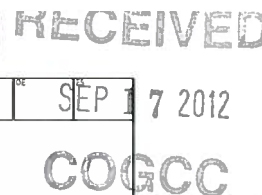


State of Colorado  
Oil and Gas Conservation Commission  
1120 Lincoln Street, Suite 801, Denver, Colorado 80203 Phone: (303)894-2100 Fax: (303)894-2109



### SUNDRY NOTICE

Submit original plus one copy. This form is to be used for general, technical and environmental sundry information. For proposed or completed operations, describe in full on Technical Information Page (Page 2 of this form.) Identify well or other facility by API Number or by OGCC Facility ID. Operator shall send an informational copy of all sundry notices for wells located in High Density Areas to the Local Government Designee (Rule 603b.)

1. OGCC Operator Number: <b>10071</b>	4. Contact Name Mary Pobuda	Complete the Attachment Checklist OP OGCC
2. Name of Operator: <b>Bill Barrett Corporation</b>	Phone: <b>303-312-8531</b>	
3. Address: <b>1099 18th Street, Suite 2300</b>	Fax: <b>303-291-0420</b>	
City: <b>Denver</b> State: <b>CO</b> Zip: <b>80202</b>		
5. API Number <b>05-123-33541</b>	OGCC Facility ID Number <b>423219</b>	Survey Plat
6. Well/Facility Name: <b>Dutch Lake</b>	7. Well/Facility Number <b>22-34H</b>	Directional Survey
8. Location (Qtr/Qtr, Sec, Twp, Rng, Meridian): <b>SESE, Sec. 34, T6N-R62W, 6th PM</b>		Surface Eqmnt Diagram
9. County: <b>Weld</b>	10. Field Name: <b>Wattenberg</b>	Technical Info Page
11. Federal, Indian or State Lease Number:		Other Analytical report

### General Notice

<input type="checkbox"/> CHANGE OF LOCATION: Attach New Survey Plat (a change of surface qtr/qtr is substantive and requires a new permit)	
Change of Surface Footage from Exterior Section Lines:	<input type="checkbox"/> FNL/FSL <input type="checkbox"/> FEL/FWL
Change of Surface Footage to Exterior Section Lines:	<input type="checkbox"/>
Change of Bottomhole Footage from Exterior Section Lines:	<input type="checkbox"/>
Change of Bottomhole Footage to Exterior Section Lines:	<input type="checkbox"/> attach directional survey
Bottomhole location Qtr/Qtr, Sec, Twp, Rng, Mer	
Latitude	Distance to nearest property line
Longitude	Distance to nearest lease line
Ground Elevation	Distance to nearest well same formation
Distance to nearest bldg, public rd, utility or RR	
Is location in a High Density Area (rule 603b)? Yes/No	
Surface owner consultation date:	
GPS DATA:	
Date of Measurement PDOP Reading Instrument Operator's Name	
<input type="checkbox"/> CHANGE SPACING UNIT	<input type="checkbox"/> Remove from surface bond
Formation Formation Code Spacing order number Unit Acreage Unit configuration	Signed surface use agreement attached
<input type="checkbox"/> CHANGE OF OPERATOR (prior to drilling):	<input type="checkbox"/> CHANGE WELL NAME
Effective Date:	From:
Plugging Bond: <input type="checkbox"/> Blanket <input type="checkbox"/> Individual	To:
	Effective Date:
<input type="checkbox"/> ABANDONED LOCATION:	<input type="checkbox"/> NOTICE OF CONTINUED SHUT IN STATUS
Was location ever built? <input type="checkbox"/> Yes <input type="checkbox"/> No	Date well shut in or temporarily abandoned:
Is site ready for inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No	Has Production Equipment been removed from site? <input type="checkbox"/> Yes <input type="checkbox"/> No
Date Ready for Inspection:	MIT required if shut in longer than two years. Date of last MIT
<input type="checkbox"/> SPUD DATE:	<input type="checkbox"/> REQUEST FOR CONFIDENTIAL STATUS (6 mos from date casing set)
<input type="checkbox"/> SUBSEQUENT REPORT OF STAGE, SQUEEZE OR REMEDIAL CEMENT WORK	
*submit cbl and cement job summaries	
Method used	Cementing tool setting/perf depth
Cement volume	Cement top
Cement bottom	Date
<input type="checkbox"/> RECLAMATION: Attach technical page describing final reclamation procedures per Rule 1004.	
Final reclamation will commence on approximately	
<input type="checkbox"/> Final reclamation is completed and site is ready for inspection.	

### Technical Engineering/Environmental Notice

<input type="checkbox"/> Notice of Intent	<input checked="" type="checkbox"/> Report of Work Done	
Approximate Start Date:	Date Work Completed: <b>9/6/12</b>	
Details of work must be described in full on Technical Information Page (Page 2 must be submitted.)		
<input type="checkbox"/> Intent to Recomplete (submit form 2)	<input type="checkbox"/> Request to Vent or Flare	<input type="checkbox"/> E&P Waste Disposal
<input type="checkbox"/> Change Drilling Plans	<input type="checkbox"/> Repair Well	<input type="checkbox"/> Beneficial Reuse of E&P Waste
<input type="checkbox"/> Gross Interval Changed?	<input type="checkbox"/> Rule 502 variance requested	<input type="checkbox"/> Status Update/Change of Remediation Plans
<input type="checkbox"/> Casing/Cementing Program Change	<input checked="" type="checkbox"/> Other: <b>Haul Mud/Cuttings</b>	for Spills and Releases

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: Mary Pobuda Date: **9/14/12** Email: **mpobuda@billbarrettcorp.com**  
Print Name: **Mary Pobuda** Title: **Permit Analyst**

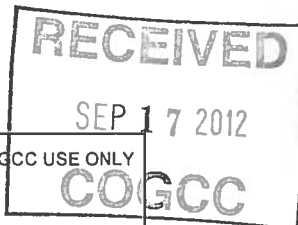
COGCC Approved: [Signature] Title: **Env. Sup.** Date: **9/19/12**

CONDITIONS OF APPROVAL IF ANY:

*Non-Facility ID = 430225*

*See Attached Conditions of Approval and Comments*

TECHNICAL INFORMATION PAGE



1. OGCC Operator Number: 10071 API Number: \_\_\_\_\_  
2. Name of Operator: Bill Barrett Corporation OGCC Facility ID # 423219  
3. Well/Facility Name: Dutch Lake Well/Facility Number: 22-34H  
4. Location (QtrQtr, Sec, Twp, Rng, Meridian): SESE, Sec. 34, T6N-R62W, 6th PM

This form is to be completed whenever a Sundry Notice is submitted requiring detailed report of work to be performed or completed. This form shall be transmitted within 30 days of work completed as a "subsequent" report and must accompany Form 4, page 1.

5. DESCRIBE PROPOSED OR COMPLETED OPERATIONS

Bill Barrett Corporation (BBC) is submitting this sundry to notify COGCC that drill cuttings from the referenced well were hauled beginning ~09/06/12 to Krier Spreadfield in Weld County, CO (Sec. 33, T6N R61W).

Please see attached analytical reports and maps.

= Background Samples

= Non Facility ID 430225

**REQUESTED INFORMATION AND CONDITIONS OF APPROVAL (COA) FOR**

**KRIER SPREADFIELD NON-FACILITY ID 430225**

2/14/12  
AT

**NWNE SEC 33 T6N R61W**

*Please provide the following within 30 days of Sundry approval.*

Provide that Latitude/Longitude of the entrance to the Krier Spread field.

Provide the size of the proposed Krier Spread field.

Provide a description of the land use.

Provide a statement that this is not a Centralized Exploration and Production (E&P) facility or Commercial Disposal Facility.

Provide a map showing the location of origin of the mud/cuttings (E&P waste) and the proposed Krier Spread field.

Please provide a written copy of surface owner approval.

Provide the approximate volume of E&P waste that will be generated.

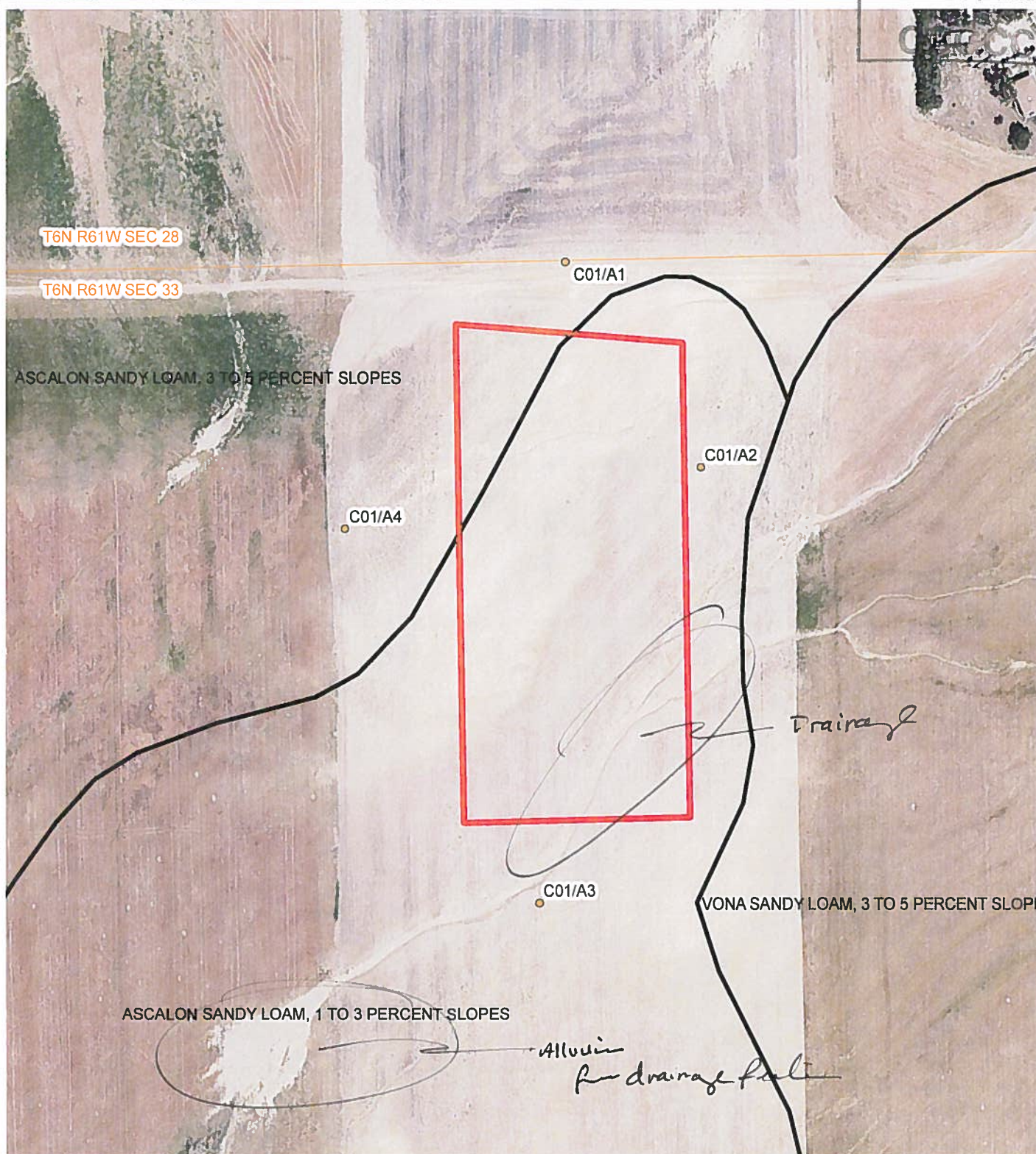
Provide Bill Barrett Corporations (BBCs) sampling program for characterization of the E&P waste.

Provide analytical data of the E&P waste supporting compliance with 910-1 prior to incorporating into the field.

Provide a description of how the E&P waste will be incorporated into the field.

There is a drainage along the southeast portion of the Krier Spread field. Provide storm water that will prevent the E & P waste from entering this feature.

Notify the COGCC via Sundry Form 4 upon closure of the beneficial reuse location (Krier Spread field).



LEGEND

- SOIL SAMPLE
- SITE LOCATION
- SOIL TYPE
- SECTION

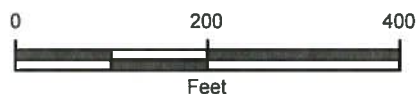
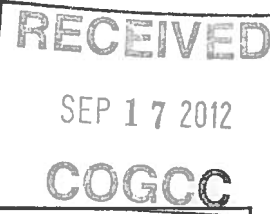


IMAGE COURTESY OF ESRI/BING

FIGURE 2  
SITE MAP  
KRIER SPREADFIELD  
SEC 33 T06N R61W  
WELD COUNTY, COLORADO  
BILL BARRETT CORPORATION



S<sub>2</sub>



LT Environmental, Inc.  
4600 West 60th Avenue  
Arvada CO, 80003

Project: BBC - Krier  
Project Number: 0273-120  
Project Manager: Brian Dodek

Reported:  
07/31/12 22:22

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
C01	R207249-01	Soil	07/25/12 16:15	07/26/12 17:00
A1	R207249-02	Soil	07/25/12 15:45	07/26/12 17:00
A2	R207249-03	Soil	07/25/12 15:50	07/26/12 17:00
A3	R207249-04	Soil	07/25/12 15:55	07/26/12 17:00
A4	R207249-05	Soil	07/25/12 16:00	07/26/12 17:00

Summit Scientific

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



COGCC

Page 2 of 14

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LT Environmental, Inc.  
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Arvada CO, 80003

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Project Number: 0273-120  
Project Manager: Brian Dodek

Reported:  
07/31/12 22:22

C01  
R207249-01 (Soil)

Summit Scientific

**Calculated Analytes**

Date Sampled: 07/25/12 16:15

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium+3 Calculated	3.69	1.00	mg/kg	1	2073101	07/30/12	07/31/12	Calculation	

**Total Metals by EPA Method 6020 - Dry Weight Basis**

Date Sampled: 07/25/12 16:15

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	2.69	0.100	mg/kg	1	2072701	07/27/12	07/27/12	EPA 6020A	
Barium	60.3	0.100	"	"	"	"	"	"	
Cadmium	ND	0.100	"	"	"	"	"	"	
Chromium	4.69	0.100	"	"	"	"	"	"	
Copper	4.04	0.500	"	"	"	"	"	"	
Lead	5.62	0.100	"	"	"	"	"	"	
Nickel	4.70	0.100	"	"	"	"	"	"	
Selenium	ND	0.100	"	"	"	"	"	"	
Silver	ND	0.100	"	"	"	"	"	"	
Zinc	18.9	10.0	"	"	"	"	"	"	

**Total Mercury by EPA Method 7471/7470**

Date Sampled: 07/25/12 16:15

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Mercury	ND	0.0500	mg/kg	1	2072702	07/27/12	07/27/12	EPA 7471B	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: 07/25/12 16:15

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.301	0.00100	mmhos/cm	1	2072711	07/27/12	07/27/12	SM 2510B	

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Project Number: 0273-120  
Project Manager: Brian Dodek

Reported:  
07/31/12 22:22

**C01**  
**R207249-01 (Soil)**

**Summit Scientific**

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: 07/25/12 16:15

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.4		pH Units	1	2072712	07/27/12	07/27/12	EPA 9045B	

**Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis**

Date Sampled: 07/25/12 16:15

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	354	2.50	mg/kg	1	2072704	07/27/12	07/30/12	EPA 6020/Mod. USDA60 6(2, 3A)	
Magnesium	34.2	1.00	"	"	"	"	"	"	
Sodium	5.07	5.00	"	"	"	"	"	"	

Date Sampled: 07/25/12 16:15

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0700		units	"	2073010	07/30/12	07/30/12	"	

**Accutest Laboratories - 6010 Hexavalent Chromium, Soil (3060A Mod Digest)**

Date Sampled: 07/25/12 16:15

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	1	mg/kg	1	2073101	07/30/12	07/31/12	3060A/7196 A	

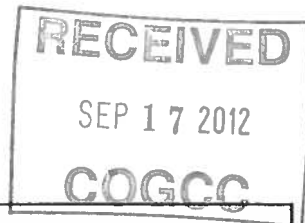
Summit Scientific

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Arvada CO, 80003

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Project Manager: Brian Dodek

Reported:  
07/31/12 22:22

A1  
R207249-02 (Soil)

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**Total Metals by EPA Method 6020 - Dry Weight Basis**

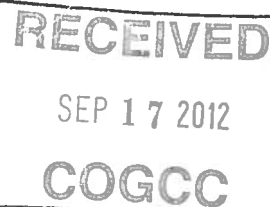
Date Sampled: 07/25/12 15:45

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	3.01	0.100	mg/kg	1	2072701	07/27/12	07/27/12	EPA 6020	

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Arvada CO, 80003

Project: BBC - Krier  
Project Number: 0273-120  
Project Manager: Brian Dodek

Reported:  
07/31/12 22:22

A2  
R207249-03 (Soil)

Summit Scientific

**Total Metals by EPA Method 6020 - Dry Weight Basis**

Date Sampled: 07/25/12 15:50

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Arsenic	2.43	0.100		mg/kg	1	2072701	07/27/12	07/27/12	EPA 6020	

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Arvada CO, 80003

Project: BBC - Krier  
Project Number: 0273-120  
Project Manager: Brian Dodek

Reported:  
07/31/12 22:22

A3  
R207249-04 (Soil)

Summit Scientific

Total Metals by EPA Method 6020 - Dry Weight Basis

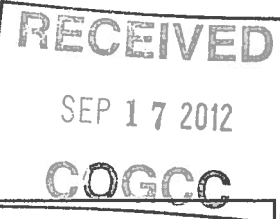
Date Sampled: 07/25/12 15:55

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	2.46	0.0866	mg/kg	1	2072701	07/27/12	07/27/12	EPA 6020	

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Project Number: 0273-120  
Project Manager: Brian Dodek

Reported:  
07/31/12 22:22

A4  
R207249-05 (Soil)

Summit Scientific

**Total Metals by EPA Method 6020 - Dry Weight Basis**

Date Sampled: 07/25/12 16:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	2.25	0.100	mg/kg	1	2072701	07/27/12	07/27/12	EPA 6020	

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4600 West 60th Avenue  
Arvada CO, 80003

Project: BBC - Krier  
Project Number: 0273-120  
Project Manager: Brian Dodek

Reported:  
07/31/12 22:22

**Total Metals by EPA Method 6020 - Dry Weight Basis - Quality Control**  
**Summit Scientific**

Analyte	Reporting			Spike	Source	%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit

**Batch 2072701 - EPA 3050B****Blank (2072701-BLK1)**

Prepared &amp; Analyzed: 07/27/12

Arsenic	ND	0.100	mg/kg
Arsenic	ND	0.100	"
Barium	ND	0.100	"
Cadmium	ND	0.100	"
Chromium	0.126	0.100	"
Copper	ND	0.500	"
Lead	ND	0.100	"
Nickel	ND	0.100	"
Selenium	ND	0.100	"
Silver	ND	0.100	"
Zinc	ND	10.0	"

**LCS (2072701-BS1)**

Prepared &amp; Analyzed: 07/27/12

Arsenic	2.51	0.100	mg/kg	2.54	98.7	80-120
Arsenic	2.51	0.100	"	2.54	98.7	80-120
Barium	217	0.100	"	225	96.4	80-120
Cadmium	1.10	0.100	"	1.02	108	80-120
Chromium	11.2	0.100	"	10.0	111	80-120
Copper	19.1	0.500	"	20.0	95.1	80-120
Lead	71.9	0.100	"	75.0	95.9	80-120
Nickel	14.8	0.100	"	15.1	98.1	80-120
Selenium	0.990	0.100	"	1.15	86.1	80-120
Silver	0.202	0.100	"	0.200	101	80-120
Zinc	69.1	10.0	"	75.0	92.2	80-120

**LCS Dup (2072701-BSD1)**

Prepared &amp; Analyzed: 07/27/12

Arsenic	2.46	0.100	mg/kg	2.54	96.9	80-120	1.85	20
Arsenic	2.46	0.100	"	2.54	96.9	80-120	1.85	20
Barium	216	0.100	"	225	96.0	80-120	0.465	20
Cadmium	1.12	0.100	"	1.02	111	80-120	2.27	20
Chromium	11.3	0.100	"	10.0	112	80-120	0.879	20
Copper	19.1	0.500	"	20.0	95.3	80-120	0.181	20
Lead	72.0	0.100	"	75.0	96.0	80-120	0.0606	20
Nickel	14.8	0.100	"	15.1	98.0	80-120	0.105	20
Selenium	1.01	0.100	"	1.15	87.9	80-120	2.16	20
Silver	0.199	0.100	"	0.200	99.3	80-120	1.55	20
Zinc	68.6	10.0	"	75.0	91.5	80-120	0.675	20

Summit Scientific

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Reported:  
07/31/12 22:22

**Total Metals by EPA Method 6020 - Dry Weight Basis - Quality Control**  
**Summit Scientific**

Analyte	Reporting			Spike	Source	%REC		RPD		
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

**Batch 2072701 - EPA 3050B****Matrix Spike (2072701-MS1)****Source: R207246-01****Prepared & Analyzed: 07/27/12**

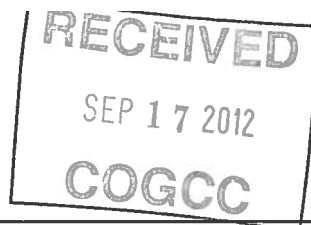
Arsenic	3.64	0.100	mg/kg	2.56	0.975	104	75-125			
Arsenic	3.64	0.100	"	2.56	0.975	104	75-125			
Barium	322	0.100	"	227	115	91.8	75-125			
Cadmium	1.13	0.100	"	1.02	0.0397	106	75-125			
Chromium	23.3	0.100	"	10.1	14.7	84.7	75-125			
Copper	40.6	0.500	"	20.2	19.4	105	75-125			
Lead	74.3	0.100	"	75.5	10.0	85.1	75-125			
Nickel	27.2	0.100	"	15.2	12.2	98.4	75-125			
Selenium	0.894	0.100	"	1.16	ND	77.2	75-125			
Silver	0.232	0.100	"	0.201	0.0549	87.9	75-125			
Zinc	108	10.0	"	75.5	46.2	81.8	75-125			

**Matrix Spike Dup (2072701-MSD1)****Source: R207246-01****Prepared & Analyzed: 07/27/12**

Arsenic	3.23	0.100	mg/kg	2.46	0.975	91.7	75-125	12.0	25	
Arsenic	3.23	0.100	"	2.46	0.975	91.7	75-125	12.0	25	
Barium	310	0.100	"	218	115	89.7	75-125	3.94	25	
Cadmium	1.08	0.100	"	0.983	0.0397	106	75-125	4.47	25	
Chromium	20.4	0.100	"	9.73	14.7	58.5	75-125	13.2	25	QM-07
Copper	35.8	0.500	"	19.4	19.4	84.6	75-125	12.6	25	
Lead	71.5	0.100	"	72.6	10.0	84.7	75-125	3.84	25	
Nickel	24.7	0.100	"	14.6	12.2	85.3	75-125	9.62	25	
Selenium	0.858	0.100	"	1.11	ND	77.0	75-125	4.13	25	
Silver	0.225	0.100	"	0.194	0.0549	88.0	75-125	2.83	25	
Zinc	101	10.0	"	72.6	46.2	75.2	75-125	6.90	25	

Summit Scientific

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Project Number: 0273-120  
Project Manager: Brian Dodek

Reported:  
07/31/12 22:22

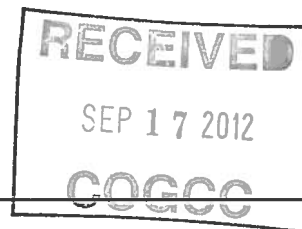
**Total Mercury by EPA Method 7471/7470 - Quality Control**  
**Summit Scientific**

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 2072702 - EPA 7471A										
Blank (2072702-BLK1)				Prepared & Analyzed: 07/27/12						
Mercury	ND	0.0500	mg/kg							
LCS (2072702-BS1)				Prepared & Analyzed: 07/27/12						
Mercury	0.407	0.0500	mg/kg	0.400	102	85.5-116				
LCS Dup (2072702-BSD1)				Prepared & Analyzed: 07/27/12						
Mercury	0.397	0.0500	mg/kg	0.400	99.2	85.5-116	2.52	17		
Matrix Spike (2072702-MS1)		Source: R207246-01		Prepared & Analyzed: 07/27/12						
Mercury	0.429	0.0500	mg/kg	0.427	0.0143	97.0	75-125			
Matrix Spike Dup (2072702-MSD1)		Source: R207246-01		Prepared & Analyzed: 07/27/12						
Mercury	0.378	0.0500	mg/kg	0.371	0.0143	98.1	75-125	12.4	25	

Summit Scientific

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LT Environmental, Inc.  
4600 West 60th Avenue  
Arvada CO, 80003

Project: BBC - Krier  
Project Number: 0273-120  
Project Manager: Brian Dodek

Reported:  
07/31/12 22:22

**Physical Parameters by APHA/ASTM/EPA Methods - Quality Control**  
**Summit Scientific**

Analyte	Reporting			Spike	Source	%REC		RPD		
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

**Batch 2072711 - General Preparation**

<b>Duplicate (2072711-DUP1)</b>	<b>Source: R207249-01</b>			<b>Prepared &amp; Analyzed: 07/27/12</b>						
Specific Conductance (EC)	0.300	0.00100	mmhos/cm		0.301			0.233	15.5	

**Batch 2072712 - General Preparation**

<b>Duplicate (2072712-DUP1)</b>	<b>Source: R207249-01</b>			<b>Prepared &amp; Analyzed: 07/27/12</b>						
pH	8.4		pH Units		8.4			0.00	4.95	

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LT Environmental, Inc.  
4600 West 60th Avenue  
Arvada CO, 80003

Project: BBC - Krier  
Project Number: 0273-120  
Project Manager: Brian Dodek

Reported:  
07/31/12 22:22

**Soluble Nutrients by EPA 6020/Mod. USDA60 6(2, 3A) - Dry Weight Basis - Quality Control**  
**Summit Scientific**

Analyte	Reporting			Spike	Source	%REC		RPD		Notes
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	

**Batch 2072704 - General Preparation****Blank (2072704-BLK1)**

Prepared: 07/27/12 Analyzed: 07/30/12

Calcium	ND	2.50	mg/kg
Magnesium	ND	1.00	"
Sodium	ND	5.00	"

**LCS (2072704-BS1)**

Prepared: 07/27/12 Analyzed: 07/30/12

Calcium	404	2.50	mg/kg	400	101	70-130
Magnesium	196	1.00	"	200	97.9	70-130
Sodium	777	5.00	"	800	97.2	70-130

**LCS Dup (2072704-BSD1)**

Prepared: 07/27/12 Analyzed: 07/30/12

Calcium	407	2.50	mg/kg	400	102	70-130	0.602	25
Magnesium	201	1.00	"	200	101	70-130	2.62	25
Sodium	797	5.00	"	800	99.6	70-130	2.49	25

**Matrix Spike (2072704-MS1)**

Source: R207249-01

Prepared: 07/27/12 Analyzed: 07/30/12

Calcium	698	2.50	mg/kg	431	354	79.8	70-130
Magnesium	249	1.00	"	216	34.2	99.8	70-130
Sodium	870	5.00	"	862	5.07	100	70-130

**Matrix Spike Dup (2072704-MSD1)**

Source: R207249-01

Prepared: 07/27/12 Analyzed: 07/30/12

Calcium	736	2.50	mg/kg	421	354	90.7	70-130	5.32	25
Magnesium	256	1.00	"	211	34.2	105	70-130	2.70	25
Sodium	878	5.00	"	842	5.07	104	70-130	0.924	25

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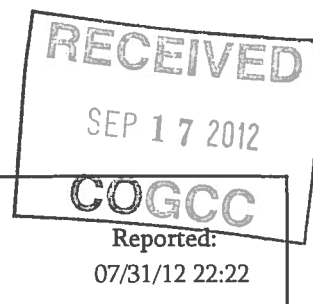
*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



S<sub>2</sub>

LT Environmental, Inc.  
4600 West 60th Avenue  
Arvada CO, 80003

Project: BBC - Krier  
Project Number: 0273-120  
Project Manager: Brian Dodek



### Notes and Definitions

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS/LCSD recovery.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

---

Summit Scientific

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A handwritten signature in black ink, appearing to be "J.M." or similar, with a long, sweeping underline.

**TABLE 1**  
**SOIL ANALYTICAL RESULTS**  
**KRIER SPREAD FIELD**  
**WELD COUNTY, COLORADO**  
**BILL BARRETT CORPORATION**

PARAMETER	COGCC Table 910-1 Concentration Levels	UNITS	Sample ID: C01	Sample ID: A1	Sample ID: A2	Sample ID: A3	Sample ID: A4
Sample Date			7/25/2012	7/25/2012	7/25/2012	7/25/2012	7/25/2012
Sample Type			Background	Background	Background	Background	Background
Arsenic	0.39	mg/kg	2.69	3.01	2.43	2.46	2.25
Barium	15,000	mg/kg	60.3	--	--	--	--
Cadmium	70	mg/kg	<0.100	--	--	--	--
Chromium (III)	120,000	mg/kg	3.69	--	--	--	--
Chromium (VI)	23	mg/kg	<1	--	--	--	--
Copper	3,100	mg/kg	4.04	--	--	--	--
Lead	400	mg/kg	5.62	--	--	--	--
Mercury	23	mg/kg	<0.0500	--	--	--	--
Nickel	1,600	mg/kg	4.70	--	--	--	--
Selenium	390	mg/kg	<0.100	--	--	--	--
Silver	390	mg/kg	<0.100	--	--	--	--
Zinc	23,000	mg/kg	18.9	--	--	--	--
EC	4.0	mmhos/cm	0.301	--	--	--	--
pH	6 - 9	SU	8.4	--	--	--	--
Calcium		mg/kg	354	--	--	--	--
Magnesium		mg/kg	34.2	--	--	--	--
Sodium		mg/kg	5.07	--	--	--	--
SAR	12	unitless	0.07	--	--	--	--

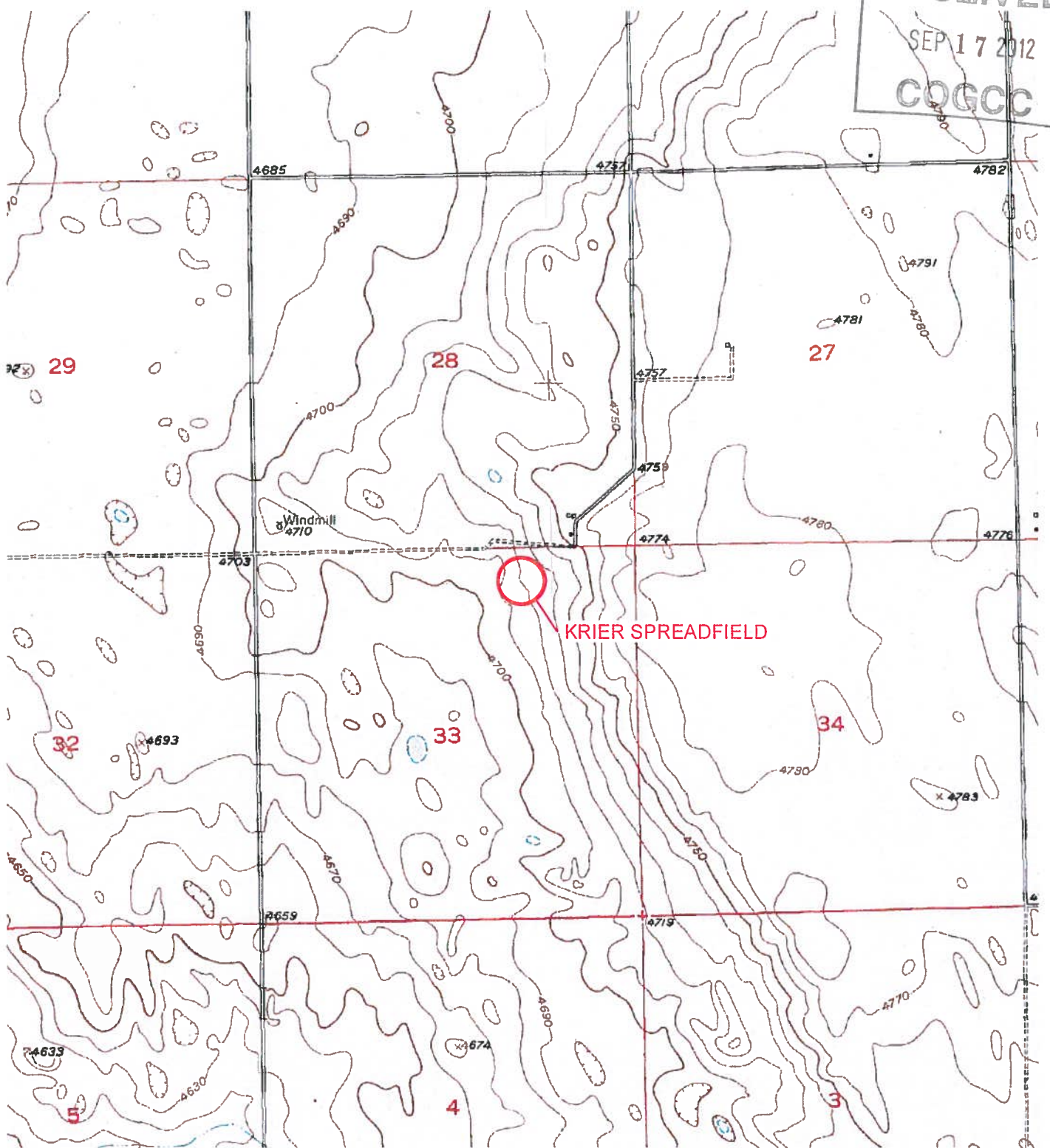
**NOTES:**

mg/kg - milligrams per kilogram  
mmhos/cm - millimhos per centimeter in saturated paste extract  
EC - electrical conductivity  
SU - standard unit on saturated paste  
SAR - sodium adsorption ratio  
< - less than the stated reporting limit  
--- not analyzed

**BOLD** - indicates result exceeds the Colorado Oil and Gas Conservation Commission (COGCC) Table 910-1 concentration level.



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KRIER SPREADFIELD

LEGEND

○ SITE LOCATION

IMAGE COURTESY OF USDA/NRCS, VARIOUS DATES



FIGURE 1  
SITE LOCATION MAP  
KRIER SPREADFIELD  
WELD COUNTY, COLORADO

BILL BARRETT CORPORATION

