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LOST CREEK ISR, LLC

November 16, 2012

Ms. Melissa Bautz
State of Wyoming
Department of Environmental Quality
Land Quality Division
510 Meadowview Drive
Lander, WY 82520

Re: Submittal of Response to Comments for the 2011-2012 Annual Report
Lost Creek Project Permit PT788

Dear Ms. Bautz,

Please find behind this cover, responses to the comments made by Wyoming Department of Environmental Quality-Land Quality Division (WDEQ-LQD) November 7, 2012 regarding the 2012 Interim In Situ Annual Report (AR). Included with this submittal in duplicate:

- Responses to Comments;
- Revised edition of the AR with changes made as described in the Responses;
- Addition to Appendix A (summary on additional historic borehole locating attempt);
- Revised surety estimate (Appendix B); and
- Electronic submittal of water quality data on compact disc.

If you have questions regarding this submittal please contact me or John Cash at the Casper Office.

Sincerely,
Lost Creek ISR, LLC
By: Ur-Energy USA, Inc., Manager

Michael D. Gaither
EHS Coordinator

Cc: Theresa Horne, Ur-Energy, Littleton Office
Mark Newman, BLM, Rawlins Office
Tanya Oxenberg, PhD, NRC

RESPONSES TO WDEQ-LQD COMMENTS on the LOST CREEK PROJECT PT788 *INTERIM* IN SITU ANNUAL REPORT

Lost Creek ISR, LLC
Sweetwater County, WY

November 16, 2012

The following are responses provided by Lost Creek ISR, LLC (LCI) to comments made by Wyoming Department of Environmental Quality-Land Quality Division (WDEQ-LQD) November 7, 2012 regarding the 2012 Interim In Situ Annual Report (AR). Five (5) comments were provided by Melissa L. Bautz, P.G. – Natural Resource Analyst and five responses are offered by LCI.

Comment #1 (LQD):
"A description of LCI's (post July 30, 2012) attempt to locate historic drill holes is needed."

Response #1 (LCI):
The summary of additional historic borehole locating has been provided to be included in Appendix A.

Comment #2 (LQD):
"A discussion of the pump test conducted at the site in early September 2012 is needed."

Response #2 (LCI):
Discussion on pump testing has been added to Section 3.2: *Water Balance/Hydrology* in the AR.

Comment #3 (LQD):
"The bond estimate presented in Appendix B must be further explained and a NSR for it to replace the existing bond estimate in the Permit must be submitted."

Response #3 (LCI):
Additional discussion has been added to Section 6.0 of the AR.

The following corrections have been made to the bond estimate submitted with the AR:

- Removed "Chemist" and associated costs from Section VI of Groundwater Restoration – Worksheet 1. The cost estimates for sample analysis is based on third-party service as opposed to in-house labor. Redundant cost is therefore eliminated.
- Changed number of samples on Decommissioning and Restoration: Restoration Analytical Costs
- Corrected "Analysis (Cost per Kilogallon)" for Groundwater Sweep and Reverse Osmosis on Groundwater Restoration – Worksheet 1

The corrections have adjusted the bond estimate originally submitted with the 2012 AR from $8,966,963 to $8,599,391.

The 2010 bond estimate and supplemental bond currently in the Permit will be replaced with the updated and approved bond and a NSR will be submitted to LQD.

Comment #4 (LQD):
"A discussion of the effects of the increase in the well field area by six (6) acres must be provided."

Specifically:

a. *"Did the increase change the perimeter of the pattern area?"*
b. *"Does this increase affect Table MU1 3-1 (topsoil table) in Volume 6A of the Permit?"*
c. *"Given this increase, is the requirement to have at least one overlying and underlying well per four acres of well field being followed?"*

Response #4 (LCI):
The changes in acreage noted in the comments are not due to any design changes but are due to the change in anticipated completion. More accurate estimations were able to be made due to the refinements in construction schedules following the granting of Permits. In turn, this altered the affected acreage for the construction schedule. Therefore, the specific questions, a through c, are not applicable. The answers, however, are: no, no, and yes. The wellfield layout and disturbance calculations have not changed from what is provided in the Permit.

Comment #5 (LQD):

"The water quality data must be submitted in an electronic form as well as paper." "LCI is asked to implement the [LQD-recommended] table formats prior to submitting the data."

Response #5 (LCI):
Data in electronic format is submitted with these responses as a data CD. The data tables shall be modified for the next AR (2012-2013) as requested to include:

- Indication of well type
- Tables and charts that are well-specific
- Hard copies of UCL data in an approved format

Water quality data formatting for hard copy presentation will be determined for the next reporting year (2012-2013) and will be submitted in an LQD-approved format.

2012

INTERIM IN SITU ANNUAL REPORT for the

LOST CREEK PROJECT

PERMIT TO MINE #788

Lost Creek ISR, LLC
Sweetwater County, WY

Prepared by Ur-Energy USA, Inc. for:

Wyoming Department of Environmental Quality – Land Quality Division

September 21, 2012

Revised November 16, 2012

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

1.0 TITLE/CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for known violations.

Name: John W. Cash

Title: Vice President of Regulatory Affairs (Lost Creek ISR, LLC)

Signature: John W Cash

Date: 11/15/12

2.0 REPORT INFORMATION

This interim In-Situ Annual Report (ISAR) report has been prepared in accordance with the approved Interim Monitoring and Reporting Plan (Interim Plan) for the Lost Creek Project. Approval for the Interim Plan was granted by Wyoming Department of Environmental Quality Land Quality Division (WDEQ-LQD) in a letter dated November 28, 2011.

The contents of this ISAR are provided pursuant to LQD Rules and Regulations Chapter 11 Section 15(c) and the Wyoming Environmental Quality Act WS §35-11-411. The report format is consistent with WDEQ-LQD *Draft* Guideline 4 Appendix IX.

2.1 Permittee

Lost Creek ISR, LLC
A fully owned subsidiary of Ur-Energy USA, Inc.

5880 Enterprise Dr. Suite 200
Casper, WY 82609

Permit to Mine #788
October 21, 2011

2.2 Regulatory Contacts

John Cash
Lost Creek ISR, LLC
Vice President of Regulatory Affairs
(307) 265-2373 x 303

Michael Gaither
Ur-Energy USA, Inc
EHS Coordinator
(307) 265-2373 x 321

2.3 Reporting Period

The reporting period covered by this ISAR is **September 21, 2011** to **September 20, 2012**.

3.0 MINE OPERATIONS

3.1 Operating Wellfields

No wellfields were constructed for this project during the reporting period.

All exsiting wells within the permit area are shown on Figure 3.1-1.

3.2 Water Balance/Hydrology

No injection or extraction occurred during the reporting period.

Potentiometric surface maps are provided depicting pre-mining water contours for the project. The maps are included as Figure 3.2-1A, B and C.

No discharge to ponds occurred since the ponds had not been constructed during the reporting period. The two approved ponds will be constructed with a proposed capacity of each at 2.3 acre-feet (equivalent to 749,458 gallons).

No fluids were disposed in the deep disposal well since the well had not been completed.

Hydrologic Testing
In response to the commitment to perform supplemental pump testing for each Mine Unit as described in Appendix D5 (pg D5-9a) and D6 (pg D6-21) of the approved Permit, a pump test was performed on Mine Unit 1 in July-August of 2012. The two-phase pump test designed to mimic pump testing conducted in 2008 was initiated to re-evaluate HJ Horizon aquifer characteristics following historic borehole re-abandonment efforts (see Section 5.2 below). The two phases included separate pump tests to evaluate the north and south sides of the Lost Creek Fault. Draw-down pumping and water level data collection occurred but analysis of the pump test had not been concluded during the reporting period.

Additionally, a Class V Underground Injection Control (UIC) Permit was granted by WDEQ Water Quality Division on August 1, 2012 to support a 5-spot injection test. The 5-spot injection test detailed in the Class V permit application was designed to evaluate the hydraulic characteristics of the KM Horizon in response to pumping and re-injection. Pump testing commenced September 4, 2012 that included only drawdown testing of the pumping well (5S-KM3). The pumping and re-injection phase of the 5-spot test was delayed and had not occurred until outside of the reporting period in October 2012.

3.3 Spills

No spills occurred since wellfields had not been constructed.

Spill mitigation and corrective actions were not necessary. Preventative measures will be described in the Standard Operating Procedure for spill response.

3.4 Excursions

No excursions occurred since wellfields had not been constructed.

There are no excursion response plans or compliance schedules required for this report pursuant to LQD NC R&R Chapter 11 Section 12(d)(iii).

3.5 Mechanical Integrity Testing Results for Existing Wells

A Mechanical Integrity Test (MIT) was performed on monitoring well M-KM3A. MIT procedures are described in Permit to Mine Operations Plan (OP) Section 3.4.

Well #	MIT Date	Pass/Fail	Property	Comment
M-KM3A	11/13/2011	P	Lost Creek	Replacement well for M-KM3

No wells were repaired or converted.

For the 3rd quarter of 2012, the following MITs were performed.

Well #	MIT Date	Pass/Fail	Property	Comment
M-UKM-1	9/24/2012	P	Lost Creek	
KPW-1A	9/21/2012	P	Lost Creek	

3.6 New Disturbance during the Reporting Period Past Year

Only short-term stockpiles of topsoil occurred from mud pit excavation associated with exploration drilling and monitoring well installation. The depth of topsoil removal was approximately one (1) foot with an area of approximately 130 square feet for each drilling location. The volume of topsoil for each location therefore is approximately 5 cubic yards. The topsoil was replaced upon plugging of the drill hole or completion of the well. Locations of disturbance are provided in Section 5.1 below.

No overburden removal occurred.

No new buildings were constructed.

No new ponds were constructed.

A total of 48 new exploration holes were drilled as described in Section 5.2.

No new roads or power lines were installed.

3.7 New Wells/Wellfields Installed During the Reporting Period

No new wellfields were constructed. See Figure 3.1-1 for locations of wells.

One new monitoring well was installed summarized as follows:

Hole ID	Drill Date	Drilled TD ft-bgs	Easting NAD83 ft	Northing NAD83 ft	Ground Elevation ft	Twp	Rng	Sec	Qtr-Qtr	Comments
M-KM3A	10/11/2011	610	2214542	595504	6945.14	25	92	20	NE-NW	Replaces M-KM3

The completion detail of M-KM3A is provided on Figure 3.7-1.

No new production or injection wells were installed.

No new Class I disposal wells were installed.

3.8 Class III Well Stimulation Activity

No stimulation activities occurred since no Class III wells were installed or existed during the reporting period.

3.9 Monitoring

Water Quality
Water quality monitoring occurred in January, August, and September of 2012. Water quality data is included as Appendix A. See Figure 3.1-1 for locations of wells.

No trends or anomalies were determined due to the limited rounds of data.

No other water quality monitoring has been undertaken since production has not occurred yet.

Wildlife
Wildlife monitoring for the 2011 segment of the reporting period occurred as described in the 2011 Wildlife Monitoring Report. Wildlife monitoring for the 2012 segment of the reporting period will be included in the 2012 Wildlife Monitoring Report to be submitted in April 2013.

3.10 Deviations or Unanticipated Events or Conditions

No deviations from the Mine Plan occurred.

No unanticipated events occurred.

No revisions to the mining schedule were made.

3.11 Projected Operations

The mine processing plant, Mine Unit 1 (MU1) wellfield and associated infrastructure, and Mine Unit 2 (MU2) monitoring wells will be constructed during the next reporting period. The schedule of events including the acreage of anticipated disturbance is included in the reclamation bond calculation in Appendix B.

Well Installation

Two additional Class I deep disposal wells will potentially be installed during the next reporting period under UIC permit 09-586. As shown on the table below, permits for well installation were approved by the Wyoming State Engineers Office for the installation of the MU1 wellfield as proposed in Volume 6 of the approved Permit to Mine and for additional monitoring wells.

Lost Creek ID	WSEO Permit	Well Type	Maximum Number of Wells
NWNE19P	198897 (block permit)	Production and Injection	280
NENE19P	198898 (block permit)	Production and Injection	190
SWSE18P	198899 (block permit)	Production and Injection	10
SESE18P	198900 (block permit)	Production and Injection	100
NWNW20P	198901 (block permit)	Production and Injection	170
NENW20P	198902 (block permit)	Production and Injection	140
SWSW17P	198903 (block permit)	Production and Injection	50
LC1007W	198926	Monitoring/Water Supply	1
LC1008W	198928	Monitoring/Water Supply	1

Installation of approximately 85 monitoring wells that include the monitoring ring and mine unit monitoring wells for MU2 is projected to commence in 2013. Projected average depth for MU2 monitoring wells is approximately 460'.

Exploration/Delineation Drilling

Additional delineation holes will be drilled in MU1 and delineation drilling will commence for Mine Unit 2 during the next reporting period. The planned number of drill holes is approximately 25 for MU1 and approximately 188 for MU2. Projected average depth for drill holes in MU1 is approximately 450 feet and MU2 is approximately 660 feet.

4.0 RECLAMATION/RESTORATION ACTIVITIES

4.1 Groundwater Restoration Activities

No groundwater restoration activities occurred.

4.2 Well Plugging and Abandonment Activities

No wells were plugged and abandoned.

4.3 Surface Reclamation Activities

No surface reclamation was performed other than that associated with exploration drilling as described in Section 5.3 below.

4.4 Deviations or Unanticipated Events or Conditions

No deviations to the approved Reclamation Plan occurred.

No wellfield wells are anticipated to be abandoned and no wellfields are anticipated to be restored for the next reporting period.

No wellfield restoration initiation is anticipated for the next reporting period.

No permanent reclamation is anticipated for the next reporting period.

5.0 DRILL HOLE REPORTING

5.1 Area of Activity

A map depicting the area of exploration drilling disturbance and reclamation activity is shown on Figure 5.1-1.

5.2 Drill Hole Summary

Forty eight (48) exploration drill holes were installed and subsequently plugged during the reporting period.

Fifty (50) historic exploration holes located within the Mine Unit 1 monitoring ring were washed out and reabandoned as described in "Status Report on Plugging of Historic Exploration Holes" submitted to LQD on July 30, 2012. A copy of the report is provided as Appendix C.

Exploration and historic holes are summarized on Table 5.2-1.

5.3 Disturbance/Reclamation

Disturbance at each drilling location was estimated to be approximately 0.025 acres due to drilling and mud pit excavation. Topsoil was preserved at each location during excavation according to mud pit excavation procedures in the Permit to Mine OP-2.5.1. Reclamation of areas disturbed due to drilling and historic hole re-abandonment covering approximately 2.5 collective acres included hole plugging, mud pit backfilling, topsoil restoration, and contouring.

Number of Drill Locations	Acreage Per Location	Total Acres of Reclamation
98	0.025	2.45

5.4 Reclamation Seeding Details

Seeding of the locations of exploration drill holes occurred in April 2012 covering approximately 2 collective acres with approved seed mix. A summary of the 77 seeded locations is included on Table 5.4-1 and shown on Figure 5.4-1. Approved seed mix includes:

SEED	lbs-PLS/acre
Thickspike Wheatgrass	4
Western Wheatgrass	2
Indian Ricegrass	2
Great Basin Wildrye	2
Big Sagebrush	1
Winterfat (Ceratoides lanata)	1.5
Slender Wheatgrass	2.5
Sandberg Bluegrass	1.5
Total	16.5

6.0 RECLAMATION PERFORMANCE BOND ESTIMATE

The recalculated bond (surety) estimate and projected reclamation schedule for the next reporting period of September 21, 2012 to September 21, 2013 is included as Appendix B pursuant to WS 35-11-417(c)(ii) and WS 35-11-411(a)(iii).

Update in Bond Amount

The currently revised bond is in the amount of $8,599,391 which is an increase from the 2010 bond in the amount of $6,151,685. The change in bond amount is reflective of improved estimations of projected work schedule and refinements in estimations of materials, acreages, and costs involved in decommissioning and reclamation. Increases have been in the estimation of operable Mine Unit 1 area and amount of structures and wells that will be constructed. The bond currently in the Permit included the 2010 bond and 2011 supplemental bond and both will be replaced by the new 2012-2013 bond estimate.

It should be noted that no design changes have been made but the changes are a reflection of what construction is anticipated to be completed at the time of bond posting.

Overall, the bond amount has increased but brief explanations of the changes are offered as follows:

Summary Item	Bond Worksheet	Change	Explanation of Changes
Groundwater Restoration	Worksheet 1	Increase	Increase in anticipated operational area for the reporting period; Removal of chemist salary
Plant Equipment Removal and Disposal	Worksheet 2	Increase	Increased volume of material
Plant Building Demolition and Disposal	Worksheet 3	Increase	Increased disposal costs
Storage Pond Sludge and Liner Handling	Worksheet 4	Decrease	Reduced sludge volume estimates
Well Abandonment	Worksheet 5	Increase	Increase in anticipated number of wells installed
Wellfield Equipment Removal and Disposal	Worksheet 6	Increase	Increase in anticipated number of wells installed
Topsoil Replacement and Revegetation	Worksheet 7	Increase	Increase in anticipated affected area due to addition of well roads
Miscellaneous Reclamation Activity	Worksheet 8	Increase	Increase in fencing length and disposal well piping quantity

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LOST CREEK ISR, LLC

MEMO

Date: 8/10/2012

To: Lost Creek Project Files

From: Mike Gaither – EHS Coordinator

Subject: Attempt to Find Historic Boreholes by Excavation with a Motor Grader

Personnel Present: **Ur-Energy**: Mike Gaither, Jay Douthit, Steve Hatten, Chuck Kelsey, Chris Pedersen; **WDEQ-LQD**: Mark Moxley, Amy Boyle

On August 1, 2012, an attempt was made to locate historic boreholes by excavation using a motor grader (blade). Approval had been granted by the BLM for the additional disturbance which was not to exceed 0.5 acres total.

The location of the target excavation area included the following historic boreholes:

- TG15-19, P6-9, TGC1-19, P5-19, and TG16-19

The coordinates of the borehole locations were located with survey-grade GPS and staked. Four of the five were targeted for excavation. A majority of the target area was previously disturbed by a two-track, monitoring well access road. The location of TG16-19 was not excavated since it was collocated with a more recent borehole location (LC6C).

The blade, operated by a Barrett Oilfield Service individual, was used to scrape the topsoil away in an attempt to reveal indications of drill pits or boreholes. A plot approximately 200' by 50' with depth ranging from 6" to 18" was excavated, or "bladed", by scraping the topsoil away approximately 2" to 4" at a time. Topsoil was scraped away until subsoil was reached at which point scraping had ceased to prevent top/subsoil mixing. T-probes and shovels were used throughout the excavation process to examine the excavated area.

No indications of boreholes had been discovered, however, indications of former drill pits may have been discovered in the vicinity of two of the four target locations (P6-19 and TGC1-19). The indications included slight soil color variations and more loose soil texture. The process was discontinued due to the failure to locate any boreholes.

The topsoil was returned to the scraped area and shaped to its original contour.

Approximate area of excavation.

N

0 400 800

US survey feet

MU1 Historic Hole Re-abandonment Effort Results - July, 26 2012

- (86) Located and re-abandoned by URE
- (6) Located, access unauthorized; not re-abandoned by URE
- (3) Located, re-abandonment attempt unsuccessful by URE
- (86) Unable to locate hole

Lost Creek ISR, LLC

J. Cooper 7/26/12

Table RP-4: Reclamation/Restoration Bond Estimate
2012 Interim In Situ Annual Report - Rev1
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
2012 Interim In Situ Annual Report - Rev1
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
2012 Interim In Situ Annual Report - Rev1
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
2012 Interim In Situ Annual Report - Rev1
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
2012 Interim In Situ Annual Report - Rev1
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
2012 Interim In Situ Annual Report - Rev1
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
2012 Interim In Situ Annual Report - Rev1
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
2012 Interim In Situ Annual Report - Rev1
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
2012 Interim In Situ Annual Report - Rev1
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
2012 Interim In Situ Annual Report - Rev1
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
2012 Interim In Situ Annual Report - Rev1
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
2012 Interim In Situ Annual Report - Rev1
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
2012 Interim In Situ Annual Report - Rev1
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
2012 Interim In Situ Annual Report - Rev1
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
2012 Interim In Situ Annual Report - Rev1
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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
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

	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**

Table RP-4: Reclamation/Restoration Bond Estimate
2012 Interim In Situ Annual Report - Rev1
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
2012 Interim In Situ Annual Report - Rev1
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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
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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
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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
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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
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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	Depth*pi*((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
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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
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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
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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
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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
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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
2012 Interim In Situ Annual Report - Rev1
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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
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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
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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
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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
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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
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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
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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
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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
2012 Interim In Situ Annual Report - Rev1
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
2012 Interim In Situ Annual Report - Rev1
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
2012 Interim In Situ Annual Report - Rev1
Lost Creek Project #788

LOST CREEK ISR, LLC DECOMMISSIONING AND SURFACE RECLAMATION: G. Miscellaneoues 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		yrs 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
2012 Interim In Situ Annual Report - Rev1
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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 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.

Table RP-5: Analysis, Equipment and Tank Lists for Bond Estimate
2012 Interim In Situ Annual Report - Rev1
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
2012 Interim In Situ Annual Report - Rev1
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
2012 Interim In Situ Annual Report - Rev1
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
2012 Interim In Situ Annual Report - Rev1
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
2012 Interim In Situ Annual Report - Rev1
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
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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
2012 Interim In Situ Annual Report - Rev1
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
2012 Interim In Situ Annual Report - Rev1
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
2012 Interim In Situ Annual Report - Rev1
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
2012 Interim In Situ Annual Report - Rev1
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										
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				
1-6	Aug-2013															GWS								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										Pump Test		Writeup															

Table RP-5 Supplement: Lost Creek Construction/Production Schedule for Bond Estimate
2012 Interim In Situ Annual Report - Rev1
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 Constr[redacted]/Production Determinations for Bond Estimate
2012 Interim In Situ Annual Report - Rev1
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

UR-Energy
Your Uranium Powerhouse
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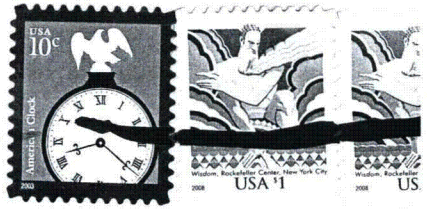

Deputy Director, Decommissioning & Uranium
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