

Gaither, Mike

From: Gaither, Mike
Sent: Tuesday, February 19, 2013 11:14 AM
To: 'John.Saxton@nrc.gov'
Cc: Cash, John
Subject: Lost Creek SUA-1598 - Surety Calculation Tables
Attachments: TabRP_4_Bond_Dec12.pdf; TabRP_5_Bond_Dec12.pdf

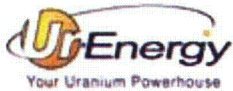
Mr. Saxton,

Regarding the Lost Creek project SUA-1598, for your convenience, copies of the current (2012) surety calculations are being provided to you electronically. Please find attached to this e-mail the following PDF copies of documents from the Wyoming Department of Environmental Quality – Land Quality Division Permit to Mine (PT788):

TabRP_4_Bond_Dec12.pdf
TabRP_5_Bond_Dec12.pdf

Hard copies will be sent to you also. Please don't hesitate to contact me if you have any questions regarding this submittal.

Michael Gaither
EHS Coordinator
Ur-Energy USA Inc.
5880 Enterprise Dr. Suite 200
Casper, WY 82609 USA
(307) 265-2373 ext. 321



**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

LOST CREEK ISR, LLC SUMMARY OF RECLAMATION/RESTORATION BOND ESTIMATE			
I GROUNDWATER RESTORATION - Worksheet 1			\$3,856,489
II DECOMMISSIONING AND SURFACE RECLAMATION			\$2,809,706
A. Plant Equipment Removal and Disposal - Worksheet 2			\$1,038,227
B. Plant Building Demolition and Disposal - Worksheet 3			\$766,515
C. Storage Pond Sludge and Liner Handling - Worksheet 4			\$50,352
D. Well Abandonment - Worksheet 5			\$383,009
E. Wellfield Equipment Removal and Disposal - Worksheet 6			\$232,976
F. Topsoil Replacement and Revegetation - Worksheet 7			\$207,937
G. Miscellaneous Reclamation Activities - Worksheet 8			\$130,690
SUBTOTAL RESTORATION AND RECLAMATION			\$6,666,194
III TOTAL CONTINGENCY			\$1,933,196
Miscellaneous Items (Footnote 1)	25%	=	\$1,666,549
Project Design			
Contractor Profit & Mobilization			
Pre-Construction Investigation			
Project Management			
On-Site Monitoring			
Site Security & Liability Assurance			
Longterm Administration			
Contingency (Footnote 2)	4%	=	\$266,648
TOTAL RESTORATION AND RECLAMATION			\$8,599,391

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.

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

LOST CREEK ISR, LLC GROUNDWATER RESTORATION - WORKSHEET 1			
Assumptions/Items	Mine Unit No. 1	Explanation	Source
Technical Assumptions:			
Wellfield Area (Square Feet)	1,319,646	Proposed area	Data
Wellfield Area (Acres)	30.29		Calculated
Affected Ore Zone Area (Square Feet)	1,319,646	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)	22,803,483	= 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	44,348,214	= Volume * Porosity * gal/ft ³	Calculated
Number of Wells in Unit(s)			
Production Wells	147	Proposed well count	Data
Injection Wells	285	Proposed well count	Data
Average Well Spacing (Feet)	95	Proposed well spacing	Data
Average Well Depth (Feet)	420	Proposed well depth	Data

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

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	0.3		Data
Total Gallons For Treatment	13,304,464	= Gallons per Pore Volume * Number of Pore Volumes	Calculated
Total Kilogallons for Treatment	13,304		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)	\$0.60	From Table RP-5	Unit Rate

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

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	\$0.877		Calculated
Total Treatment Cost	\$11,666		Calculated
Utilities			
Power (Cost per Month)	\$225	Estimate	Unit Rate
Propane (Cost per Month)	\$225	Estimate	Unit Rate
Time for Treatment			
Minutes for Treatment	110,871	=Total Gallons for Treatment Divided by Flow Rate (gpm)	Calculated
Hours for Treatment	1,848		Calculated
Days for Treatment	77		Calculated
Average Days per Month	30.4		Calculated
Months for Treatment	2.5		Calculated
Utilities Cost	\$1,139		Calculated
TOTAL PLANT & OFFICE COST	\$12,805		

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

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	\$4,270	Not Applicable, No restoration required	Calculated
TOTAL GROUNDWATER SWEEP COST	\$17,075	Not Applicable, No restoration required	Calculated

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

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	6.0		Data
Total Gallons for Treatment	266,089,281	= Gallons per Pore Volume * Number of Pore Volumes	Calculated
Total Kilogallons for Treatment	266,089	= Total Gallons / 1000	Calculated
Feed to Reverse Osmosis Unit (Gallons per Minute)	760	Planned flow	Data
Permeate Flow (Gallons per Minute)	684	= Planned Flow * Average Reverse Osmosis Recovery	Calculated
Brine Flow (Gallons per Minute)	76	= Planned Flow - Permeate Flow	Calculated
Average Reverse Osmosis Recovery	90.0%	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 regional power 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)	\$0.159	From Table RP-5	Unit Rate

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

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	\$0.871		Calculated
Total Pumping Cost	\$231,774		Calculated
Utilities			
Power (Cost per Month)	\$560	Estimate	Unit Rate
Propane (Cost per Month)	\$225	Estimate	Unit Rate
Time for Treatment			
Minutes for Treatment	350,117		Calculated
Hours for Treatment	5,835		Calculated
Days for Treatment	243		Calculated
Average Days per Month	30.4		Calculated
Months for Treatment	8.0		Calculated
Utilities Cost	\$6,280		Calculated
TOTAL PLANT & OFFICE COST	\$238,054		Calculated

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

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	\$79,736		Calculated
TOTAL REVERSE OSMOSIS COST	\$317,790		Calculated

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

LOST CREEK ISR, LLC GROUNDWATER RESTORATION - WORKSHEET 1			
Assumptions/Items	Mine Unit No. 1	Explanation	Source
III RECIRCULATION			
A. WELLFIELD			
Operating Assumptions:			
Pore Volumes Required	1.0		Data
Total Gallons for Treatment	44,348,214	= Gallons per Pore Volume * Number of Pore Volumes	Calculated
Total Kilogallons for Treatment	44,348	= Total Gallons / 1000	Calculated
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	147.0	Estimate from pumping	Data
Average Connected Horsepower	1,107.5	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	4704	Planned flow	Data
Gallons per Hour	282240		Calculated
Cost per Hour	\$49.57		Calculated
Cost per Gallon	\$0.0002		Calculated
Cost per Kilogallon	0.176		Calculated
Repair & Maintenance (Cost per Kilogallon)	\$0.115	Estimate	Unit Rate
Analysis (Cost per Kilogallon)	\$0.106	From Table RP-5	Unit Rate
Total Cost per Kilogallon	\$0.396		Calculated
TOTAL WELLFIELD RECIRCULATION COST	\$17,569		Calculated

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

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	No credit taken for evaporation	Data
Average Monthly Evaporation Capacity (Gallons)	0		Calculated
Total Disposal Requirement			
RO Brine and GWS (Total Gallons)	39,913,392	=Treatment Gallons * (1- Reverse Osmosis Recovery) + GWS	Calculated
RO Brine and GWS (Total Kilogallons)	39,913		Calculated
Brine Concentration Factor	50%	Reverse Osmosis Design	Data
Total Concentrated Brine (Gallons)	26,608,928	= Reverse Osmosis Brine Gallons * Brine Conc Factor + GWS	Calculated
Months of RO and GWS Operation	10.5		Calculated
Average Monthly Requirement (Gallons)	2,526,654	=Total Concentrated Brine / Months of Reverse Osmosis Operation	Calculated
Monthly Balance for DDW (Gallons)	2,526,654	=Average Monthly Requirement - Average Monthly Evaporation	Calculated
Total WDW Disposal (Gallons)	26,608,928		Calculated
Total WDW Disposal (Kilogallons)	26,609		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

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

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	\$100,110	Not Applicable, No restoration required	Calculated
V STABILIZATION MONITORING			
Operating Assumptions:			
Time of Stabilization (Months)	12	Time frame required	Data
Frequency of Analysis (Months)	3	Required sampling	Data
Total Sets of Analysis	5	Required sampling	Data
Cost Assumptions:			
Power (Cost per Month)	\$1,125	Estimate	Unit Rate
Total Power Cost	\$13,500		Calculated
Sampling & Analysis (Cost per Set)	\$8,178	From Table RP-5	Unit Rate
Total Sampling & Analysis Cost	\$40,890	From Table RP-5	Calculated
Utilities (Cost per Month)	\$2,250	Estimate	Unit Rate
Total Utilities Cost	\$27,000		Calculated
TOTAL STABILIZATION COST	\$81,390		Calculated

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

LOST CREEK ISR, LLC GROUNDWATER RESTORATION - WORKSHEET 1

Assumptions/Items				Mine Unit No. 1	Explanation	Source
VI LABOR						
Cost Assumptions						
		Cost per Hour	Hours	Crew	Cost	
		\$75.00	7800	Project Manager	\$585,000	Based on URE surveys and recent hiring, includes 25% for benefits Data
		\$60.00	7800	Supervisor/RSO	\$468,000	Based on URE surveys and recent hiring, includes 25% for benefits Data
		\$30.00	7800	EHS Tech	\$234,000	Based on URE surveys and recent hiring, includes 25% for benefits Data
		\$30.00	13000	Plant and Field Operators	\$390,000	Based on URE surveys and recent hiring, includes 25% for benefits Data
		\$30.00	10400	Maintenance	\$312,000	Based on URE surveys and recent hiring, includes 25% for benefits Data
		\$30.00	7800	Office Support	\$234,000	Based on URE surveys and recent hiring, includes 25% for benefits Data
		\$30.00	7800	Equipment Operator	\$234,000	Based on URE surveys and recent hiring, includes 25% for benefits Data
		\$30.00	8320	Reclamation Laborer	\$249,600	Based on URE surveys and recent hiring, includes 25% for benefits Data
		\$35.00	7800	Foreman	\$273,000	Based on URE surveys and recent hiring, includes 25% for benefits Data
		\$3.41	10758	Vehicles	\$36,685	Hourly truck use per WDEQ LQD, Guideline 12. Data
TOTAL RESTORATION LABOR COST					\$3,016,285	
VII RESTORATION CAPITAL REQUIREMENTS						
I Plug and Abandon DDW (3)				\$306,270	\$104,090 for well 1 and \$101,090 for wells 2 and 3 based on LCI's Application for UIC Permit, Class I, June, 2009 Data	
TOTAL				\$306,270		

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

LOST CREEK ISR, LLC GROUNDWATER RESTORATION - WORKSHEET 1			
Assumptions/Items	Mine Unit No. 1	Explanation	Source
SUMMARY:			
I GROUNDWATER SWEEP	\$17,075		
II REVERSE OSMOSIS	\$317,790		
III RECIRCULATION	\$17,569		
IV WASTE DISPOSAL WELL	\$100,110		
V STABILIZATION	\$81,390		
VI LABOR	\$3,016,285		
VII CAPITAL	\$306,270		
TOTAL GROUNDWATER RESTORATION COST	\$3,856,489		

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

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)	62	1527	11	2464	15	4,079	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	3.1	76.4	0.5	123.2	0.8	203.9		Calculated	
I DECONTAMINATION									
Decontamination Cost per Truck Load	\$620	\$620	\$620	\$620	\$620		Estimated average decontaminate	Unit Rate	
Percent Requiring Decontamination	0.0%	100.0%	0.0%	100.0%	100.0%		NA	Data	
TOTAL DECONTAMINATION COST	\$0	\$47,345	\$0	\$76,344	\$467	\$124,157		Calculated	
II DISMANTLING & LOADING									
Cost per Truck Load	\$805	\$805	\$805	\$805	\$805		Estimated average dismantle cost	Unit Rate	
TOTAL DISMANTLING & LOADING COST	\$2,489	\$61,472	\$428	\$99,173	\$607	\$164,169		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	\$2,803	\$20	\$4,521	\$28	\$7,371		Calculated	
IV TRANSPORTATION & DISPOSAL									
A. Landfill									
Percent to be Shipped	100.0%	50.0%	100.0%	50.0%	50.0%		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	\$430	\$5,315	\$74	\$8,574	\$52			Calculated	
Disposal Fee per Cubic Yard	\$13.50	\$13.50	\$13.50	\$13.50	\$13.50		Landfill fee Rawlins, WY Landfill	Unit Rate	
Disposal Cost	\$835	\$10,309	\$144	\$16,632	\$102			Calculated	
Total Cost	\$1,265	\$15,624	\$218	\$25,206	\$154			Calculated	
B. Licensed Site									
Percent to be Shipped	0.0%	50.0%	0.0%	50.0%	50.0%		Percent requiring disposal at licensed site	Calculated	
Distance (Miles)	105	105	105	105	105		Distance to Shirley Basin Site, Wy	Data	
Cost per Mile	\$2.90	\$2.90	\$2.90	\$2.90	\$2.90		Current transport rate	Unit Rate	
Transportation Cost	\$0	\$11,626	\$0	\$18,757	\$115			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	\$255,251	\$0	\$411,796	\$2,519			Calculated	
Total Cost Licensed Site	\$0	\$266,877	\$0	\$430,553	\$2,634			Calculated	
TOTAL TRANSPORTATION & DISPOSAL COST	\$1,265	\$282,501	\$218	\$455,759	\$2,788	\$742,530		Calculated	
TOTAL PLANT EQUIPMENT REMOVAL AND DISPOSAL COST	\$3,754	\$394,120	\$665	\$635,797	\$3,890	\$1,038,227		Calculated	

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

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. (8)	1-Story Pole Barn			
Demolition Volume (Cubic Feet)						1,248,000	26,160	22,400		Estimated volume of structures	Data
Demolition Cost per Cubic Foot						\$0.2620	\$0.2620	\$0.2620		WDEQ-LQD Guideline 12, Appendix K	Unit Rate
Demolition Cost						\$326,976	\$6,854	\$5,869	\$339,699		Calculation
Factor For Gutting						10.0%	10.0%	10.0%		Estimated gutting factor	Data
Gutting Cost						\$32,698	\$685	\$587	\$33,970		Calculation
Weight (Pounds)						196,750	132,000	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 25 260 13000 2.5 32500											
Internal Wall 1 25 460 11500 2.5 28750											
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	3.3	0.4			Calculation
Distance to Landfill						48	48	48		Distance to Rawlins, WY landfill	Data
Cost per Mile						\$2.90	\$2.90	\$2.90		Current transport rate	Unit Rate
Transportation Cost						\$685	\$459	\$52	\$1,196		
Disposal Cost per Ton						\$40.20	\$40.20	\$40.20		City of Rawlins, WY Landfill Fee	Unit Rate
Disposal Cost						\$3,955	\$2,653	\$302	\$6,909		Calculation
TOTAL STRUCTURE DEMOLITION & DISPOSAL COST						\$364,313	\$10,652	\$6,809	\$381,774		Calculation

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

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)	36,643	2,264	565		Building concrete area	Data
Average Thickness (Feet)	1	0.7	0.3			Data
Volume (Cubic Feet)	36,643	1,517	141			Calculation
Percent Requiring Decontamination	66.4%	50.0%	0.0%			Data
Percent Decontaminated	33.2%	50.0%	0.0%			Data
Decontamination (Cost per Square Foot)	\$0.191	\$0.191	\$0.191			Unit Rate
Decontamination Cost	\$2,323	\$216	\$0	\$2,539		Calculation
Demolition (Cost per Square Foot)	\$5.270	\$5.270	\$5.270		WDEQ-LQD Guideline 12, Appendix K	Unit Rate
Demolition Cost	\$193,107	\$11,931	\$2,978	\$208,016		Calculation
Transportation & Disposal						
A. Landfill Disposal						
Percent to be Disposed at Landfill	67%	50%	100%			Data
Concrete Weight (Pounds per Cubic Foot)	150	150	150			Data
Concrete Weight (Pounds)	3,672,176	113,766	21,188			
Weight per Truck Load (Pounds)	40,000	40,000	40,000			
Number of Truck Loads	91.8	2.8	0.5			
Distance to Landfill (Miles)	48	48	48			
Cost per Mile	\$2.90	\$2.90	\$2.90		Current transport rate	
Transportation Cost	\$12,779	\$396	\$74	\$13,249		Data
Disposal Cost per Ton	\$40.20	\$40.20	\$40.20		City of Rawlins, WY Landfill Fee	Unit Rate
Disposal Cost	\$73,811	\$2,287	\$426	\$76,523		Calculation
B. Licensed Site						
Percent to be Shipped	33%	50%	0%			Calculation
Distance (Miles)	105	105	105			Data
Cost per Mile	\$2.90	\$2.90	\$2.90		Current transport rate	Unit Rate
Transportation Cost	\$6,858	\$428	\$0	\$7,285		Calculation
Disposal Cost per Cubic Foot	\$4.16	\$4.16	\$4.16		Licensed Site Fee	Unit Rate
Volume per Truck Load (Cubic Yards)	20	20	20			Data
Volume per Truck Load (Cubic Feet)	540	540	540			Calculation
Disposal Cost	\$50,592	\$3,155	\$0	\$53,747		Calculation
TOTAL CONCRETE DECONTAMINATION, DEMOLITION & DISPOSAL COST	\$339,470	\$18,413	\$3,477	\$361,360		Calculation

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

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	\$116	\$116	\$116		WDEQ-LQD Guideline 12, Appendix J	
Time with Front End Loader (Hours)	24	6	0	0		
Cost of Front End Loader	\$2,789	\$697	\$0	\$0	Assume removal of 3" of Contaminated	Data
Volume to be Shipped (Cubic Feet)	3467	600	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	\$1,955	\$338	\$0	\$2,293		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	\$14,421	\$2,496	\$0	\$16,917		Calculation
TOTAL SOIL REMOVAL & DISPOSAL COST	\$19,165	\$3,532	\$0	\$22,697		Calculation
IV RADIATION SURVEY						
Area Required (Acres)	0.96	0.06	0.04			Data
Survey Cost per Acre	\$653.00	\$653.00	\$653.00		Estimate	Unit Rate
TOTAL RADIATION SURVEY COST	\$624	\$36	\$24	\$684		Calculation
TOTAL PLANT BUILDING DEMOLITION AND DISPOSAL COST	\$723,572	\$32,632	\$10,311	\$766,515		Calculation

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

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)	0.021	0.021			Data
Average Sludge Area (Square Feet)	40,300	40,300			Data
Sludge Volume (Cubic Feet)	840	840			Calculated
Sludge Volume (Cubic Yards)	31	31			Calculated
Sludge Volume per Truck Load (Cubic Yards)	20.0	20.0			Data
Number of Sludge Truck Loads	1.6	1.6			Calculated
Sludge Handling Cost Per Load	\$232.44	\$232.44		Estimate 2 hrs per truck with loader	Unit Rate
Total Sludge Handling Cost	\$372	\$372	\$744	from WDEQ-LQD Gdl 12, App J	Calculated
Transportation & Disposal					
Percent to be Shipped	100.0%	100.0%			Data
Distance (Miles)	105	105			Data
Cost per Mile	\$2.90	\$2.90		Current Transport Rate	Unit Rate
Transportation Cost	\$487	\$487			Calculated
Disposal Cost per Cubic Foot	\$12.38	\$12.38		Licensed Site Fee	Unit Rate
Volume per Truck Load (Cubic Yards)	20.0	20.0			Data
Volume per Truck Load (Cubic Feet)	540	540			Calculated
Disposal Cost	\$10,696	\$10,696			Calculated
Total Transportation & Disposal Cost	\$11,183	\$11,183	\$22,367		Calculated
TOTAL POND SLUDGE COST	\$11,555	\$11,555	\$23,110		Calculated

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

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)	96720	96720			Calculated
Liner Thickness (Mils)	30	30			Data
Liner Thickness (Inches)	0.0300	0.0300			Calculated
Liner Thickness (Feet)	0.0025	0.0025			Calculated
Compaction Factor	20.0%	20.0%			Data
Liner Volume (Cubic Feet)	290	290			Calculated
Truck Loads of Liner	0.5	0.5			Calculated
Liner Handling Cost					
Labor Crew Cost per Hour	\$125	\$125		3 laborers @ \$30, 1 foreman @ \$35	Unit Rate
Hours per Load	2.0	2.0			Unit Rate
Liner Handling Cost per Load	\$250.00	\$250.00			Calculated
Total Liner Handling Cost	\$125	\$125	\$250		Calculated
Transportation & Disposal					
Percent to be Shipped	100.0%	100.0%			Data
Distance (Miles)	48	48			Data
Cost per Mile	\$2.90	\$2.90		Current transport rate	Unit Rate
Transportation Cost	\$70	\$70			Calculated
Disposal Cost per Cubic Foot	\$0.50	\$0.50		Disposal Fee Rawlins, WY landfill	Unit Rate
Volume per Truck Load (Cubic Feet)	540	540			Data
Disposal Cost	\$135	\$135			Calculated
Total Transportation & Disposal	\$205	\$205	\$409		Calculated
TOTAL POND LINER COST	\$330	\$330	\$659		Calculated

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

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	\$0.46	\$0.46		WDEQ-LQD Guideline 12, App. E	Unit Rate
TOTAL POND BACKFILL COST	\$4,817	\$4,817	\$9,634		Calculated
IV RADIATION SURVEY					
Areal required (Acres)	0.93	0.93			Data
Survey Cost per Acre	\$653.00	\$653.00		Estimate	Unit Rate
TOTAL RADIATION SURVEY COST	\$607	\$607	\$1,214		Calculated
V LEAK DETECTION SYSTEM REMOVAL					
Gravel and Piping Volume (Cubic Feet)	10075	10075		Assume 3 inches	Data
Volume per Truck Load (Cubic Feet)	540	540			Data
Loads to be Shipped	18.7	18.7			Calculated
Distance (Miles)	48	48			Data
Cost per Mile	\$2.90	\$2.90		Current transport rate	Unit Rate
Transportation Cost	\$2,597	\$2,597			Calculated
Handling Cost	\$232.44	\$232.44		Estimate 2 hrs per truck with loader	Unit Rate
Disposal Fee per Cubic Foot	\$0.50	\$0.50		Disposal Fee Rawlins, WY landfill	Unit Rate
Disposal Cost	\$5,038	\$5,038			Calculated
TOTAL LEAK DETECTION SYSTEM REMOVAL COST	\$7,867	\$7,867	\$15,734		Calculated
TOTAL POND RECLAMATION COST	\$25,176	\$25,176	\$50,352		Calculated

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

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	432	175		Data
Average Depth (Feet)	420	533		Data
Average Diameter (Inches)	4.328	4.328		Data
I Well Abandonment Costs				
Class G Neat Cement Required (Cubic Feet per Well)	42.9	54.5	$\text{Depth} \times \pi \times ((\text{diameter in inches}/12)^2)/4$	Calculated
Cement Sacks Required per Well	33.5	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	\$15.65	\$15.65	Current cost from local vendor	Unit Rate
Cement Cost per Well	\$524.63	\$665.78		Calculated
Bentonite Sacks Required per Well	0.9	1.2		Calculated
Bentonite Bag Cost	\$4.25	\$4.25	Current cost from local vendor	Unit Rate
Bentonite Cost per Well	\$4.02	\$5.10		Calculated
TOTAL MATERIALS COST PER WELL	\$528.65	\$670.88		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	Estimated time for pit and casing removal	Data
Backhoe Cost per Hour	\$36.33	\$36.33	WDEQ-LQD Guideline 12, Appendix O	Unit Rate
Cementer Cost per Hour	\$25.00	\$25.00	Estimate	Unit Rate
Total Equipment Cost per Well	\$61.33	\$61.33		Calculated
TOTAL ABANDONMENT COST PER WELL	\$589.98	\$732.21		Calculated
SUBTOTAL WELL ABANDONMENT COST	\$ 254,871	\$ 128,137		
TOTAL WELL ABANDONMENT COST	\$ 383,009			Calculated

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

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

Assumptions/Items	MU-1	Site Wells	Explanation	Source
I. WELLFIELD PIPING				
A. Removal				
Surface Length per Well (Feet)	250	0		data
Downhole Length per Well (Feet)	0	0		data
Total Number of Wells	432	175		data
Total Length (Feet)	108,000	0		Calculated
Cost of Removal per Foot	\$0.109	\$0.109	estimate	Unit Rate
Cost of Removal	\$11,718	\$0		Calculated
Chipping Rate (feet per hour)	1500	1500	estimate	Estimate
Chipper Cost per Hour	\$30	\$30	estimate	Unit Rate
Chipping Cost	\$2,160	\$0		Calculated
Average OD (Inches)	1.6	1.6	hdpe pipe od	data
Chipped Volume Reduction (Cubic Feet per Foot)	0.008	0.008		Unit Rate
Chipped Volume (Cubic Feet)	864	0		Calculated
Volume per Truck Load (Cubic Feet)	540	540		data
Total Number of Truck Loads	1.6	0.0		Calculated
B. Survey & Decontamination				
Percent Requiring Decontamination	0%	0%	na, no operations yet	Estimate
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%	No wells piped in	
Loads to be Shipped	0.0	0.0		Calculated
Distance (Miles)	48	48		Data
Transportation Cost per Mile	\$2.90	\$2.90	Current transport rate	Unit Rate
Transportation Cost	\$0	\$0		Calculated
Landfill Disposal				
Disposal Fee per Cubic Yard	\$13.50	\$13.50	Rawlins, WY landfill fee	Unit Rate
Load Volume (Cubic Yards)	32	0		Calculated
Disposal Cost	\$0	\$0		Calculated
Total Landfill Cost	\$0	\$0		Calculated

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: E. Wellfield Equipment Removal and Disposal - WORKSHEET 6				
Assumptions/Items	MU-1	Site Wells	Explanation	Source
I WELLFIELD PIPING (continued)				
C. Transport & Disposal (continued)				
Licensed Site				
Transportation				
Percent to be Shipped	100.0%	0.0%	na, no operations yet	Calculated
Loads to be Shipped	1.6	0.0		Calculated
Distance (Miles)	105	105		
Transportation Cost per Mile	\$2.90	\$2.90	Current transport rate	Unit Rate
Transportation Cost	\$487	\$0		Calculated
Disposal				
Disposal Fee per Cubic Foot	\$12.38	\$12.38	Licensed site fee	Unit Rate
Disposal Fee per Cubic Yard	\$334.26	\$334.26		Calculated
Load Volume (Cubic Yards)	32	0		
Disposal Cost	\$17,114	\$0		Calculated
Total Licensed Site Cost	\$17,601	\$0		Calculated
Total Transport & Disposal Cost	\$17,601	\$0		Calculated
TOTAL WELLFIELD PIPING REMOVAL & DISPOSAL COST	\$31,479	\$0		Calculated
II WELL PUMPS				
A. Pump and Tubing Removal				
Number of Wells with Pumps	147	175		
Removal Cost per Well	\$24.13	\$24.13	estimate	Unit Rate
Removal Cost	\$3,547	\$4,223		Calculated
Number of Pumps per Truck Load	180	180		
Number of Truck Loads (Pumps)	0.8	1.0		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

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

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

Assumptions/Items	MU-1	Site Wells	Explanation	Source
II WELL PUMPS (continued)				
C. Tubing Volume Reduction & Loading				
Length per Well (Feet)	370	450		
Total Length (Feet)	54,390	78,750		Calculated
Removal Cost per Foot	\$0.027	\$0.027	estimate	Unit Rate
Removal Cost	\$1,469	\$2,126		Calculated
Average OD (Inches)	2.0	2.0		
Chipped Volume Reduction (Cubic Feet per Foot)	0.012	0.012		
Chipped Volume (Cubic Feet)	653	945		Calculated
Volume per Truck Load (Cubic Feet)	540	540		
Number of Truck Loads	1.2	1.8		Calculated
D. Transport & Disposal				
Landfill				
Transportation				
Percent to be Shipped (Pumps)	0.0%	100.0%		
Loads to be Shipped	0.0	2.8		Calculated
Distance (Miles)	48	48		
Cost per Mile	\$2.90	\$2.90	Current transport rate	Unit Rate
Transportation Cost	\$0	\$390		Calculated
Disposal				
Disposal Fee per Cubic Yard	\$13.50	\$13.50	Rawlins, WY landfill fee	Unit Rate
Load Volume (Cubic Yards)	0	56		Calculated
Disposal Cost	\$0	\$2,117		Calculated
Total Landfill Cost	\$0	\$2,507		Calculated
Licensed Site				
Transportation				
Percent to be Shipped (Pumps)	100.0%	0.0%		
Percent to be Shipped (Tubing)	100.0%	0.0%		
Loads to be Shipped	0.8	0.0		Calculated
Distance (Miles)	105	105		Data
Cost per Mile	\$2.90	\$2.90	Current transport rate	Unit Rate
Transportation Cost	\$244	\$0		Calculated

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

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

Assumptions/Items	MU-1	Site Wells	Explanation	Source
II WELL PUMPS (continued)				
D. Transport & Disposal (continued)				
Licensed Site (continued)				
Disposal				
Disposal Cost per Cubic Foot	\$12.38	\$12.38	Licensed site fee	Unit Rate
Disposal Fee per Cubic Yard	\$334.26	\$334.26		Calculated
Load Volume (Cubic Yards)	32	0		Data
Disposal Cost	\$8,557	\$0		Calculated
Total Licensed Site Cost	\$8,801	\$0		Calculated
Total Transport & Disposal Cost	\$8,801	\$2,507		Calculated
TOTAL WELL PUMP REMOVAL & DISPOSAL COST	\$13,816	\$8,856		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

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

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

Assumptions/Items	MU-1	Site Wells	Explanation	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	Current transport rate	Unit Rate
Transportation Cost	\$0	\$0		Calculated
Disposal				
Disposal Fee per Cubic Yard	\$13.50	\$13.50	Rawlins, WY landfill fee	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	Licensed site disposal fee	Unit Rate
Disposal Fee per Cubic Yard	\$334.26	\$334.26		Calculated
Load Volume (Cubic Yards)	32	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

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

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

Assumptions/Items	MU-1	Site Wells	Explanation	Source
IV BURIED TRUNKLINE				
A. Removal				
Total Length (Feet)	24,304	0		Data
Removal Cost per Buried Foot	\$1.58	\$1.58	Estimate	Unit Rate
Removal Cost	\$19,139	\$0		Calculated
Chipping Rate (feet per hour)	150	150	Estimate	Estimate
Chipper Cost per Hour	\$30	\$30	Estimate	Unit Rate
Chipping Cost	\$4,861	\$0		Calculated
Average OD (Inches)	9.635	9.635	Based on proposed designs	Data
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		Data
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	0.0%	100.0%		
Loads to be Shipped	0.0	0.0		Calculated
Distance (Miles)	48	48		
Cost per Mile	\$2.90	\$2.90	Current transport rate	Unit Rate
Transportation Cost	\$0	\$0		Calculated
Disposal				
Disposal Fee per Cubic Yard	\$13.50	\$13.50	Rawlins, WY landfill fee	Unit Rate
Load Volume (Cubic Yards)	0.0	0.0		Calculated
Disposal Cost	\$0	\$0		Calculated
Total Landfill Cost	\$0	\$0		Calculated

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

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

Assumptions/Items	MU-1	Site Wells	Explanation	Source
IV BURIED TRUNKLINE (continued)				
C. Transport & Disposal (continued)				
Licensed Site				
Transportation				
Percent to be Shipped	100.0%	0.0%		Calculated
Loads to be Shipped	13.9	0.0		Calculated
Distance (Miles)	105	105		
Cost per Mile	\$2.90	\$2.90	Current transport rate	Unit Rate
Transportation Cost	\$4,233	\$0		Calculated
Disposal				
Disposal Cost per Cubic Foot	\$12.38	\$12.38	Licensed site disposal fee	Unit Rate
Disposal Fee per Cubic Yard	\$334.26	\$334.26		Calculated
Load Volume (Cubic Yards)	32	0		
Disposal Cost	\$148,679	\$0		Calculated
Total Licensed Site Cost	\$152,911	\$0		Calculated
Total Transport & Disposal Cost	\$152,911	\$0		Calculated
TOTAL BURIED TRUNKLINE REMOVAL & DISPOSAL COST	\$176,912	\$0		Calculated
V MANHOLES				
A. Removal				
Total Quantity	15	0		
Removal Cost per Manhole	\$73.16	\$73.16	Estimate	Unit Rate
Removal Cost	\$1,097	\$0		Calculated
Quantity per Truck Load	10	10		
Number of Truck Loads	1.5	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

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: E. Wellfield Equipment Removal and Disposal - WORKSHEET 6				
Assumptions/Items	MU-1	Site Wells	Explanation	Source
V MANHOLES (continued)				
C. Transport & Disposal				
Landfill				
Transportation				
Percent to be Shipped	100.0%	100.0%		
Loads to be Shipped	1.5	0.0		Calculated
Distance (Miles)	48	48		Unit Rate
Cost per Mile	\$2.90	\$2.90	Current transport rate	Calculated
Transportation Cost	\$209	\$0		
Disposal				
Disposal Fee per Cubic Yard	\$13.50	\$13.50	Rawlins, WY landfill fee	Unit Rate
Load Volume (Cubic Yards)	30.0	0.0		
Disposal Cost	\$608	\$0		Calculated
Total Landfill Cost	\$816	\$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	Current transport rate	Unit Rate
Transportation Cost	\$0	\$0		Calculated
Disposal				
Disposal Cost per Cubic Foot	\$12.38	\$12.38	Licensed site disposal fee	Unit Rate
Disposal Fee per Cubic Yard	\$334.26	\$334.26		Calculated
Load Volume (Cubic Yards)	32	0		
Disposal Cost	\$0	\$0		Calculated
Total Licensed Site Cost	\$0	\$0		Calculated
Total Transport & Disposal Cost	\$816	\$0		Calculated
TOTAL MANHOLE REMOVAL & DISPOSAL COST	\$1,914	\$0		Calculated
SUBTOTAL WELLFIELD EQUIPMENT REMOVAL AND DISPOSAL COS	\$224,121	\$8,856		
TOTAL WELLFIELD EQUIPMENT REMOVAL AND DISPOSAL COST	\$232,976			Calculated

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

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	Explanation	Source
I PLANT				
A. Topsoil Handling & Grading				
Affected Area (Acres)	5.0	0.0		Data
Average Affected Thickness (Inches)	16.0	12.0		Data
Topsoil Volume (Cubic Yards)	10,756	0		Calculated
Hauling/Placement Cost per Cubic Yard	\$1.07	\$1.07	WDEQ-LQD Gdline 12, App B, Case 1	Unit Cost
Topsoil Handling Cost	\$11,541	\$0		Calculated
Grading Cost per Acre	\$73.79	\$73.79	WDEQ-LQD Gdline 12, App G	Unit Cost
Grading Cost	\$369	\$0		Calculated
Total Topsoil Handling & Grading Cost	\$11,910	\$0		Calculated
B. Radiation Survey & Soil Analysis				
Survey & Analysis Cost per Acre	\$653.00	\$653.00		Unit Cost
Total Survey & Analysis Cost	\$3,265	\$0		Calculated
C. Revegetation				
Fertilizer Cost per Acre	\$52.33	\$52.33	Estimate	Unit Cost
Seeding Preparation & Seeding Cost per Acre	\$189.85	\$189.85	Estimate	Unit Cost
Mulching & Crimping Cost per Acre	\$311.25	\$311.25	Estimate	Unit Cost
Total Revegetation Cost per Acre	\$553.43	\$553.43		Calculated
Total Revegetation Cost	\$2,767	\$0		Calculated
TOTAL PLANT COST	\$17,942	\$0		Calculated

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

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	Explanation	Source
II PONDS				
A. Topsoil Handling & Grading				
Affected Area (Acres)	5.0	0.0		Data
Average Affected Thickness (Inches)	22	20		Data
Topsoil Volume (Cubic Yards)	14,789	0		Calculated
Hauling/Placement Cost per Cubic Yard	\$1.07	\$1.07	WDEQ-LQD Gdline 12, App B, Case 1	Unit Cost
Topsoil Handling Cost	\$15,868	\$0		Calculated
Grading Cost per Acre	\$73.79	\$73.79	WDEQ-LQD Gdline 12, App G	Unit Cost
Grading Cost	\$369	\$0		Calculated
Total Topsoil Handling & Grading Cost	\$16,237	\$0		Calculated
B. Radiation Survey & Soil Analysis				
Survey & Analysis Cost per Acre	\$653.00	\$653.00		Unit Cost
Total Survey & Analysis Cost	\$3,265	\$0		Calculated
C. Revegetation				
Fertilizer Cost per Acre	\$52.33	\$52.33	Estimate	Unit Cost
Seeding Preparation & Seeding Cost per Acre	\$189.85	\$189.85	Estimate	Unit Cost
Mulching & Crimping Cost per Acre	\$311.25	\$311.25	Estimate	Unit Cost
Total Revegetation Cost per Acre	\$553.43	\$553.43		Calculated
Total Revegetation Cost	\$2,767	\$0		Calculated
TOTAL POND COST	\$22,270	\$0		Calculated

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

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	Explanation	Source
III WELLFIELDS				
A. Topsoil Handling & Grading				
Affected Area (Acres)	10.0	0.0		Data
Average Affected Thickness (Inches)	0.0	0.0	NA - Included in well costs - WS5	Data
Topsoil Volume (Cubic Yards)	0	0		Calculated
Hauling/Placement Cost per Cubic Yard	\$1.07	\$1.07		Unit Cost
Topsoil Handling Cost	\$0	\$0		Calculated
Grading Cost per Acre	\$0.00	\$0.00	NA	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	\$653.00	\$653.00		Unit Cost
Total Survey & Analysis Cost	\$6,530	\$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	Current transport rate	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

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

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	Explanation	Source
III WELLFIELDS (continued)				
D. Revegetation				
Fertilizer Cost per Acre	\$52.33	\$52.33	Estimate	Unit Cost
Seeding Preparation & Seeding Cost per Acre	\$189.85	\$189.85	Estimate	Unit Cost
Mulching & Crimping Cost per Acre	\$311.25	\$311.25	Estimate	Unit Cost
Total Revegetation Cost per Acre	\$553.43	\$553.43		Calculated
Total Revegetation Cost	\$5,534	\$0		Calculated
TOTAL WELLFIELDS COST	\$12,064	\$0		Calculated
IV ROADS				
A. Topsoil Handling & Grading				
Affected Area (Acres)	36.1	2.3		
Main Road Lengths (ft)	Secondary Road Lengths (ft)			
2,435	730			
948	129			
12,295	596			
3,981	176			
1,537	695			
2,114	882			
1,017	184			
482	270			
1,325	551			
6,000	159			
16,983	733			
49,117	5,105	Total Road Lengths (Feet)		
20	12	Road Width (Feet)		
12	8	Road Borrow (Feet)		
32	20	Road Width and Borrow (Feet)		
36.1	2.3	Road Area (Acres)		
38.4	Total Road Area (Acres)			

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

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	Explanation	Source
IV ROADS (continued)				
A. Topsoil Handling & Grading (continued)				
Average Affected Thickness (Inches)	15	15		
Topsoil Volume (Cubic Yards)	72,766	4,727		Calculated
Hauling/Placement Cost per Cubic Yard	\$1.07	\$1.07	WDEQ-LQD Gdline 12, App B, Case 1	Unit Cost
Topsoil Handling Cost	\$78,078	\$5,072		Calculated
Grading Cost per Acre	\$0.00	\$0.00	WDEQ-LQD Gdline 12, App G	Unit Cost
Grading Cost	\$0	\$0		Calculated
Scarify Compacted Area per Acre	\$67.68	\$67.68	WDEQ-LQD Gdline 12, App P	Unit Cost
Scarify Cost	\$2,442	\$159		Calculated
Total Topsoil Handling & Grading Cost	\$80,520	\$5,231		Calculated
B. Radiation Survey & Soil Analysis				
Survey & Analysis Cost per Acre	\$653.00	\$653.00		Unit Cost
Total Survey & Analysis Cost	\$23,562	\$1,531		Calculated
C. Revegetation				
Fertilizer Cost per Acre	\$52.33	\$52.33	Estimate	Unit Cost
Seeding Preparation & Seeding Cost per Acre	\$189.85	\$189.85	Estimate	Unit Cost
Mulching & Crimping Cost per Acre	\$311.25	\$311.25	Estimate	Unit Cost
Total Revegetation Cost per Acre	\$553.43	\$553.43		Calculated
Total Revegetation Cost	\$19,969	\$1,297		Calculated
TOTAL ROADS COST	\$124,051	\$8,058		Calculated

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

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	Explanation	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	\$1.07	\$1.07	WDEQ-LQD Gdline 12, App B, Case 1	Unit Cost
Topsoil Handling Cost	\$2,164	\$2,218		Calculated
Grading Cost per Acre	\$0.00	\$0.00	WDEQ-LQD Gdline 12, App G	Unit Cost
Grading Cost	\$0	\$0		Calculated
Total Topsoil Handling & Grading Cost	\$2,164	\$2,218		Calculated
B. Radiation Survey & Soil Analysis				
Survey & Analysis Cost per Acre	\$653.00	\$653.00	NA / no operations yet	Unit Cost
Total Survey & Analysis Cost	\$653	\$669		Calculated
C. Revegetation				
Fertilizer Cost per Acre	\$52.33	\$52.33	Estimate	Unit Cost
Seeding Preparation & Seeding Cost per Acre	\$189.85	\$189.85	Estimate	Unit Cost
Mulching & Crimping Cost per Acre	\$311.25	\$311.25	Estimate	Unit Cost
Total Revegetation Cost per Acre	\$553.43	\$553.43		Calculated
Total Revegetation Cost	\$553	\$567		Calculated
TOTAL OTHER COST	\$3,370	\$3,455		Calculated

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

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	Explanation	Source
VI REMEDIAL ACTION				
A. Topsoil Handling & Grading				
Affected Area (Acres)	28.5	1.7	Reseed 50% of previously seeded	Data
Average Affected Thickness (Inches)	0.0	0.0		Data
Topsoil Volume (Cubic Yards)	0	0		Calculated
Hauling/Placement Cost per Cubic Yard	\$1.07	\$1.07	WDEQ-LQD Gdline 12, App B, Case 1	Unit Cost
Topsoil Handling Cost	\$0	\$0		Calculated
Grading Cost per Acre	\$0.00	\$0.00	NA - reseed only	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	\$15,796	\$932		Calculated
TOTAL REMEDIAL ACTION COST	\$15,796	\$932		Calculated
SUBTOTAL TOPSOIL REPLACEMENT AND REVEGETATION	\$195,492	\$12,445		
TOTAL TOPSOIL REPLACEMENT AND REVEGETATION COST	\$207,937			

**Table RP-4: Reclamation/Restoration Bond Estimate
Lost Creek Project #788**

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

Assumptions/Items	Quantity	Explanation	Source
I FENCE REMOVAL & DISPOSAL			
Length (Feet)	18,050		Data
Removal & Disposal Cost per Foot	\$0.34	WDEQ-LQD Guideline 12, Appendix H	Unit Cost
TOTAL FENCE REMOVAL AND DISPOSAL COST	\$6,137		Calculated
II CULVERT REMOVAL & DISPOSAL			
Length (Feet)	200		
Removal & Disposal Cost per Foot	\$3.29	WDEQ-LQD Guideline 12, Appendix J	Unit Cost
TOTAL CULVERT REMOVAL & DISPOSAL COST	\$658	Reduce cost by 50% due to 1/2 size culv	Calculated
III UTILITIES			
Number of Months	6		
Cost per Month	\$2,380	Estimate	Unit Cost
TOTAL UTILITIES COST	\$14,280		Calculated
IV DDW PIPELINE REMOVAL AND DISPOSAL			
Length (Feet)	13,280		
Removal & Disposal Cost per Foot	\$5.59	See "DDW Pipeline Calcs" Worksheet	Unit Cost
TOTAL DDW PIPELINE REMOVAL & DISPOSAL COST	\$74,265		Calculated
V REVEGETATION RETAINER FOR PRIOR YEAR'S DRILLING			
Drill Holes Requiring Retainer	707		ysr 2005 - 2010
Revegetation Retainer	\$50.00	per WDEQ-LQD	Unit Cost
TOTAL REVEGETATION RETAINER FOR PRIOR YEAR'S DRILLING	\$35,350		Calculated
TOTAL MISCELLANEOUS RECLAMATION ACTIVITIES COST	\$130,690		Calculated

**Table RP-5: Analysis, Equipment and Tank Lists for Bond Estimate
Lost Creek Project #788**

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	55	24	0.17	Cl, HCO ₃ , Conductivity ⁽¹⁾	\$30.00	\$6,600.00
Monitoring of Pattern Area including Production & MP Wells	--	--	--	--	--	--
Production Composite ⁽²⁾	--	--	--	--	--	--
Disposal Stream to Deep Well(s) and Local Water Supply Well	2	12	0.17	TDS, U, Ra	\$115.00	\$460.00
Storage Ponds	2	4	0.17	See Table RP-1b.	\$337.00	\$449.33
Storage Pond Wells	4	12	0.17	Cl, HCO ₃ , Conductivity, U	\$55.00	\$440.00
						\$7,949.33
Sample Type	Reverse Osmosis					
	# of Sample Points	Frequency (Rounds/ Year)	Length of Time (years)	Analytes	Cost per Sample	Total
UCL Monitoring	55	24	0.53	Cl, HCO ₃ , Conductivity	\$33.00	\$23,232.00
Monitoring of Pattern Area including Production & MP Wells	13	52	0.53	U, Conductivity	\$35.00	\$12,618.67
Production Composite	1	12	0.53	See Table RP-1b.	\$337.00	\$2,156.80
Disposal Stream to Deep Well(s) and Local Water Supply Well	2	12	0.53	TDS, U, Ra	\$115.00	\$1,472.00
Storage Ponds	2	4	0.53	See Table RP-1b.	\$337.00	\$1,437.87
Storage Pond Wells	4	12	0.53	Cl, HCO ₃ , Conductivity, U	\$55.00	\$1,408.00
						\$42,325.33
Sample Type	Recirculation					
	# of Sample Points	Frequency (Rounds/ Year)	Length of Time (years)	Analytes	Cost per Sample	Total
UCL Monitoring	55	24	0.08	Cl, HCO ₃ , Conductivity	\$33.00	\$3,630.00
Monitoring of Pattern Area including Production & MP Wells	13	1	0.08	U, Conductivity	\$35.00	\$37.92
Production Composite	1	12	0.08	See Table RP-1b.	\$337.00	\$337.00
Disposal Stream to Deep Well(s) and Local Water Supply Well	2	12	0.08	TDS, U, Ra	\$115.00	\$230.00
Storage Ponds	2	4	0.08	See Table RP-1b.	\$337.00	\$224.67
Storage Pond Wells	4	12	0.08	Cl, HCO ₃ , Conductivity, U	\$55.00	\$220.00
						\$4,679.58
Sample Type	Stabilization					
	# of Sample Points	Frequency (Rounds/ Year)	Length of Time (years)	Analytes	Cost per Sample	Total
UCL Monitoring	55	6	1	Cl, HCO ₃ , Conductivity	\$33.00	\$10,890.00
Monitoring of Pattern Area including Production & MP Wells	13	5	1	See Table RP-1b.	\$337.00	\$21,905.00
Production Composite	--	--	--	--	--	--
Disposal Stream to Deep Well(s) and Local Water Supply Well	2	12	1	TDS, U, Ra	\$115.00	\$2,760.00
Storage Ponds	2	4	1	See Table RP-1b.	\$337.00	\$2,696.00
Storage Pond Wells	4	12	1	Cl, HCO ₃ , Conductivity, U	\$55.00	\$2,640.00
						\$40,891.00
⁽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 anticipated 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 anticipated to vary greatly.						
⁽²⁾ Combination of flows from all the wells being pumped in a given mine unit, i.e., plant inflow.						

**Table RP-5: Analysis, Equipment and Tank Lists for Bond Estimate
Lost Creek Project #788**

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)	Crushed Volume (cu. Yd)	Contamination	Contaminated Volume (Cubic Yards)	Percent Contamination	
SHOP / LAB / OFFICE										
Concrete										
Shop Floor	1	125	40	0.5	2500	92.6	N	0.0	0.0%	
Lab Floor	1	40	40	0.5	800	29.6	N	0.0	0.0%	
Office Floor	1	40	80	0.5	1600	59.3	N	0.0	0.0%	
Drum Storage	1	40	55	0.5	1100	40.7	Y	40.7	13.5%	
Miscellaneous	1	1	884.5	1	884.5	32.8	N	0.0	0.0%	
Perimeter Beam	1	380	0.75	4	1140	42.2	N	0.0	0.0%	
Internal Perimeter	1	380	0.5	0.5	95	3.5	N	0.0	0.0%	
Total Concrete					8119.5	300.7		40.7	13.5%	
Equipment										
Lab Tables	1	1	435	3	1305	24.2	N	0.0	0.0%	
Air Compressor	2	3	3	2	36	1.0	N	0.0	0.0%	
Water Heater	2	3	3	6	108	2.0	N	0.0	0.0%	
Generator	1	6	4	4	96	2.7	N	0.0	0.0%	
MCC	6	12	2	8	1152	32.0	N	0.0	0.0%	
Total Equipment					2697	61.8		0.0	0.0%	
TOTAL SHOP / LAB / OFFICE					10816.5	362.6		40.7	11.2%	

**Table RP-5: Analysis, Equipment and Tank Lists for Bond Estimate
Lost Creek Project #788**

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)	Crushed Volume (cu. Yd)	Contamination	Contaminated Volume (Cubic Yards)	Percent Contamination
PRECIPITATION SECTION									
Concrete									
Precip Floor	1	180	40	0.5	3600	133.3	Y	133.3	42.8%
Perimeter Beam	1	40	0.75	4	120	4.4	N	0.0	0.0%
Internal Perimeter	1	260	0.5	0.5	65	2.4	N	0.0	0.0%
Miscellaneous	1	1	4625.5	1	4625.5	171.3	Y	171.3	55.0%
Total Concrete					8410.5	311.5		304.6	97.8%
Equipment									
Filter Press	2	12	3	4	288	1512.0	Y	1512.0	99.0%
YC Slurry Tank	2	1	89.1	1	178.2	6.0	Y	6.0	0.4%
YC Dryer Ass'y	2	1	300	1	600	5.0	Y	5.0	0.3%
Precip. Tank	4	1	91.8	1	367.2	3.1	Y	3.1	0.2%
Pumps	8	2	2	1	32	1.2	Y	1.2	0.1%
Total Equipment					1465	1527.3		1527.3	100.0%
TOTAL PRECIPITATION SECTION					9876	1838.8		1831.9	99.6%
CHEMICAL STORAGE									
Concrete									
Chem. Floor	1	80	40	0.5	1600	59.3	N	0.0	0.0%
Perimeter Beam	1	120	0.75	4	360	13.3	N	0.0	0.0%
Internal Perimeter	1	190	0.5	0.5	47.5	1.8	N	0.0	0.0%
Miscellaneous	1	1	2193.9	1	2193.9	81.3	N	0.0	0.0%
Total Concrete					4201.4	155.6		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	1.2	N	0.0	0.0%
NaOH Tank	1	1	81	1	81	1.4	N	0.0	0.0%
NaCl Saturator	1	1	75.6	1	75.6	1.0	N	0.0	0.0%
Peroxide Tank	1	1	18.9	1	18.9	0.7	N	0.0	0.0%
Acid Tank	2	1	56.7	1	113.4	2.5	N	0.0	0.0%
Pumps	6	2	2	1	24	0.9	N	0.0	0.0%
Total Equipment					451	10.6		0.0	0.0%
TOTAL CHEMICAL STORAGE					4652	166.237484		0.0	0.0%

**Table RP-5: Analysis, Equipment and Tank Lists for Bond Estimate
Lost Creek Project #788**

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)	Crushed Volume (cu. Yd)	Contamination	Contaminated Volume (Cubic Yards)	Percent Contamination
ION EXCHANGE SECTION									
Concrete									
IX Floor A	1	180	80	0.5	7200	266.7	Y	266.7	51.9%
IX Floor B	1	40	40	0.5	800	29.6	Y	29.6	5.8%
Perimeter Beam	1	300	0.75	4	900	33.3	N	0.0	0.0%
Internal Perimeter	1	55	0.5	0.5	13.75	0.5	N	0.0	0.0%
Miscellaneous	1	1	4957	1	4957.08	183.6	Y	183.6	35.7%
Total Concrete					13870.8	513.7		479.9	93.4%
Equipment									
IX Column	10	1	86.4	1	864	28.2	y	28.2	1.1%
Guard Column	2	1	64.8	1	129.6	5.0	y	5.0	0.2%
Elution Vessel	2	1	86.4	1	172.8	5.6	y	5.6	0.2%
Fresh Eluate Tank	2	1	91.8	1	183.6	1.2	y	1.2	0.0%
Eluate Tank	2	1	91.8	1	183.6	1.1	y	1.1	0.0%
Rich Eluate Tank	2	1	99.9	1	199.8	1.1	y	1.1	0.0%
Fresh Water Tank	2	1	91.8	1	183.6	1.2	N	0.0	0.0%
Resin Water Decant	1	1	35.1	1	35.1	1.6	y	1.6	0.1%
Resin Water Tank	1	1	91.8	1	91.8	1.1	y	1.1	0.0%
Waste Water Tank	2	1	91.8	1	183.6	2.3	y	2.3	0.1%
RW Bag Filter	4	1	0.8	1	3.2	0.1	y	0.1	0.0%
RW Element Filter	4	1	0.8	1	3.2	0.1	y	0.1	0.0%
Eluate Sump Filter	4	1	0.8	1	3.2	0.1	y	0.1	0.0%
Eluate Bag Filter	6	1	0.8	1	4.8	0.2	y	0.2	0.0%
Eluate Element Filter	4	1	0.8	1	3.2	0.1	y	0.1	0.0%
Resin Screen	4	8	4	1	128	10.0	y	10.0	0.4%
RO Unit	0	20	4	6	0	2400.0	y	2400.0	97.4%
RO Pump	1	1	3.7	1	3.7	0.1	y	0.1	0.0%
IC/PC Pump	12	1	3.7	1	44.4	1.6	y	1.6	0.1%
WDW Pump	1	4	6	2	48	1.8	y	1.8	0.1%
Sump Pump	4	1	1	3	12	0.4	y	0.4	0.0%
Pumps	6	2	2	1	24	0.9	y	0.9	0.0%
Total Equipment					2505	2463.9		2462.7	100.0%
TOTAL ION EXCHANGE SECTION					16376	2977.7		2942.6	98.8%

**Table RP-5: Analysis, Equipment and Tank Lists for Bond Estimate
Lost Creek Project #788**

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)	Crushed Volume (cu. Yd)	Contamination	Contaminated Volume (Cubic Yards)	Percent Contamination
RESTORATION SECTION									
Concrete									
Rest. Floor	1	40	80	0.5	1600	59.3	Y	59.3	78.4%
Miscellaneous	1	1	441	1	440.5	16.3	Y	16.3	21.6%
Total Concrete					2040.5	75.6		75.6	100.0%
Equipment									
Rest. Column	2	1	75.6	1	151.2	5.6	y	5.6	37.4%
RO Unit	1	20	4	6	480	8.9	y	8.9	59.0%
RO Pump	1	1	3.7	1	3.7	0.1	y	0.1	0.9%
Sump Pump	1	1	1	3	3	0.1	y	0.1	0.7%
Pumps	2	2	2	1	8	0.3	y	0.3	2.0%
Total Equipment					645.9	15.1		15.1	100.0%
TOTAL RESTORATION SECTION					2686.4	90.6		90.6	100.0%

**Table RP-5: Analysis, Equipment and Tank Lists for Bond Estimate
Lost Creek Project #788**

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	9.5	9.5	673	6734	0.625	20000	200000	2.8	28.2	IX - 1-10
Guard Columns	2	Ellip Hd	CS	7	8	308	616	0.625	12500	25000	2.5	5.0	IX - 11/12
Restoration Columns	2	Ellip Hd	CS	9.5	9.5	673	1347	0.625	20000	40000	2.8	5.6	IX - 13/14
Elution Vessels	2	Ellip Hd	CS	9.5	9.5	673	1347	0.625	20000	40000	2.8	5.6	E-1/2
Tanks													
Fresh Eluate Tanks	2	Flat Btm	FRP	10	18	1414	2827	0.270	2,400	4,800	0.6	1.2	T-FE-1/2
Eluate Tanks	2	Flat Btm	FRP	10	16	1257	2513	0.270	2,200	4,400	0.5	1.1	T-IE-1/2
Rich Eluate Tanks	2	Flat Btm	FRP	10	16	1257	2513	0.270	2,200	4,400	0.5	1.1	T-RE-1/2
Fresh Water Tanks	2	Flat Btm	FRP	10	18	1414	2827	0.270	2,400	4,800	0.6	1.2	T-FW-1/2
Resin Water Decant	1	Cone Btm	FRP	14	16.5	2540	2540	0.500	6,400	6,400	1.6	1.6	T-RWD
Resin Water Tank	1	Flat Btm	FRP	14	20	3079	3079	0.310	4,500	4,500	1.1	1.1	T-RW
Waste Water Tanks	2	Flat Btm	FRP	14	20	3079	6158	0.310	4,500	9,000	1.1	2.3	T-WW-1/2
Precipitation Tanks	4	Flat Btm	FRP	10	20	1571	6283	0.320	3,000	12,000	0.8	3.1	T-PR -1-4
Permeate Tank	1	Flat Btm	FRP	10	16	1257	1257	0.280	2,200	2,200	0.6	0.6	T-Perm
Y/C Slurry Storage	2	Cone Btm	CS - RL	12.5	19.75	2424	4847	0.313	12,500	25,000	3.0	6.0	T-YC-1/2
Soda Ash Tank	1	Flat Btm	FRP	12	20	2262	2262	1.000	9,316	9,316	3.0	3.0	T-SA
Bicarb Mix Tank	1	Flat Btm	FRP	12	19.5	2205	2205	0.400	4,000	4,000	1.2	1.2	T-Bicarb
NaCl Saturator	1	Flat Btm	FRP	12	19.67	2225	2225	0.320	3,600	3,600	1.0	1.0	T-NaCl
NaOH Tank	1	Flat Btm	FRP	12	22.3	2522	2522	0.420	4,700	4,700	1.4	1.4	T-NaOH
H2O2 Tank	1	Hor Tank	Alum	9	16.5	1050	1050	0.375	2,396	2,396	0.7	0.7	T-H2O2
Acid Tanks	2	Flat Btm	FRP	12	14.3	1617	3235	0.530	4,340	8,680	1.3	2.5	T-HCl-1/2
Filtration													
RW Bag Filter	2	Ellip Hd	316ss	2	3	9	19	0.375	175	351	0.03	0.1	
RW Element Filter	2		304ss	2	3	9	19	0.375	175	351	0.03	0.1	
Eluate Sump Filter	2		316ss	2	3	9	19	0.375	175	351	0.03	0.1	
Eluate Bag Filter	6		316ss	2	3	9	57	0.375	175	1,052	0.03	0.2	
Eluate Element Filter	2		304ss	2	3	9	19	0.375	175	351	0.03	0.1	
Slurry Filter Press	2		8	5	27	1080	2160	na	42,634	85,268	756.00	1,512.0	FP-1/2

**Table RP-5: Analysis, Equipment and Tank Lists for Bond Estimate
Lost Creek Project #788**

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	4	22	P-IC - 1-6
PC Pumps (75 hp submersible)	6		SS			3.7	22		560	3,360	4	22	P-PC - 1-6
RO Pumps (75 hp horizontal)	6		CS/SS			3.7	22		560	3,360	4	22	
Waste Water Pumps (25 hp centrifugal)	2		SS			2	3		100	200	2	3	
Resin Water Pumps (20 hp centrifugal)	4		SS			2	6		265	1,060	2	6	
Waste Disposal Pump (Plunger)	3		CS/SS			23	69		2,400	7,200	23	69	
Sump Pumps (5 hp)	4		SS			1	4		295	1,180	1	4	
Reverse Osmosis													
200 GPM Unit	1		12	20	20	4800	4800		5,000	5,000	2,400	2,400	RO
Other													
Resin Screens	5	Pipe	CS	0.8333	1.75	1	5	0.125	150	750	2.0	10.0	RT - 1-5
Water Heater	2		CS	2	4	50	101	0.125	100	200	2.0	4.0	WH - 1/2
Air Compressor	2		3	3	3	27	54	0.250	750	1500	27.0	54.0	AC - 1/2
Dryer	2		CS			300	600	0.500	5,000	10,000	3	5.0	VD-1/2
Generator	1		CS			100	100		2,000	2,000	75	75	Gen - 1
MCC	6		2	12	8	192	1152		1,500	9,000	144	864	MCC 1-6

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

**Table RP-5: Analysis, Equipment and Tank Lists for Bond Estimate
Lost Creek Project #788**

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

Assumptions/Items	Deep Disposal Well No. 1	Deep Disposal Well No. 3	Deep Disposal Well No. 4	Total	Source
PIPELINE					
A. Removal					
Total Length (Feet)	11,850	1,230	200	13,280	
Removal Cost per Foot	\$1.58	\$1.58	\$1.58		Unit Rate
Removal Cost	\$18,723	\$972	\$158		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	62	4,104	Calculated
Volume per Truck Load (Cubic Feet)	540	540	540		
Number of Truck Loads	6.8	0.7	0.1	7.6	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	0.0%	0.0%	0.0%		
Loads to be Shipped	0.0	0.0	0.0	0.0	Calculated
Distance (Miles)	48	48	48		
Cost per Mile	\$2.90	\$2.90	\$2.90		Unit Rate
Transportation Cost	\$0	\$0	\$0	\$0	Calculated
Disposal					
Disposal Fee per Cubic Yard	\$13.50	\$13.50	\$13.50		Unit Rate
Load Volume (Cubic Yards)	20	20	20		
Disposal Cost	\$0	\$0	\$0	\$0	Calculated
Total Landfill Cost	\$0	\$0	\$0	\$0	Calculated

**Table RP-5: Analysis, Equipment and Tank Lists for Bond Estimate
Lost Creek Project #788**

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

Assumptions/Items	Deep Disposal Well No. 1	Deep Disposal Well No. 3	Deep Disposal Well No. 4	Total	Source
PIPELINE (continued)					
C. Transport & Disposal (continued)					
Licensed Site					
Transportation					
Percent to be Shipped	100.0%	100.0%	100.0%		Calculated
Loads to be Shipped	6.8	0.7	0.1	7.6	Calculated
Distance (Miles)	105	105	105		
Cost per Mile	\$2.90	\$2.90	\$2.90		Unit Rate
Transportation Cost	\$2,071	\$213	\$30	\$2,314	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	\$45,459	\$4,680	\$669	\$50,808	Calculated
Total Licensed Site Cost	\$47,530	\$4,893	\$699	\$53,122	Calculated
Total Transport & Disposal Cost	\$47,530	\$4,893	\$699	\$53,122	Calculated
TOTAL PIPELINE REMOVAL & DISPOSAL COST	\$66,253	\$5,864	\$857	\$72,974	Calculated
MANHOLES					
A. Removal					
Total Quantity	1	1	1	3	
Removal Cost per Manhole	\$146.32	\$146.32	\$146.32		Unit Rate
Removal Cost	\$146	\$146	\$146	\$439	Calculated
Quantity per Truck Load	10	10	10		
Number of Truck Loads	0.1	0.1	0.1	0.3	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

**Table RP-5: Analysis, Equipment and Tank Lists for Bond Estimate
Lost Creek Project #788**

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

Assumptions/Items	Deep Disposal Well No. 1	Deep Disposal Well No. 3	Deep Disposal Well No. 4	Total	Source
MANHOLES (continued)					
C. Transport & Disposal					
Landfill					
Transportation					
Percent to be Shipped	100.0%	100.0%	100.0%		
Loads to be Shipped	0.1	0.1	0.1	0.3	Calculated
Distance (Miles)	48	48	48		Unit Rate
Cost per Mile	\$2.90	\$2.90	\$2.90		Calculated
Transportation Cost	\$14	\$14	\$14	\$42	
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	\$270	\$810	Calculated
Total Landfill Cost	\$284	\$284	\$284	\$852	Calculated
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	\$284	\$284	\$284	\$852	Calculated
TOTAL MANHOLE REMOVAL & DISPOSAL COST	\$430	\$430	\$430	\$1,291	Calculated
TOTAL DEEP DISPOSAL WELL PIPELINE REMOVAL AND DISPOSAL CO	\$66,683	\$6,295	\$1,287	\$74,265	Calculated
DEEP DISPOSAL WELL PIPELINE REMOVAL AND DISPOSAL COST PER FOOT	\$5.59				Calculated

Table RP-5 Supplement: Lost Creek Construction/Production Schedule for Bond Estimate
Lost Creek Project #788

Lost Creek Construction / Production Schedule																												
Start		2012			2013												2014											
HH	Date	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1-1	Jul-2013														GWS		RO	RO										RETURN
1-2	Aug-2013														GWS			RO	RO	RO								
1-3	Jun-2013														GWS				RO	RO								
1-4	Jun-2013															GWS				RO	RO	RO						
1-5	Jul-2013															GWS					RO	RO	RO	RO				
1-6	Aug-2013															GWS							RO	RO	RO	RO		
1-7	Sep-2013																GWS	GWS							RO	RO		
Plant Construction																												
Startup Schedule										1-1/3	1-2/4	1-5/6	1-7															
MU-1 420																												
Drilling 60.7 cased wells/hh		Field Work																										
Delineation/Other				25																								
Pilot - 32 wls/mo/rig		1-1/3	1-4	1-2	1-5	1-6	1-7	1-8	1-9	1-10	1-11	1-12																
Case - 16 wls/mo/rig			1-1	1-3	1-4	1-2	1-5	1-6	1-7	1-8	1-9	1-10	1-11															
U/R - 16 wls/mo/rig				1-1	1-3	1-4	1-2	1-5	1-6	1-7	1-8	1-9	1-10															
MIT - 48 wls/mo/rig																												
Construction																												
Infrastructure																												
Header Houses						1-1	1-3	1-4	1-2	1-5	1-6	1-7	1-8															
MU-2 461																												
Drilling 55.2 cased wells/hh																												
Delineation/Other			88				50	50																				
Pilot - 32 wls/mo/rig					MWR2																							
Case - 16 wls/mo/rig						MWR2	MWR2																					
U/R - 16 wls/mo/rig								MWR2	MWR2																			
MIT - 48 wls/mo/rig																												

Table RP-5 Supplement: Lost Creek Construction/Production Schedule for Bond Estimate
Lost Creek Project #788

Start		2015												2016												2017					
HH	Date	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
1-1	Jul-2013	STABILIZATION												REGULATORY APPROVAL						RECLAMATION											
1-2	Aug-2013																														
1-3	Jun-2013																														
1-4	Jun-2013																														
1-5	Jul-2013																														
1-6	Aug-2013																														
1-7	Sep-2013																														
Plant Construction																															
Startup Schedule																															
MU-1 420																															
Drilling	60.7 cased wells/hh																														
	Delineation/Other																														
	Pilot - 32 wls/mo/rig																														
	Case - 16 wls/mo/rig																														
	U/R - 16 wls/mo/rig																														
	MIT - 48 wls/mo/rig																														
Construction																															
	Infrastructure																														
	Header Houses																														
MU-2 461																															
Drilling	55.2 cased wells/hh																														
	Delineation/Other																														
	Pilot - 32 wls/mo/rig																														
	Case - 16 wls/mo/rig																														
	U/R - 16 wls/mo/rig																														
	MIT - 48 wls/mo/rig																														

**Table RP-5 Supplement: Lost Creek Construction/Production Determinations for Bond Estimate
Lost Creek Project #788**

Mine Unit	Header House	Producers	Injectors	Total Wells	L1	L2	L3	L4	Total	Area/Ptn	Thickness	Porosity	Vert. Flare	Horiz. Flare	Pore Volume
1	1	21	41	62	163896	26239			190135	9054	12	0.26	1.2	1.2	6389704
1	2	21	38	59	101540	50466	29974		181980	8666	12	0.26	1.2	1.2	6115646
1	3	21	38	59	153533	36802			190335	9064	12	0.26	1.2	1.2	6396425
1	4	21	41	62	74014	36738	52488	24547	187787	8942	12	0.26	1.2	1.2	6310797
1	5	21	45	66	96145	52266	37683	7762	193856	9231	12	0.26	1.2	1.2	6514753
1	6	21	43	64	107577	52178	27747		187502	8929	12	0.26	1.2	1.2	6301219
1	7	21	39	60	128507	59544			188051	8955	12	0.26	1.2	1.2	6319669
		147	285	432					1319646	8977					44348214

4-6 agencies

Separate categories (find categories of commonality – these should be areas of interest to NRC in its next 2-3 years of planning)

Section 106

Resource Planning

Opening paragraph in categories can discuss similarities btw. agencies, following paragraphs can discuss differences/unique qualities amongst agencies

Talk about interagency work together to fill regulatory gaps and attempts to streamline regulatory overlap

Talk about Different geographic regions for different agency program coverages.