	Cl, HCO_3, Conductivity	$33.00	$0.00
Monitoring of Pattern Area including Production & MP Wells	–	–	–	–	–	–
Production Composite	0	12	0.08	See Table RP-1b.	$337.00	$0.00
Disposal Stream to Deep Well(s) and Local Water Supply Well	0	12	0.08	TDS, U, Ra	$115.00	$0.00
Storage Ponds	0	4	0.08	See Table RP-1b.	$337.00	$0.00
Storage Pond Wells	0	12	0.08	Cl, HCO_3, Conductivity, U	$55.00	$0.00
						$0.00

Sample Type	Stabilization					
	# of Sample Points	Frequency (Rounds/ Year)	Length of Time (years)	Analytes	Cost per Sample	Total
UCL Monitoring (Monitor Well Ring)	0	6	1	Cl, HCO_3, Conductivity	$33.00	$0.00
Monitoring of Pattern Area including Production & MP Wells	0	5	1	See Table RP-1b.	$337.00	$0.00
Production Composite	–	–	–	–	–	–
Disposal Stream to Deep Well(s) and Local Water Supply Well	0	12	1	TDS, U, Ra	$115.00	$0.00
Storage Ponds	0	4	1	See Table RP-1b.	$337.00	$0.00
Storage Pond Wells	0	12	1	Cl, HCO_3, Conductivity, U	$55.00	$0.00
						$0.00

[1] Per Section OP 3.6.4.1, specific UCL parameters for each mine unit will depend on the mine unit characteristics. However, the listed analytes are aniticapted to be those used for the all the Lost Creek mine units, and even if another analyte is chosen, the total cost of the analytes is not anticipted to vary greatly.

[2] Combination of flows from all the wells being pumped in a given mine unit, i.e., plant inflow.

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: Equipment and Tank List

	Quantity	Length (Feet)	Width or Area (Feet or Square Feet)	Thickness (Feet)	Volume (Cubic Feet)	Volume (Cubic Yards)	Contamination	Contaminated Volume (Cubic Yards)	Percent Contamination
SHOP / LAB / OFFICE									
Concrete									
Shop Floor	1	180	40	0.5	3600	133.3	N	0.0	0.0%
Lab Floor	1	40	40.5	0.5	810	30.0	N	0.0	0.0%
Office Floor	1	40	80	0.5	1600	59.3	N	0.0	0.0%
Perimeter Beam	1	340	1	4	1360	50.4	N	0.0	0.0%
Internal Perimeter	1	300	1	2	600	22.2	N	0.0	0.0%
Total Concrete					7970.0	295.2		0.0	0.0%
Equipment									
Lab Tables	0	1	435	3	0	0.0	N	0.0	0.0%
Air Compressor	0	3	3	2	0	0.0	N	0.0	0.0%
Water Heater	0	3	3	6	0	0.0	N	0.0	0.0%
Generator	1	6	4	4	96	3.6	N	0.0	0.0%
MCC	1	20	2	8	320	11.9	N	0.0	0.0%
Total Equipment					416	15.4		0.0	0.0%
TOTAL SHOP / LAB / OFFICE					**8386**	**310.6**		**0.0**	**0.0%**

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: Equipment and Tank List

	Quantity	Length (Feet)	Width or Area (Feet or Square Feet)	Thickness (Feet)	Volume (Cubic Feet)	Volume (Cubic Yards)	Contamination	Contaminated Volume (Cubic Yards)	Percent Contamination
PRECIPITATION SECTION									
Concrete									
Precip Floor	1	180	40	0.5	3600	133.3	N	0.0	0.0%
Perimeter Beam	1	40	1	4	160	5.9	N	0.0	0.0%
Internal Perimeter	1	400	1	2	800	29.6	N	0.0	0.0%
Tank Base	6	1	140	1	840	31.1	N	0.0	0.0%
Pump Base	4	5	5	1	100	3.7	N	0.0	0.0%
Total Concrete					5500	203.7		0.0	0.0%
Equipment									
Filter Press	2	12	3	4	288	10.7	N	0.0	0.0%
YC Slurry Tank	2	1	89.1	1	178.2	6.6	N	0.0	0.0%
YC Slurry Trailer	0	1	189	1	0	0.0	N	0.0	0.0%
Precip. Tank	4	1	91.8	1	367.2	13.6	N	0.0	0.0%
Pumps	8	2	2	1	32	1.2	N	0.0	0.0%
Total Equipment					865	32.1		0.0	0.0%
TOTAL PRECIPITATION SECTION					**6365**	**235.8**		**0.0**	**0.0%**

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: Equipment and Tank List

	Quantity	Length (Feet)	Width or Area (Feet or Square Feet)	Thickness (Feet)	Volume (Cubic Feet)	Volume (Cubic Yards)	Contamination	Contaminated Volume (Cubic Yards)	Percent Contamination
CHEMICAL STORAGE									
Concrete									
Chem. Floor	1	80	40	0.5	1600	59.3	N	0.0	0.0%
Perimeter Beam	1	120	1	4	480	17.8	N	0.0	0.0%
Internal Perimeter	1	120	1	2	240	8.9	N	0.0	0.0%
Acid Floor	2	16	16	1	512	19.0	N	0.0	0.0%
Acid Perimeter	2	64	1	2	256	9.5	N	0.0	0.0%
Tank Base	4	1	140	1	560	20.7	N	0.0	0.0%
Pump Base	4	5	5	1	100	3.7	N	0.0	0.0%
Total Concrete					3748	138.8		0.0	0.0%
Equipment									
Soda Ash Tank	1	1	81	1	81	3.0	N	0.0	0.0%
Bicarb Tank	1	1	56.7	1	56.7	2.1	N	0.0	0.0%
NaOH Tank	1	1	81	1	81	3.0	N	0.0	0.0%
NaCl Saturator	1	1	75.6	1	75.6	2.8	N	0.0	0.0%
Peroxide Tank	1	1	18.9	1	18.9	0.7	N	0.0	0.0%
HCl Tank	1	1	2.7	1	2.7	0.1	N	0.0	0.0%
Acid Tank	2	1	56.7	1	113.4	4.2	N	0.0	0.0%
Pumps	6	2	2	1	24	0.9	N	0.0	0.0%
Total Equipment					453	16.8		0.0	0.0%
TOTAL CHEMICAL STORAGE					**4201**	**155.6**		**0.0**	**0.0%**

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: Equipment and Tank List

	Quantity	Length (Feet)	Width or Area (Feet or Square Feet)	Thickness (Feet)	Volume (Cubic Feet)	Volume (Cubic Yards)	Contamination	Contaminated Volume (Cubic Yards)	Percent Contamination
ION EXCHANGE SECTION									
Concrete									
IX Floor A	1	180	80	0.5	7200	266.7	N	0.0	0.0%
IX Floor B	1	40	40	0.5	800	29.6	N	0.0	0.0%
Perimeter Beam	1	300	1	4	1200	44.4	N	0.0	0.0%
Tank Base	12	1	140	1	1680	62.2	N	0.0	0.0%
IX Base	56	1	1	2	112	4.1	N	0.0	0.0%
Pump Base	8	5	5	1	200	7.4	N	0.0	0.0%
Total Concrete					11192	414.5		0.0	0.0%
Equipment									
IX Column	10	1	86.4	1	864	32.0	N	0.0	0.0%
Guard Column	2	1	64.8	1	129.6	4.8	N	0.0	0.0%
Elution Vessel	2	1	86.4	1	172.8	6.4	N	0.0	0.0%
Fresh Eluate Tank	2	1	91.8	1	183.6	6.8	N	0.0	0.0%
Eluate Tank	2	1	91.8	1	183.6	6.8	N	0.0	0.0%
Rich Eluate Tank	2	1	99.9	1	199.8	7.4	N	0.0	0.0%
Fresh Water Tank	2	1	91.8	1	183.6	6.8	N	0.0	0.0%
Resin Water Decant	1	1	35.1	1	35.1	1.3	N	0.0	0.0%
Resin Water Tank	1	1	91.8	1	91.8	3.4	N	0.0	0.0%
Waste Water Tank	2	1	91.8	1	183.6	6.8	N	0.0	0.0%
RW Sand Filter	0	1	13.5	1	0	0.0	N	0.0	0.0%
RW Bag Filter	4	1	0.8	1	3.2	0.1	N	0.0	0.0%
RW Element Filter	4	1	0.8	1	3.2	0.1	N	0.0	0.0%
Eluate Sump Filter	4	1	0.8	1	3.2	0.1	N	0.0	0.0%
Eluate Bag Filter	6	1	0.8	1	4.8	0.2	N	0.0	0.0%
Eluate Element Filter	4	1	0.8	1	3.2	0.1	N	0.0	0.0%
Resin Screen	4	8	4	1	128	4.7	N	0.0	0.0%
RO Unit	0	20	4	6	0	0.0	N	0.0	0.0%
RO Pump	1	1	3.7	1	3.7	0.1	N	0.0	0.0%
IC/PC Pump	12	1	3.7	1	44.4	1.6	N	0.0	0.0%
WDW Pump	1	4	6	2	48	1.8	N	0.0	0.0%
Sump Pump	4	1	1	3	12	0.4	N	0.0	0.0%
Pumps	6	2	2	1	24	0.9	N	0.0	0.0%
Total Equipment					2505	92.8		0.0	0.0%
TOTAL ION EXCHANGE SECTION					**13697**	**507.3**		**0.0**	**0.0%**

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: Equipment and Tank List

	Quantity	Length (Feet)	Width or Area (Feet or Square Feet)	Thickness (Feet)	Volume (Cubic Feet)	Volume (Cubic Yards)	Contamination	Contaminated Volume (Cubic Yards)	Percent Contamination
RESTORATION SECTION									
Concrete									
Rest. Floor	1	40	80	0.5	1600	59.3	N	0.0	0.0%
IX Base	8	1	1	2	16	0.6	N	0.0	0.0%
Pump Base	1	5	5	1	25	0.9	N	0.0	0.0%
Total Concrete					1641	60.8		0.0	0.0%
Equipment									
Rest. Column	2	1	75.6	1	151.2	5.6	N	0.0	0.0%
RO Unit	0	20	4	6	0	0.0	N	0.0	0.0%
RO Pump	0	1	3.7	1	0	0.0	N	0.0	0.0%
Sump Pump	1	1	1	3	3	0.1	N	0.0	0.0%
Pumps	2	2	2	1	8	0.3	N	0.0	0.0%
Total Equipment					162.2	6.0		0.0	0.0%
TOTAL RESTORATION SECTION					**1803.2**	**66.8**		**0.0**	**0.0%**

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: Equipment and Tank Calculations

	Quantity	Type	Material	ID (Feet)	Height (Feet)	Unit Volume (Cubic Feet)	Total Volume (Cubic Feet)	Thickness (Inches)	Unit Dry Weight (Pounds)	Total Dry Weight (Pounds)	Unit Crushed Volume (Cubic Yards)	Total Crushed Volume (Cubic Yards)	Vessel Numbers
Pressure Vessels													
Ion Exchange Columns	10	Ellip Hd	CS	11.5	9	3739	37393	0.750	25000	250000	3.2	32.3	IX-1 to 10
Guard Columns	2	Ellip Hd	CS	6.5	9	1195	2389	0.500	9200	18400	2.4	4.8	IX-11, 12
Restoration Columns	2	Ellip Hd	CS	10	8	2513	5027	0.625	13700	27400	2.8	5.6	IX-13, 14
Elution Vessels	2	Ellip Hd	CS	11.5	9	3739	7479	0.750	25000	50000	3.2	6.5	E-1, 2
Tanks													
Fresh Eluate Tanks	2	Flat Btm	FRP	14	18	11084	22167	1.000	10,450	20,900	3.4	6.8	T-210A, B
Eluate Tanks	2	Flat Btm	FRP	14	18	11084	22167	1.000	10,450	20,900	3.4	6.8	T-211A, B
Rich Eluate Tanks	2	Flat Btm	FRP	14	20	12315	24630	1.000	11,286	22,572	3.7	7.3	T-212A, B
Fresh Water Tanks	2	Flat Btm	FRP	14	18	11084	22167	1.000	10,450	20,900	3.4	6.8	T-200A, B
Resin Water Decant	1	Cone Btm	FRP	12	8.5	3845	3845	0.750	3,896	3,896	1.3	1.3	T-201
Resin Water Tank	1	Flat Btm	FRP	14	18	11084	11084	1.000	10,450	10,450	3.4	3.4	T-202
Waste Water Tanks	2	Flat Btm	FRP	14	18	11084	22167	1.000	10,450	20,900	3.4	6.8	T-203A, B
Precipitation Tanks	4	Flat Btm	FRP	14	18	11084	44334	1.000	10,450	41,801	3.4	13.6	T-213A - D
Y/C Slurry Storage	2	Cone Btm	CS - RL	12.5	15	7363	14726	0.500	8,242	16,484	3.3	6.6	T-220A, B
Soda Ash Tank	1	Flat Btm	FRP	12	20	9048	9048	1.000	9,316	9,316	3.0	3.0	T-214
Bicarb Mix Tank	1	Flat Btm	FRP	12	12	5429	5429	1.000	6,449	6,449	2.1	2.1	T-215
NaCl Saturator	1	Flat Btm	FRP	12	18	8143	8143	1.000	8,599	8,599	2.8	2.8	T-216
NaOH Tank	1	Flat Btm	FRP	12	20	9048	9048	1.000	9,316	9,316	3.0	3.0	T-219
H2O2 Tank	1	Hor Tank	Alum	9	16.5	4199	4199	0.375	2,396	2,396	0.7	0.7	T-220
Acid Day Tank	1	Flat Btm	CS	5.5	6	570	570	0.250	773	773	0.1	0.1	T-217
Acid Tanks	2	Flat Btm	FRP	12	12	5429	10857	1.000	6,449	12,899	2.1	4.2	T-218A, B
Filtration													
RW Sand Filter	0	Ellip Hd	CS	6	12.5	1414	0	0.500	7,450	0	0.5	0.0	
RW Bag Filter	2		316ss	2	3	38	75	0.375	175	351	0.03	0.1	
RW Element Filter	2		304ss	2	3	38	75	0.375	175	351	0.03	0.1	
Eluate Sump Filter	2		316ss	2	3	38	75	0.375	175	351	0.03	0.1	
Eluate Bag Filter	6		316ss	2	3	38	226	0.375	175	1,052	0.03	0.2	
Eluate Element Filter	2		304ss	2	3	38	75	0.375	175	351	0.03	0.1	
Slurry Filter Press	2						0			0	0.00	0.0	

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: Equipment and Tank Calculations

	Quantity	Type	Material	ID (Feet)	Height (Feet)	Unit Volume (Cubic Feet)	Total Volume (Cubic Feet)	Thickness (Inches)	Unit Dry Weight (Pounds)	Total Dry Weight (Pounds)	Unit Crushed Volume (Cubic Yards)	Total Crushed Volume (Cubic Yards)	Vessel Numbers
Pumps													
IC Pumps (75 hp submersible)	6		SS			3.7	22		560	3,360			P-206A - F
PC Pumps (75 hp submersible)	6		SS			3.7	22		560	3,360			P-207A - F
RO Pumps (75 hp horizontal)	6		CS/SS			3.7	22		560	3,360			
Waste Water Pumps (25 hp centrifugal)	2		SS				0		100	200			P-203A/B
Resin Water Pumps (20 hp centrifugal)	4		SS				0		265	1,060			P-201A/B, 202A/B
Waste Disposal Pump (Plunger)	0		CS/SS			23	0		2,400	0			
Sump Pumps (5 hp)	4		SS				0		295	1,180			
Reverse Osmosis													
200 GPM Unit	0						0			0			
Other													
Resin Screens	5		CS/SS				0			0			S-1A, B, S-2A, B
Water Heater							0			0			
Air Compressor							0			0			
Slurry Trailer	0		CS				0	0.375	15,000	0	7	0.0	TR-1, 2
Generator	2						0			0			
MCC							0			0			

FRP =	0.06
CS =	0.28
SS =	0.29
AI =	0.097
Accy Fact	1.1

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: Deep Disposal Pipeline Calculations

Assumptions/Items	Deep Disposal Well No. 1	Deep Disposal Well No. 2	Deep Disposal Well No. 3	Total	Source
PIPELINE					
A. Removal					
Total Length (Feet)	11,850	1,230	0	13,080	
Removal Cost per Foot	$1.58	$1.58	$1.58		Unit Rate
Removal Cost	$9,362	$972	$0		Calculated
Average OD (Inches)	4.500	4.500	4.500		
Chipped Volume Reduction (Cubic Feet per Foot)	0.309	0.309	0.309		Unit Rate
Chipped Volume (Cubic Feet)	3,662	380	0	4,042	Calculated
Volume per Truck Load (Cubic Feet)	540	540	540		
Number of Truck Loads	6.8	0.7	0.0	7.5	Calculated
B. Survey & Decontamination					
Percent Requiring Decontamination	0.0%	0.0%	0.0%		
Number of Decontamination Truck Loads	0.0	0.0	0.0	0.0	Calculated
Decontamination Cost per Load	$0.00	$0.00	$0.00		Unit Rate
Decontamination Cost	$0	$0	$0	$0	Calculated
C. Transport & Disposal					
Landfill					
Transportation					
Percent to be Shipped	100.0%	100.0%	0.0%		
Loads to be Shipped	6.8	0.7	0.0	7.5	Calculated
Distance (Miles)	48	48	48		
Cost per Mile	$2.90	$2.90	$2.90		Unit Rate
Transportation Cost	$947	$97	$0	$1,044	Calculated
Disposal					
Disposal Fee per Cubic Yard	$13.50	$13.50	$13.50		Unit Rate
Load Volume (Cubic Yards)	20	20	20		
Disposal Cost	$1,836	$189	$0	$2,025	Calculated
Total Landfill Cost	$2,783	$286	$0	$3,069	Calculated

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: Deep Disposal Pipeline Calculations

Assumptions/Items	Deep Disposal Well No. 1	Deep Disposal Well No. 2	Deep Disposal Well No. 3	Total	Source
PIPELINE (continued)					
C. Transport & Disposal (continued)					
Licensed Site					
Transportation					
Percent to be Shipped	0.0%	0.0%	0.0%		Calculated
Loads to be Shipped	0.0	0.0	0.0	0.0	Calculated
Distance (Miles)	105	105	105		
Cost per Mile	$2.90	$2.90	$2.90		Unit Rate
Transportation Cost	$0	$0	$0	$0	Calculated
Disposal					
Disposal Cost per Cubic Foot	$12.38	$12.38	$12.38		Unit Rate
Disposal Fee per Cubic Yard	$334.26	$334.26	$334.26		Calculated
Load Volume (Cubic Yards)	20	20	20		
Disposal Cost	$0	$0	$0	$0	Calculated
Total Licensed Site Cost	$0	$0	$0	$0	Calculated
Total Transport & Disposal Cost	$0	$0	$0	$0	Calculated
TOTAL PIPELINE REMOVAL & DISPOSAL COST	$9,362	$972	$0	$10,333	Calculated
MANHOLES					
A. Removal					
Total Quantity	1	1	0	2	
Removal Cost per Manhole	$146.32	$146.32	$146.32		Unit Rate
Removal Cost	$146	$146	$0	$293	Calculated
Quantity per Truck Load	10	10	10		
Number of Truck Loads	0.1	0.1	0.0	0.2	Calculated
B. Survey & Decontamination					
Percent Requiring Decontamination	0.0%	0.0%	0.0%		
Number of Decontamination Truck Loads	0.0	0.0	0.0	0.0	Calculated
Decontamination Cost per Load	$0.00	$0.00	$0.00		Unit Rate
Decontamination Cost	$0	$0	$0	$0	Calculated

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: Deep Disposal Pipeline Calculations

Assumptions/Items	Deep Disposal Well No. 1	Deep Disposal Well No. 2	Deep Disposal Well No. 3	Total	Source
MANHOLES (continued)					
C. Transport & Disposal					
Landfill					
Transportation					
Percent to be Shipped	100.0%	100.0%	0.0%		
Loads to be Shipped	0.1	0.1	0.0	0.2	Calculated
Distance (Miles)	48	48	48		Unit Rate
Cost per Mile	$2.90	$2.90	$2.90		Calculated
Transportation Cost	$14	$14	$0	$28	
Disposal					
Disposal Fee per Cubic Yard	$13.50	$13.50	$13.50		Unit Rate
Load Volume (Cubic Yards)	20	20	20		
Disposal Cost	$270	$270	$0	$540	Calculated
Total Landfill Cost	$284	$284	$0	$568	Calculated
Licensed Site					
Transportation					
Percent to be Shipped	0.0%	0.0%	100.0%		Calculated
Loads to be Shipped	0.0	0.0	0.0	0.0	Calculated
Distance (Miles)	105	105	105		
Cost per Mile	$2.90	$2.90	$2.90		Unit Rate
Transportation Cost	$0	$0	$0	$0	Calculated
Disposal					
Disposal Cost per Cubic Foot	$12.38	$12.38	$12.38		Unit Rate
Disposal Fee per Cubic Yard	$334.26	$334.26	$334.26		Calculated
Load Volume (Cubic Yards)	20	20	20		
Disposal Cost	$0	$0	$0	$0	Calculated
Total Licensed Site Cost	$0	$0	$0	$0	Calculated
Total Transport & Disposal Cost	$284	$284	$0	$568	Calculated
TOTAL MANHOLE REMOVAL & DISPOSAL COST	$430	$430	$0	$860	Calculated
TOTAL DEEP DISPOSAL WELL PIPELINE REMOVAL AND DISPOSAL COS	**$9,792**	**$1,402**	**$0**	**$11,194**	Calculated
DEEP DISPOSAL WELL PIPELINE REMOVAL AND DISPOSAL COST PER FOOT				**$0.86**	Calculated