



December 31, 2008

Mr. Doug Mandeville  
U.S. Nuclear Regulatory Commission  
11545 Rockville Pike  
#2 White Flint, T7E18  
Rockville, MD 20852-2738

**CAMECO RESOURCES**  
**Smith Ranch-Highland**  
**Operation**

**Mail:**  
**P.O. Box 1210**  
**Glenrock, WY**  
**82637 USA**

**Tel: (307) 358-6541**  
**Fax: (307) 358-4533**  
**[www.cameco.com](http://www.cameco.com)**

Re: Smith Ranch-Highland Uranium Project  
Source Material License SUA-1548, Docket No. 40-8964  
Annual Report and Surety Updates for Ruth

Dear Mr. Mandeville:

Enclosed are two (2) paper copies of the Ruth 2008 Annual Report and Surety as required by the Wyoming Department of Environmental Quality (WDEQ) Act W.S. 35-11-411 and License Condition 9.5 of Source Material License SUA-1548. Cameco Resources proposes to increase the current surety of \$ 121,000 to \$167,850.

If you have any questions, please don't hesitate to call me at Smith Ranch-Highland Uranium Project at (307) 358-6541 ext. 62.

Sincerely,

A handwritten signature in black ink, appearing to read "K. Wenzel".

Krista Wenzel  
Manager-Environment, Health and Safety

cc: T. Cannon                      S. Bakken  
C. Foldenauer                  File SR 4.6.4.1

**2008 ANNUAL REPORT**  
**for**  
**RUTH I.S.L. PROJECT**  
**IN SITU PERMIT TO MINE No. 631-L4**

*Prepared for:*

**Wyoming Dept. of Environmental Quality – Land Quality Division**  
**District III, Sheridan, WY**

*Prepared by:*

**Cameco Resources (Power Resources, Inc.)**  
**Casper, WY**  
**Tel. 307-237-2128**

**December 23, 2008**

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### APPENDIX (following Text)

Appendix A Reclamation Surety Estimate table

This submittal has been prepared to satisfy the Annual Report information requirement of W.S. 35-11-411(a) and addresses applicable requests for information contained in the Annual Report form received from the Wyoming Department of Environmental Quality, Land Quality Division.

## **1.0 NAME AND ADDRESS OF PERMITTEE**

Please note the **updated** mailing address and contact below:

Power Resources, Inc., doing business as (d.b.a.) **Cameco Resources**  
**400 East First Street, Suite 308**  
**Casper, Wyoming 82601**

Regulatory Contact: **Jean Lawlor**  
**Tel. 307-237-2128, x. 313**

## **2.0 MINING PERMIT NUMBER**

Permit No. 631 issued to Uranerz U.S.A., Inc. on December 26, 1990;  
Permit No. 631 Transferred to Pathfinder Mine Corp. on March 5, 1991;  
Permit No. 631 transferred to Power Resources, Inc. (now d.b.a Cameco Resources) on November 29, 2001.

## **3.0 REPORTING PERIOD**

This annual report covers the period December 27, 2007 through December 26, 2008.

## **4.0 DESCRIPTION OF OPERATIONS**

All facilities at the Ruth Project are non-operational and on stand-by status. Activities during the report period consisted of quarterly inspections, required by the USNRC license, of the existing facilities.

**a. Wells Installed or Repaired:**

No wells were installed or repaired during this reporting period.

**b. Completion Techniques for wells installed or repaired:**

Not applicable

**c. Permit Predictions Made, Fulfilled, Deviated from:**

No changes were made to previously submitted permit documents during this reporting period.

**d. Revised Schedule of Operations & Reclamation:**

Construction for commercial operations has been postponed at least through 2009, dependent upon uranium market and general economic conditions. No mining activity is planned for the Ruth project during 2009.

**e. Map of Major Features of Existing Mining Operations:**

Plate 1 included with the 2001 Annual Report shows the current layout of the Ruth project.

**f. Updated Potentiometric Surface Maps:**

A potentiometric surface map is not included because the project is not operational. No aquifers have been affected by project activity during the current reporting period or will be affected by project activity during the upcoming reporting period.

## 5.0 MONITORING ACTIVITIES

Monitoring activities conducted during the report period included quarterly inspections of site security, the evaporation pond fence and embankments, evaporation pond liners, and pond water levels. No problems were observed during the report period.

## 6.0 RECLAMATION SURETY ESTIMATE

There has been no activity on this project, which remained non-operational over the past year. A reclamation surety of \$167,850 is proposed (Appendix A), estimated using WDEQ Guideline 12<sup>1</sup>. This represents an increase of \$46,850 from the December 2007 estimate of \$121,000. No operational or development activities are planned for the upcoming surety period.

Report prepared by Original to WDEQ signed Date 12/31/08  
by Jean Lawler. J.L.

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<sup>1</sup> Wyoming Dept. Environmental Quality, Land Quality Div. October 8, 2008. Guideline 12 Standardized Reclamation Performance Bond Format and Cost Calculation Methods.

## **APPENDIX A**

### **RECLAMATION SURETY ESTIMATE**

CAMECO RESOURCES  
RUTH ISL PROJECT PERMIT No. 631  
2009 SURETY ESTIMATE

**TOTAL DECOMMISSIONING AND RECLAMATION COST ESTIMATE**

I. BUILDING DEMOLITION AND DISPOSAL COSTS	\$67,164	
II. EVAPORATION POND DECOMMISSIONING COSTS	\$36,886	
III. MISC. SURFACE RECLAMATION COSTS	\$9,785	
IV. WELL PLUGGING AND ABANDONMENT	\$10,445	
V. FINAL STATUS SURVEY REPORT	\$10,000	
	SUBTOTAL	\$134,280
	PROJECT MANAGEMENT AND MISCELLANEOUS COSTS (15%) <sup>a</sup>	\$20,142
	CONTRACTOR PROFIT, OVERHEAD, AND MOBILIZATION COSTS (10%) <sup>b</sup>	\$13,428
	TOTAL	<b>\$167,850</b>

<sup>a</sup> Based on WDEQ-LQD Guideline No. 12 (10/8/08), Section II(B)(12)(except b) and (13).

<sup>b</sup> Based on WDEQ-LQD Guideline No. 12 (10/8/08), Section II(B)(12)(b).

CAMECO RESOURCES RUTH ISL PROJECT PERMIT No. 631  
2009 SURETY ESTIMATE

BUILDING DEMOLITION AND DISPOSAL	Process Building	Warehouse Building	Generator Building
<b>I. Demolition Costs</b>			
<b>A. Equipment</b>			
Equipment remaining on site includes 6 tanks/vessels and injection manifold. Assume \$2000 for dismantling.			
Subtotal Equipment Dismantling Costs	\$8,000	\$0	\$0
<b>B. Building</b>			
Total Volume of Building (ft <sup>3</sup> )	80,000	6,000	1,500
Demolition Unit Cost per WDEQ Guideline 12, App. K (\$/ft <sup>3</sup> )	\$0.240	\$0.240	\$0.240
Subtotal Building Demolition Costs	\$19,200	\$1,440	\$360
<b>C. Concrete Floor</b>			
Area of Concrete Floor (ft <sup>2</sup> )	4000	600	150
Demolition Unit Cost per WDEQ Guideline 12, App. K (\$/ft <sup>2</sup> )	\$4.73	\$4.73	\$4.73
Subtotal Concrete Floor Demolition Costs	\$18,920	\$2,838	\$710
<b>D. Concrete Footing</b>			
Length of Concrete Footing (ft)	280	0	0
Demolition Unit Cost per WDEQ Guideline 12, App. K (\$/lin. ft)	\$16.41	\$16.41	\$16.41
Subtotal Concrete Footing Demolition Costs	\$4,595	\$0	\$0
Subtotal Demolition Costs per Building	\$50,715	\$4,278	\$1,070
<b>Total Demolition Costs</b>	<b>\$56,063</b>		
<b>II. Disposal Costs</b>			
<b>A. Equipment</b>			
Assumptions <sup>a</sup> : Per Byproduct Material Disposal Agreement between PRI and Pathfinder, first 185 cy disposed of at Shirley Basin at no cost.			
Assume equipment volume of 15 cy.			
# Trips	2	0	0
Transportation Unit Cost (\$/trip)	\$1,000	\$1,000	\$1,000
Disposal Unit Cost (\$/ton)	\$0	\$0	\$0
Subtotal Equipment Disposal Costs	\$2,000	\$0	\$0
<b>B. Buildings (On-Site)</b>			
Assumptions: Thickness of building material (ft)	0.75	0.5	0.5
Building Length (ft)	100	30	15
Building Width (ft)	40	20	10
Building Height (ft)	20	10	10
Volume of Building Materials (cy)	267	30	12
Volume for Disposal (assuming 25% swell factor) (cy)	334	38	15
Disposal Unit Cost per WDEQ Guideline 12, App. K (\$/cy)	\$8.41	\$8.41	\$8.41
Subtotal Building Disposal Costs	\$2,809	\$320	\$126
<b>C. Concrete Floor</b>			
Assumptions: Per Byproduct Material Disposal Agreement between PRI and Pathfinder, first 185 cy disposed of at Shirley Basin at no cost.			
Area of Concrete Floor (ft <sup>2</sup> )	4000	600	150
Average Thickness of Concrete Floor (ft)	0.5	0.5	0.5
Volume of Concrete Floor (cy)	74	11	3
<b>1. On-Site</b>			
Percentage (%) <sup>b</sup>	90%	100%	100%
Volume for Disposal (cy)	66.6	11	3
Disposal Unit Cost per WDEQ Guideline 12, App. K (\$/cy)	\$7.04	\$7.04	\$7.04
Subtotal On-Site Disposal Costs	\$469	\$77	\$21
<b>2. NRC-Licensed Facility</b>			



CAMECO RESOURCES RUTH ISL PROJECT PERMIT No. 631  
2009 SURETY ESTIMATE

<b>BUILDING DEMOLITION AND DISPOSAL</b>	<b>Process Building</b>	<b>Warehouse Building</b>	<b>Generator Building</b>
Percentage (%) <sup>b</sup>	10%	0%	0%
Volume for Disposal (cy)	7.4	0	0
Volume for Disposal (assuming 50% swell factor) (cy)	11	0	0
# Trips	1	0	0
Transportation Unit Cost (\$/trip)	\$1,000	\$0	\$0
Disposal Unit Cost (\$/cy)	\$0	\$0	\$0
Subtotal NRC-Licensed Facility Disposal Costs	\$1,000	\$0	\$0
Subtotal Concrete Floor Disposal Costs	\$1,469	\$77	\$21
<b>D. Concrete Footing (On-Site)</b>			
Length of Concrete Footing (ft)	280	0	0
Average Depth of Concrete Footing (ft)	4	4	4
Average Width of Concrete Footing (ft)	1	1	1
Volume of Concrete Footing (cy)	41	0	0
Disposal Unit Cost per WDEQ Guideline 12, App. K (\$/cy)	\$4.73	\$4.73	\$4.73
Subtotal Concrete Footing Disposal Costs	\$194	\$0	\$0
Subtotal Disposal Costs per Building	\$6,472	\$397	\$147
<b>Total Disposal Costs</b>	<b>\$7,016</b>		
<b>III. Radiation Surveys and Soil Sampling</b>			
Assumptions: Based on NRC regulations and ambient levels of radiation on-site, environmental and personnel monitoring (TLD) not required.			
<b>A. Equipment (Alpha/Gamma Surveys and Smear Samples)</b>			
# Weeks	2	0	0
Rental Rate (\$/week)	\$250	\$250	\$250
Total Equipment Costs	\$500	\$0	\$0
<b>B. Labor (Surveys and Soil Sampling)</b>			
# Hours	80	0	0
Labor Cost (\$/hr)	\$39	\$39	\$39
Total Labor Costs	\$3,085	\$0	\$0
<b>C. Analytical Costs</b>			
# Samples	5	0	0
Ra-226 Analytical Cost (\$/sample)	\$100	\$100	\$100
Total Analytical Costs	\$500	\$0	\$0
Subtotal Radiation Survey and Soil Sampling Costs	\$4,085	\$0	\$0
<b>Total Radiation Survey and Soil Sampling Costs</b>	<b>\$4,085</b>		
<b>SUBTOTAL BUILDING DEMOLITION AND DISPOSAL COSTS</b>	<b>\$61,272</b>	<b>\$4,675</b>	<b>\$1,217</b>
<b>TOTAL BUILDING DEMOLITION AND DISPOSAL COSTS</b>	<b>\$67,164</b>		

Notes: a- Byproduct Material Disposal Agreement, Contract Date July 24, 2006, Expiration Date July 31, 2009.  
b- Based on radiation surveys conducted by Pathfinder Mines Co. during October - November 2001 (see site transfer letter dated November 2, 2001).

CAMECO RESOURCES RUTH ISL PROJECT PERMIT No. 631  
2009 SURETY ESTIMATE

EVAPORATION POND DECOMMISSIONING	Pond No. 1	Pond No. 2
<b>I. Byproduct Material Removal and Loading</b>		
<b>A. Volume of Byproduct Material</b>		
Area of Pond Bottom (ft <sup>2</sup> )	22,138	21,947
1. Area with Fill (ft <sup>2</sup> )	2,813	0
Average Thickness of Fill (in)	3.5	0
Volume of Fill (cy)	30	0
2. Remaining Area with Pond Residue (ft <sup>2</sup> )	19,325	21,947
Average Thickness of Pond Residue (in)	1	0.5
Volume of Pond Residue (cy)	60	34
3. Area of Liner (ft <sup>2</sup> )	22,138	21,947
Thickness of Liner (in)	0.036	0.036
Volume of Liner (cy)	2.5	2.4
Volume of Liner Assuming 25% Void Space (cy)	3	3
4. Area of Contaminated Sump and Drain (ft <sup>2</sup> )	0	1
Length of Sump and Drain (ft)	0	240
Volume of Sump and Drain (cy)	0	9
5. Diameter of Contaminated Soil (ft)	0	10
Depth of Contaminated Soil (in)	0	6
Volume of Contaminated Soil (cy)	0	1
Subtotal Volume of Byproduct Material (cy)	93	47
<b>B. Equipment (Front End Loader)</b>		
# Hours	40	20
Operating Cost (\$/hr)	\$107	\$107
Subtotal Equipment Costs	\$4,270	\$2,135
<b>C. Labor</b>		
# Hours	40	20
# Laborers	3	3
Labor Cost (\$/hr)	\$39	\$39
Subtotal Labor Costs	\$4,627	\$2,314
Subtotal Byproduct Material Removal and Loading Costs	\$8,897	\$4,449
<b>Total Byproduct Material Removal and Loading Costs</b>	<b>\$13,346</b>	
<b>II. Transportation and Disposal</b>		
Total Volume of Byproduct Material (cy)	93	47
Assumptions: Per Byproduct Material Disposal Agreement between PRI and Pathfinder, first 185 cy disposed of at Shirley Basin at no cost.		
<b>A. Transportation</b>		
Volume of Soil per Trip (cy/trip)	30	30
# Trips	3	2
Cost per Trip (\$/trip)	\$1,000	\$1,000
Subtotal Transportation Costs	\$3,000	\$2,000
<b>B. Disposal</b>		
Disposal Unit Cost (\$/cy)	\$0	\$0
Subtotal Disposal Costs	\$0	\$0
Subtotal Transportation and Disposal Costs	\$3,000	\$2,000
<b>Total Transportation and Disposal Costs</b>	<b>\$5,000</b>	
<b>III. Ripping</b>		
Area (acres)	0.5	0.5
Ripping Unit Cost per WDEQ Guideline 12, App. I (\$/acre)	\$1,048.11	\$1,048.11
Subtotal Ripping Costs	\$524	\$524
<b>Total Ripping Costs</b>	<b>\$1,048</b>	

CAMECO RESOURCES RUTH ISL PROJECT PERMIT No. 631  
2009 SURETY ESTIMATE

EVAPORATION POND DECOMMISSIONING	Pond No. 1	Pond No. 2
<b>IV. Backfilling</b>		
Assumptions: Surface grade = 0%; Avg. haul distance = 100 ft.		
Volume of Soil (cy)	5400	5400
Backfilling Unit Cost per WDEQ Guideline 12, App. E (\$/cy)	\$0.207	\$0.207
Subtotal Backfilling Costs	\$1,118	\$1,118
<b>Total Backfilling Costs</b>	<b>\$2,236</b>	
<b>V. Grading</b>		
Area (acres)	1.5	1.5
Rough Grading Unit Cost per WDEQ Guideline 12, App. M (\$/acre)	\$79.16	\$79.16
Final Grading Unit Cost per WDEQ Guideline 12, App. G (\$/acre)	\$64.77	\$64.77
Subtotal Grading Costs	\$216	\$216
<b>Total Grading Costs</b>	<b>\$432</b>	
<b>VI. Replacement of Topsoil</b>		
Assumptions: Surface grade = 0%; Avg. haul distance = 400 ft.		
Volume of Topsoil (cy)	3756	3756
Application Unit Cost per WDEQ Guideline No.12, App.E (\$/cy)	\$0.80	\$0.80
Subtotal Topsoil Replacement Costs	\$3,016	\$3,016
<b>Total Topsoil Replacement Costs</b>	<b>\$6,032</b>	
<b>VII. Seeding/Revegetation</b>		
Area (acres)	1.5	1.5
Disking/Seeding (\$/acre)	\$500	\$500
Mulching (\$/acre)	\$300	\$300
Subtotal Seeding/Revegetation Costs	\$1,200	\$1,200
<b>Total Seeding/Revegetation Costs</b>	<b>\$2,400</b>	
<b>VIII. Fence Removal</b>		
Length (ft)	800	800
Removal Unit Cost per WDEQ Guideline 12, App. H (\$/ft)	\$0.50	\$0.50
Subtotal Fence Removal Costs	\$400	\$400
<b>Total Fence Removal Costs</b>	<b>\$800</b>	
<b>IX. Radiation Surveys and Soil Sampling</b>		
Assumptions: Based on NRC regulations and ambient levels of radiation on-site, environmental and personnel monitoring (TLD) not required.		
A. Equipment (Alpha/Gamma Surveys and Smear Samples)		
# Weeks	1	1
Rental Rate (\$/week)	\$250	\$250
Total Equipment Costs	\$250	\$250
B. Labor (Surveys and Soil Sampling)		
# Hours	40	40
Labor Cost (\$/hr)	\$39	\$39
Total Labor Costs	\$1,546	\$1,546
C. Analytical Costs		
# Samples	10	10
Ra-226 Analytical Cost (\$/sample)	\$100	\$100
Total Analytical Costs	\$1,000	\$1,000
Subtotal Radiation Survey and Soil Sampling Costs	\$2,796	\$2,796
<b>Total Radiation Survey and Soil Sampling Costs</b>	<b>\$5,592</b>	
<b>SUBTOTAL EVAPORATION POND DECOMMISSIONING COSTS</b>	<b>\$21,167</b>	<b>\$15,719</b>
<b>TOTAL EVAPORATION POND DECOMMISSIONING COSTS</b>	<b>\$36,886</b>	

CAMECO RESOURCES RUTH ISL PROJECT No. 631  
2009 SURETY ESTIMATE

<b>MISC. SURFACE RECLAMATION</b>	
<b>I. Buildings, Roads, and Parking Areas</b>	
A. Gravel Removal	
Assumptions: Surface Grade = 0%; Avg. haul distance = 500 ft.	
Volume (cy)	1500
Removal Unit Cost per WDEQ Guideline 12, App. C (\$/cy)	\$0.99
<b>Total Gravel Removal Costs</b>	<b>\$1,491</b>
B. Ripping	
Area (acres)	2
Ripping Unit Cost per WDEQ Guideline 12, App. I (\$/acre)	\$1,048.11
<b>Total Ripping Costs</b>	<b>\$2,096</b>
C. Replacement of Topsoil	
Assumptions: Surface grade = 0%; Avg. haul distance = 400 ft.	
Volume of Topsoil (cy)	2070
Application Unit Cost per WDEQ Guideline No.12, App.E (\$/cy)	\$0.80
<b>Total Topsoil Replacement Costs</b>	<b>\$1,662</b>
D. Seeding/Revegetation	
Area (acres)	2
Disking/Seeding (\$/acre)	\$500
Mulching (\$/acre)	\$300
<b>Total Seeding/Revegetation Costs</b>	<b>\$1,600</b>
E. Fence Removal	
Length (ft)	2880
Removal Unit Cost per WDEQ Guideline 12, App. H (\$/ft)	\$0.50
<b>Total Fence Removal Costs</b>	<b>\$1,440</b>
<b>Total Bldgs, Roads, and Parking Area Surface Reclamation Costs</b>	<b>\$8,289</b>
<b>II. R&amp;D Wellfield Area</b>	
A. Replacement of Topsoil	
Assumptions: Surface grade = 0%; Avg. haul distance = 350 ft.	
Volume of Topsoil (cy)	1180
Application Unit Cost per WDEQ Guideline No.12, App.E (\$/cy)	\$0.725
<b>Total Topsoil Replacement Costs</b>	<b>\$856</b>
B. Seeding/Revegetation	
Area (acres)	0.8
Disking/Seeding (\$/acre)	\$500
Mulching (\$/acre)	\$300
<b>Total Seeding/Revegetation Costs</b>	<b>\$640</b>
<b>Total R&amp;D Wellfield Area Surface Reclamation Costs</b>	<b>\$1,496</b>
<b>TOTAL MISC. SURFACE RECLAMATION COSTS</b>	<b>\$9,785</b>

CAMECO RESOURCES RUTH ISL PROJECT No. 631  
2009 SURETY ESTIMATE

<b>WELL PLUGGING AND ABANDONMENT</b>	
<b>I. Plugging</b>	
Assumptions: Based on WDEQ Guideline 12, Appendix L	
Well Casing Diameter (in)	5
# Wells (based on 12/08 review of WSEO records)	3
Average Well Depth (ft)	550
Total Casing Length (ft)	1650
Plugging Unit Cost <sup>a</sup> (\$/ft of casing)	\$6.28
Removal of Casing Top and Cement Plug Installation (\$/well)	\$22.50
<b>Total Plugging Costs</b>	<b>\$10,430</b>
<b>II. Seeding/Revegetation</b>	
# Sites	3
Seeding Unit Cost per WDEQ Guideline 12, App. L (\$/site) <sup>b</sup>	\$5
<b>Total Seeding Costs</b>	<b>\$15</b>
<b>TOTAL WELL PLUGGING AND ABANDONMENT COSTS</b>	<b>\$10,445</b>

Notes: <sup>a</sup> Includes well plugging, removing top of casing, installing cement plug, etc.  
<sup>b</sup> Seeding of abandoned well locations to be completed in conjunction with seeding of other reclaimed areas.

CAMECO RESOURCES  
RUTH ISL PROJECT PERMIT No. 631  
2009 SURETY ESTIMATE

**TOTAL DECOMMISSIONING AND RECLAMATION COST ESTIMATE**

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V. FINAL STATUS SURVEY REPORT	\$10,000
SUBTOTAL	\$134,280
PROJECT MANAGEMENT AND MISCELLANEOUS COSTS (15%) <sup>a</sup>	\$20,142
CONTRACTOR PROFIT, OVERHEAD, AND MOBILIZATION COSTS (10%) <sup>b</sup>	\$13,428
TOTAL	<b>\$167,850</b>

<sup>a</sup> Based on WDEQ-LQD Guideline No. 12 (10/8/08), Section II(B)(12)(except b) and (13).

<sup>b</sup> Based on WDEQ-LQD Guideline No. 12 (10/8/08), Section II(B)(12)(b).

CAMECO RESOURCES RUTH ISL PROJECT PERMIT No. 631  
2009 SURETY ESTIMATE

BUILDING DEMOLITION AND DISPOSAL	Process Building	Warehouse Building	Generator Building
<b>I. Demolition Costs</b>			
A. Equipment			
Equipment remaining on site includes 6 tanks/vessels and injection manifold. Assume \$2000 for dismantling.			
Subtotal Equipment Dismantling Costs	\$8,000	\$0	\$0
B. Building			
Total Volume of Building (ft <sup>3</sup> )	80,000	6,000	1,500
Demolition Unit Cost per WDEQ Guideline 12, App. K (\$/ft <sup>3</sup> )	\$0.240	\$0.240	\$0.240
Subtotal Building Demolition Costs	\$19,200	\$1,440	\$360
C. Concrete Floor			
Area of Concrete Floor (ft <sup>2</sup> )	4000	600	150
Demolition Unit Cost per WDEQ Guideline 12, App. K (\$/ft <sup>2</sup> )	\$4.73	\$4.73	\$4.73
Subtotal Concrete Floor Demolition Costs	\$18,920	\$2,838	\$710
D. Concrete Footing			
Length of Concrete Footing (ft)	280	0	0
Demolition Unit Cost per WDEQ Guideline 12, App. K (\$/lin. ft)	\$16.41	\$16.41	\$16.41
Subtotal Concrete Footing Demolition Costs	\$4,595	\$0	\$0
Subtotal Demolition Costs per Building	\$50,715	\$4,278	\$1,070
<b>Total Demolition Costs</b>	<b>\$56,063</b>		
<b>II. Disposal Costs</b>			
A. Equipment			
Assumptions <sup>a</sup> : Per Byproduct Material Disposal Agreement between PRI and Pathfinder, first 185 cy disposed of at Shirley Basin at no cost.			
Assume equipment volume of 15 cy.			
# Trips	2	0	0
Transportation Unit Cost (\$/trip)	\$1,000	\$1,000	\$1,000
Disposal Unit Cost (\$/ton)	\$0	\$0	\$0
Subtotal Equipment Disposal Costs	\$2,000	\$0	\$0
B. Buildings (On-Site)			
Assumptions: Thickness of building material (ft)	0.75	0.5	0.5
Building Length (ft)	100	30	15
Building Width (ft)	40	20	10
Building Height (ft)	20	10	10
Volume of Building Materials (cy)	267	30	12
Volume for Disposal (assuming 25% swell factor) (cy)	334	38	15
Disposal Unit Cost per WDEQ Guideline 12, App. K (\$/cy)	\$8.41	\$8.41	\$8.41
Subtotal Building Disposal Costs	\$2,809	\$320	\$126
C. Concrete Floor			
Assumptions: Per Byproduct Material Disposal Agreement between PRI and Pathfinder, first 185 cy disposed of at Shirley Basin at no cost.			
Area of Concrete Floor (ft <sup>2</sup> )	4000	600	150
Average Thickness of Concrete Floor (ft)	0.5	0.5	0.5
Volume of Concrete Floor (cy)	74	11	3
1. On-Site			
Percentage (%) <sup>b</sup>	90%	100%	100%
Volume for Disposal (cy)	66.6	11	3
Disposal Unit Cost per WDEQ Guideline 12, App. K (\$/cy)	\$7.04	\$7.04	\$7.04

CAMECO RESOURCES RUTH ISL PROJECT PERMIT No. 631  
2009 SURETY ESTIMATE

<b>BUILDING DEMOLITION AND DISPOSAL</b>	<b>Process Building</b>	<b>Warehouse Building</b>	<b>Generator Building</b>
Subtotal On-Site Disposal Costs	\$469	\$77	\$21
<b>2. NRC-Licensed Facility</b>			
Percentage (%) <sup>b</sup>	10%	0%	0%
Volume for Disposal (cy)	7.4	0	0
Volume for Disposal (assuming 50% swell factor) (cy)	11	0	0
# Trips	1	0	0
Transportation Unit Cost (\$/trip)	\$1,000	\$0	\$0
Disposal Unit Cost (\$/cy)	\$0	\$0	\$0
Subtotal NRC-Licensed Facility Disposal Costs	\$1,000	\$0	\$0
Subtotal Concrete Floor Disposal Costs	\$1,469	\$77	\$21
<b>D. Concrete Footing (On-Site)</b>			
Length of Concrete Footing (ft)	280	0	0
Average Depth of Concrete Footing (ft)	4	4	4
Average Width of Concrete Footing (ft)	1	1	1
Volume of Concrete Footing (cy)	41	0	0
Disposal Unit Cost per WDEQ Guideline 12, App. K (\$/cy)	\$4.73	\$4.73	\$4.73
Subtotal Concrete Footing Disposal Costs	\$194	\$0	\$0
Subtotal Disposal Costs per Building	\$6,472	\$397	\$147
<b>Total Disposal Costs</b>	<b>\$7,016</b>		
<b>III. Radiation Surveys and Soil Sampling</b>			
Assumptions: Based on NRC regulations and ambient levels of radiation on-site, environmental and personnel monitoring (TLD) not required.			
<b>A. Equipment (Alpha/Gamma Surveys and Smear Samples)</b>			
# Weeks	2	0	0
Rental Rate (\$/week)	\$250	\$250	\$250
Total Equipment Costs	\$500	\$0	\$0
<b>B. Labor (Surveys and Soil Sampling)</b>			
# Hours	80	0	0
Labor Cost (\$/hr)	\$39	\$39	\$39
Total Labor Costs	\$3,085	\$0	\$0
<b>C. Analytical Costs</b>			
# Samples	5	0	0
Ra-226 Analytical Cost (\$/sample)	\$100	\$100	\$100
Total Analytical Costs	\$500	\$0	\$0
Subtotal Radiation Survey and Soil Sampling Costs	\$4,085	\$0	\$0
<b>Total Radiation Survey and Soil Sampling Costs</b>	<b>\$4,085</b>		
<b>SUBTOTAL BUILDING DEMOLITION AND DISPOSAL COSTS</b>	<b>\$61,272</b>	<b>\$4,675</b>	<b>\$1,217</b>
<b>TOTAL BUILDING DEMOLITION AND DISPOSAL COSTS</b>	<b>\$67,164</b>		

Notes: a- Byproduct Material Disposal Agreement, Contract Date July 24, 2006, Expiration Date July 31, 2009.  
b- Based on radiation surveys conducted by Pathfinder Mines Co. during October - November 2001 (see site transfer letter dated November 2, 2001).



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EVAPORATION POND DECOMMISSIONING	Pond No. 1	Pond No. 2
<b>I. Byproduct Material Removal and Loading</b>		
A. Volume of Byproduct Material		
Area of Pond Bottom (ft <sup>2</sup> )	22,138	21,947
1. Area with Fill (ft <sup>2</sup> )	2,813	0
Average Thickness of Fill (in)	3.5	0
Volume of Fill (cy)	30	0
2. Remaining Area with Pond Residue (ft <sup>2</sup> )	19,325	21,947
Average Thickness of Pond Residue (in)	1	0.5
Volume of Pond Residue (cy)	60	34
3. Area of Liner (ft <sup>2</sup> )	22,138	21,947
Thickness of Liner (in)	0.036	0.036
Volume of Liner (cy)	2.5	2.4
Volume of Liner Assuming 25% Void Space (cy)	3	3
4. Area of Contaminated Sump and Drain (ft <sup>2</sup> )	0	1
Length of Sump and Drain (ft)	0	240
Volume of Sump and Drain (cy)	0	9
5. Diameter of Contaminated Soil (ft)	0	10
Depth of Contaminated Soil (in)	0	6
Volume of Contaminated Soil (cy)	0	1
Subtotal Volume of Byproduct Material (cy)	93	47
B. Equipment (Front End Loader)		
# Hours	40	20
Operating Cost (\$/hr)	\$107	\$107
Subtotal Equipment Costs	\$4,270	\$2,135
C. Labor		
# Hours	40	20
# Laborers	3	3
Labor Cost (\$/hr)	\$39	\$39
Subtotal Labor Costs	\$4,627	\$2,314
Subtotal Byproduct Material Removal and Loading Costs	\$8,897	\$4,449
<b>Total Byproduct Material Removal and Loading Costs</b>	<b>\$13,346</b>	
<b>II. Transportation and Disposal</b>		
Total Volume of Byproduct Material (cy)	93	47
Assumptions: Per Byproduct Material Disposal Agreement between PRI and Pathfinder, first 185 cy disposed of at Shirley Basin at no cost.		
A. Transportation		
Volume of Soil per Trip (cy/trip)	30	30
# Trips	3	2
Cost per Trip (\$/trip)	\$1,000	\$1,000
Subtotal Transportation Costs	\$3,000	\$2,000
B. Disposal		
Disposal Unit Cost (\$/cy)	\$0	\$0
Subtotal Disposal Costs	\$0	\$0
Subtotal Transportation and Disposal Costs	\$3,000	\$2,000
<b>Total Transportation and Disposal Costs</b>	<b>\$5,000</b>	
<b>III. Ripping</b>		
Area (acres)	0.5	0.5
Ripping Unit Cost per WDEQ Guideline 12, App. I (\$/acre)	\$1,048.11	\$1,048.11
Subtotal Ripping Costs	\$524	\$524
<b>Total Ripping Costs</b>	<b>\$1,048</b>	

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EVAPORATION POND DECOMMISSIONING	Pond No. 1	Pond No. 2
<b>IV. Backfilling</b>		
Assumptions: Surface grade = 0%; Avg. haul distance = 100 ft.		
Volume of Soil (cy)	5400	5400
Backfilling Unit Cost per WDEQ Guideline 12, App. E (\$/cy)	\$0.207	\$0.207
Subtotal Backfilling Costs	\$1,118	\$1,118
<b>Total Backfilling Costs</b>	<b>\$2,236</b>	
<b>V. Grading</b>		
Area (acres)	1.5	1.5
Rough Grading Unit Cost per WDEQ Guideline 12, App. M (\$/acre)	\$79.16	\$79.16
Final Grading Unit Cost per WDEQ Guideline 12, App. G (\$/acre)	\$64.77	\$64.77
Subtotal Grading Costs	\$216	\$216
<b>Total Grading Costs</b>	<b>\$432</b>	
<b>VI. Replacement of Topsoil</b>		
Assumptions: Surface grade = 0%; Avg. haul distance = 400 ft.		
Volume of Topsoil (cy)	3756	3756
Application Unit Cost per WDEQ Guideline No. 12, App. E (\$/cy)	\$0.80	\$0.80
Subtotal Topsoil Replacement Costs	\$3,016	\$3,016
<b>Total Topsoil Replacement Costs</b>	<b>\$6,032</b>	
<b>VII. Seeding/Revegetation</b>		
Area (acres)	1.5	1.5
Disking/Seeding (\$/acre)	\$500	\$500
Mulching (\$/acre)	\$300	\$300
Subtotal Seeding/Revegetation Costs	\$1,200	\$1,200
<b>Total Seeding/Revegetation Costs</b>	<b>\$2,400</b>	
<b>VIII. Fence Removal</b>		
Length (ft)	800	800
Removal Unit Cost per WDEQ Guideline 12, App. H (\$/ft)	\$0.50	\$0.50
Subtotal Fence Removal Costs	\$400	\$400
<b>Total Fence Removal Costs</b>	<b>\$800</b>	
<b>IX. Radiation Surveys and Soil Sampling</b>		
Assumptions: Based on NRC regulations and ambient levels of radiation on-site, environmental and personnel monitoring (TLD) not required.		
A. Equipment (Alpha/Gamma Surveys and Smear Samples)		
# Weeks	1	1
Rental Rate (\$/week)	\$250	\$250
Total Equipment Costs	\$250	\$250
B. Labor (Surveys and Soil Sampling)		
# Hours	40	40
Labor Cost (\$/hr)	\$39	\$39
Total Labor Costs	\$1,546	\$1,546
C. Analytical Costs		
# Samples	10	10
Ra-226 Analytical Cost (\$/sample)	\$100	\$100
Total Analytical Costs	\$1,000	\$1,000
Subtotal Radiation Survey and Soil Sampling Costs	\$2,796	\$2,796
<b>Total Radiation Survey and Soil Sampling Costs</b>	<b>\$5,592</b>	
<b>SUBTOTAL EVAPORATION POND DECOMMISSIONING COSTS</b>	<b>\$21,167</b>	<b>\$15,719</b>
<b>TOTAL EVAPORATION POND DECOMMISSIONING COSTS</b>	<b>\$36,886</b>	

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<b>MISC. SURFACE RECLAMATION</b>	
<b>I. Buildings, Roads, and Parking Areas</b>	
A. Gravel Removal	
Assumptions: Surface Grade = 0%; Avg. haul distance = 500 ft.	
Volume (cy)	1500
Removal Unit Cost per WDEQ Guideline 12, App. C (\$/cy)	\$0.99
<b>Total Gravel Removal Costs</b>	<b>\$1,491</b>
B. Ripping	
Area (acres)	2
Ripping Unit Cost per WDEQ Guideline 12, App. I (\$/acre)	\$1,048.11
<b>Total Ripping Costs</b>	<b>\$2,096</b>
C. Replacement of Topsoil	
Assumptions: Surface grade = 0%; Avg. haul distance = 400 ft.	
Volume of Topsoil (cy)	2070
Application Unit Cost per WDEQ Guideline No.12, App.E (\$/cy)	\$0.80
<b>Total Topsoil Replacement Costs</b>	<b>\$1,662</b>
D. Seeding/Revegetation	
Area (acres)	2
Disking/Seeding (\$/acre)	\$500
Mulching (\$/acre)	\$300
<b>Total Seeding/Revegetation Costs</b>	<b>\$1,600</b>
E. Fence Removal	
Length (ft)	2880
Removal Unit Cost per WDEQ Guideline 12, App. H (\$/ft)	\$0.50
<b>Total Fence Removal Costs</b>	<b>\$1,440</b>
<b>Total Bldgs, Roads, and Parking Area Surface Reclamation Costs</b>	<b>\$8,289</b>
<b>II. R&amp;D Wellfield Area</b>	
A. Replacement of Topsoil	
Assumptions: Surface grade = 0%; Avg. haul distance = 350 ft.	
Volume of Topsoil (cy)	1180
Application Unit Cost per WDEQ Guideline No.12, App.E (\$/cy)	\$0.725
<b>Total Topsoil Replacement Costs</b>	<b>\$856</b>
B. Seeding/Revegetation	
Area (acres)	0.8
Disking/Seeding (\$/acre)	\$500
Mulching (\$/acre)	\$300
<b>Total Seeding/Revegetation Costs</b>	<b>\$640</b>
<b>Total R&amp;D Wellfield Area Surface Reclamation Costs</b>	<b>\$1,496</b>
<b>TOTAL MISC. SURFACE RECLAMATION COSTS</b>	<b>\$9,785</b>

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<b>WELL PLUGGING AND ABANDONMENT</b>	
<b>I. Plugging</b>	
Assumptions: Based on WDEQ Guideline 12, Appendix L	
Well Casing Diameter (in)	5
# Wells (based on 12/08 review of WSEO records)	3
Average Well Depth (ft)	550
Total Casing Length (ft)	1650
Plugging Unit Cost <sup>a</sup> (\$/ft of casing)	\$6.28
Removal of Casing Top and Cement Plug Installation (\$/well)	\$22.50
<b>Total Plugging Costs</b>	<b>\$10,430</b>
<b>II. Seeding/Revegetation</b>	
# Sites	3
Seeding Unit Cost per WDEQ Guideline 12, App. L (\$/site) <sup>b</sup>	\$5
<b>Total Seeding Costs</b>	<b>\$15</b>
<b>TOTAL WELL PLUGGING AND ABANDONMENT COSTS</b>	<b>\$10,445</b>

Notes: <sup>a</sup> Includes well plugging, removing top of casing, installing cement plug, etc.  
<sup>b</sup> Seeding of abandoned well locations to be completed in conjunction with seeding of other reclaimed areas.