

December 9, 2013

Attn: Document Control Desk
Director
Office of Federal and State Materials and
Environmental Management Programs
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Attn: Document Control Desk
U.S. Nuclear Regulatory Commission
Deputy Director
Decommissioning and Uranium Recovery Licensing Directorate
Division of Waste Management and Environmental Protection
Office of Federal and State Materials and Environmental Management Protection
Mail Stop T-8F5
11545 Rockville Pike
Two White Flint North
Rockville, MD 20852-2738

RE: Uranerz Energy Corporation, Nichols Ranch Project, Source Materials License SUA-1597, License Condition 9.5 Financial Assurance Annual Update

Dear Mr. Linton,

Uranerz Energy Corporation (Uranerz) reviewed the financial assurance (surety) with no revisions, as stated in the Semi-Annual Report submitted to the NRC under cover letter dated July 17, 2013. As mentioned in the Semi-Annual Report Uranerz indicated that the next surety review would occur in December 2013. Uranerz is therefore submitting the annual updated as provided to the Wyoming Department of Environmental Quality Land Quality Division (WDEQ-LQD).

Uranerz currently holds a Six Million, Eight Hundred Thousand Dollar (\$6,800,000) financial assurance bond that was accepted by the WDEQ-LQD with the issuance of the Permit to Mine No. 778. Uranerz recently completed the annual surety review, as required by the WDEQ-LQD, concluding the surety amount remains sufficient for the activities engaged.

Through the review adjustments have been made; however, the total estimate remains less than the surety bond amount. A copy of the Surety Estimate document is enclosed along with a CD containing the spreadsheets. Additionally, a summary of the adjustment, by worksheet

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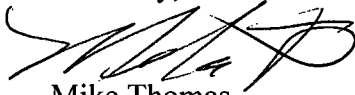
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has been included to facilitate the NRC review.

Of note, a courtesy copy of the entire WDEQ-LQD Annual Report 2012-2013, which contains the surety review was sent to the NRC on December 9, 2013.

If you should have any questions regarding this matter or this proposed plan, please contact me by phone at 307-265-8900 or by email at mthomas@uranerz.com.

Sincerely,



Mike Thomas
Vice President, Regulatory Affairs
Uranerz Energy Corporation

MT/dk

Attachments:

Surety Estimate (w/CD)
Surety Estimate Adjustment Summary

Cc: WDEQ/LQD Dorrان Larner, Project Manager

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Surety Estimate Adjustment Summary 2012-2013

According to WDEQ-LQD Permit to Mine No. 778 and NRC License SUA-1597, Uranerz is required to submit an updated Annual Surety Estimate Revision each year to adjust the bond amount to reflect existing operations and those planned for construction or operation in the following year. Appendix F contains the bond estimate. The following is a discussion of the bond and adjustments made to the bond are discussed by worksheet below.

The current performance bond accounts for construction and start-up of the Nichols Unit CPP, associated facilities, PA#1, restoration of PA#1, monitor wells for PA# 2, various activities for the 2014 year, and reclamation of the entire Nichols Ranch Unit operation. The amount of \$6.8 million for Bond No. 1057688 was approved by the WDEQ-LQD with the issuance of Permit to Mine No. 778. Uranerz review of the current approved bond finds that overall it remains sufficient to cover all costs of reclamation and restoration for the level of activity. At this time, Uranerz respectfully requests that no changes be made to the bond.

Significant changes to the surety estimate include:

- Uranerz decided to switch from using the producer price index to the consumer price index (CPI) adjustment factor. Uranerz initially used the Producer Price Index (PPI) indicating that it better represented industry; however the majority of industry uses the CPI. In switching, Uranerz adjusted the CPI to the 2012 annual adjustment. Once in production, the CPI adjustment factor will be updated to the last annual index change, e.g. during the 2014 review the estimate will be updated to 2013 CPI adjustments.
- Uranerz previous bond estimate accounted for 12 Header Houses in PA#1. The plan is to only have 8 Header Houses in by end of 2014. The number of Header Houses in PA#1 was therefore reduced from 12 to 8. This reduction also required an adjustment to the number of injection and recovery wells needed for 8 Header Houses.
- Surety was added for buildings and related infrastructure related to deep disposal wells NICH DW-1 and NICH DW-4.
- Chemical costs were adjusted based on new product availability. As well, elution costs were removed as no elution circuits have been installed at this time, nor are planned for the coming year.
- A new worksheet, Worksheet 5, No IV, was added to account for manholes along the main trunkline to PA#1.
- Cost for propane was adjusted to current costs.
- Surety was added for the temporary lodging facilities that are to be installed in the permit boundary.
- Surety was added for the planned installation and completion of 70 new monitor wells for Production Area #2. This includes the monitor ring wells, and overlying, underlying, and production monitoring wells.

Worksheet 1, No.1

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- The Wellfield Area (Acres) was reduced to account for 8 header houses versus the 12 header houses initially provided for.
- The numbers of recovery and injection wells were reduced to account for 8 header houses planned.
- Pump efficiency was increased from 80% up to 100%.
- Propane costs were evaluated and adjusted to represent current cost. The adjustment accounts for a decrease in surety cost from \$800 per month to \$330 per month.

Worksheet 1, No. II

- Pump efficiency was increased from 80% up to 100%.
- Sulfuric acid and caustic soda were removed as these chemicals are no longer planned for use in the process at this time.
- The RO antiscalent cost was increased to reflect actual current product cost.
- Propane costs were adjusted to reflect same change as in Worksheet 1, No. 1.

Worksheet 1, No III

- Pump efficiency was increased from 80% up to 100%.
- Sulfuric acid, corrosion inhibitor and algaecide were removed as these chemicals are no longer planned for use in the process.
- The RO antiscalent and DDW antiscalent costs were increased to reflect actual current product cost.

Worksheet 1, No IV – VI

- The Quantity of Monitoring Wells in the Restoration Monitoring, Section IV, was reduced. The production monitoring wells (i.e. MPN wells) were removed from the count as these wells are not included in the restoration sampling. According to the Reclamation Plan, Section 1.4 only monitor ring, overlying and underlying monitor wells are included in the sampling regime.

Worksheet 1, Nos. VII, VIII & Summary

- No changes

Worksheet 2a

- Deep well infrastructure costs were added.
- Header Houses were reduced from 12 to 8 for PA#1. Additionally costs were added for the Manifold.
- The License Site cost for Disposal Cost (\$/ton) and Unloading Cost (per shipment) were adjusted to remove the inflation factor and reflect actual contract pricing with 11e2 disposal contractor.

Worksheet 2b

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- Columns for the temporary personnel lodging facility and deep well infrastructure (2 deep wells) were added.
- Header Houses were reduced from 12 to 8 for PA#1. Added the Manifold building and Fuel Island Pad in with the Header House costs.
- Unit Cost for Demolition and Disposal Cost were adjusted to reflect costs taken from WDEQ Guideline 12 (rev. 2013).
- Under Concrete Decontamination, Demo & Disposal, the Area for Header Houses was adjusted to 8 header houses.
- Demolition (\$/Ft2) and Disposal Cost per Cubic Yard were adjusted to reflect costs taken from WDEQ Guideline 12 (rev. 2013).
- The License Site cost for Disposal Cost (\$/ton) and Unloading Cost (per shipment) were adjusted to remove the inflation factor and reflect actual contract pricing with 11e2 disposal contractor.

Worksheet 3

- Columns for the temporary personnel lodging facility and deep well infrastructure were added.
- Header Houses were reduced from 12 to 8 for PA#1.
- The License Site cost for Disposal Cost (\$/ton) and Unloading Cost (per shipment) were adjusted to remove the inflation factor and reflect actual contract pricing with 11e2 disposal contractor.
- Under Radiation Survey the number of header house structures was reduced from 12 to 8 header houses.

Worksheet 4

- Reduced the Number of Wells for PA#1 to match the count on Worksheet 1, No. I, plus accounted for the plant and domestic water wells.
- The Disposal Cost (\$/ton) was increased to reflect contract pricing with 11e2 disposal contractor.
- Added surety for 70 monitor wells in Production Area #2, planned for 2014. The number accounts for monitoring ring, overlying, underlying and monitoring production wells.

Worksheet 5, No. I

- Total Number of Wells for PA#1 was adjusted to match the count on Worksheet 1, No. I.
- The Disposal Cost (\$/ton) was increased to reflect contract pricing with 11e2 disposal contractor.
- The License Site cost for Disposal Cost (\$/ton) and Unloading Cost (per shipment) were adjusted to remove the inflation factor and reflect actual contract pricing with 11e2 disposal contractor.

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Worksheet 5, No. II

- The Number of Production Wells was adjusted to match Worksheet 1, No. I.
- The Disposal Cost (\$/ton) was increased to reflect contract pricing with 11e2 disposal contractor.
- The License Site cost for Disposal Cost (\$/ton) and Unloading Cost (per shipment) were adjusted to remove the inflation factor and reflect actual contract pricing with 11e2 disposal contractor.

Worksheet 5, No. III

- The Disposal Cost (\$/ton) was increased to reflect contract pricing with 11e2 disposal contractor.
- The License Site cost for Disposal Cost (\$/ton) and Unloading Cost (per shipment) were adjusted to remove the inflation factor and reflect actual contract pricing with 11e2 disposal contractor.

Worksheet 5, No. IV

- This is a new worksheet created to account for the manholes along the trunkline in PA#1.

Worksheets 6, No. I and Nos. II & III

- No changes to No. I.
- No. II Affected Area (Acres) was adjusted for 8 header houses instead of 12.
- No III Affected Area (Acres) was adjusted to reduce the area as only 8 header houses are planned.

Worksheet 6, Nos IV & V

- No changes

Worksheet 7, Nos. I-VII

- No. I – the Demolition Unit Cost was adjusted for WDEQ Guideline 12 (rev. 2013).
- Nos. II-IV no changes.
- No V – 5 culverts were added to PA#1. It is worth noting that these culverts are only 18-inch culverts versus the 48 inch culverts used in pricing in Guideline 12.
- Nos. VI-VII no changes.

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Surety Estimate 2013 Review

Nichols Ranch In-Situ Recovery Project Uranerz Energy Corporation

Total Restoration and Reclamation Cost Estimates

No.	Cost Item	Cost
1	GROUNDWATER RESTORATION COST	\$2,799,602
2a	PLANT EQUIPMENT REMOVAL AND DISPOSAL COST	\$268,205
2b	BUILDING DEMOLITION AND DISPOSAL COST	\$981,445
3	SOIL REMOVAL & DISPOSAL COST	\$119,076
4	TOTAL WELL ABANDONMENT COST	\$328,744
5	WELLFIELD EQUIPMENT REMOVAL & DISPOSAL COST	\$300,920
6	TOPSOIL REPLACEMENT & REVEGETATION COST	\$133,151
7	MISCELLANEOUS RECLAMATION COST	\$4,081
	Subtotal Restoration and Reclamation Cost Estimate	\$4,935,224
	CONTINGENCY (Miscellaneous & Unknown) (25%)	\$1,233,806
	Project Design	
	Contractor Profit, Overhead and Mobilization	
	Pre-Construction Investigation	
	Project Management	
	On-Site Monitoring	
	Longterm Administration & Licenses/Permits	
	Site Security & Liability Assurance	
	TOTAL CALCULATED IN 2013 DOLLARS	\$6,169,030

US DEPT. of CONSUMER PRICE INDEX ADJUSTMENT 2007 to 2012

10.65%

US DEPT. of CONSUMER PRICE INDEX ADJUSTMENT 2009 to 2012

6.99%

**Surety Estimate
First Year of Operation
Nichols Ranch ISR Project
Uranerz Energy Corporation**

**Worksheet 1, No. 1 --
GROUNDWATER RESTORATION**

GROUNDWATER RESTORATION		
Cost Item	Mining Unit	Notes
	Nichols#1	
Technical Assumptions		
Wellfield Area (Ft ²)	1,034,433	
Wellfield Area (Acres)	23.75	44.14 Ac at Nichols Ranch Unit Production Area #1 (8 HH)
Affected Ore Zone Area (Ft ²)	1,034,433	
Avg Completed Thickness (Ft)	7.27	
Factor for Flare	1.45	
Affected Volume:	10,904,478	
Porosity	0.3	
Gallons per Cubic Foot	7.48	
Gallon per Pore Volume	24,469,649	
Number of Wells in Unit(s)		
Recovery Wells	207	Recovery Wells for 8 Header Houses
Injection Wells	230	Injection Wells for 8 Header Houses
Monitor Wells	68	Monitoring Ring, Overlying, Underlying & Production Wells
Average Well Spacing (Ft)	100	
Average Well Depth (Ft)	550	
I Groundwater Sweep		
A. Plant & Office		
Operating Assumptions:		
Flowrate (gpm)	50	
PV's Required	1.00	
Total Gallons for Treatment	24,469,649	
Total Kgals for Treatment	24,470	
Cost Assumptions:		
Power		
Avg Connected Hp	15	
Kwh's/Hp	0.75	
\$/Kwh	0.06	\$0.02 plus demand charges per quote
Gallons per Minute	50	
Gallons per Hour	3000	
Cost per Hour	\$0.62	
Cost per Kgal (\$)	\$0.21	
Chemicals		
Barium Chloride (\$/Kgals)	\$0.000	Costs from operating ISR facility experience (Cogema)
Antiscalent (\$/Kgals)	\$0.000	Costs from operating ISR facility experience (Cogema)
Elution (\$/Kgals)	\$0.000	Costs from operating ISR facility experience (Cogema)
Repair & Maintenance (\$/Kgals)	\$0.067	Costs from operating ISR facility experience (Cogema)
Analysis (\$/Kgals)	\$0.181	Costs from operating ISR facility experience (Cogema)
Total Cost per Kgal	\$0.46	
Total Treatment Cost	\$11,142	
Utilities		
Power (\$/Month)	1,992	
Propane (\$/Month)	330	Adjusted to actual cost
Time for Treatment		
Minutes for Treatment	489,393	
Hours for Treatment	8,157	
Days for Treatment	340	
Average Days per Month	30	
Months for Treatment	11.3	
Years for Treatment	0.94	
Utilities Cost (\$)	\$26,301	
TOTAL PLANT & OFFICE COST	\$37,443	
B. WELLFIELD		
Cost Assumptions:		
Power		
Avg Flow/Pump (gpm)	1	
Avg Hp/Pump	1.5	
Avg # of Pumps Required	50	
Avg Connected Hp	75	
Kwh's/Hp	0.75	
\$/Kwh	0.06	
Gallons per Minute	50	
Gallons per Hour	3000	
Costs per Hour (\$)	\$3.10	
Costs per Gallon (\$)	\$0.0010	
Costs per Kgal (\$)	\$1.03	
Repair & Maintenance (\$/Kgals)	\$0.02	
Total Cost per Kgal	\$1.05	
TOTAL WELLFIELD COST	\$25,681	
TOTAL GROUNDWATER SWEEP COST	\$63,124	

**Surety Estimate
First Year of Operation
Nichols Ranch ISR Project
Uranerz Energy Corporation**

**Worksheet 1, No. II
GROUNDWATER RESTORATION**

Cost Item	Mining Unit	Notes
	Nichols #1	
II REVERSE OSMOSIS (RO)		
A. PLANT & OFFICE		
Operating Assumptions:		
Flowrate (gpm)	50	
PV's Required	6	
Total Gallons for Treatment	146,817,895	
Total Kgals for Treatment	146,818	
Feed to RO (gpm)	50	
Permeate Flow (gpm)	40	
Brine Flow (gpm)	10	
Average RO Recovery	80%	
Cost Assumptions:		
Power		
Avg Connected Hp	15	
kWh/Hp	0.75	
\$/Kwh	0.06	\$.02 plus demand charges per quote
Gallons per Minute	50	
Gallons per Hour	3000	
Cost per Hour (\$)	\$0.62	
Cost per Gallon (\$)	\$0.0002	
Cost per Kgal (\$)	\$0.21	
Chemicals		
RO Antiscalant (\$/Kgallons)	\$0.180	Costs from GE Water & Process Technologies
Hydrochloric Acid (\$/Kgals)	\$0.010	Uranerz cost plus cpi
Reductant Sulfide (\$/Kgals)	\$0.325	Costs from operating ISR facility experience (Cogema)
Repair & Maintenance (\$/Kgals)	\$0.309	Costs from operating ISR facility experience (Cogema)
Sampling & Analysis (\$/Kgals)	\$0.181	Costs from operating ISR facility experience (Cogema)
Total Cost per Kgal (\$)	\$1.21	
Total Pumping Cost (\$)	\$177,907	
Utilities		
Power (\$/Month)	1,992	
Propane (\$/Month)	330	Adjusted to actual cost
Time for Treatment	0	
Minutes for Treatment	2,936,358	
Hours for Treatment	48,939	
Days for Treatment	2,039	
Average Days per Month	30	
Months for Treatment	67	
Utilities Cost (\$)	\$155,732	
TOTAL PLANT & OFFICE COST	\$333,639	
B. WELLFIELD		
Cost Assumptions:		
Power		
Avg Flow/Pump (gpm)	1	
Avg Hp/Pump	1.5	
Avg # of Pumps Required	50	
Avg Connected Hp	75	
Kwh's/Hp	0.75	
\$/Kwh	0.06	
Gallons per Minute	51	
Gallons per Hour	3060	
Costs per Hour (\$)	\$3.10	
Costs per Gallon (\$)	\$0.0010	
Costs per Kgal (\$)	\$1.01	
Repair & Maintenance (\$/Kgals)	\$0.02	
Total Cost per Kgal	\$1.03	
TOTAL WELLFIELD COST	\$151,117	
TOTAL REVERSE OSMOSIS COST	\$484,756	

**Surety Estimate
First Year of Operation
Nichols Ranch ISR Project
Uranerz Energy Corporation**

**Worksheet 1, No III --
GROUNDWATER RESTORATION**

Cost Item	Mining Unit Nichols #1	Notes
III Deep Disposal Well (DDW)		
Operating Assumptions:		
Total Disposal Requirement		
RO Brine Total Gallons	29,363,579	
RO Brine Total Kgallons	29,364	
Brine Concentration Factor	1	
Total Concentrated Brine (gallons)	29,363,579	
Months of RO Operation	11	
Average Monthly Req'm't (Gallons)	2,592,000	
Average Brine Flow (gpm)	60	
Total DDW Disposal (gallons)	29,363,579	
Total DDW Disposal (Kgallons)	29,364	
Cost Assumptions:		
Avg Connected Hp	15	
Kwh's/Hp	0.75	
\$/Kwh	0.06	Cost plus cpi
Gallons per Minute	60	
Gallons per Hour	3600	
Cost per Hour (\$)	\$0.62	
Cost per Gallon (\$)	\$0.0002	
Cost per Kgal (\$)	\$0.17	
Chemicals		
RO Antiscalent (\$/Kgallons)	\$0.180	Costs from GE Water & Process Technologies
DDW Antiscalent (\$/Kgallons)	\$0.160	Costs from GE Water & Process Technologies
Repair & Maint. (\$/Kgallons)	\$0.254	Costs from operating ISR facility experience (Cogema)
Total Cost per Kgallon	\$0.766	
TOTAL DEEP DISPOSAL WELL COST	\$22,506	

**Surety Estimate
First Year of Operation
Nichols Ranch ISR Project
Uranerz Energy Corporation**

**Worksheet 1, Nos. IV & VI --
GROUNDWATER RESTORATION**

Cost Item	Mining Unit	Labor Cost Factors			Notes
	Nichols #1				
IV RESTORATION MONITORING					
Operating Assumptions:					
Time of Restoration (months)	24				Monitoring Ring, Overlying & Underlying Wells Only
Frequency of Analysis (months)	2				
Quantity of Monitoring Wells	55				Quote from Energy Laboratories
Total Sets of Analysis	12				
Cost per Event	\$30				
Total Sampling & Analysis Cost (\$)	\$19,800				
V STABILIZATION MONITORING					
Operating Assumptions:					
Time of Stabilization (months)	12				Monitoring Ring Wells Only
Frequency of Analysis (months)	2				Monitoring Ring Wells Only
Total Sets of Analysis	6				Production Monitoring Wells Only
Frequency of Analysis (months)	4				Production Monitoring Wells Only
Total Sets of Analysis	3				
Cost Assumptions:					
Power (\$/Month)	\$0				No add'l power required to sample
Total Power Cost	\$0				
Quantity of Monitoring Ring Wells	32				Monitoring Ring Wells Only
Quantity of Production Monitoring Wells	13				Production Monitoring Wells Only
Cost per Event	\$365				Quote from Energy Laboratories
Sampling & Analysis (each set)	\$16,432				
Total Sampling & Analysis Cost (\$)	\$147,884				
Utilities (\$/Month)	\$0				No add'l utilities required to sample
Total Utilities Cost (\$)	\$0				
TOTAL STABILIZATION COST	\$147,884				
VI LABOR					
Cost Assumptions:					
Crew:	No.	Cost/Hour	Hours/Year	Cost	Prices based on 2013 Building Construction Prevailing Wages, WDEQ-LQD Guideline 12 (2013)
1. Supervisor	1	29	2080	\$60,320	
2. Operators	4	22	2080	\$183,040	
3. Maintenance	2	20	2080	\$83,200	
4. Vehicles	2	10	2080	\$41,600	
Cost per Year				\$368,160	
Time Required - Years	5.02				
TOTAL RESTORATION LABOR COST	\$1,848,163				

**Surety Estimate
First Year of Operation
Nichols Ranch ISR Project
Uranerz Energy Corporation**

**Worksheet 1, Nos. VII, VIII & Summary --
GROUNDWATER RESTORATION**

Cost Item	Mining Unit	Notes
	Nichols #1	
VII RESTORATION CAPITAL REQUIREMENTS		
I Deep Disposal Well(s)	2	
II Plug and Abandon DDW	\$106,684	\$96,416 price required by UIC 10-392 Permit
III Reverse Osmosis Unit	\$0	Already in Processing Plant
TOTAL RESTORATION CAPITAL REQUIREMENTS	\$213,368.61	
VIII RESTORATION OF EXCURSION WELLS		
I Shallow Sand Well(s)		
Total Wells in Excursion	0	Assume no excursions during Year 1
Cost of Clean-Up	\$0	
Total Shallow Sand Cleanup	\$0	
II Ore Zone Wells		
Total Wells in Excursion	0	
Cost of Clean-Up	\$0	
Total Ore Zone Cleanup	\$0	
III Deep Zone Wells		
Total Wells in Excursion	0	
Cost of Clean-Up	\$0	
Total Deep Zone Cleanup	\$0	
TOTAL WELLFIELD COST		
TOTAL EXCURSION CLEANUP COST	\$0	
SUMMARY:		
I GROUNDWATER SWEEP	\$63,124	
II REVERSE OSMOSIS (RO)	\$484,756	
III DEEP DISPOSAL WELL	\$22,506	
IV RESTORATION MONITORING	\$19,800	
V STABILIZATION MONITORING	\$147,884	
SUB TOTAL	\$738,070	
VI LABOR	\$1,848,163	
VII RESTORATION CAPITAL REQUIREMENTS	\$213,369	
VIII RESTORATION OF EXCURSION WELLS	\$0	
TOTAL GROUNDWATER RESTORATION COST	\$2,799,602	

**Surety Estimate
First Year of Operation
Nichols Ranch ISR Project
Uranerz Energy Corporation**

**Worksheet 2 a
PLANT EQUIPMENT REMOVAL AND DISPOSAL**

Cost Item	Nichols Mine Unit							Sub Total	Notes
	Office & Laboratory	Main Process Building	Maintenance Building	Resin + Sand Filter Media	External Tanks	Header Houses, Manifold	Deep Well Bldgs		
Volume (Yds ³)	40	200	45	110	109	170	10		
Quantity per Truck Load (Yds ³)	20	20	20	20	20	20	20		
Number of Truck Loads	2	10	2.25	5.5	5.45	8.5	0.5		
I Decontamination Cost									
Decontamination Cost (\$/Load)	663.9	663.9	663.9	663.9	663.9	663.9	663.9		
Percent Requiring Decontamination	20%	100%	20%	0%	50%	100%	100%		
Total Cost	\$266	\$6,639	\$299	\$0	\$1,809	\$5,643	\$332		
II Dismantle and Loading Cost									
Cost per Truck Load (\$)	\$885	\$885	\$885	\$885	\$885	\$885	\$885		
Total Cost	\$1,770	\$8,852	\$1,992	\$4,869	\$4,824	\$7,524	\$443		
III Oversize Charges									
Percent Requiring Permits	40%	40%	40%	0%	50%	40%	40%		
Cost per Truck Load (\$)	\$443	\$443	\$443	\$443	\$443	\$443	\$443		
Total Cost	\$354	\$1,770	\$398	\$0	\$1,206	\$1,505	\$89		
IV Transportation & Disposal									
A. Landfill									
Percent to be Shipped	90%	80%	90%	0%	100%	80%	80%		
Distance (Miles)	75	75	75	75	75	75	75		
Transport Cost (\$/Ton-Mile)	\$0.17	\$0.17	\$0.17	\$0.17	\$0.17	\$0.17	\$0.17		
Transportation Cost	\$484	\$2,151	\$544	\$0	\$1,465	\$1,828	\$108		
Disposal Fee per Cubic Yard	\$67	\$67	\$67	\$67	\$67	\$67	\$67		
Disposal Cost	\$2,430	\$10,799	\$2,734	\$0	\$7,357	\$9,180	\$540		
Total Cost	\$2,914	\$12,950	\$3,278	\$0	\$8,823	\$11,008	\$648		
B. Licensed Site									
Percent to be Shipped	10%	20%	10%	100%	0%	20%	20%		
Distance (Miles)	646	646	646	646	646	646	646		
Transport Cost (\$/Ton-Mile)	\$0.17	\$0.17	\$0.17	\$0.17	\$0.17	\$0.17	\$0.17		
Transport Cost	\$2,791	\$27,907	\$3,140	\$76,745	\$0	\$23,721	\$1,395		
Disposal Cost (\$/Ton)	\$135	\$150	\$150	\$180	\$150	\$150	\$150		Based on Contract Prices
Quantity per Truck Load (Yds ³)	20	20	20	20	20	20	20		
Quantity per Truck Load (Tons)	21.6	21.6	21.6	21.6	21.6	21.6	21.6		Based on avg 80lbs per cf
Unloading Cost (per Shipment)	\$750	\$750	\$750	\$750	\$750	\$750	\$750		Based on Contract Prices
Unloading Cost	\$150	\$1,500	\$169	\$4,125	\$0	\$1,275	\$75		
Disposal Cost	\$733.20	7,980	898	25,509	0	6,783	399		
Total Cost	\$3,524	\$35,887	\$4,037	\$102,254	\$0	\$30,504	\$1,794		
Total Cost	\$6,438	\$48,838	\$7,315	\$102,254	\$8,823	\$41,512	\$2,442		
TOTAL COST NICHOLS RANCH MINE	\$8,828	\$66,099	\$10,004	\$107,122	\$16,662	\$56,184	\$3,305	\$268,205	

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Worksheet 2 b –
BUILDING DEMOLITION AND DISPOSAL

BUILDING DEMOLITION AND DISPOSAL								
Cost Item	Nichols Mine Unit							Notes
	Office & Laboratory	Main Process Building	Maintenance Building	Header Houses, Manifold & Fuel Island Pad	Personnel Interim Lodging	Deep Disposal Well Bldgs.	Sub Total	
STRUCTURE DEMOLITION & DISPOSAL								
Structural Character								
Demolition Volume (Ft³)	90,000	1,188,000	144,000	2,585	800	2,302		
Unit Cost of Demolition (\$/ Ft³)	\$0.297	\$0.297	\$0.297	\$0.297	\$0.297	\$0.297		Demolition Unit Cost per WDEQ Guideline No.12, App. K (\$/ft3) 2013
Total Demolition Cost	\$26,769	\$353,349	\$42,830	\$769	\$238	\$685		
Weight of Disposal Material in Tons	41	535	85	1	0.36	1		
Factor for Gutting	0.1	0.3	0.2	0.25	0.2	0.25		
Cost for Gutting (\$)	\$2,677	\$106,005	\$8,566	\$192	\$48	\$171		
Quantity per Truck Load (Ton)	21.6	21.6	21.6	21.6	21.6	21.6		
Number of Truckloads	1.9	24.8	3.0	0.1	0.02	0.0		
Distance to Landfill	75	75	75	75	75	75		
Unit Cost (Ton-Mile)	\$0.17	\$0.17	\$0.17	\$0.17	\$0.17	\$0.17		
Transportation Cost	\$504.15	\$6,654.77	\$806.64	\$14.48	\$4.48	\$12.90		
Disposal Cost (\$/ton)	\$75.85	\$75.85	\$75.85	\$75.85	\$75.85	\$75.85		Demolition Unit Cost per WDEQ Guideline No.12, App. K, Adjusted Cost per Unit 2013
Disposal Cost (\$)	\$3,071.73	\$40,546.85	\$4,914.77	\$88.23	\$27.30	\$78.57		
TOTAL STRUCTURE DEMO & DISPOSAL	\$33,022	\$506,556	\$57,118	\$1,064	\$317	\$947	\$599,024	
CONCRETE DECONTAMINATION, DEMO & DISPOSAL								
Area	9000	29700	8000	2517	0	408		8 header houses @250 sq ft each, manifold is 357 sq ft., fuel island is 160 sq ft
Average Thickness (Ft)	0.5	0.5	0.5	0.5	0.5	1		
Volume (Ft³)	4500	14850	4000	1258.5	0	408		
Weight of Disposal Concrete Assuming 145lbs/cubic foot	652,500	2,153,250	580,000	182,483	0	59,160		
Weight of Disposal in Tons	326	1077	290	91	0	30		
Percent Requiring Decontamination	0%	100%	0%	10%	0%	100%		
Volume Decontaminated (Ft³)	0	14,850	0	126	0	408		
Decontamination (\$/Ft²)	\$0.315	\$0.315	\$0.315	\$0.315	\$0.315	\$0.315		Decontamination by Steam Cleaning (137.5 ft²/hr) ECHOS Unit Cost Book
Decontamination Cost	\$0	\$4,675	\$0	\$40	\$0	\$128		
Demolition (\$/Ft²)	\$5.86	\$5.86	\$5.86	\$5.86	\$5.86	\$5.86		Demolition Unit Cost per WDEQ Guideline No.12, App. K, Adjusted Cost per Unit 2013
Demolition Cost	\$52,767	\$174,133	\$46,904	\$14,757	\$0	\$2,392		
Transportation & Disposal								
A. Onsite Disposal								
Percent to be Disposed Onsite	100%	75%	100%	75%	0%	75%		
Transportation Cost	\$0	\$0	\$0	\$0	\$0	\$0		
Disposal Cost per Cubic Yard (\$)	\$8.87	\$8.87	\$8.87	\$8.87	\$8.87	\$8.87		Demolition Unit Cost per WDEQ Guideline No.12, App. K, Adjusted Cost per Unit, 2013
Disposal Cost (\$)	\$1,478	\$4,878	\$1,314	\$413	\$0	\$134		
B. Licensed Site								
Percent to be Shipped	0%	25%	0%	25%	0%	25%		
Distance (Miles)	646	646	646	646	646	646		
Unit Cost (Ton-Mile)	\$0.17	\$0.17	\$0.17	\$0.17	\$0.17	\$0.17		
Transportation Cost (\$)	\$0	\$28,859	\$0	\$2,446	\$0	\$793		
Disposal Cost (\$/Ton)	\$135	\$135	\$135	\$135	\$135	\$135		Based on Contract Prices.
Unloading Cost (per Shipment)	\$830	\$830	\$830	\$830	\$830	\$830		Based on Contract Prices
Unloading Cost	\$0	\$10,341	\$0	\$12,088	\$0	\$3,919		
Disposal Cost (\$)	\$0	\$46,677.11	\$0	\$3,079	\$0	\$998		
TOTAL TRANSPORT & DISPOSAL COST	\$54,246	\$259,222	\$48,218	\$20,735	\$0	\$4,446	\$382,421	
TOTAL BUILDING DEMO & DISPOSAL COST	\$87,267	\$765,778	\$105,336	\$21,799	\$317	\$5,393	\$981,445	

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Worksheet 3
SOIL REMOVAL & DISPOSAL

Cost Item	Nichols Mine Unit						Notes
	Office & Laboratory	Main Process Building	Maintenance Building	Header Houses, Manifold & Fuel Island Pad	Deep Disposal Well Bldgs.	Sub Total	
SOIL EXCAVATION, TRANSPORT & DISPOSAL							
Removal Under Building Footprints							\$89.04/hr per WDEQ Guideline12 and 150 cy/hr
Excavation, Front End Loader	\$53	\$175	\$47	\$15	\$2		Assume removal of 3" of Contaminated Soil under Primary Areas, Disposal at a Licensed facility (ft3)
Quantity to be Shipped (Ft ³)	2,250	7,425	2,000	629	102		
Weight in Tons	112.5	371.25	100	31.46	5.1		
Quantity per Truck Load (Ton)	21.6	21.6	21.6	21.6	21.6		
Number of Truckloads	5.2	17.2	4.6	1.5	0.2		
Distance (Miles)	646	646	646	646	646		
Transportation Unit Cost (Ton/Mile)	\$0.17	\$0.17	\$0.17	\$0.17	\$0.17		
Transportation Cost	\$12,062	\$39,805	\$10,722	\$3,373	\$547		
Disposal Fee (\$/Ton)	\$150	\$150	\$150	\$150	\$150		Based on Contract Prices
Disposal Cost (\$)	\$16,875	\$55,688	\$15,000	\$4,719	\$765	\$93,047	
Unloading Cost (per Shipment)	\$750	\$750	\$750	\$750	\$750		Based on Contract Prices
Unloading Cost	\$3,906	\$12,891	\$3,472	\$1,092	\$177	\$21,539	
Removal NPDES Pts.							
Quantity to be Shipped (Ft ³)	0	0	0	0	0		Zero discharge facility
Weight in Tons	0	0	0	0	0		
Distance (Miles)	160	160	160	160	160		
Transportation Cost Ton/Mile	\$0.17	\$0.17	\$0.17	\$0.17	\$0.17		
Transportation Cost	\$0	\$0	\$0	\$0	\$0		
Disposal Fee (\$/Ton)	\$350	\$350	\$350	\$350	\$350		Based on Contract Prices
Disposal Cost	\$0	\$0	\$0	\$0	\$0		
Total NPDES Removal Cost	\$0	\$0	\$0	\$0	\$0	\$0	
TOTAL SOILS EXC., TRANSPORT & DISPOSAL	\$20,781	\$68,578	\$18,472	\$5,812	\$942	\$114,586	
RADIATION SURVEY							
Area Required (Acres)	0.21	0.68	0.18	0.06	0.01		
Survey Cost (\$/Acre)	\$664	\$664	\$664	\$664	\$664		
Number of Structures	1	1	1	8	4		
Cost per Structure (\$)	\$249	\$249	\$249	\$249	\$249		
TOTAL RAD SURVEY COST	\$386	\$702	\$371	\$2,030	\$1,002	\$3,489	
TOTAL SOIL REMOVAL & DISPOSAL COST	\$21,167	\$69,280	\$18,843	\$7,842	\$1,944	\$119,076	

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**Worksheet 4 --
Well Abandonment**

Cost Item	Mining Unit		Sub Total	Notes
	Nichols #1	Nichols #2		
Number of Wells	507	70		Includes injection, recovery and monitor wells. See Worksheet 1, No.1, Plus 1 Plant water well and 1 domestic well.
Average Depth (ft)	550	550		
Average Diameter (inch)	5	5		
Area of Annulus (ft ²)	0.1364	0.1364		
Materials				
Bentonite Chips Required (Ft ³ /Well)	40.9	40.9		300 feet of clay above water
Bags of Chips Required/Well	55	55		
Cost per Bag (\$)	\$7.14	\$7.14		Uranerz Cost plus cpi
Cost/Well Bentonite Chips	\$393	\$393		
Gravel Fill Required (Ft ³ /Well)	34.1	34.1		Avg depth less 300 feet filled w/ gravel
Cost of Gravel/Yd ³	\$22	\$22		Uranerz Cost plus cpi
Cost/Well Gravel Fill	\$28	\$28		
Cement Cone/Markers Req'd/Well	1	1		
Cost of Cement Cones Markers	\$6.64	\$6.64		
Total Materials Cost per Well	\$427	\$427		
Labor				
Hours Required per Well	2	2		
Labor Cost per Hour	\$77	\$77		
Total Labor Cost per Well	\$155	\$155		
Equipment Rental				
Hours Required per Well	1	1		
Backhoe w/Operator Cost/Hr	\$66	\$66		
Total Equipment Cost per Well	\$66	\$66		
Total Cost per Well	\$648	\$648		
TOTAL WELL ABANDONMENT COST	\$328,744	\$45,389	\$374,132	

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Worksheet 5, No. 1 --
WELLFIELD EQUIPMENT REMOVAL & DISPOSAL

Cost Item	Mining Unit Nichols #1	Notes
I Wellfield Piping		
A. Removal		
Total Number of Wells	505	Includes injection, recovery and monitor wells. See Worksheet 1, No.1
Feeder lines from HH to Injection wells 1" HDPE (Ft)	71,560	From Preliminary Design
Pregnant solution feeder lines from production wells to HH 1" HDPE (Ft)	50,427	From Preliminary Design
Total Quantity of 1" HDPE Piping (Ft)	121,987	
Plastic Volume (Ft ³)	400.05	Thickness Based on WL Plastics Corp PSI 160 (R1=.05479', R2=.04425')
Chipped Volume Assuming 30% Void Space (Ft ³)	520.07	
Disposal Weight (tons)	20.80	Year 1 buildout only to include Nichols 1
Quantity per Truck Load (Tons)	21.6	Based on 20 cy per truckload and 80lbs per cf
Total Number of Truck Loads	1	
Total Length of Feeder line Trench (Ft)	40,765	Includes Shared Trenches
Pipeline Removal Unit Cost (\$/ft of trench)	\$2.49	Quote - Jordan Construction
Total Cost for Trunkline Removal	\$101,488	
Total Cost - Removal	\$101,488	
B. Survey & Decontamination		
Percent Requiring Decontamination	0	No survey or decon needed. Total volume to disposal
Loads for Decontamination	0	
Cost for Decontamination (\$/Load)	\$664	
Cost for Decontamination	\$0	
C. Transport & Disposal		
1.) Landfill		
a. Transportation		
Percent to be Shipped	0%	
Loads to be Shipped	0	
Distance (Miles)	75	
Transportation Cost (Ton/Mile)	\$0.17	
Transportation Cost	\$0	
b. Disposal		
Disposal Fee per Yd ³	\$67	
Yds ³ per Load	20	
Disposal Cost	\$0	
Total Cost - Landfill	\$0	
2.) Licensed Site		
a. Transportation		
Percent to be Shipped	100%	
Loads to be Shipped	1	
Tons to be Shipped	20.80	
Distance (Miles)	646	
Transportation Cost Ton/Mile	\$0.17	
Transportation Cost	\$2,230	
b. Disposal		
Disposal Fee per ton	\$150	Based on Contract Prices
Disposal Cost	\$3,120	
Unloading Cost (per Shipment)	\$750	Based on Contract Prices
Unloading Cost	\$750	
Total Cost - Licensed Site	\$6,101	
Total Cost - Transport & Disposal	\$6,101	
Total Cost - WF Piping Removal & Disposal	\$107,589	

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Worksheet 5, No. II

WELLFIELD EQUIPMENT REMOVAL & DISPOSAL

Cost Item	Mining Unit	Notes
	Nichols #1	
II Production Well Pumps		
A. Pump and Tubing Removal		
Number of Production Wells	208	From Worksheet 1 No I.
Cost of Removal (\$/well)	\$44	
Cost of Removal	\$9,206	
Number of Pumps per Truck Load	180	
Number of Truck Loads (Pumps)	1.16	
Weight of Pumps	21.16	Assume 20 T per truck
B. Survey & Decontamination (Pumps)		
Percent Requiring Decontamination	50%	
Loads for Decontamination	0.58	
Cost for Decontamination (\$/Load)	\$664	
Cost for Decontamination	\$384	
C. Tubing Volume Reduction & Loading		
Length per Well (Ft)	300	
Total Quantity (Ft ³)	204.6	Thickness Based on WL Plastics Corp PSI 160 (R1=.05479', R2=.04425')
Chipped Volume Assuming 30% Void Space (Ft ³)	266.0	
Cost of Removal (\$/Ft)	\$0.03	
Cost of Removal	\$9.96	
Quantity per Truck Load (Ft ³)	540	
Number of Truck Loads	0.38	
D. Transport & Disposal		
1.) Landfill		
a. Transportation		
Percent to be Shipped (Pumps)	50%	
Loads to be Shipped	0.6	
Distance (Miles)	75	
Transportation Ton/Mile	\$0.17	
Transportation Cost	\$155	
b. Disposal		
Disposal Fee per Yd ³	\$67	
Yds ³ per Load	20	
Disposal Cost	\$780	
Total Cost - Landfill	\$935	
2.) Licensed Site		
a. Transportation		
Percent to be Shipped (Pumps)	50%	
Percent to be Shipped (Tubing)	100%	
Loads to be Shipped	0.96	
Distance (Miles)	646	
Transportation Ton/Mile	\$0.17	
Transportation Cost	\$2,216	
b. Disposal		
Disposal Fee per ton	\$150	
Disposal Cost	\$150	Based on Contract Prices
Unloading Cost (per Shipment)	\$750	Based on Contract Prices
Unloading Cost	\$718	
Disposal Cost	\$868	
Total Cost - Licensed Site	\$3,083	
Total Cost - Transport & Disposal	\$4,019	
Total Cost - Pump Removal & Disposal	\$13,618	

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Worksheet 5, No. III

WELLFIELD EQUIPMENT REMOVAL & DISPOSAL

Cost Item	Mining Unit	Notes
	Nichols #1	
III Buried Trunkline		
A. Removal		
Trunk lines from Resin Plant to HH 8" HDPE Pipe (Ft)	38,473	
Pregnant solution trunk lines form HH to Resin Plant 8" HDPE Pipe (Ft)	38,473	
Total Quantity of 8" HDPE Piping (Ft)	76,946	
Plastic Volume (Ft³)	51,906	Thickness Based on WL Plastics Corp PSI 160 (R1=.7188', R2=.5494')
Chipped Volume Assuming 30% Void Space (Ft³)	67,478	
Disposal Tons	320	8.315lb/ft per WL Plastics
Quantity per Truck Load (Tons)	21.6	
Total Number of Truck Loads	15	
Total Length of Trunkline Trench (Ft)	38,473	
Pipeline Removal Unit Cost (\$/Ft of trench)	\$2.49	Quote Jordan Construction
Total Cost for Trunkline Removal	\$95,783	
B. Survey & Decontamination		
Percent Requiring Decontamination	0	No survey or decon needed. Total volume to low level disposal
Loads for Decontamination	0	
Cost for Decontamination (\$/Load)	\$664	
Cost for Survey & Decontamination	\$0	
C. Transportation & Disposal		
1.) Landfill		
a. Transportation		
Percent to be Shipped	0%	
Loads to be Shipped	0	
Distance (Miles)	75	
Transportation Cost per Ton/Mile	\$0.17	
Transportation Cost	\$0	
b. Disposal		
Disposal Fee per Yd³	\$67	
Yds³ per Load	20	
Disposal Cost	\$0	
Total Cost - Landfill	\$0	
2.) Licensed Site		
a. Transportation		
Percent to be Shipped	100%	
Loads to be Shipped	15	
Tons to be Shipped	319.90	
Distance (Miles)	646	
Transportation Ton/Mile	\$0.17	
Transportation Cost	\$34,300	
b. Disposal		
Disposal Fee per ton	\$150	Based on Contract Prices
Disposal Cost	\$47,985	
Unloading Cost (per Shipment)	\$750	Based on Contract Prices
Unloading Cost	\$11,250	
Total Cost - Licensed Site	\$82,285	
Total Cost Transportation & Disposal	\$82,285	
Total Cost - Buried Trunkline Removal & Disposal	\$178,069	

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Worksheet 5, No. IV

WELLFIELD EQUIPMENT REMOVAL & DISPOSAL

Cost Item	Mining Unit	Notes
	Nichols #1	
IV Manholes		
A. Removal		
Total Quantity	6	
Cost of Removal (\$ Each)	\$ 139.12	
Total Cost of Removal (\$)	\$ 834.72	
Disposal Tons	3.19	
Quantity per Truck Load (Tons)	21.6	Based on 20 cy per truckload and 80lbs per cf
Total Number of Truck Loads	0.28	
B. Survey & Decontamination		No survey or decon needed. Total volume to low level disposal
Percent Requiring Decontamination	0%	
Loads for Decontamination	0	
Cost for Decontamination (\$/Load)	\$642	
Cost for Survey & Decontamination	\$0	
C. Transportation & Disposal		
1.) Landfill		
a. Transportation		
Percent to be Shipped	0%	
Loads to be Shipped	0	
Distance (Miles)	75	
Transportation Cost per Ton/Mile	\$0.16	
Transportation Cost	\$0	
b. Disposal		
Disposal Fee per Yd ³	\$65	
Yds ³ per Load	20	
Disposal Cost	\$0	
Total Cost - Landfill	\$0	
2.) Licensed Site		
a. Transportation		
Percent to be Shipped	100%	
Loads to be Shipped	0.28	
Tons to be Shipped	3.19	
Distance (Miles)	646	
Transportation Ton/Mile	\$0.16	
Transportation Cost	\$331	
b. Disposal		
Disposal Fee per ton	\$150	
Disposal Cost	\$479	
Unloading Cost (per Shipment)	\$750	
Unloading Cost	\$208	
Total Cost - Licensed Site	\$809	
Total Cost Transportation & Disposal	\$809	
Total Cost - Removal & Disposal	\$1,644	
TOTAL WELLFIELD EQUIPMENT REMOVAL & DISPOSAL COST	\$300,920	

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Worksheet 6, No. I

TOPSOIL REPLACEMENT & REVEGETATION

Cost Item	Mining Unit Nichols #1	Notes
I Process Plant and Office Building		
A. Topsoil Handling & Grading		
Affected Area (Acres)	5.2	Plant site is 475' by 475'
Average Affected Thickness (Inch)	6	
Topsoil Volume (Yds ³)	4,178	
Unit Cost (\$/Yds ³)	\$6	Price from Dragstrip Soil Cover Project MT
Sub Total - Topsoil	\$23,116	
B. Radiation Survey & Soil Analysis		
Unit Cost (\$/Acre)	\$664	
Sub Total - Survey & Analysis	\$3,439	
C. Revegation		
Fertilizer (\$/Arec)	\$256.71	Price from Dragstrip Soil Cover Project MT
Seeding Prep & Seeding (\$/Acre)	\$251.18	Price from Dragstrip Soil Cover Project MT
Mulching & Crimping (\$/Acre)	\$110.65	Price from Dragstrip Soil Cover Project MT
Sub Total Cost/Acre	\$618.53	
Sub Total Revegation	\$3,204	
TOTAL PLANT AND OFFICE BUILDING		
TOPSOIL REPLACEMENT & REVEG COST	\$29,759	

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Worksheet 6, Nos. II & III

TOPSOIL REPLACEMENT & REVEGETATION

Cost Item	Mining Unit	Notes
	Nichols #1	
II Wellfields		
A. Topsoil Handling & Grading		
Affected Area (Acres)	15	Equals trench length times 12 feet wide
Average Affected Thickness (Inch)	6	
Topsoil Volume (Yds ³)	11,739	
Unit Cost - Haul/Place/Grading (\$/Yds ³)	\$5.53	Price from Dragstrip Soil Cover Project MT
Sub Total - Topsoil	\$64,945	
B. Radiation Survey & Soil Analysis		
Unit Cost (\$/Arec)	\$664	
Sub Total - Survey & Analysis	\$9,661	
C. Spill Cleanup		
Affected Area (Acres)	0	
Affected Area (Ft ²)	0	
Affected Area Thickness (Ft)	0.25	
Affected Volume (Ft ³)	0	
Quantity per Truckload (Ft ³)	540	
Quantity to be Shipped (Loads)	0	
Distance (Miles)	160	
Transportation Cost per Ton/Mile	\$0.17	
Transportation Cost	\$0	
Handling Cost (\$/Load)	\$221	
Handling Cost	\$0	
Disposal Fee (\$/Ton)	\$387	
Disposal Cost	\$0	
Sub Total - Spill Cleanup	\$0	
D. Revegation		
Fertilizer (\$/Acre)	\$256.71	Price from Dragstrip Soil Cover Project MT
Seeding Prep & Seeding (\$/Acre)	\$251.18	Price from Dragstrip Soil Cover Project MT
Mulching & Crimping (\$/Acre)	\$110.65	Price from Dragstrip Soil Cover Project MT
Sub Total Cost/Acre	\$618.53	
Sub Total Revegation	\$9,001	
Sub Total - Wellfields	\$83,608	
TOTAL WELLFIELDS COST	\$83,608	
III Roads		
A. Topsoil Handling & Grading		
Affected Area (Acres)	3.44	2500 feet by 60 feet wide
Average Affected Thickness (Ins)	6	
Topsoil Volume (Yds ³)	2,778	
Unit Cost - Haul/Place/Grading (\$/cy)	\$5.53	Price from Dragstrip Soil Cover Project MT
Sub Total - Topsoil	\$15,368	
B. Radiation Survey & Soil Analysis		
Unit Cost (\$/Ac)	\$664	
Sub Total - Survey & Analysis	\$2,286	
C. Revegation		
Fertilizer (\$/Ac)	\$257	Price from Dragstrip Soil Cover Project MT
Seeding Prep & Seeding (\$/Ac)	\$251	Price from Dragstrip Soil Cover Project MT
Mulching & Crimping (\$/Ac)	\$111	Price from Dragstrip Soil Cover Project MT
Sub Total Cost/Acre	\$619	
Sub Total Revegation	\$2,130	
Sub Total - Roads	\$19,784	
TOTAL ROADS COST	\$19,784.15	

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Worksheet 6, Nos IV & V

TOPSOIL REPLACEMENT & REVEGETATION

Cost Item	Mining Unit	Notes
	Nichols #1	
IV Other		
A. Topsoil Handling & Grading		
Affected Area (Acres)	0	
Average Affected Thickness (Inch)	3	
Topsoil Volume (Yds ³)	0	
Unit Cost - Haul/Place/Grading (\$/Acre)	\$5.53	Price from Dragstrip Soil Cover Project MT
Sub Total - Topsoil	\$0	
B. Radiation Survey & Soil Analysis		
Unit Cost (\$/Acre)	\$664	
Sub Total - Survey & Analysis	\$0	
C. Revegation		
Fertilizer (\$/Ac)	\$256.71	Price from Dragstrip Soil Cover Project MT
Seeding Prep & Seeding (\$/Acre)	\$251.18	Price from Dragstrip Soil Cover Project MT
Mulching & Crimping (\$/Acre)	\$110.65	Price from Dragstrip Soil Cover Project MT
Sub Total Cost/Acre	\$618.53	
Sub Total Revegation	\$0	
Sub Total - Other	\$0	
TOTAL OTHER COST	\$0	
V Remedial Action		
A. Topsoil Handling & Grading		
Affected Area (Acres)	0	Assume no spills
Average Affected Thickness (Inch)	3	
Topsoil Volume (Yds ³)	0	
Unit Cost - Haul/Place/Grading (\$/Yds ³)	\$5.53	Price from Dragstrip Soil Cover Project MT
Sub Total - Topsoil	\$0	
B. Radiation Survey & Soil Analysis		
Unit Cost (\$/Acre)	\$664	
Sub Total - Survey & Analysis	\$0	
C. Revegation		
Fertilizer (\$/Acre)	\$256.71	Price from Dragstrip Soil Cover Project MT
Seeding Prep & Seeding (\$/Acre)	\$251.18	Price from Dragstrip Soil Cover Project MT
Mulching & Crimping (\$/Arec)	\$110.65	Price from Dragstrip Soil Cover Project MT
Sub Total Cost/Acre	\$618.53	
Sub Total Revegation	\$0	
TOTAL REMEDIAL ACTION	\$0	
TOTAL TOPSOIL REPLACEMENT & REVEGETATION COST (Total of 7I through 7V)	\$133,151	

**Surety Estimate
First Year of Operation
Nichols Ranch ISR Project
Uranerz Energy Corporation**

Worksheet 7, Nos I - VII

MISCELLANEOUS RECLAMATION

Cost Item		Mining Unit	Notes
		Nichols #1	
I	Fence Removal & Disposal		
	Quantity (Ft)	8,558	
	Cost of Removal/Disposal (\$/Ft)	\$0.39	Demolition Unit Cost per WDEQ Guideline No.12, App. H, 2013
	Cost of Removal/Disposal (\$)	\$3,338	
II	Powerline Removal & Disposal		
	Quantity (Ft)	160,460	Power to Wells, header houses. Other power already in place by CBM companies
	Cost of Removal/Disposal (\$/Ft)	\$0	Lines buried in pipe trenches. Excavation costs covered on Sheets 6I and 6III. Assume salvage of wire at no cost.
	Cost of Removal/Disposal (\$)	\$0	
III	Powerpole Removal & Disposal		
	Quantity	0	Overhead powerpoles and lines will remain in place for future gas production
	Cost of Removal/Disposal (\$/Each)	0	
	Cost of Removal/Disposal (\$)	\$0.00	
IV	Transformer Removal & Disposal		
	Quantity	0	
	Cost of Removal/Disposal (\$/Each)	0	Tri-County Electric will remove at no cost, WDEQ Guideline No.12, App. H
	Cost of Removal/Disposal (\$)	0	
V	Culvert Removal & Disposal		
	Quantity (Ft)	100	5, 20 ft culverts (\$139.12/20') WDEQ Guideline No.12, App. J 2013
	Cost of Removal/Disposal (\$/Ft)	\$7.44	
	Cost of Removal/Disposal (\$)	\$743.58	
VI	Guardrail Removal		
	Quantity (Ft)	0	None
	Cost of Removal/Disposal (\$/Ft)	\$7.19	
	Cost of Removal/Disposal (\$)	\$0	
VII	Low Water Stream Crossing		
	Quantity	0	None
	Cost of Removal/Disposal (\$/Each)	\$8,852	
	Cost of Removal/Disposal (\$)	\$0	
	TOTAL MISCELLANEOUS COST	\$4,081	