

APPENDIX D

D.1 2012 Soil Investigations

D.2 Radiological Investigation

D.3 Laboratory Test Results

D.4 Original Closeout Plan Soil Data

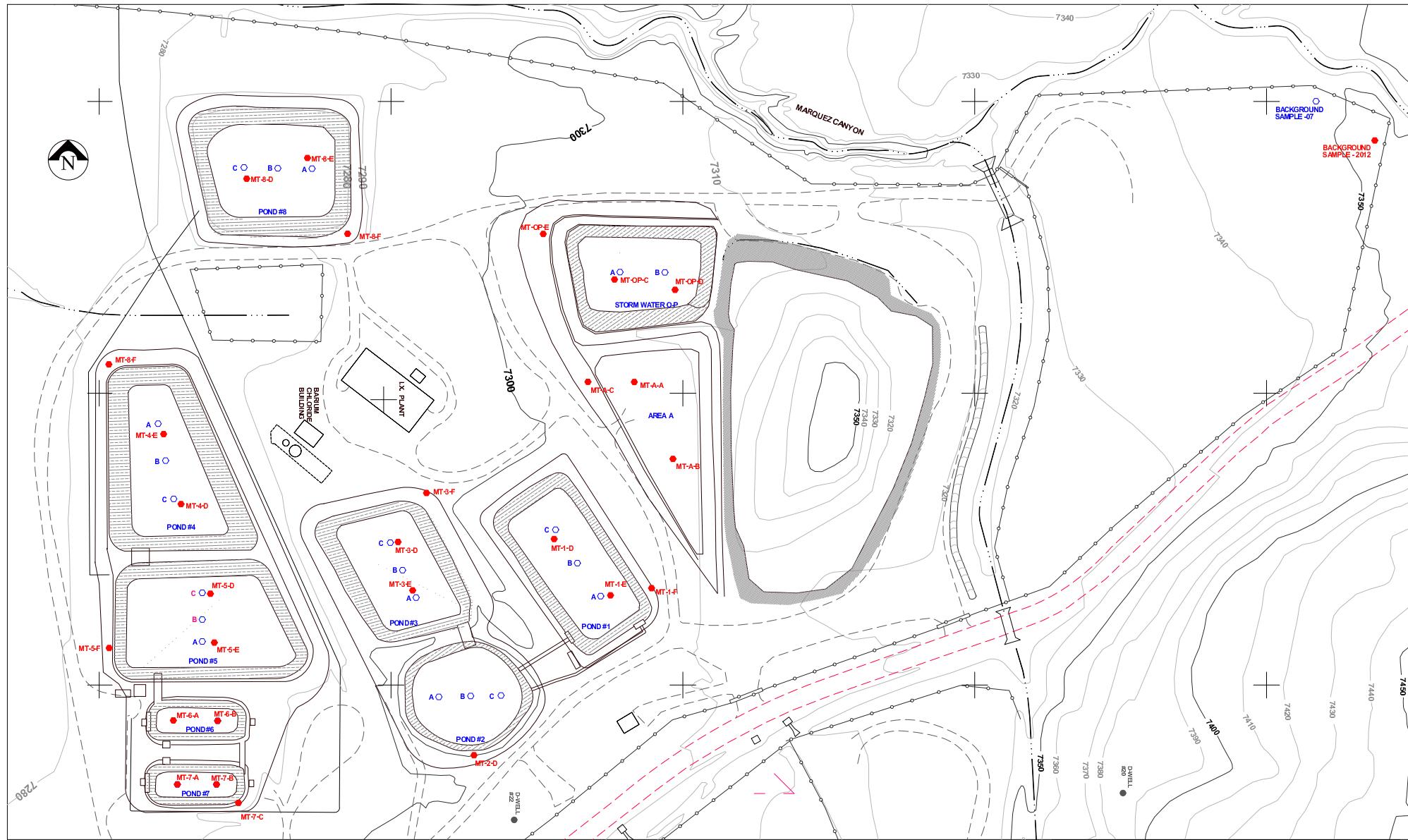


FIGURE 1

PROPOSED SAMPLE LOCATIONS
MARCH 29, 2012 - TASK 7A



File #

Mt Taylor Mine - Borrow Test Pit Log			Pit #	MT-1-F
Location Pond # 1 Berm		GPS N 35-20.578'	W 107-38.001'	
Location Description Top edges of Ponds – South East Side of Pond # 1				
Field Engineer: Stan Fitch / Ed Loescher			Excavation Method: Small Bobcat Backhoe	
Date: April - 10-2012 10:30 am			Operator:	
Weather and Moisture Conditions: Warm – Sunny – 60 to 70d				
	Graphic Log	Sample #	Description (USCS, texture, density, color, moisture, odor, inclusions, etc.)	
0		MT - 1- F Depth 6"	Silty Clay, mixed with some coarse sand, trace gravel, dark brown	
1				
2				
3				
4				
5				
6				
7				
8				
Total Depth: 12" DEEP				
Comments: Part of the sample for sent for Geotechnical testing - Part for Environmental Testing.				
Checked:		Date:		
Approved:		Date:		



File #

Mt Taylor Mine - Borrow Test Pit Log

Pit #

MT-2-D

Location Pond #2 berm GPS N 35-20.541' W 107-38.057'

Location Description Top edges of Ponds – South Side of Pond # 2

Field Engineer: Stan Fitch / Ed Loescher Excavation Method: Small Bobcat Backhoe

Date: April - 10-2012 10:15 am Operator:

Weather and Moisture Conditions: Warm – Sunny – 60 to 70d

	Graphic Log	Sample #	Description (USCS, texture, density, color, moisture, odor, inclusions, etc.)
0		MT - 2- D Depth 6"	Clayey Silt, some sand, trace roots, medium brown
1			
2			
3			
4			
5			
6			
7			
8			

Total Depth: 12" DEEP

Comments:

Part of the sample for sent for Geotechnical testing - Part for Environmental Testing.

Checked:

Date:

Approved:

Date:



File #

Mt Taylor Mine - Borrow Test Pit Log			
			Pit #
Location Pond # 3 Berm			GPS N 35-20.632' W 107-38.089'
Location Description Top edges of Ponds – North East Corner of Pond # 3			
Field Engineer: Stan Fitch / Ed Loescher		Excavation Method: Small Bobcat Backhoe	
Date: April - 10-2012 11:10 am		Operator:	
Weather and Moisture Conditions: Warm – Sunny – 60 to 70d			
	Graphic Log	Sample #	Description (USCS, texture, density, color, moisture, odor, inclusions, etc.)
0		MT -3-F Depth 6"	Silty Clay, some sand, trace gravel, dark brown
1			
2			
3			
4			
5			
6			
7			
8			
Total Depth: 12" DEEP			
Comments: Part of the sample for sent for Geotechnical testing - Part for Environmental Testing.			
Checked:		Date:	
Approved:		Date:	



File #

Mt Taylor Mine - Borrow Test Pit Log

Pit #

MT-4-F

Location	Pond #4 berm	GPS N 35-20.661'	W 107-38.220'
Location Description		Top edges of Ponds – North West Corner of Pond # 4	
Field Engineer: Stan Fitch / Ed Loescher		Excavation Method: Small Bobcat Backhoe	
Date:	April - 10-2012 9:35 am	Operator:	
Weather and Moisture Conditions: Warm – Sunny – 60 to 70d			
.	Graphic Log	Sample #	Description (USCS, texture, density, color, moisture, odor, inclusions, etc.)
0		MT -4-F Depth 6"	Sandy Clay, trace roots, dark brown
1			
2			
3			
4			
5			
6			
7			
8			
Total Depth: 12" DEEP			
Comments: Part of the sample for sent for Geotechnical testing - Part for Environmental Testing.			
Checked:		Date:	
Approved:		Date:	



File #

Mt Taylor Mine - Borrow Test Pit Log			Pit #	MT-5-F
Location	Pond #5 Berm	GPS N 35-20.576' W 107-38.217'		
Location Description		Top edges of Ponds – South West Corner of Pond # 5		
Field Engineer: Stan Fitch / Ed Loescher		Excavation Method: Small Bobcat Backhoe		
Date: April - 10-2012 9:45 am		Operator:		
Weather and Moisture Conditions: Warm – Sunny – 60 to 70d				
	Graphic Log	Sample #	Description (USCS, texture, density, color, moisture, odor, inclusions, etc.)	
0		MT-5-F Depth 6"	Clayey Silt, some sand, trace roots, medium brown	
1				
2				
3				
4				
5				
6				
7				
8				
Total Depth: 12" DEEP				
Comments: Part of the sample for sent for Geotechnical testing - Part for Environmental Testing.				
Checked:		Date:		
Approved:		Date:		



File #

Mt Taylor Mine - Borrow Test Pit Log			Pit #	MT-7-C
Location Pond #7 Berm		GPS N 35-20.526'	W 107-38.148'	
Location Description Top edges of Ponds – South East Corner of Pond # 7				
Field Engineer: Stan Fitch / Ed Loescher			Excavation Method: Small Bobcat Backhoe	
Date: April - 10-2012 9:55 am			Operator:	
Weather and Moisture Conditions: Warm – Sunny – 60 to 70d				
	Graphic Log	Sample #	Description (USCS, texture, density, color, moisture, odor, inclusions, etc.)	
0		MT -7-C Depth 6"	Clayey Silt, some sand, trace roots, light brown	
1				
2				
3				
4				
5				
6				
7				
8				
Total Depth: 12" DEEP				
Comments: Part of the sample for sent for Geotechnical testing - Part for Environmental Testing.				
Checked:		Date:		
Approved:		Date:		



File #

MT-8-F

Mt Taylor Mine - Borrow Test Pit Log

Pit #

Location Pond #8 Berm

GPS N 35-20.693' W 107-38.108'

Location Description

Top edges of Ponds – South West Corner of Pond # 8

Field Engineer: Stan Fitch / Ed Loescher

Excavation Method: Small Bobcat Backhoe

Date: April - 10-2012 9:50 am

Operator:

Weather and Moisture Conditions: Warm – Sunny – 60 to 70d

	Graphic Log	Sample #	Description (USCS, texture, density, color, moisture, odor, inclusions, etc.)
0		MT-8-F Depth 6"	Clayey Silt, some sand, trace gravel, brown
1			
2			
3			
4			
5			
6			
7			
8			

Total Depth: 12" DEEP

Comments:

Part of the sample for sent for Geotechnical testing - Part for Environmental Testing.

Checked:

Date:

Approved:

Date:



File #

Mt Taylor Mine - Borrow Test Pit Log

Pit #

MT-Borrow

Location Background borrow area GPS N 35-20.724' W 107-38.759'

Location Description NE Corner of the Property in the main proposed borrow area.

Field Engineer: Stan Fitch / Ed Loescher Excavation Method: Small Bobcat Backhoe

Date: April - 10-2012 8:50 am Operator:

Weather and Moisture Conditions: Warm – Sunny – 60 to 70d

	Graphic Log	Sample #	Description (USCS, texture, density, color, moisture, odor, inclusions, etc.)
0			(0-24") Clayey Silt, some sand, trace roots gravel, brown
1			
2		MT -borrow Composite Sample 24"-66"	(24"- 66") Silty Sand with Clay, trace gravel, occasional gray sand seams, brown.
3			
4			
5			
6			(66" – 72") Clayey Sand, with silt, trace roots and gravel, brown.
7			
8			

Total Depth: 72" DEEP

Comments:

Part of the sample for sent for Geotechnical testing - Part for Environmental Testing.

Checked:

Date:

Approved:

Date:



File #

Mt Taylor Mine - Borrow Test Pit Log

Pit #

MT-A-C

Location Pond # Area "A" GPS N 35-20.650' W 107-38.046'

Location Description Top edges of Ponds – North West Corner of Area A

Field Engineer: Stan Fitch / Ed Loescher Excavation Method: Small Bobcat Backhoe

Date: April - 10-2012 10:55 am Operator:

Weather and Moisture Conditions: Warm – Sunny – 60 to 70d

	Graphic Log	Sample #	Description (USCS, texture, density, color, moisture, odor, inclusions, etc.)
0		MT -A-C Depth 6"	Silty Sand, some clay, trace gravel, light brown
1			
2			
3			
4			
5			
6			
7			
8			

Total Depth: 12" DEEP

Comments:

Sample submitted for Environmental Testing.

Checked:

Date:

Approved:

Date:



File #

Mt Taylor Mine - Borrow Test Pit Log

Pit #

MT-OP-E

Location Pond # OP (Ore Pile Pond) GPS N 35-20.694' W 107-38.062'

Location Description Top edges of Ponds – North West Corner of Pond # OP

Field Engineer: Stan Fitch / Ed Loescher Excavation Method: Small Bobcat Backhoe

Date: April - 10-2012 9:10 am Operator:

Weather and Moisture Conditions: Warm – Sunny – 60 to 70d

	Graphic Log	Sample #	Description (USCS, texture, density, color, moisture, odor, inclusions, etc.)
0		MT-OP-E Depth 6"	Sandy Clay, trace gravel, medium brown
1			
2			
3			
4			
5			
6			
7			
8			

Total Depth: 12" DEEP

Comments:

Part of the sample for sent for Geotechnical testing - Part for Environmental Testing.

Checked:

Date:

Approved:

Date:



File #

Mt Taylor Mine Water Treatment Pond Test Pit Log			
			Pit #
Location			Pond 1 (GPS) N 35°20.579' W 107°38.023'
Location Description MT-1-E			
Field Engineer:		B. Everett	
Date:		4/10/2012 Operator: K. Strickland	
Weather and Moisture Conditions: clear, sunny, warm; cool and windy in afternoon			
Depth	Graphic Log	Sample #	Description (USCS, texture, density, color, moisture, odor, inclusions, etc.)
0		S1-01-01	0-6": Sediment, silty to sandy clay, slightly moist Sample collected at 0-4" bgs at 10:45
1		S1-01-02	6"-26": Clay sediments, trace gravel and cobles, some silt lenses, dark gray, dense, moist Sample collected at 16-18" bgs at 10:50
2			26-67": Sandy clay, hard, moist, brown
3		S1-01-03	Sample collected at 44-48" bgs at 11:00
4			
5			TD = 67" bgs
6			
7			
8			
Total Depth: 67" bgs			
Comments: Pond sediments 0-6" Clay 6-26" bgs Native soil 26-67" bgs			
Checked:		Date:	
Approved:		Everett	Date: 5/7/2012



File #

Mt Taylor Mine Water Treatment Pond Test Pit Log

Pit #

2

Location MT-1-D (GPS) N W

Location Description Distal to inlet

Field Engineer: B. Everett Excavation Method: Backhoe/Shovel

Date: 4/10/2012 Operator: K. Strickland

Weather and Moisture Conditions: clear, sunny, warm; cool and windy in afternoon

Depth	Graphic Log	Sample #	Description (USCS, texture, density, color, moisture, odor, inclusions, etc.)
0		SL-02-01	0-10": Pond sediment, silty sand, friable, mottled brown and gray, moist Sample collected at 0-4" bgs at 11:40
1			10"-30": Silty sand, some clay, friable, yellow-brown, moist
2		SL-02-02	Sample collected at 26-30" at 11:43 30-48": Silty sand, some clay, friable, yellow-brown, slightly moist
3		SL-02-03	Sample collected at 44-48" bgs at 11:45
4			TD = 48" bgs
5			
6			
7			
8			

Total Depth: 48" bgs

Comments: No visible clay or clay liner at this location.
Native material at 10-inches

Checked:

Date:

Approved:

Everett

Date: 5/7/2012



File #

Mt Taylor Mine Water Treatment Pond Test Pit Log**Pit #****1**

Location Pond 3 (GPS) N 35°20.592' W 107°38.02'

Location Description MT-3-E

Field Engineer: B. Everett Excavation Method: Backhoe/Shovel

Date: 4/10/2012 Operator: K. Strickland

Weather and Moisture Conditions: clear, sunny, warm; cool and windy in afternoon

Depth	Graphic Log	Sample #	Description (USCS, texture, density, color, moisture, odor, inclusions, etc.)
0			0-4": Sediment and organic matter, clayey silt - silty sand, light gray, varved lenses of settling
1		S3-01-01	4"-20": Clay and bentonite, dark gray, with lenses of silt, pond liner material Sample collected at 0-12" bgs
2		S3-01-02	20"-22": Silt - clayey silt, dense, white, wet. Sample collected at 20-26" bgs at 08:50
2		S3-01-03	22"-26": Clayey Silt, brown, wet at 25 ft bgs
3			26"-64": Clay, hard, dense, brown, moist, trace gravel and some silt/sand lenses. Sample collected at 26-36" bgs at 09:40
4			
5		S3-01-04	64"-75": Silty Sand, friable, yellow-brown, trace gravel Sample collected at 64-75" bgs at 09:40
6			TD - 75" bgs
7			
8			
Total Depth:	75" bgs		
Comments:	Pond sediments 0-4" Clay 4-20" bgs Clayey silt 20-26" bgs Clay 26-64" bgs Native material 64" bgs		

Checked: _____ Date: _____

Approved: Everett Date: 5/7/2012



File #

Mt Taylor Mine Water Treatment Pond Test Pit Log

Pit #

2

Location Pond 3 (GPS) N 35°20.605' W 107°38.106'

Location Description MT-3-D

Field Engineer: B. Everett Excavation Method: Backhoe/Shovel

Date: 4/10/2012 Operator: K. Strickland

Weather and Moisture Conditions: clear, sunny, warm; cool and windy in afternoon

Depth	Graphic Log	Sample #	Description (USCS, texture, density, color, moisture, odor, inclusions, etc.)
0		S3-02-01	0-13": Sediment, silty to sandy clay, slightly moist Sample collected at 0-12" bgs at 10:05
1			13"-19": Clay sediments, varved white and dark gray, dense, moist
			19"-37": Clay, dense brown, moist
2		S3-02-02	Sample collected at 26-30" bgs at 10:30
3			37"-54": Silty sand, friable, yellow-brown, moist, native soil
4		S3-02-03	Sample collected at 50-54" bgs at 10:30 TD = 54" bgs
5			
6			
7			
8			

Total Depth: 54" bgs

Comments: Pond sediments 0-19"
Clay 19-37" bgs
Native soil 37-54" bgs

Checked:

Date:

Approved:

Everett

Date: 5/7/2012



File #

Mt Taylor Mine Water Treatment Pond Test Pit Log				Pit #	MT-4-D
Location Pond #4 bottom		GPS N 35-20.644'	W 107-38.178'		
Location Description Bottom of Pond – North End					
Field Engineer: Ed Loescher			Excavation Method: Small Bobcat Backhoe		
Date: April - 10-2012 2:00 pm			Operator:		
Weather and Moisture Conditions: Warm – Sunny – 70d					
	Graphic Log	Sample #	Description (USCS, texture, density, color, moisture, odor, inclusions, etc.)		
0 12"		MT -4-D-S1 Depth 6"	(0"-12") Pond Sediment - Sandy Clay with some silt– Dark Brown		
1		MT -4-D-S2 Depth 14"	(12"- 42") Soft –fine grained- Sandstone, highly fractured, white, easily excavated with bobcat. (<i>Natural Soil</i>)		
2					
3 42"		MT -4-D-S3 Depth 48"	(42"- 48") Sandy Silt Brown – trace gravel (<i>Natural Soil</i>)		
4					
5					
6					
7					
8					
Total Depth: 48" DEEP					
Comments:					
Checked:		Date:			
Approved:		Date:			



File #

Mt Taylor Mine Water Treatment Pond Test Pit Log				Pit #	MT-4-E
Location Pond # 4 Bottom		GPS N 35-20.522'	W 107-38.170'		
Location Description Bottom of Pond – South End					
Field Engineer: Ed Loescher			Excavation Method: Small Bobcat Backhoe		
Date: April - 10-2012 1:35 pm			Operator:		
Weather and Moisture Conditions: Warm – Sunny – 60d to 70d					
	Graphic Log	Sample #	Description (USCS, texture, density, color, moisture, odor, inclusions, etc.)		
6"	0	MT-4-E-S1 Depth 4"	(0"-6") Pond Sediment - Silty Sand, with some silt lenses – the sand was white/tan and the silt lenses were dark Brown.		
20"	1	MT-4-E-S2 Depth 10-12"	(6" - 20") Silty Clay, dark brown, moist, hard (<i>Natural Soil or Possible liner</i>)		
48"	2	MT-4-E-S3 Depth 36"	(20"-48") Sandy Clay, some silt, trace gravel, brown, (<i>Natural Soil</i>)		
50"	3				
50"	4	MT-4-E-S4 Depth 48" -50"	(48"- 50") Clayey Sand, trace gravel, brown (<i>Natural Soil</i>)		
6					
7					
8					
Total Depth: 50" DEEP					
Comments: Possible clay liner from 6 to 20" depth					
Checked:			Date:		
Approved:			Date:		



File #

Mt Taylor Mine Water Treatment Pond Test Pit Log

Pit #

1

Location Pond 5 (GPS) N 35°20.580' W 107°38.150'

Location Description MT-5-E

Field Engineer: B. Everett Excavation Method: Backhoe/Shovel

Date: 4/10/2012 Operator: K. Strickland

Weather and Moisture Conditions: clear, sunny, warm; cool and windy in afternoon

Depth	Graphic Log	Sample #	Description (USCS, texture, density, color, moisture, odor, inclusions, etc.)
0		S5-01-01	0-22": Clayey silt with sand, friable, brown, moist Sample collected at 0-12" bgs at 14:05
1			
2			22"-37": Silty sand, trace clay, friable, dry
3		S5-01-02	Sample collected at 36-37" bgs at 14:09 TD = 37" bgs
4			
5			
6			
7			
8			

Total Depth: 37" bgs

Comments: No clay layer noted
Clayey silt with sand 0-22" bgs
Native soil at 22" bgs
Silty sand with trace clay 22-37" bgs

Checked:

Date:

Approved: Everett

Date: 5/7/2012



File #

Mt Taylor Mine Water Treatment Pond Test Pit Log

Pit #

2

Location Pond 5 (GPS) N 35°20.595' W 107°38.189'

Location Description MT-5-D

Field Engineer: B. Everett Excavation Method: Backhoe/Shovel

Date: 4/10/2012 Operator: K. Strickland

Weather and Moisture Conditions: clear, sunny, warm; cool and windy in afternoon

Depth	Graphic Log	Sample #	Description (USCS, texture, density, color, moisture, odor, inclusions, etc.)
0		S5-02-01	0-10": Silty sand, slightly clayey, brown, mottled with white dense BaCl, friable, slightly damp Sample collected at 0-12" bgs at 14:30
1			10"-17": Clay with white precipitate BaCl, varved sediments from settling, dark brown gray and white, dense, some silt
		S5-02-02	17"-24": Silty sand, friable, yellow brown, slightly moist Sample collected 17-24" bgs at 14:15
2			24"- 44": Silty sand, friable yellow brown, slightly damp, trace gravel and cobbles
3		S5-02-03	Sample collected at 40-44" bgs at 14:20 TD = 45" bgs
4			
5			
6			
7			
8			

Total Depth: 45" bgs

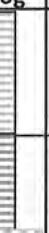
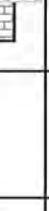
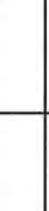
Comments: No liner in this pond. Various construction debris on surface. Moist to 24" bgs, slightly damp below.
 Pond sediments 0-17" bgs
 Native soil 17-44" bgs

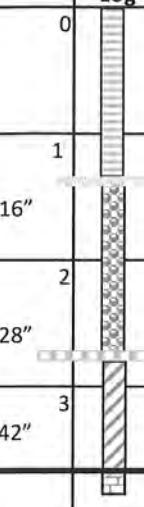
Checked:

Date:

Approved: Everett

Date: 5/7/2012

Mt Taylor Mine Water Treatment Pond Test Pit Log			Pit #	MT-6-A
Location	Pond # 6 Bottom	GPS N 35-20.557' W 107-38.157'		
Location Description		Bottom of Pond – East end		
Field Engineer:		Ed Loescher		
Excavation Method:		Small Bobcat Backhoe		
Date:	April - 10-2012	3:00 pm	Operator:	
Weather and Moisture Conditions: Warm – Sunny – 60d to 70d				
	Graphic Log	Sample #	Description (USCS, texture, density, color, moisture, odor, inclusions, etc.)	
0 12"		MT -6-A-S1 Depth 0-5"	(0"-12") Pond Sediment - Sandy Silt, light gray (sand from erosion of pond side-banks)	
1 20"		MT -4-D-S2 Depth 12-20	(12"- 20") Silty Clay, dark gray and reddish brown silt seams, moist (Pond sediment) (Hypalon geomembrane liner at 20" depth)	
2			(20"-40") River Rocks, rounded, 3"dia to 6"dia.	
3 40"			(Hypalon geomembrane liner at 40" depth) 40" - Hit hard rock surface. Appears to be a sandstone layer.	
4				
5				
6				
7				
8				
Total Depth: 40" DEEP				
Comments: Hypalon and river-rock liner.				
Checked:		Date:		
Approved:		Date:		

Mt Taylor Mine Water Treatment Pond Test Pit Log			Pit #	MT-6-B
Location Pond #6 Bottom		GPS N 35-20.560' W 107-38.174'		
Location Description Bottom of Pond West End				
Field Engineer: Ed Loescher		Excavation Method: Small Bobcat Backhoe		
Date: April - 10-2012 2:30 pm		Operator:		
Weather and Moisture Conditions: Warm – Sunny –60d to 70d				
	Graphic Log	Sample #	Description (USCS, texture, density, color, moisture, odor, inclusions, etc.)	
0		MT -6-B-S1 depth 8"- 10"	(0"-16") Pond Sediment - Intermittent lenses of silt, sand and sandy Clay, light gray (sand from erosion of pond side banks)	
16"			(Hypalon geomembrane liner at 16" depth) (16"- 28") River Rocks, rounded, 3"dia to 6"dia.	
28"			(Hypalon geomembrane liner at 28" depth)	
42"		MT -6-B-S2 Depth 30"	(28"- 42") Sandy Silt Brown – trace gravel (<i>Natural Soil</i>) 42" - Hit hard rock surface. Appears to be a sandstone layer	
4				
5				
6				
7				
8				
Total Depth: 42" DEEP				
Comments: Hypalon and river-rock liner.				
Checked:		Date:		
Approved:		Date:		



File #

Mt Taylor Mine Water Treatment Pond Test Pit Log

Pit #

1

Location Pond 7 (GPS) N 35°20.544 W 107°38.171'

Location Description MT-7-A

Field Engineer: B. Everett Excavation Method: Backhoe/Shovel

Date: 4/10/2012 Operator: K. Strickland

Weather and Moisture Conditions: clear, sunny, warm; cool and windy in afternoon

Depth	Graphic Log	Sample #	Description (USCS, texture, density, color, moisture, odor, inclusions, etc.)
0		S7-01-01	0-10": Sediments, clayey silt, moist, dark brown Sample collected at 0-10" bgs at 15:12
			10"-12": Clay, soft red, moist
1			12"-30.5": Silty clay, dense, dark brown, moist
2		S7-01-02	Sample collected at 24-30" bgs at 15:17
			30.5"-35": Silty sand, yellow brown, moist Sample collected at 30.5-34" bgs at 15:22
3		S7-01-03	TD = 35" bgs
4			
5			
6			
7			
8			

Total Depth: 35" bgs

Comments: Geolayer at 10" bgs, 2" of moist red clay below liner
18" of dark brown clay below red clay
Native soil - silty sand below 30.5" bgs, slightly moist
Bedrock at 35" bgs

Checked:

Date:

Approved:

Everett

Date: 5/7/2012



File #

Mt Taylor Mine Water Treatment Pond Test Pit Log			
			Pit #
Location Pond 7 (GPS) N 35°20.544 W 107°38.171'			2
Location Description MT-7-B			
Field Engineer: B. Everett		Excavation Method: Backhoe/Shovel	
Date: 4/10/2012		Operator: K. Strickland	
Weather and Moisture Conditions: clear, sunny, warm; cool and windy in afternoon			
Depth	Graphic Log	Sample #	Description (USCS, texture, density, color, moisture, odor, inclusions, etc.)
0		S7-02-01	0-23": Silty sand sediments, loose, light tan, some organic material, moist to 12" bgs, dry below 12" bgs Sample collected at 0-12" bgs at 15:45
1			
2		S7-02-02	23"-43": Pond sediments, silt varved from settling Sample collected at 23-43" bgs
3		S7-02-03	43"-45": Clay, red, moist, soft. Sample collected at 43-46" bgs 45"-49": Clay and silt, brown, dense, moist
4			49"-50": Sandy silt, yellow brown, dry TD =50" bgs
5			
6			
7			
8			
Total Depth: 50" bgs			
Comments: Geolayer at 43" bgs with 2" red clay beneath Native soil at 49-50" bgs Bedrock at 50" bgs			
Checked:		Date:	
Approved: Everett		Date: 5/7/2012	



File #

Mt Taylor Mine Water Treatment Pond Test Pit Log

Pit #

1

Location Pond 8 (GPS) N 35°20.708 W 107°38.129'

Location Description MT-8-E

Field Engineer: B. Everett Excavation Method: Backhoe/Shovel

Date: 4/10/2012 Operator: K. Strickland

Weather and Moisture Conditions: clear, sunny, warm; cool and windy in afternoon

Depth	Graphic Log	Sample #	Description (USCS, texture, density, color, moisture, odor, inclusions, etc.)
0		S8-01-01	0-17": Clayey silt, pliable, brown, moist Sample collected at 0-8" bgs at 13:00
1		S8-01-02	17"-30": Clay, dense, gray brown, with white precipitate BaCl 6" layer from 17-23" bgs Sample collected at 17-30" bgs Increase in brown silty sand 23-30" bgs
2		S8-01-03	30"-40": Silty sand, friable, yellow brown, dry Sample collected at 36-40" bgs at 13:09 TD = 40" bgs
3			
4			
5			
6			
7			
8			

Total Depth: 40" bgs

Comments: Moist to 20" bgs
BaCl layer 17-23" bgs in clay 17-30" bgs
Native soil yellow brown, silty sand at 30" bgs

Checked:

Date:

Approved:

Everett

Date: 5/7/2012



File #

Mt Taylor Mine Water Treatment Pond Test Pit Log

Pit #

2

Location Pond 8 (GPS) N 35°20.714' W 107°38.150'

Location Description MT-8-D

Field Engineer: B. Everett Excavation Method: Backhoe/Shovel

Date: 4/10/2012 Operator: K. Strickland

Weather and Moisture Conditions: clear, sunny, warm; cool and windy in afternoon

Depth	Graphic Log	Sample #	Description (USCS, texture, density, color, moisture, odor, inclusions, etc.)
0		S8-02-01	0-18": Silty sand, trace gravel, brown, friable, moist Sample collected at 0-12" bgs at 13:26
1		S8-02-02	18"-24": Clayey silt, varved gray and white sediment settling Sample collected 18-24" bgs at 13:36
2			24"-56": Clay, very dense, dark brown, slightly damp to dry
3		S8-02-03	Sample collected at 40-50" bgs at 13:36
4			
5		S8-02-04	56"-62": Silty sand, yellow brown, friable, dry Sample collected 58-62" bgs at 13:39 TD = 62" bgs
6			
7			
8			

Total Depth: 62" bgs

Comments: Silty sand, brown, friable, some gravel 0-18" bgs
Clayey silt, gray white, varved pond sediments 18-24" bgs
Clay, very dense, dark brown, dry 24-56" bgs
Native soil, yellow brown, silty sand 56-62" bgs

Checked: Date:

Approved: Everett Date: 5/7/2012



File #

Mt Taylor Mine Water Treatment Pond Test Pit Log**Pit #****MT-A-A**

Location Area "A" GPS no reading W no reading

Location Description Bottom of Pond –North End

Field Engineer: Ed Loescher Excavation Method: Small Bobcat Backhoe

Date: April - 10-2012 11:45 am Operator:

Weather and Moisture Conditions: Warm – Sunny – 60 to 70d

	Graphic Log	Sample #	Description (USCS, texture, density, color, moisture, odor, inclusions, etc.)
4"	0	MT -A-A-S1 Depth 4"	(0"-4") Pond Sediment - Clayey Silt with some silt– Dark Brown
	1	MT -A-A-S2 Depth 8"	(4"- 30") Sandy Clay, trace gravel, brown, moist (<i>Natural Soil</i>)
30"	2		
36"			(30"-36") Silty Sand, some clay, trace gravel, tan (<i>Natural Soil</i>)
	3		
	4		
	5		
	6		
	7		
	8		

Total Depth: 36" DEEP

Comments:

Checked: _____ Date: _____

Approved: _____ Date: _____



RIO GRANDE RESOURCES CORPORATION

File #

MT-A-B

Mt Taylor Mine Water Treatment Pond Test Pit Log

Pit #

Location Area "A" GPS no reading W no reading

Location Description Bottom of Pond -South End

Field Engineer: Ed Loescher Excavation Method: Small Bobcat Backhoe

Date: April - 10-2012 11:30 am Operator:

Weather and Moisture Conditions: Warm – Sunny – 60 to 70d

	Graphic Log	Sample #	Description (USCS, texture, density, color, moisture, odor, inclusions, etc.)
0 6"		MT -A-B-S1 Depth 4"	(0"-6") Pond Sediment - Clayey Silt with some silt- Dark Brown
1		MT -A-B-S2 Depth 8"	(6"- 28") Sandy Clay, trace gravel, brown, moist (Natural Soil)
2 28"		MT -A-B-S3 Depth 30"	(28"-36") Silty Sand, some clay, trace gravel, brown, moist (Natural Soil)
3			
4			
5			
6			
7			
8			

Total Depth: 36" DEEP

Comments:

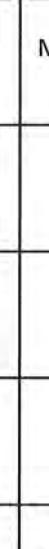
Checked:

Date:

Approved:

Date:

File #

Mt Taylor Mine Water Treatment Pond Test Pit Log			Pit #	MT-OP-D
Location	OP (ore pile pond)	GPS N 35-20.675' W 107-38.004'		
Location Description Bottom of Pond – West end				
Field Engineer:	Ed Loescher		Excavation Method: Small Bobcat Backhoe	
Date:	April - 10-2012 12:45 pm		Operator:	
Weather and Moisture Conditions: Warm – Sunny – 60 -70d				
	Graphic Log	Sample #	Description (USCS, texture, density, color, moisture, odor, inclusions, etc.)	
0		MT -OP-D-S1 Depth 6"	(Alluvial Sand 0-48") Sand, trace silt and gravel, tan, loose. (layer of sand from erosion of inlet channel and pond side-banks.)	
1				
2				
3				
48"				
4		MT -OP-D-S2 Depth 48" -50"	(48"- 72") Clay, frequent silt seams, dark gray, moist. (possible original pond sediment from 48"-50" and underlain by a clay liner to 72")	
5				
72"				
6			(72"-76") Clayey Sand, trace gravel, brown, moist (Natural Soil)	
76"				
7				
8				
Total Depth: 76" DEEP				
Comments: Difficult to determine layering below 48" due to the upper layer of sand caving into excavation. Upper layer of sand due to erosion from pond inlet and side-banks. Observed perched water seeping slowly into excavation at 50" depth				
Checked:		Date:		
Approved:		Date:		



Mt Taylor Mine Water Treatment Pond Test Pit Log			Pit #	MT-OP-C
Location OP (ore pile pond)		GPS N 35-20.680' W 107-38.032'		
Location Description Bottom of Pond - East end				
Field Engineer: Ed Loescher		Excavation Method: Small Bobcat Backhoe		
Date: April - 10-2012 1:20 pm		Operator:		
Weather and Moisture Conditions: Warm – Sunny – 60 -70d				
	Graphic Log	Sample #	Description (USCS, texture, density, color, moisture, odor, inclusions, etc.)	
0		MT -OP-C-S1 Depth 6"	(Pond Sediment 0-18") Mix of Silt and Clay - Dark Gray- Trace Gravel	
1 18"				
2		MT -OP-C-S2 Depth 20"	(18"- 44") Clayey Sand with some silt - Brown - Trace Gravel (Natural Soil)	
3 44"				
4		MT -OP-C-S3 Depth 48" -50"	(44"- 72") Sandy Clay - Brown- Some Gravel – moist (Natural Soil)	
5 72"				
6		MT -OP-C-S4 Depth 72"	(72") Clayey Sand - Brown - Some Gravel – moist (Natural Soil)	
7				
8				
Total Depth: 72" DEEP				
Comments:				
Checked:		Date:		
Approved:		Date:		

APPENDIX B
Kleinfelder Laboratory Results

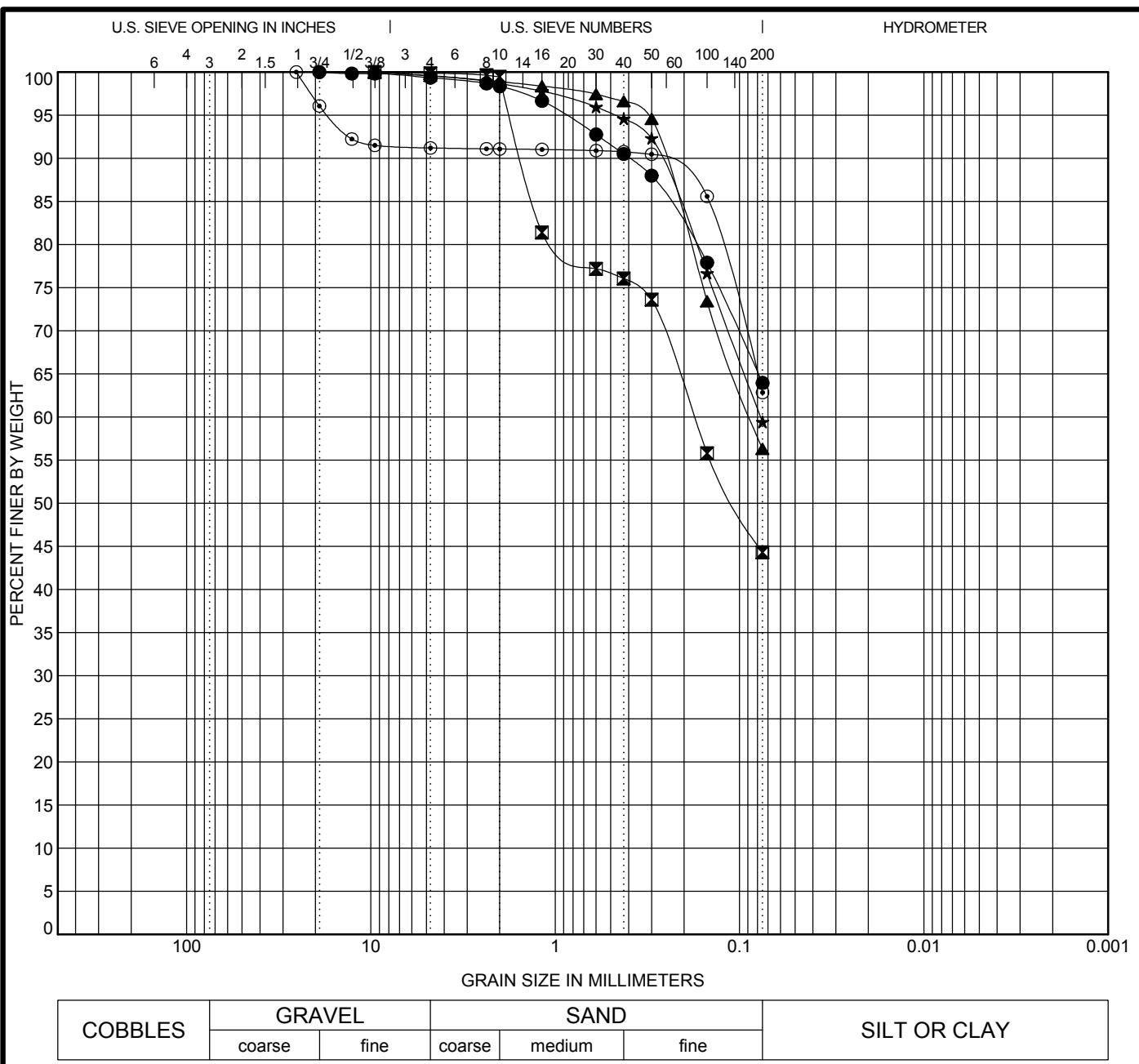
SUMMARY OF LABORATORY ANALYSIS

Project: **Mount Taylor Mine: Settling Pond Evaluations**
 Project Number: **96450**

Location: **San Mateo, New Mexico**

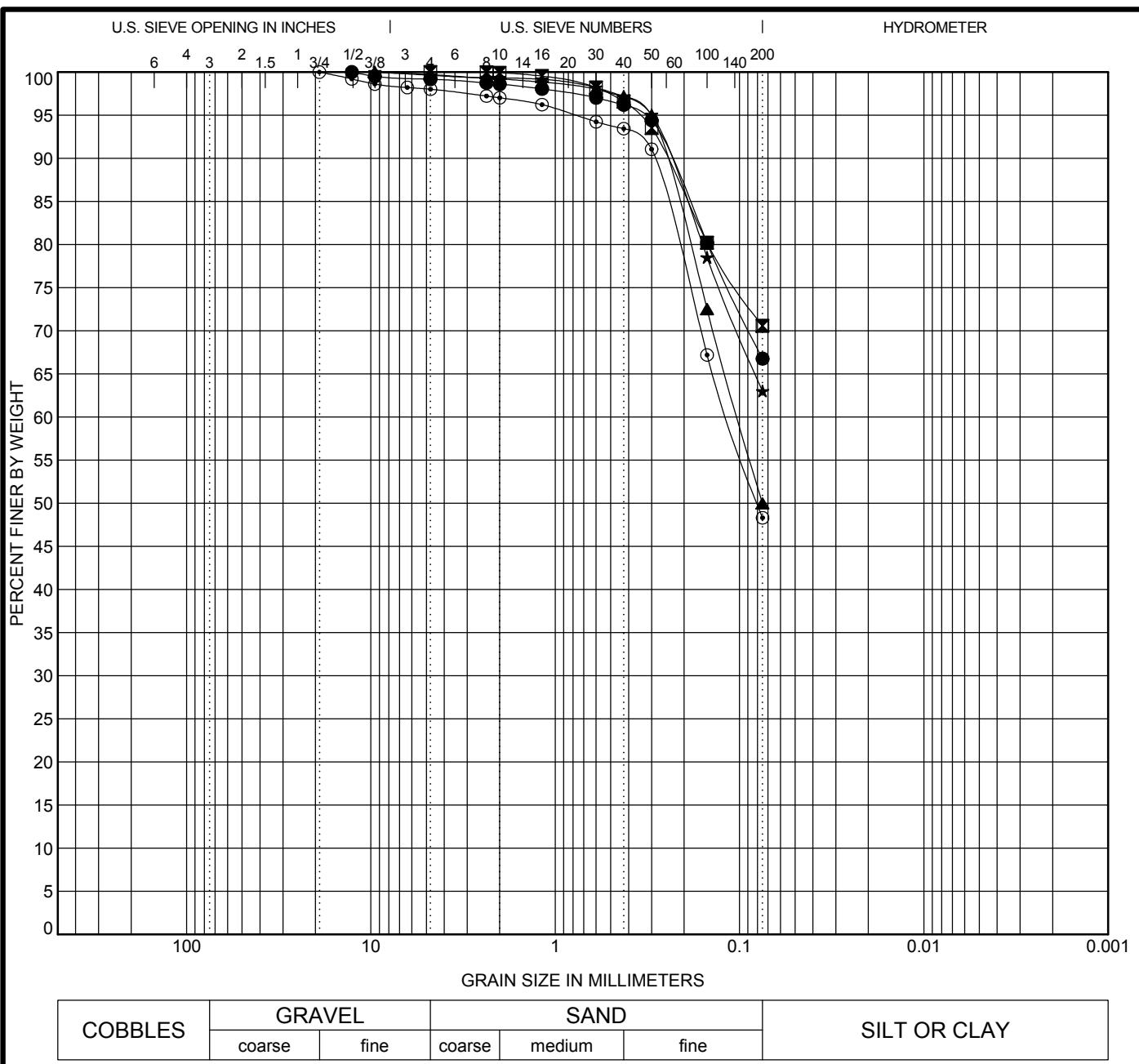
Boring Number	Depth (ft.)	Soil Classification		Atterberg Limits		Sieve Analysis - Accumulative % Passing														Moisture Content (%)	Dry Density (pcf)	Unconfined Comp. Strength (psi)
		USCS	AASHTO	PI	LL	No. 200	No. 100	No. 50	No. 40	No. 30	No. 16	No. 10	No. 8	No. 4	3/8 in	1/2 in	3/4 in	1 in	1/2 in			
Borrow Area	2.0 - 5.5	CL	A-6	13	37	64	78	88	91	93	97	98	99	99	100	100	100	--	--	10.7	--	--
MT-1-F	0.0 - 0.5	SC	A-6	15	35	44	56	74	76	77	81	99	100	100	100	--	--	--	--	13.7	--	--
MT-2-D	0.0 - 0.5	CL	A-6	14	33	56	73	95	97	97	98	99	99	100	100	--	--	--	--	16.4	--	--
MT-3-F	0.0 - 0.5	CL	A-6	17	35	59	77	92	95	96	98	99	99	100	100	--	--	--	--	17.3	--	--
MT-4-F	0.0 - 0.5	CL	A-6	13	34	63	86	90	91	91	91	91	91	92	92	96	100	--	--	10.5	--	--
MT-5-F	0.0 - 0.5	CL	A-6	17	37	67	80	94	96	97	98	99	99	99	100	100	--	--	--	17.6	--	--
MT-7-C	0.0 - 0.5	CL	A-6	17	39	71	80	94	97	98	100	100	100	100	--	--	--	--	--	17.9	--	--
MT-8-F	0.0 - 0.5	SC	A-6	13	27	50	73	95	97	98	99	99	99	100	100	--	--	--	--	12.9	--	--
MT-OP-E	0.0 - 0.5	CL	A-6	12	31	63	79	95	97	98	99	99	99	100	100	--	--	--	--	10.3	--	--
MT-WP-SM1	0.0 -	SC	A-6	24	37	48	67	91	93	94	96	97	97	98	99	99	100	--	--	5.9	--	--
MT-WP-SM2	0.0 -	CL	A-7-6	27	43	70	78	85	86	87	89	91	92	96	98	100	--	--	--	10.9	--	--
MT-WP-SM3	0.0 -	SC	A-6	21	34	46	63	89	93	95	96	97	97	98	98	99	100	--	--	3.0	--	--





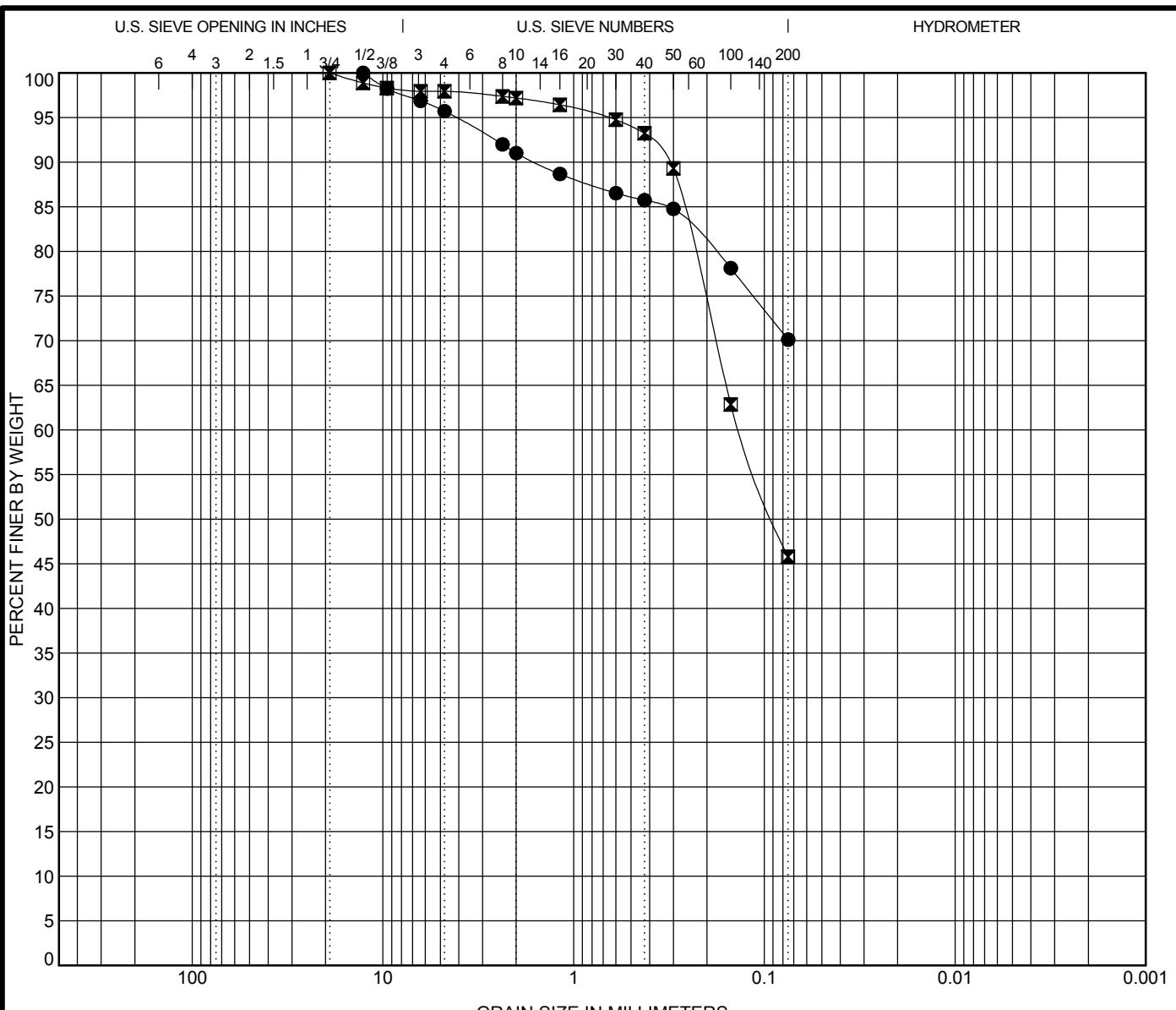
ASTM D1140 ASTM C136

					GRAIN SIZE DISTRIBUTION			
					Project: Mount Taylor Mine: Settling Pond Evaluations			
9019 Washington NE, Building A Albuquerque, NM 87113					Location: San Mateo, New Mexico			
					Project Number: 96450			



ASTM D1140 ASTM C136

 9019 Washington NE, Building A Albuquerque, NM 87113	GRAIN SIZE DISTRIBUTION	
	Project: Mount Taylor Mine: Settling Pond Evaluations	
	Location: San Mateo, New Mexico	
	Project Number: 96450	

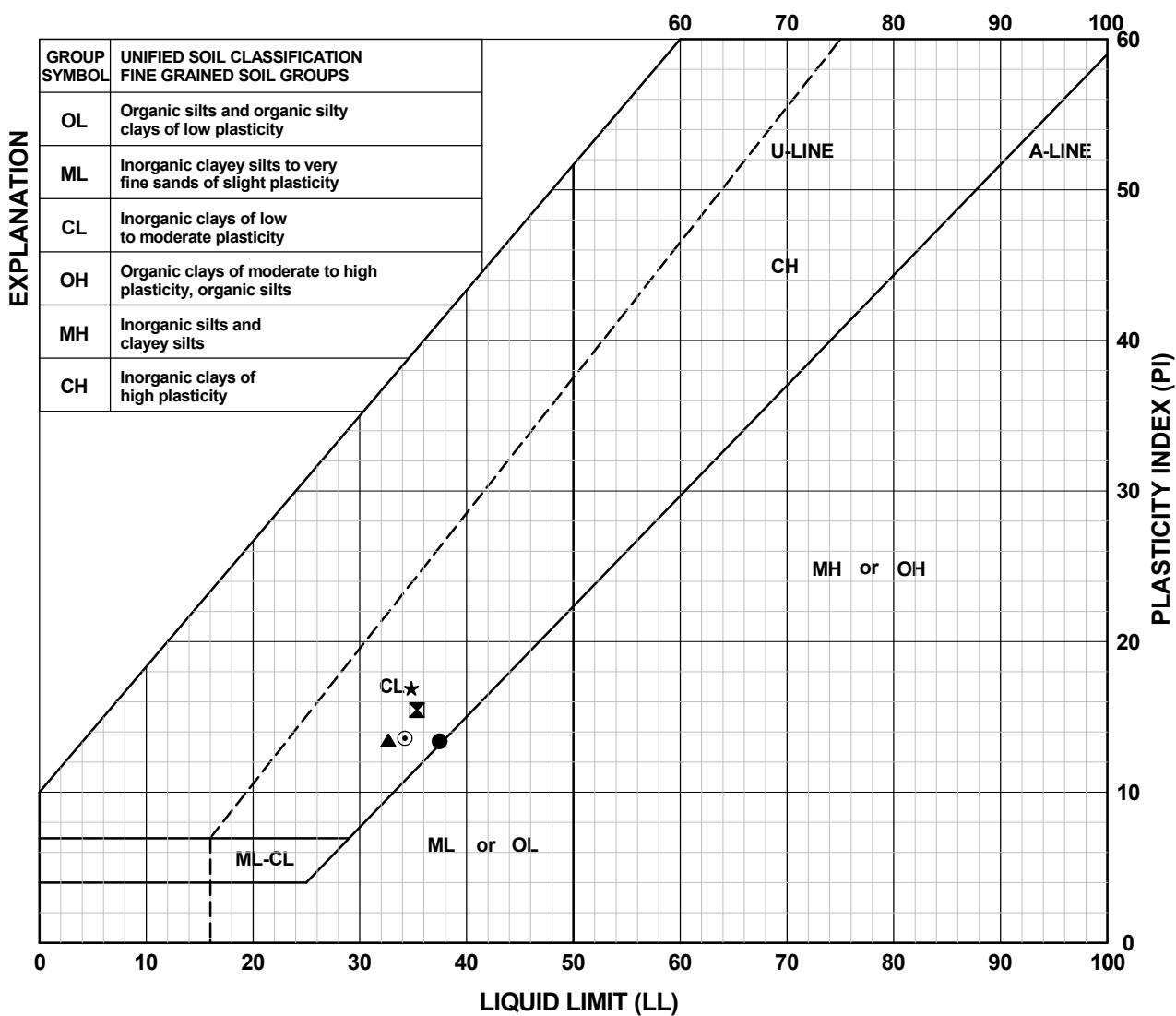


Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	MT-WP-SM2	0.0	12.7			4.3	25.6	70.1	
✖	MT-WP-SM3	0.0	19.05	0.134		2.1	52.2	45.8	

ASTM D1140 ASTM C136

 9019 Washington NE, Building A Albuquerque, NM 87113	GRAIN SIZE DISTRIBUTION	
	Project: Mount Taylor Mine: Settling Pond Evaluations	
	Location: San Mateo, New Mexico	
	Project Number: 96450	

ASTM D4318



Specimen Identification		Liquid Limit (LL)	Plastic Limit (PL)	Plasticity Index (PI)
●	Borrow Area	2.0	37	13
☒	MT-1-F	0.0	35	15
▲	MT-2-D	0.0	33	14
★	MT-3-F	0.0	35	17
○	MT-4-F	0.0	34	13

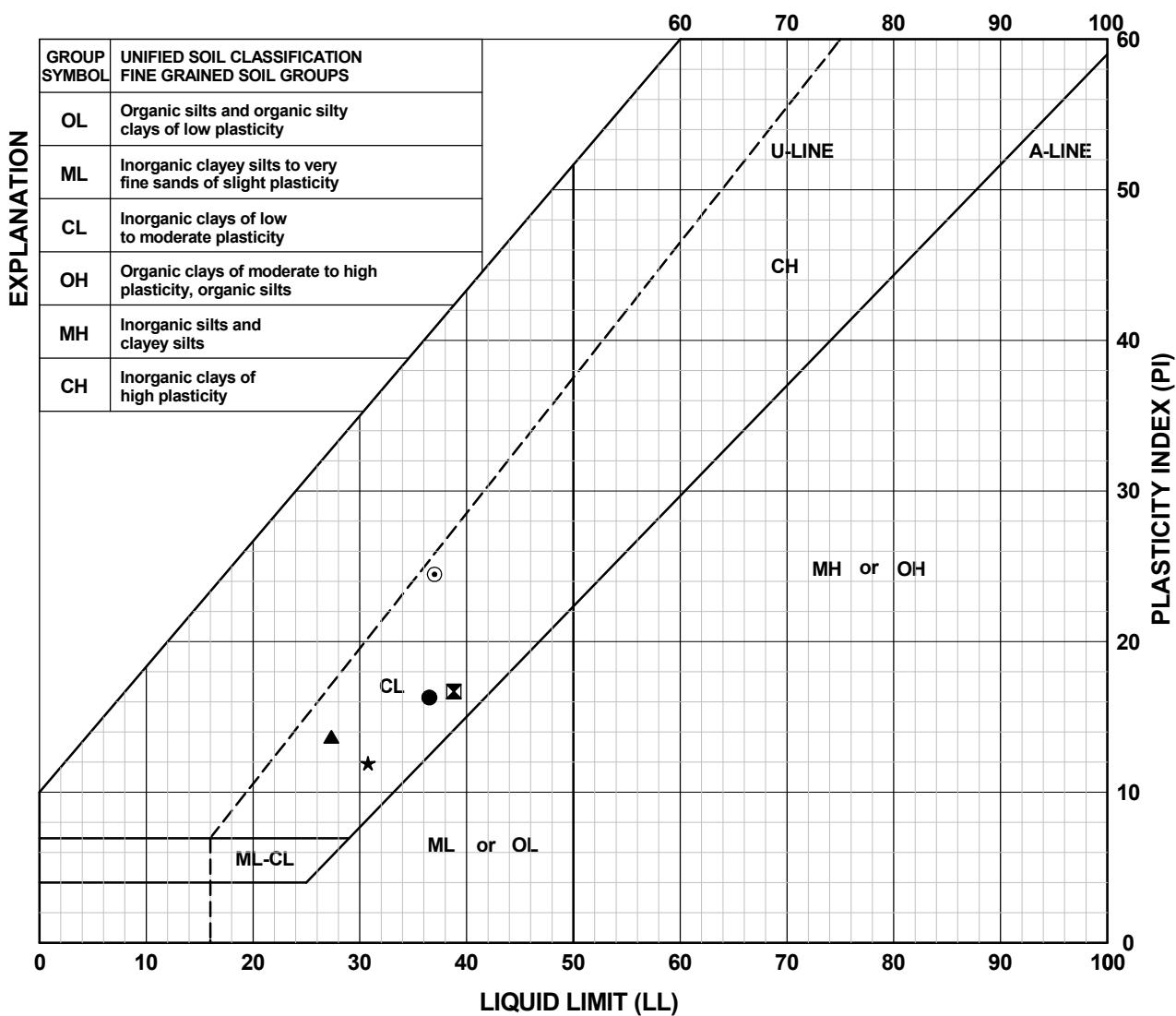


9019 Washington NE, Building A
Albuquerque, NM 87113

ATTERBERG LIMITS

Project: Mount Taylor Mine: Settling Pond Evaluations
Location: San Mateo, New Mexico
Project Number: 96450

ASTM D4318



Specimen Identification		Liquid Limit (LL)	Plastic Limit (PL)	Plasticity Index (PI)
●	MT-5-F	0.0	37	20
✖	MT-7-C	0.0	39	22
▲	MT-8-F	0.0	27	14
★	MT-OP-E	0.0	31	19
○	MT-WP-SM1	0.0	37	24

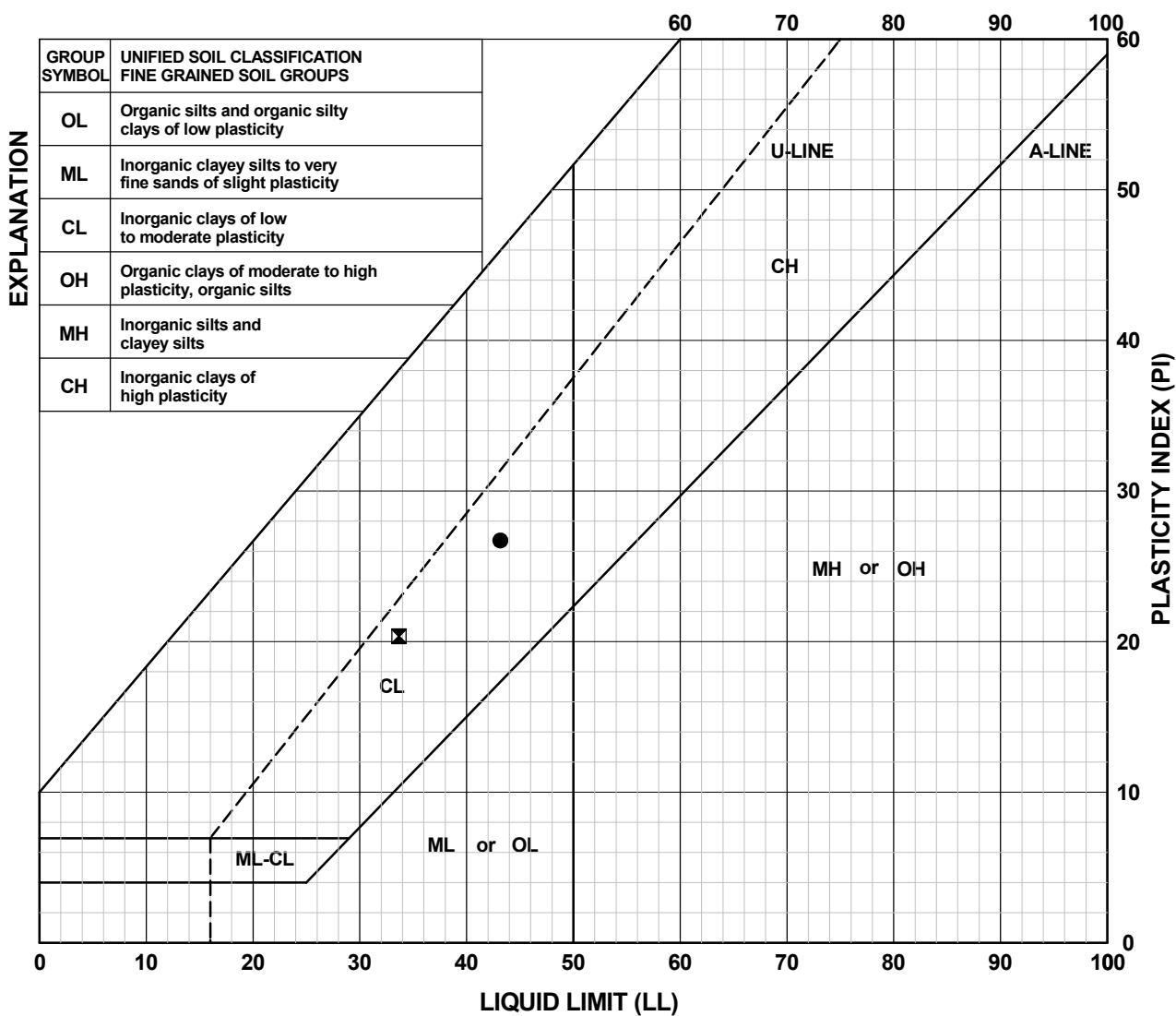


9019 Washington NE, Building A
Albuquerque, NM 87113

ATTERBERG LIMITS

Project: Mount Taylor Mine: Settling Pond Evaluations
Location: San Mateo, New Mexico
Project Number: 96450

ASTM D4318



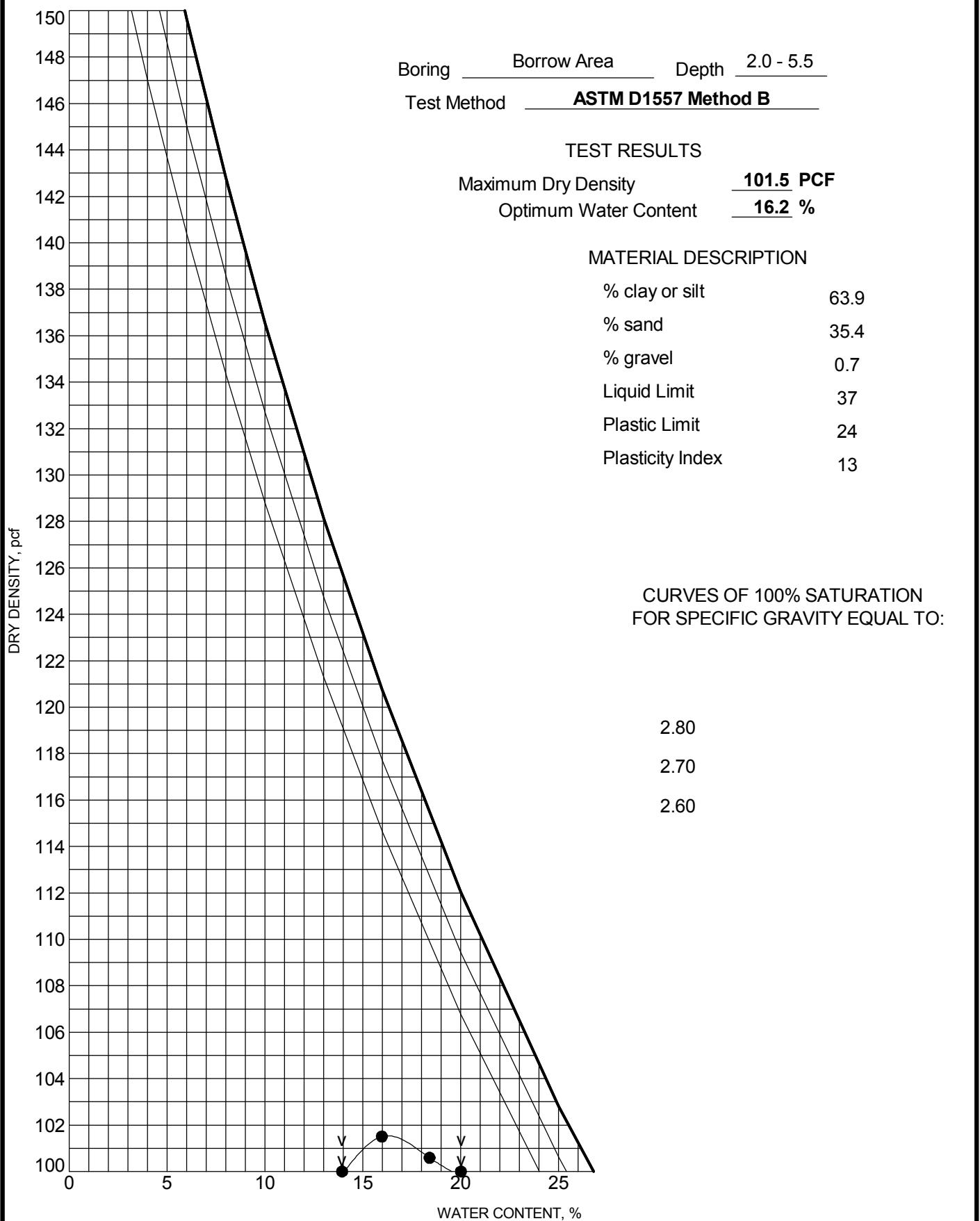
Specimen Identification		Liquid Limit (LL)	Plastic Limit (PL)	Plasticity Index (PI)
●	MT-WP-SM2	0.0	43	27
☒	MT-WP-SM3	0.0	34	21



9019 Washington NE, Building A
Albuquerque, NM 87113

ATTERBERG LIMITS

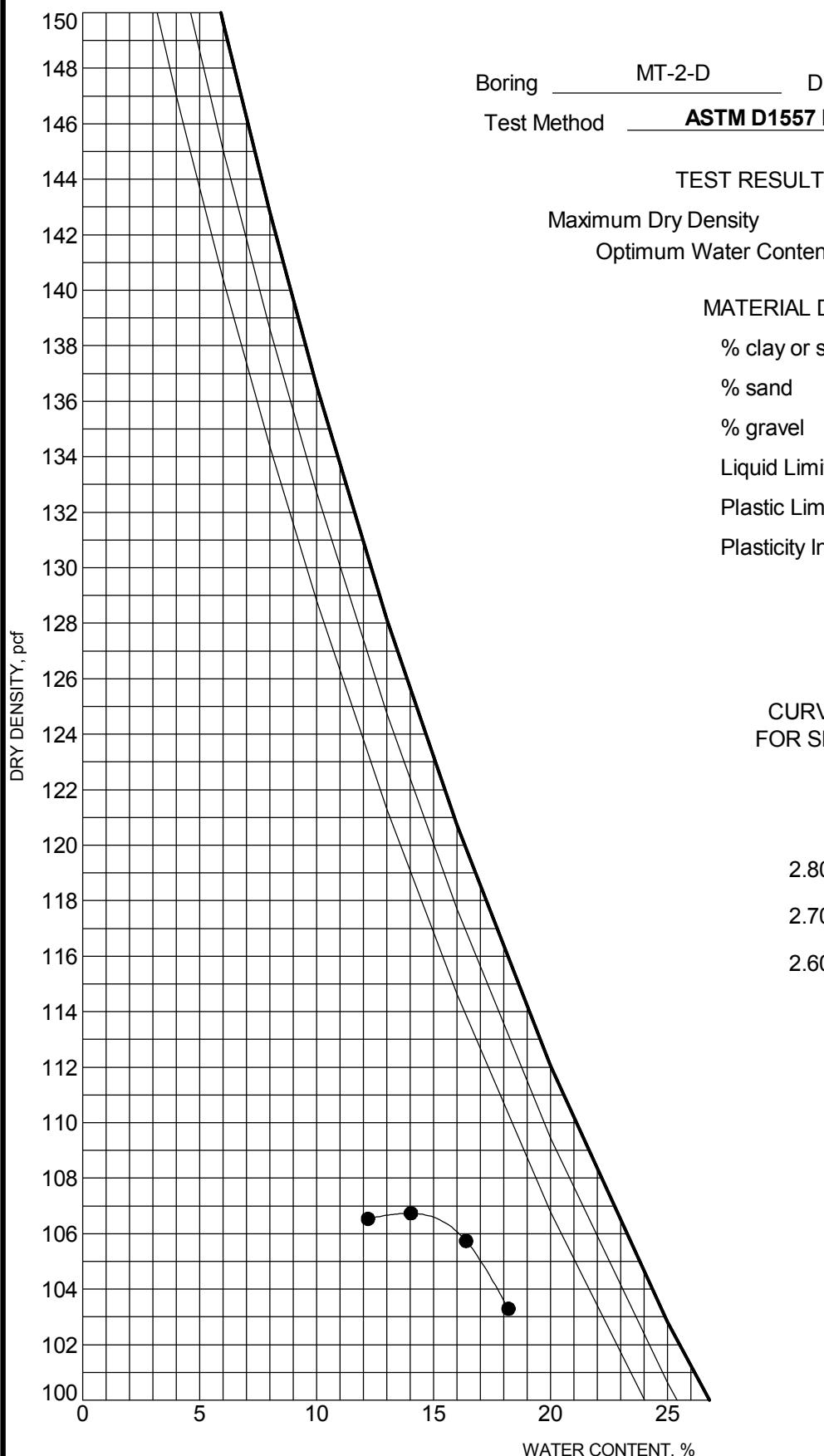
Project: Mount Taylor Mine: Settling Pond Evaluations
Location: San Mateo, New Mexico
Project Number: 96450



9019 Washinton NE Bldg A
 Albuquerque, NM 87113

MOISTURE-DENSITY RELATIONSHIP

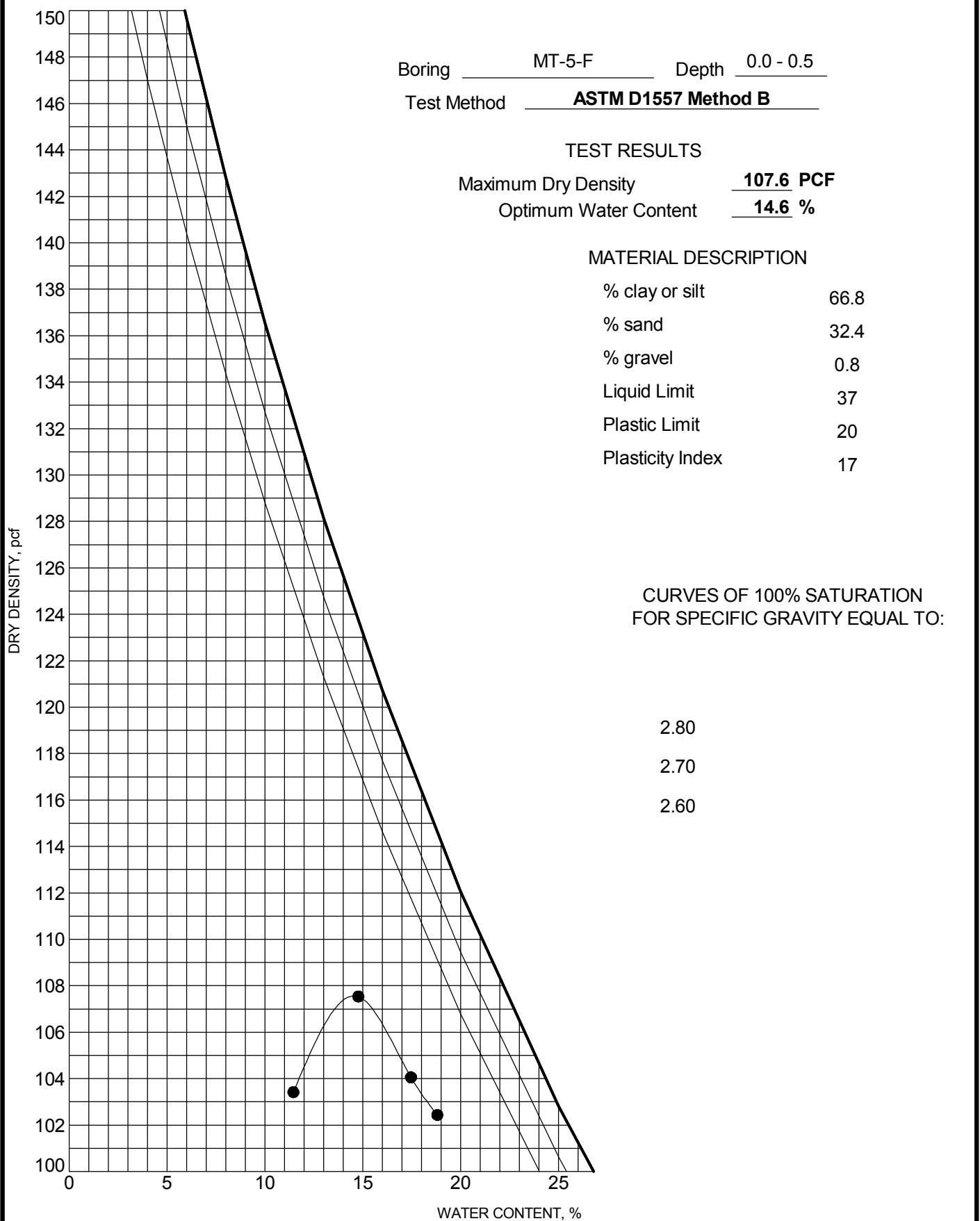
Project: Mount Taylor Mine: Settling Pond Evaluations
 Location: San Mateo, New Mexico
 Project Number: 96450



9019 Washinton NE Bldg A
Albuquerque, NM 87113

MOISTURE-DENSITY RELATIONSHIP

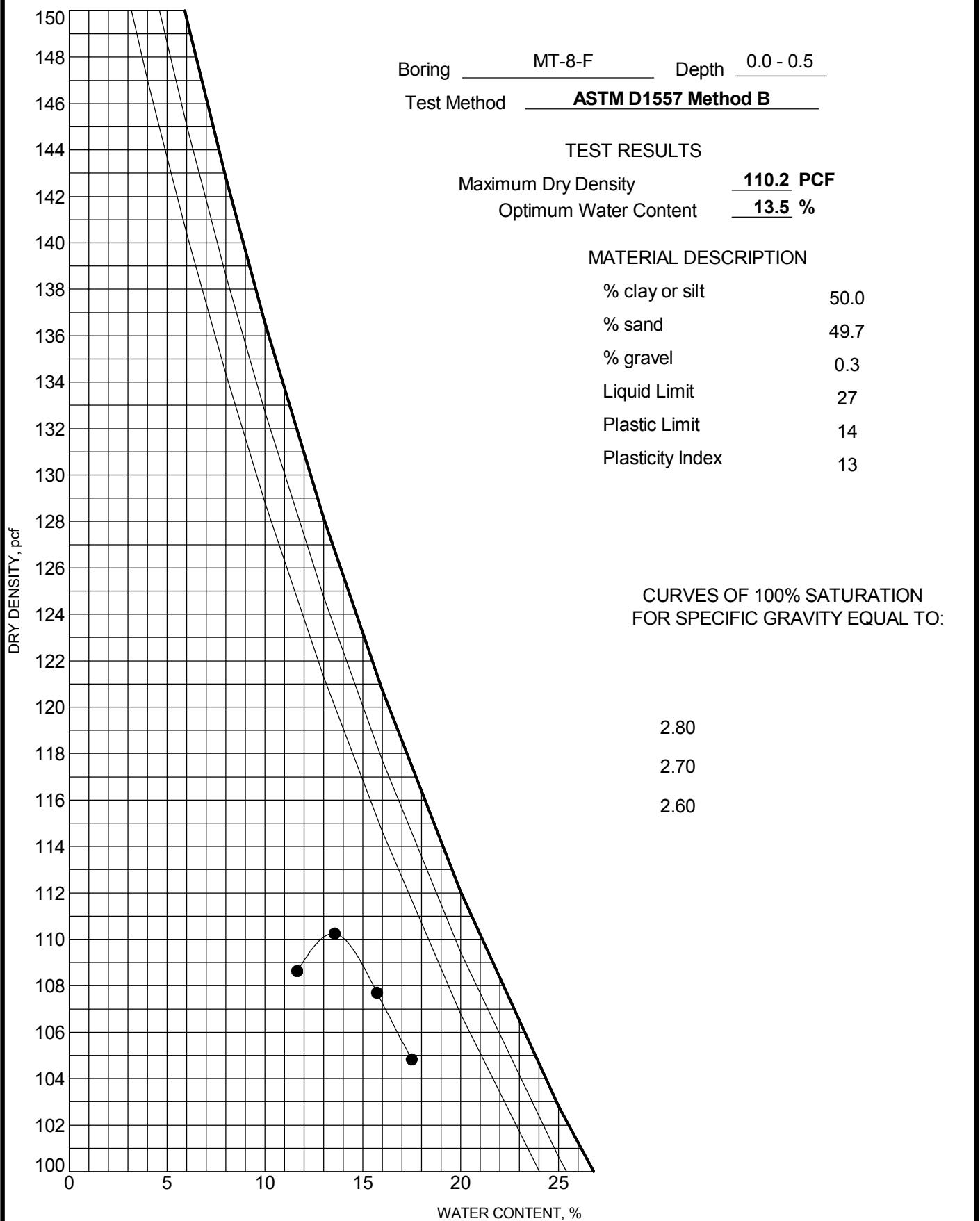
Project: Mount Taylor Mine: Settling Pond Evaluations
Location: San Mateo, New Mexico
Project Number: 96450



9019 Washinton NE Bldg A
 Albuquerque, NM 87113

MOISTURE-DENSITY RELATIONSHIP

Project: Mount Taylor Mine: Settling Pond Evaluations
 Location: San Mateo, New Mexico
 Project Number: 96450

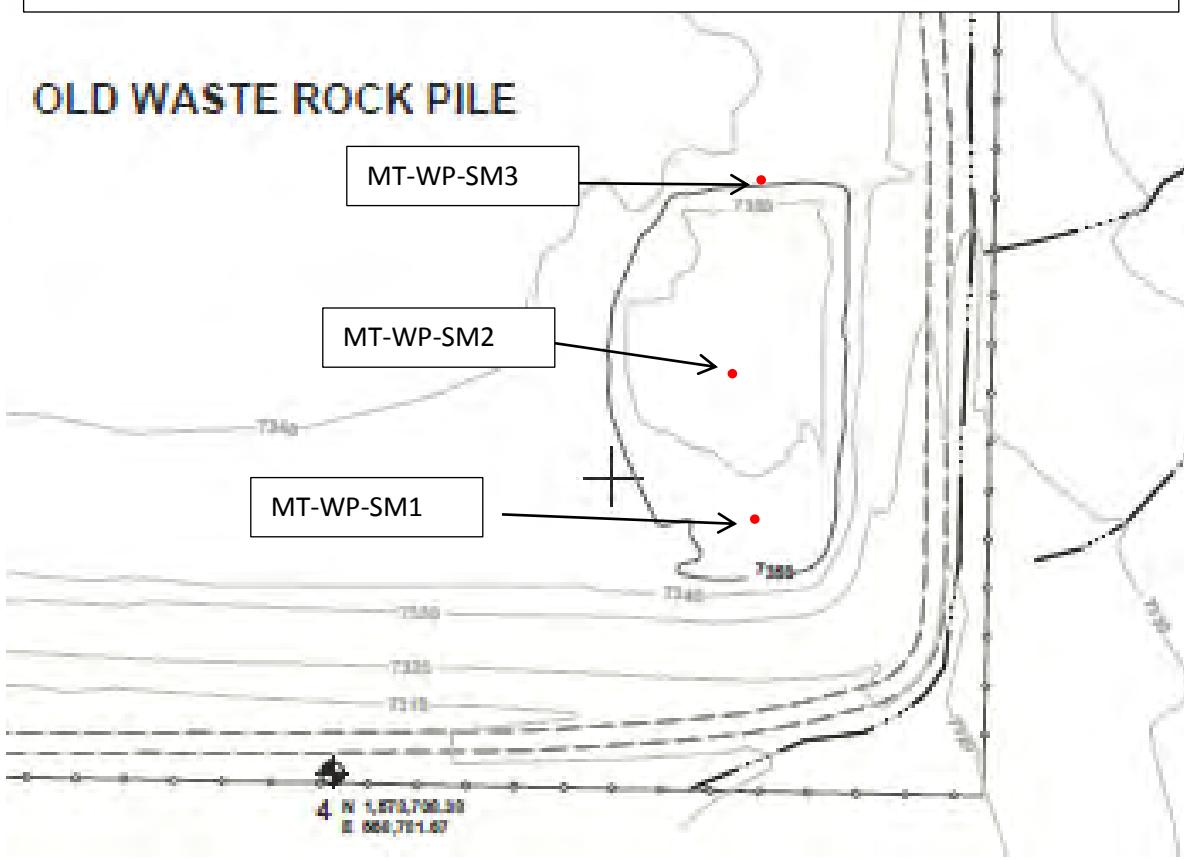


9019 Washinton NE Bldg A
 Albuquerque, NM 87113

MOISTURE-DENSITY RELATIONSHIP

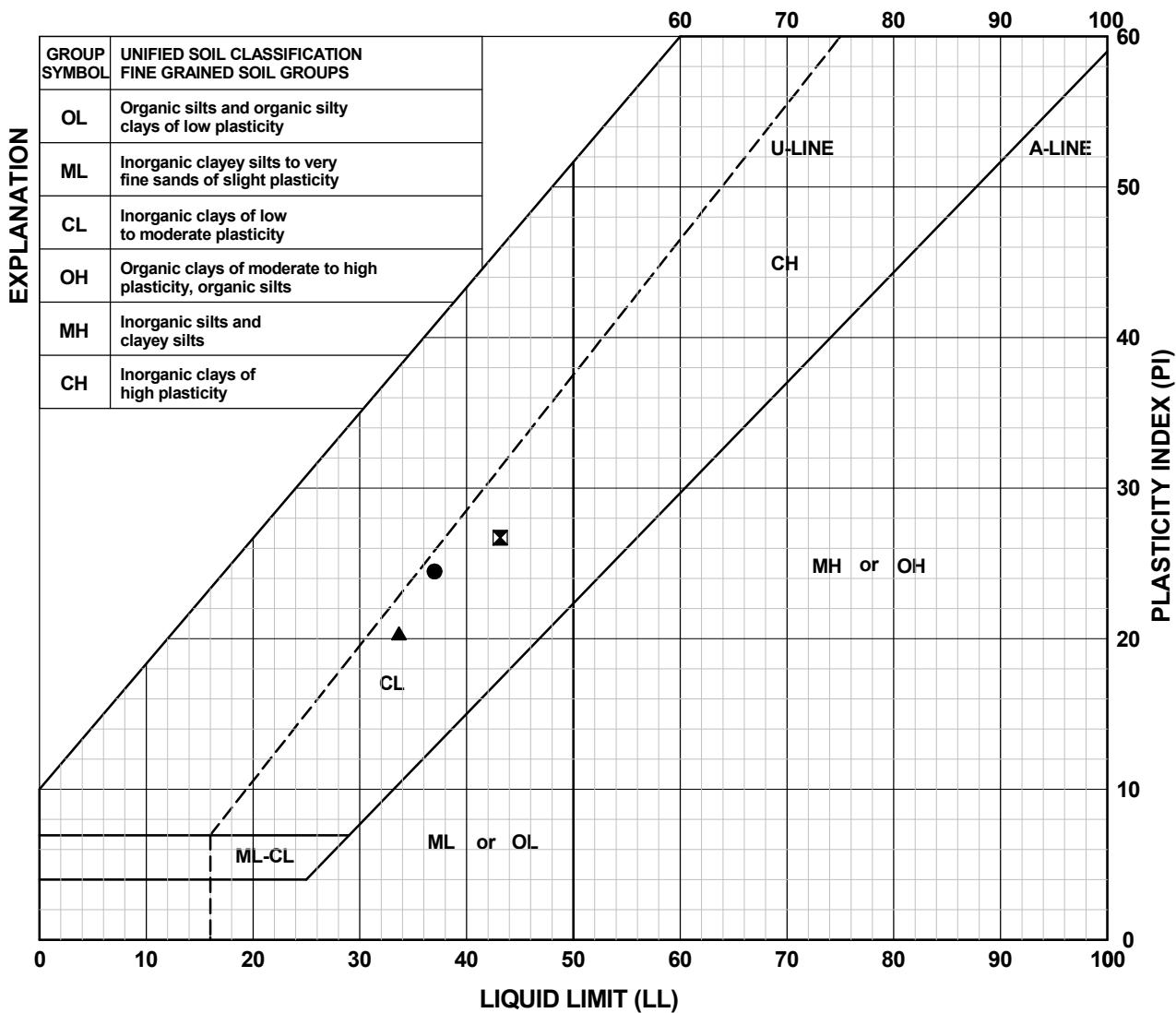
Project: Mount Taylor Mine: Settling Pond Evaluations
 Location: San Mateo, New Mexico
 Project Number: 96450

MT TAYLOR MINE SHAFT MUCK SAMPLE LOCATIONS – 5/18/2010



Bulk samples of shaft muck from Mt. Taylor Mine waste rock pile collected on 5/18/2012 by Alan Kuhn. Locations are approximate (+/- 50 ft) based on visual reference to slopes. Splits delivered 5/18/12 to Kleinfelder Albuquerque for grain size analysis and plasticity tests. Other splits left with RGR Mine office for shipment to Energy Labs for testing of U and Ra concentration.

ASTM D4318



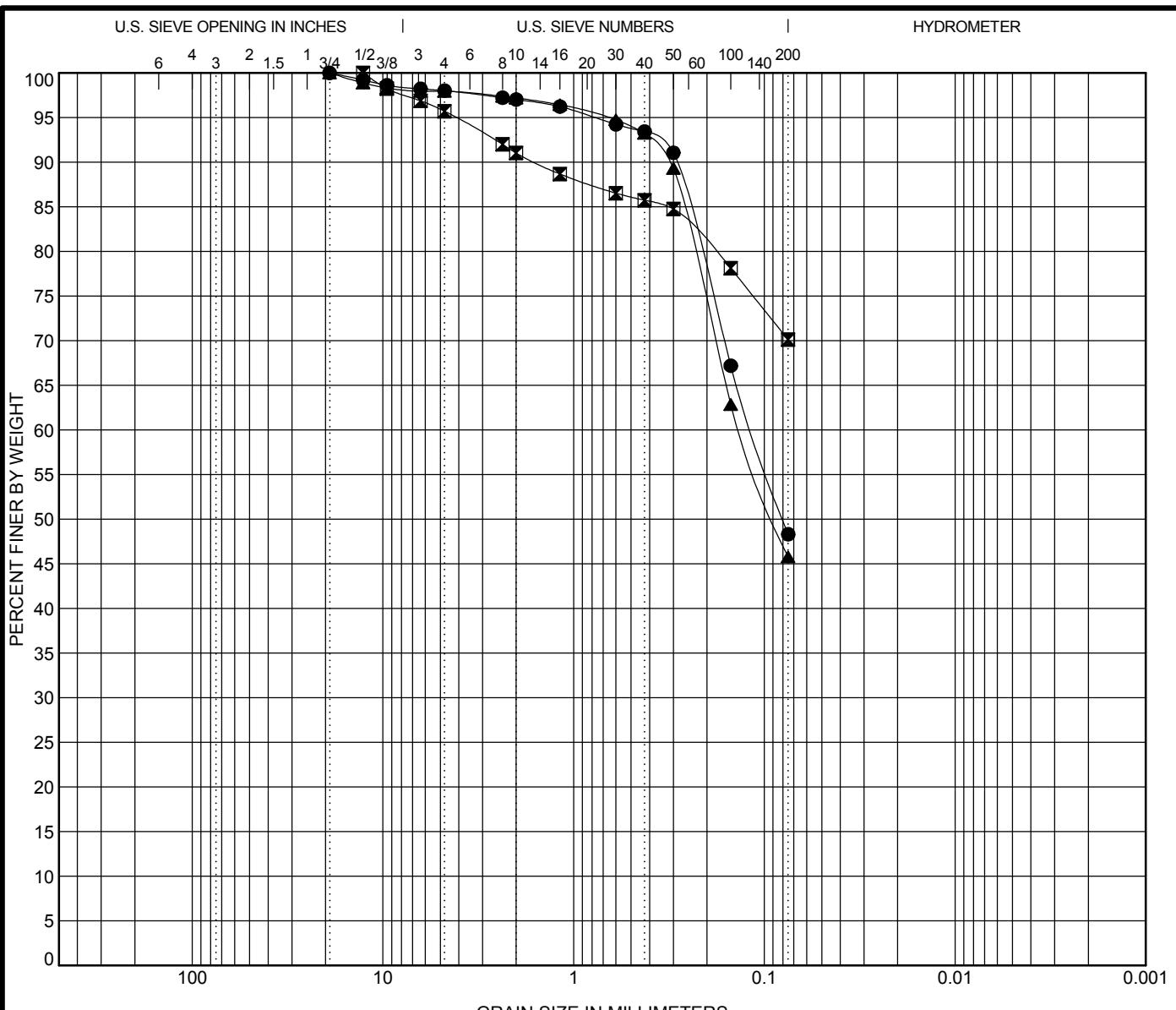
Specimen Identification		Liquid Limit (LL)	Plastic Limit (PL)	Plasticity Index (PI)
●	MT-WP-SM1	0.0	37	24
■	MT-WP-SM2	0.0	43	27
▲	MT-WP-SM3	0.0	34	21



9019 Washington NE, Building A
Albuquerque, NM 87113

ATTERBERG LIMITS

Project: Mount Taylor Mine: Settling Pond Evaluations
Location: San Mateo, New Mexico
Project Number: 96450



Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	MT-WP-SM1	0.0	19.05	0.115			2.0	49.7	48.3
■	MT-WP-SM2	0.0	12.7				4.3	25.6	70.1
▲	MT-WP-SM3	0.0	19.05	0.134			2.1	52.2	45.8

ASTM D1140 ASTM C136

 9019 Washington NE, Building A Albuquerque, NM 87113	GRAIN SIZE DISTRIBUTION	
	Project: Mount Taylor Mine: Settling Pond Evaluations	
	Location: San Mateo, New Mexico	
	Project Number: 96450	

SUMMARY OF LABORATORY ANALYSIS

Project: Mount Taylor Mine: Settling Pond Evaluations
 Project Number: 96450

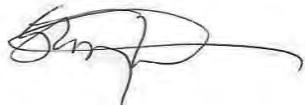
Location: San Mateo, New Mexico

Boring Number	Depth (ft.)	Soil Classification		Atterberg Limits		Sieve Analysis - Accumulative % Passing															Moisture Content (%)	Dry Density (pcf)	Unconfined Comp. Strength (psi)
		USCS	AASHTO	PI	LL	No. 200	No. 100	No. 50	No. 40	No. 30	No. 16	No. 10	No. 8	No. 4	3/8 in	1/2 in	3/4 in	1 in	1 1/2 in				
MT-WP-SM1	0.0 -	SC	A-6	24	37	48	67	91	93	94	96	97	97	98	99	99	100	--	--	5.9	--	--	
MT-WP-SM2	0.0 -	CL	A-7-6	27	43	70	78	85	86	87	89	91	92	96	98	100	--	--	--	10.9	--	--	
MT-WP-SM3	0.0 -	SC	A-6	21	34	46	63	89	93	95	96	97	97	98	98	99	100	--	--	3.0	--	--	

MEMORANDUM

Date: June 6, 2012

From: Stanley Fitch, CHP, Radiation Safety Officer



To: Joel Lister, Mine Manager, Mt. Taylor Mine

Subject: April 2012 Soil Investigation

On April 23, 2012, a soil sampling campaign was performed to investigate possible environmental dispersal of uranium and its progeny from the Mt. Taylor Mine. A total of 16 samples were retrieved, 2 background locations and 14 locations along arroyos that drain the mine property. In addition, gamma dose rate measurements were taken.

The purpose of this investigation is to determine background radionuclide concentrations and to evaluate the potential spread of uranium and radium from the mine. To wit, soil samples were taken at various locations adjacent to drainage features (e.g., Marquez Arroyo) and in the thalwegs of these features. The background locations selected are locations MTE-1 (up Marquez Canyon next to the Forest Service Boundary) and MTE-7 (North ¼ Corner of Section 24) for grades above drainage features.

MTE-2 was selected as the background location for the Marquez Canyon drainage. However, because the steepness of the arroyo created a sandy bed with very limited organics that would retain background naturally occurring radioactive material (NORM), it is believed that MTE-2 is a poor representation of the remainder of the drainage.

An aerial map is attached depicting the sample locations. The soil sample locations are also attached in Table 2 (below) with their respective New Mexico State Plane Coordinates and sample analysis results. See also Table 3.

The following observations are made based on the radionuclide data in Table 2:

- There appears to be no discernible dispersal of uranium and uranium progeny off the mine property.
- The concentrations of radionuclides in the Marquez Canyon arroyo adjacent and below Pond 8 (MTE-3, MTE-4, MTE-5, MTE-6) are equivalent to or lower than the background concentrations (MTE-1, MTE-2, MTE-7), indicating: 1) no discernible spread of contamination north of the current boundary; and 2) seasonal water flows purge organics from the Marquez arroyo thalweg that would contain naturally occurring radioactive material (NORM) and radionuclides from the mine (TENORM).

- Radionuclide concentrations in the alluvial deposits north and northeast of San Mateo (MTE-8, MTE-9, MTE-10, MTE-11, MTE-13, MTE-14) are consistent with NORM concentrations typical for this region at locales away from uranium mining operations. There are no identifiable patterns that would indicate the dispersal of uranium and radium into the plain from Mt. Taylor Mine.
- The slightly elevated ambient radiation readings north of Pond 8 were not explained by the soil sample analyses performed for this investigation. Please compare the survey results for MTE-3 and MTE-4 against the survey results for the background locations:

Table 1

Location	Dose Rate μrem/h	U-238 pCi/g	Ra-226 pCi/g
MTE-1 (Surface Grade BKG)	18	1.6	1.7
MTE-7 (Surface Grade BKG)	13	0.6	1.5
MTE-3 (Surface Grade)	26	0.5	1.4

Regressional analysis of the data in Table 2 indicates very poor statistical correlation between the dose rates and the concentrations of Radium-226 in the soil.

The conclusions are that: 1) **radiation “shine” from nearby** and elevated rock and soils could be affecting the instrument readings; and 2) soil sample analyses must be performed along with dose rate surveys when evaluating remediation requirements.

April 23, 2012
Soil Sample Locations

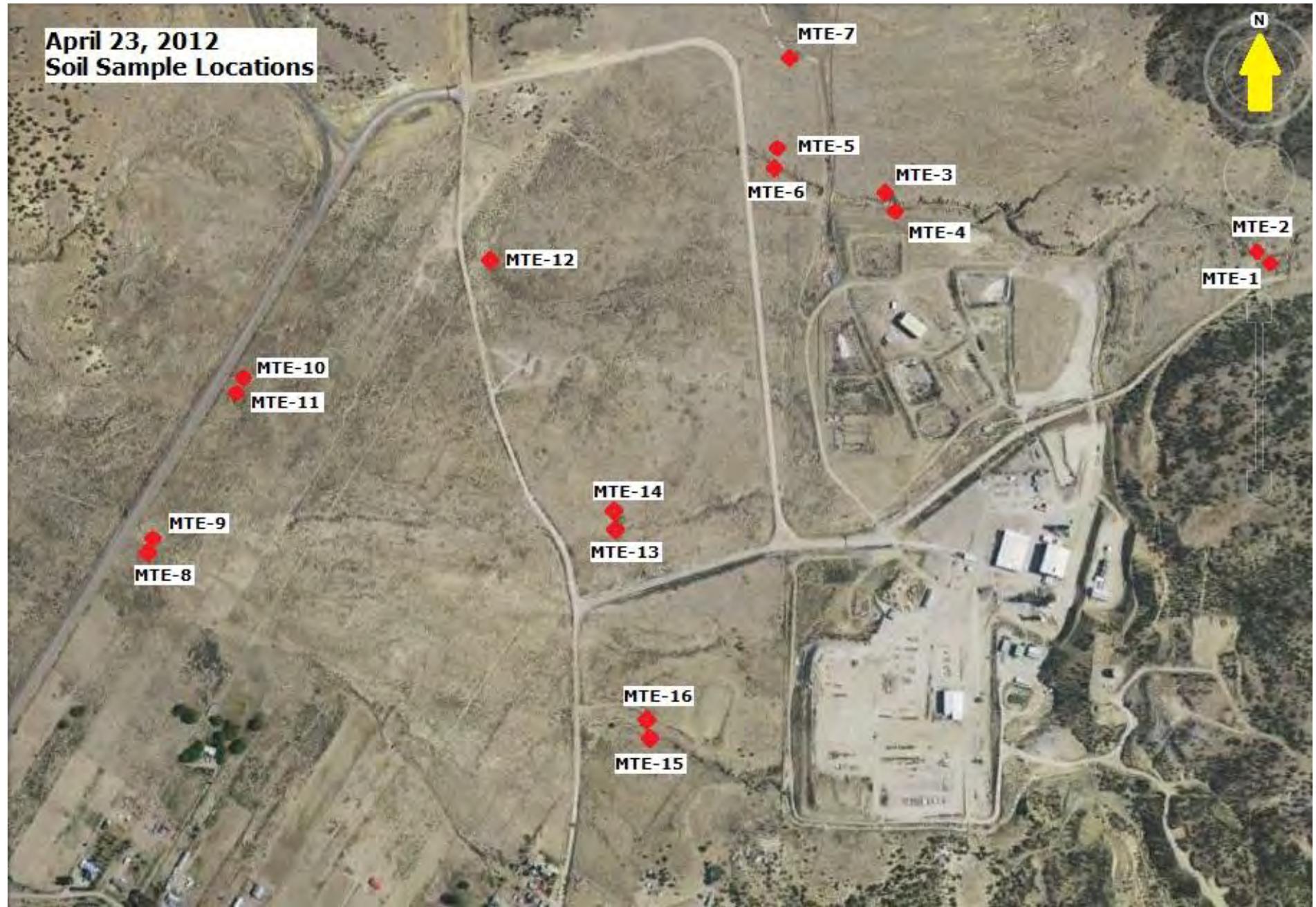


Table 2
RADIATION SURVEY AND SAMPLE RESULTS
April 23, 2012

Location #	Description	Sample Time	NAD 27 Northing	NAD 27 Easting	Dose Rate ($\mu\text{rem}/\text{h}$)	U-238 (pCi/g)	Ra-226 (pCi/g)	Gross Alpha (pCi/g)
MTE-1	Marquez Arroyo Top of Grade; clay	10:20	1580869	561223	18	1.6	1.7	6.8
MTE-2	Marquez Arroyo Thalweg; very sandy	10:25	1580963	561211	15	0.3	0.7	3.7
MTE-3	Marquez Arroyo Top of Grade; clay	10:50	1581289	559191	26	0.5	1.4	7.6
MTE-4	Marquez Arroyo Thalweg; sandy	10:58	1581226	559201	24	0.2	1.2	5.0
MTE-5	Marquez Arroyo Top of Grade; clay	11:05	1581507	558551	18	0.4	1.4	4.6
MTE-6	Marquez Arroyo Thalweg; sandy	11:10	1581479	558532	15	0.4	1.5	8.9
MTE-7	N¼ Corner Section 24; clay	11:30	1582031	558654	13	0.6	1.5	12.4
MTE-8	Drainage Top of Grade; clay	12:37	1579422	555004	14	1.2	2.8	9.8
MTE-9	Drainage Thalweg; clay	12:40	1579428	555009	14	1.1	1.8	7.6
MTE-10	Drainage Top of Grade; clay	12:52	1580023	555383	14	0.3	1.2	5.5
MTE-11	Drainage Thalweg; clay	12:54	1580047	555376	13	0.4	1.2	4.5
MTE-12	Marquez Arroyo fan; clay	13:40	1580724	556946	13	0.9	2.1	12.9
MTE-13	Drainage Thalweg; sandy clay	13:55	1579390	557582	14	1.4	2.7	8.0
MTE-14	Drainage Top of Grade; clay	14:05	1579410	557576	14	0.4	1.1	11.9
MTE-15	Drainage Thalweg; sandy	14:45	1578344	557794	14	1.0	2.0	5.8
MTE-16	Drainage Top of Grade; clay	14:50	1578386	557805	13	0.3	0.8	6.4

Notes:

1. The term "grade" above refers to the natural surface outside of and atop the drainage feature.
2. Dose Rate Instrument: Eberline PRM-7 #182, BKG = 10-12 $\mu\text{rem}/\text{h}$
3. Coordinates reported are New Mexico State Plane Coordinates in the New Mexico West UTM projection.

Table 3
COORDINATE CONVERSIONS

Location #	Description	NAD 83 Coordinates		NAD 27 Coordinates	
		N	E	N	E
MTE-1	Grade on South Side of Marquez Arroyo	1580937	2784129	1580869	561223
MTE-2	Thalweg of Marquez Arroyo	1581031	2784117	1580963	561211
MTE-3	Grade on North Side of Marquez Arroyo	1581357	2782097	1581289	559191
MTE-4	Thalweg of Marquez Arroyo	1581294	2782107	1581226	559201
MTE-5	Grade North Side of Marquez Arroyo	1581575	2781457	1581507	558551
MTE-6	Thalweg of Marquez Arroyo	1581547	2781438	1581479	558532
MTE-7	North 1/4 Corner Section 24	1582099	2781560	1582031	558654
MTE-8	Grade on South Side of Drainage	1579490	2777910	1579422	555004
MTE-9	Thalweg of Drainage	1579496	2777915	1579428	555009
MTE-10	Grade on South Side of Drainage	1580091	2778289	1580023	555383
MTE-11	Thalweg of Drainage	1580115	2778282	1580047	555376
MTE-12	Marquez Arroyo Fan	1580792	2779852	1580724	556946
MTE-13	Thalweg of Drainage	1579458	2780488	1579390	557582
MTE-14	Grade on North Side of Drainage	1579478	2780482	1579410	557576
MTE-15	Thalweg of Drainage	1578412	2780700	1578344	557794
MTE-16	Grade on North Side of Drainage	1578454	2780711	1578386	557805

Note: Coordinates reported are New Mexico State Plane Coordinates in the New Mexico West UTM projection.

ANALYTICAL SUMMARY REPORT

June 01, 2012

Rio Grande Resources Corporation
PO Box 1150
Grants, NM 87020

Workorder No.: C12041338

Project Name: Mt. Taylor Mine

Energy Laboratories, Inc. Casper WY received the following 16 samples for Rio Grande Resources Corporation on 4/30/2012 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C12041338-001	MTE-1	04/23/12 10:20	04/30/12	Soil	Digestion For RadioChemistry Gross Alpha, Gross Beta Sample Prep Gamma Sample Preparation Gross Alpha, Gross Beta Gross Gamma Uranium, Isotopic
C12041338-002	MTE-2	04/23/12 10:25	04/30/12	Soil	Same As Above
C12041338-003	MTE-3	04/23/12 10:50	04/30/12	Soil	Same As Above
C12041338-004	MTE-4	04/23/12 10:58	04/30/12	Soil	Same As Above
C12041338-005	MTE-5	04/23/12 11:05	04/30/12	Soil	Same As Above
C12041338-006	MTE-6	04/23/12 11:10	04/30/12	Soil	Same As Above
C12041338-007	MTE-7	04/23/12 11:30	04/30/12	Soil	Same As Above
C12041338-008	MTE-8	04/23/12 12:37	04/30/12	Soil	Same As Above
C12041338-009	MTE-9	04/23/12 12:40	04/30/12	Soil	Same As Above
C12041338-010	MTE-10	04/23/12 12:52	04/30/12	Soil	Same As Above
C12041338-011	MTE-11	04/23/12 12:56	04/30/12	Soil	Same As Above
C12041338-012	MTE-12	04/23/12 13:40	04/30/12	Soil	Same As Above
C12041338-013	MTE-13	04/23/12 13:55	04/30/12	Soil	Same As Above
C12041338-014	MTE-14	04/23/12 14:05	04/30/12	Soil	Same As Above
C12041338-015	MTE-15	04/23/12 14:45	04/30/12	Soil	Same As Above
C12041338-016	MTE-16	04/23/12 14:50	04/30/12	Soil	Same As Above

The analyses presented in this report were performed at Energy Laboratories, Inc., 2393 Salt Creek Hwy., Casper, WY 82601, unless otherwise noted. Radiochemistry analyses were performed at Energy Laboratories, Inc., 2325 Kerzell Lane, Casper, WY 82601, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing. Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. Data corrected for moisture content are typically noted as - dry on the report. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

If you have any questions regarding these test results, please call.

Report Approved By:



CLIENT: Rio Grande Resources Corporation
Project: Mt. Taylor Mine
Sample Delivery Group: C12041338

Report Date: 06/01/12

CASE NARRATIVE

ORIGINAL SAMPLE SUBMITTAL(S)
All original sample submittals have been returned with the data package.

SAMPLE TEMPERATURE COMPLIANCE: 4°C ($\pm 2^\circ\text{C}$)

Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

GROSS ALPHA ANALYSIS

Method 900.0 for gross alpha and gross beta is intended as a drinking water method for low TDS waters. Data provided by this method for non potable waters should be viewed as inconsistent.

RADON IN AIR ANALYSIS

The desired exposure time is 48 hours (2 days). The time delay in returning the canister to the laboratory for processing should be as short as possible to avoid excessive decay. Maximum recommended delay between end of exposure to beginning of counting should not exceed 8 days.

SOIL/SOLID SAMPLES

All samples reported on an as received basis unless otherwise indicated.

ATRAZINE, SIMAZINE AND PCB ANALYSIS

Data for PCBs, Atrazine and Simazine are reported from EPA 525.2. PCB data reported by ELI reflects the results for seven individual Aroclors. When the results for all seven are ND (not detected), the sample meets EPA compliance criteria for PCB monitoring.

SUBCONTRACTING ANALYSIS

Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

BRANCH LABORATORY LOCATIONS

eli-b - Energy Laboratories, Inc. - Billings, MT
eli-g - Energy Laboratories, Inc. - Gillette, WY
eli-h - Energy Laboratories, Inc. - Helena, MT
eli-r - Energy Laboratories, Inc. - Rapid City, SD
eli-t - Energy Laboratories, Inc. - College Station, TX

CERTIFICATIONS:

USEPA: WY00002, Radiochemical WY00937; FL-DOH NELAC: E87641, Radiochemical E871017; California: 02118CA;
Oregon: WY200001, Radiochemical WY200002; Utah: WY00002; Virginia: 00057; Washington: C836

ISO 17025 DISCLAIMER:

The results of this Analytical Report relate only to the items submitted for analysis.

ENERGY LABORATORIES, INC. - CASPER,WY certifies that certain method selections contained in this report meet requirements as set forth by the above accrediting authorities. Some results requested by the client may not be covered under these certifications. All analysis data to be submitted for regulatory enforcement should be certified in the sample state of origin. Please verify ELI's certification coverage by visiting www.energylab.com

ELI appreciates the opportunity to provide you with this analytical service. For additional information and services visit our web page www.energylab.com.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine
Lab ID: C12041338-001
Client Sample ID: MTE-1

Report Date: 06/01/12
Collection Date: 04/23/12 10:20
Date Received: 04/30/12
Matrix: Soil

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES							
Gross Alpha	6.8	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Gross Alpha precision (\pm)	0.8	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Uranium 234	1.7	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 precision (\pm)	0.4	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 MDC	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235 precision (\pm)	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235 MDC	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238	1.6	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238 precision (\pm)	0.4	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238 MDC	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
RADIONUCLIDES - GAMMA							
Potassium 40	19.2	pCi/g-dry		0.5	E901.1		05/22/12 13:10 / dpb
Potassium 40 precision (\pm)	3.8	pCi/g-dry			E901.1		05/22/12 13:10 / dpb
Radium 226	1.7	pCi/g-dry		0.3	E901.1		05/22/12 13:10 / dpb
Radium 226 precision (\pm)	0.5	pCi/g-dry			E901.1		05/22/12 13:10 / dpb

Report Definitions:	RL - Analyte reporting limit.	MCL - Maximum contaminant level.
	QCL - Quality control limit.	ND - Not detected at the reporting limit.
	MDC - Minimum detectable concentration	

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine
Lab ID: C12041338-002
Client Sample ID: MTE-2

Report Date: 06/01/12
Collection Date: 04/23/12 10:25
DateReceived: 04/30/12
Matrix: Soil

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES							
Gross Alpha	3.7	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Gross Alpha precision (\pm)	0.7	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Uranium 234	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 precision (\pm)	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 MDC	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235	0.06	pCi/g-dry	U		E908.0		05/08/12 08:58 / dmf
Uranium 235 precision (\pm)	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235 MDC	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238 precision (\pm)	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238 MDC	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
RADIONUCLIDES - GAMMA							
Potassium 40	0.0	pCi/g-dry	U	0.5	E901.1		05/22/12 13:10 / dpb
Potassium 40 precision (\pm)	0.5	pCi/g-dry			E901.1		05/22/12 13:10 / dpb
Radium 226	0.7	pCi/g-dry		0.3	E901.1		05/22/12 13:10 / dpb
Radium 226 precision (\pm)	0.3	pCi/g-dry			E901.1		05/22/12 13:10 / dpb

Report Definitions:	RL - Analyte reporting limit.	MCL - Maximum contaminant level.
	QCL - Quality control limit.	ND - Not detected at the reporting limit.
	MDC - Minimum detectable concentration	U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine
Lab ID: C12041338-003
Client Sample ID: MTE-3

Report Date: 06/01/12
Collection Date: 04/23/12 10:50
DateReceived: 04/30/12
Matrix: Soil

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES							
Gross Alpha	7.6	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Gross Alpha precision (\pm)	0.8	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Uranium 234	0.6	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 precision (\pm)	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 MDC	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235	-0.02	pCi/g-dry	U		E908.0		05/08/12 08:58 / dmf
Uranium 235 precision (\pm)	0.1	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235 MDC	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238	0.5	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238 precision (\pm)	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238 MDC	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
RADIONUCLIDES - GAMMA							
Potassium 40	0.0	pCi/g-dry	U	0.5	E901.1		05/22/12 13:10 / dpb
Potassium 40 precision (\pm)	0.5	pCi/g-dry			E901.1		05/22/12 13:10 / dpb
Radium 226	1.4	pCi/g-dry		0.3	E901.1		05/22/12 13:10 / dpb
Radium 226 precision (\pm)	0.3	pCi/g-dry			E901.1		05/22/12 13:10 / dpb

Report Definitions:	RL - Analyte reporting limit.	MCL - Maximum contaminant level.
	QCL - Quality control limit.	ND - Not detected at the reporting limit.
	MDC - Minimum detectable concentration	U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine
Lab ID: C12041338-004
Client Sample ID: MTE-4

Report Date: 06/01/12
Collection Date: 04/23/12 10:58
DateReceived: 04/30/12
Matrix: Soil

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES							
Gross Alpha	5.0	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Gross Alpha precision (\pm)	0.7	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Uranium 234	0.5	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 precision (\pm)	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 MDC	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235	0.07	pCi/g-dry	U		E908.0		05/08/12 08:58 / dmf
Uranium 235 precision (\pm)	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235 MDC	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238	0.2	pCi/g-dry	U		E908.0		05/08/12 08:58 / dmf
Uranium 238 precision (\pm)	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238 MDC	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
RADIONUCLIDES - GAMMA							
Potassium 40	0.0	pCi/g-dry	U	0.5	E901.1		05/22/12 13:10 / dpb
Potassium 40 precision (\pm)	0.5	pCi/g-dry			E901.1		05/22/12 13:10 / dpb
Radium 226	1.2	pCi/g-dry		0.3	E901.1		05/22/12 13:10 / dpb
Radium 226 precision (\pm)	0.4	pCi/g-dry			E901.1		05/22/12 13:10 / dpb

Report Definitions:	RL - Analyte reporting limit.	MCL - Maximum contaminant level.
	QCL - Quality control limit.	ND - Not detected at the reporting limit.
	MDC - Minimum detectable concentration	U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine
Lab ID: C12041338-005
Client Sample ID: MTE-5

Report Date: 06/01/12
Collection Date: 04/23/12 11:05
Date Received: 04/30/12
Matrix: Soil

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES							
Gross Alpha	4.6	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Gross Alpha precision (\pm)	0.7	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Uranium 234	0.6	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 precision (\pm)	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 MDC	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235	0.03	pCi/g-dry	U		E908.0		05/08/12 08:58 / dmf
Uranium 235 precision (\pm)	0.1	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235 MDC	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238	0.4	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238 precision (\pm)	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238 MDC	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
RADIONUCLIDES - GAMMA							
Potassium 40	0.0	pCi/g-dry	U	0.5	E901.1		05/22/12 13:10 / dpb
Potassium 40 precision (\pm)	0.5	pCi/g-dry			E901.1		05/22/12 13:10 / dpb
Radium 226	1.4	pCi/g-dry		0.3	E901.1		05/22/12 13:10 / dpb
Radium 226 precision (\pm)	0.3	pCi/g-dry			E901.1		05/22/12 13:10 / dpb

Report Definitions:	RL - Analyte reporting limit.	MCL - Maximum contaminant level.
	QCL - Quality control limit.	ND - Not detected at the reporting limit.
	MDC - Minimum detectable concentration	U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine
Lab ID: C12041338-006
Client Sample ID: MTE-6

Report Date: 06/01/12
Collection Date: 04/23/12 11:10
DateReceived: 04/30/12
Matrix: Soil

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES							
Gross Alpha	8.9	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Gross Alpha precision (\pm)	0.8	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Uranium 234	0.5	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 precision (\pm)	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 MDC	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235	0.09	pCi/g-dry	U		E908.0		05/08/12 08:58 / dmf
Uranium 235 precision (\pm)	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235 MDC	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238	0.4	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238 precision (\pm)	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238 MDC	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
RADIONUCLIDES - GAMMA							
Potassium 40	0.0	pCi/g-dry	U	0.5	E901.1		05/22/12 13:10 / dpb
Potassium 40 precision (\pm)	0.5	pCi/g-dry			E901.1		05/22/12 13:10 / dpb
Radium 226	1.5	pCi/g-dry		0.3	E901.1		05/22/12 13:10 / dpb
Radium 226 precision (\pm)	0.5	pCi/g-dry			E901.1		05/22/12 13:10 / dpb

Report Definitions:	RL - Analyte reporting limit.	MCL - Maximum contaminant level.
	QCL - Quality control limit.	ND - Not detected at the reporting limit.
	MDC - Minimum detectable concentration	U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine
Lab ID: C12041338-007
Client Sample ID: MTE-7

Report Date: 06/01/12
Collection Date: 04/23/12 11:30
DateReceived: 04/30/12
Matrix: Soil

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES							
Gross Alpha	12.4	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Gross Alpha precision (\pm)	0.9	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Uranium 234	0.6	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 precision (\pm)	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 MDC	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235	0.02	pCi/g-dry	U		E908.0		05/08/12 08:58 / dmf
Uranium 235 precision (\pm)	0.1	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235 MDC	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238	0.6	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238 precision (\pm)	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238 MDC	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
RADIONUCLIDES - GAMMA							
Potassium 40	0.0	pCi/g-dry	U	0.5	E901.1		05/22/12 13:10 / dpb
Potassium 40 precision (\pm)	0.5	pCi/g-dry			E901.1		05/22/12 13:10 / dpb
Radium 226	1.5	pCi/g-dry		0.3	E901.1		05/22/12 13:10 / dpb
Radium 226 precision (\pm)	0.5	pCi/g-dry			E901.1		05/22/12 13:10 / dpb

Report Definitions:	RL - Analyte reporting limit.	MCL - Maximum contaminant level.
	QCL - Quality control limit.	ND - Not detected at the reporting limit.
	MDC - Minimum detectable concentration	U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine
Lab ID: C12041338-008
Client Sample ID: MTE-8

Report Date: 06/01/12
Collection Date: 04/23/12 12:37
DateReceived: 04/30/12
Matrix: Soil

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES							
Gross Alpha	9.8	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Gross Alpha precision (\pm)	0.8	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Uranium 234	1.4	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 precision (\pm)	0.4	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 MDC	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235	0.1	pCi/g-dry	U		E908.0		05/08/12 08:58 / dmf
Uranium 235 precision (\pm)	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235 MDC	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238	1.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238 precision (\pm)	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238 MDC	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
RADIONUCLIDES - GAMMA							
Potassium 40	0.0	pCi/g-dry	U	0.5	E901.1		05/22/12 13:10 / dpb
Potassium 40 precision (\pm)	0.5	pCi/g-dry			E901.1		05/22/12 13:10 / dpb
Radium 226	2.8	pCi/g-dry		0.3	E901.1		05/22/12 13:10 / dpb
Radium 226 precision (\pm)	0.6	pCi/g-dry			E901.1		05/22/12 13:10 / dpb

Report Definitions:	RL - Analyte reporting limit.	MCL - Maximum contaminant level.
	QCL - Quality control limit.	ND - Not detected at the reporting limit.
	MDC - Minimum detectable concentration	U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine
Lab ID: C12041338-009
Client Sample ID: MTE-9

Report Date: 06/01/12
Collection Date: 04/23/12 12:40
DateReceived: 04/30/12
Matrix: Soil

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES							
Gross Alpha	7.6	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Gross Alpha precision (\pm)	0.8	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Uranium 234	1.1	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 precision (\pm)	0.4	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 MDC	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235	0.2	pCi/g-dry	U		E908.0		05/08/12 08:58 / dmf
Uranium 235 precision (\pm)	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235 MDC	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238	1.1	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238 precision (\pm)	0.4	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238 MDC	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
RADIONUCLIDES - GAMMA							
Potassium 40	0.0	pCi/g-dry	U	0.5	E901.1		05/22/12 13:10 / dpb
Potassium 40 precision (\pm)	0.5	pCi/g-dry			E901.1		05/22/12 13:10 / dpb
Radium 226	1.8	pCi/g-dry		0.3	E901.1		05/22/12 13:10 / dpb
Radium 226 precision (\pm)	0.5	pCi/g-dry			E901.1		05/22/12 13:10 / dpb

Report Definitions:	RL - Analyte reporting limit.	MCL - Maximum contaminant level.
	QCL - Quality control limit.	ND - Not detected at the reporting limit.
	MDC - Minimum detectable concentration	U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine
Lab ID: C12041338-010
Client Sample ID: MTE-10

Report Date: 06/01/12
Collection Date: 04/23/12 12:52
DateReceived: 04/30/12
Matrix: Soil

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES							
Gross Alpha	5.5	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Gross Alpha precision (\pm)	0.7	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Uranium 234	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 precision (\pm)	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 MDC	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235	0.08	pCi/g-dry	U		E908.0		05/08/12 08:58 / dmf
Uranium 235 precision (\pm)	0.1	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235 MDC	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238 precision (\pm)	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238 MDC	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
RADIONUCLIDES - GAMMA							
Potassium 40	0.0	pCi/g-dry	U	0.5	E901.1		05/22/12 13:10 / dpb
Potassium 40 precision (\pm)	0.5	pCi/g-dry			E901.1		05/22/12 13:10 / dpb
Radium 226	1.2	pCi/g-dry		0.3	E901.1		05/22/12 13:10 / dpb
Radium 226 precision (\pm)	0.5	pCi/g-dry			E901.1		05/22/12 13:10 / dpb

Report Definitions:	RL - Analyte reporting limit.	MCL - Maximum contaminant level.
	QCL - Quality control limit.	ND - Not detected at the reporting limit.
	MDC - Minimum detectable concentration	U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine
Lab ID: C12041338-011
Client Sample ID: MTE-11

Report Date: 06/01/12
Collection Date: 04/23/12 12:56
DateReceived: 04/30/12
Matrix: Soil

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES							
Gross Alpha	4.5	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Gross Alpha precision (\pm)	0.7	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Uranium 234	0.4	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 precision (\pm)	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 MDC	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235	0.02	pCi/g-dry	U		E908.0		05/08/12 08:58 / dmf
Uranium 235 precision (\pm)	0.1	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235 MDC	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238	0.4	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238 precision (\pm)	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238 MDC	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
RADIONUCLIDES - GAMMA							
Potassium 40	0.0	pCi/g-dry	U	0.5	E901.1		05/22/12 13:10 / dpb
Potassium 40 precision (\pm)	0.5	pCi/g-dry			E901.1		05/22/12 13:10 / dpb
Radium 226	1.2	pCi/g-dry		0.3	E901.1		05/22/12 13:10 / dpb
Radium 226 precision (\pm)	0.4	pCi/g-dry			E901.1		05/22/12 13:10 / dpb

Report Definitions:	RL - Analyte reporting limit.	MCL - Maximum contaminant level.
	QCL - Quality control limit.	ND - Not detected at the reporting limit.
	MDC - Minimum detectable concentration	U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine
Lab ID: C12041338-012
Client Sample ID: MTE-12

Report Date: 06/01/12
Collection Date: 04/23/12 13:40
DateReceived: 04/30/12
Matrix: Soil

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES							
Gross Alpha	12.9	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Gross Alpha precision (\pm)	0.9	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Uranium 234	0.9	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 precision (\pm)	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 MDC	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235	0.07	pCi/g-dry	U		E908.0		05/08/12 08:58 / dmf
Uranium 235 precision (\pm)	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235 MDC	0.4	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238	0.9	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238 precision (\pm)	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238 MDC	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
RADIONUCLIDES - GAMMA							
Potassium 40	0.0	pCi/g-dry	U	0.5	E901.1		05/22/12 13:10 / dpb
Potassium 40 precision (\pm)	0.5	pCi/g-dry			E901.1		05/22/12 13:10 / dpb
Radium 226	2.1	pCi/g-dry		0.3	E901.1		05/22/12 13:10 / dpb
Radium 226 precision (\pm)	0.5	pCi/g-dry			E901.1		05/22/12 13:10 / dpb

Report Definitions:	RL - Analyte reporting limit.	MCL - Maximum contaminant level.
	QCL - Quality control limit.	ND - Not detected at the reporting limit.
	MDC - Minimum detectable concentration	U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine
Lab ID: C12041338-013
Client Sample ID: MTE-13

Report Date: 06/01/12
Collection Date: 04/23/12 13:55
DateReceived: 04/30/12
Matrix: Soil

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES							
Gross Alpha	8.0	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Gross Alpha precision (\pm)	0.8	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Uranium 234	1.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 precision (\pm)	0.4	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 MDC	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235	0.08	pCi/g-dry	U		E908.0		05/08/12 08:58 / dmf
Uranium 235 precision (\pm)	0.1	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235 MDC	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238	1.4	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238 precision (\pm)	0.4	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238 MDC	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
RADIONUCLIDES - GAMMA							
Potassium 40	0.0	pCi/g-dry	U	0.5	E901.1		05/22/12 13:10 / dpb
Potassium 40 precision (\pm)	0.5	pCi/g-dry			E901.1		05/22/12 13:10 / dpb
Radium 226	2.7	pCi/g-dry		0.3	E901.1		05/22/12 13:10 / dpb
Radium 226 precision (\pm)	0.5	pCi/g-dry			E901.1		05/22/12 13:10 / dpb

Report Definitions:	RL - Analyte reporting limit.	MCL - Maximum contaminant level.
	QCL - Quality control limit.	ND - Not detected at the reporting limit.
	MDC - Minimum detectable concentration	U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine
Lab ID: C12041338-014
Client Sample ID: MTE-14

Report Date: 06/01/12
Collection Date: 04/23/12 14:05
DateReceived: 04/30/12
Matrix: Soil

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES							
Gross Alpha	11.9	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Gross Alpha precision (\pm)	0.9	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Uranium 234	0.4	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 precision (\pm)	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 MDC	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235	0.05	pCi/g-dry	U		E908.0		05/08/12 08:58 / dmf
Uranium 235 precision (\pm)	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235 MDC	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238	0.4	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238 precision (\pm)	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238 MDC	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
RADIONUCLIDES - GAMMA							
Potassium 40	0.0	pCi/g-dry	U	0.5	E901.1		05/22/12 13:10 / dpb
Potassium 40 precision (\pm)	0.5	pCi/g-dry			E901.1		05/22/12 13:10 / dpb
Radium 226	1.1	pCi/g-dry		0.3	E901.1		05/22/12 13:10 / dpb
Radium 226 precision (\pm)	0.3	pCi/g-dry			E901.1		05/22/12 13:10 / dpb

Report Definitions:	RL - Analyte reporting limit.	MCL - Maximum contaminant level.
	QCL - Quality control limit.	ND - Not detected at the reporting limit.
	MDC - Minimum detectable concentration	U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine
Lab ID: C12041338-015
Client Sample ID: MTE-15

Report Date: 06/01/12
Collection Date: 04/23/12 14:45
DateReceived: 04/30/12
Matrix: Soil

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES							
Gross Alpha	5.8	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Gross Alpha precision (\pm)	0.7	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Uranium 234	0.8	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 precision (\pm)	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 MDC	0.1	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235	0.02	pCi/g-dry	U		E908.0		05/08/12 08:58 / dmf
Uranium 235 precision (\pm)	0.09	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235 MDC	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238	1	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238 precision (\pm)	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238 MDC	0.1	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
RADIONUCLIDES - GAMMA							
Potassium 40	0.0	pCi/g-dry	U	0.5	E901.1		05/22/12 13:10 / dpb
Potassium 40 precision (\pm)	0.5	pCi/g-dry			E901.1		05/22/12 13:10 / dpb
Radium 226	2.0	pCi/g-dry		0.3	E901.1		05/22/12 13:10 / dpb
Radium 226 precision (\pm)	0.3	pCi/g-dry			E901.1		05/22/12 13:10 / dpb

Report Definitions:	RL - Analyte reporting limit.	MCL - Maximum contaminant level.
	QCL - Quality control limit.	ND - Not detected at the reporting limit.
	MDC - Minimum detectable concentration	U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine
Lab ID: C12041338-016
Client Sample ID: MTE-16

Report Date: 06/01/12
Collection Date: 04/23/12 14:50
DateReceived: 04/30/12
Matrix: Soil

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES							
Gross Alpha	6.4	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Gross Alpha precision (\pm)	0.8	pCi/g-dry			E900.0		05/02/12 12:00 / ep
Uranium 234	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 precision (\pm)	0.1	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 234 MDC	0.1	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235	-0.01	pCi/g-dry	U		E908.0		05/08/12 08:58 / dmf
Uranium 235 precision (\pm)	0.06	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 235 MDC	0.2	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238	0.3	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238 precision (\pm)	0.1	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
Uranium 238 MDC	0.1	pCi/g-dry			E908.0		05/08/12 08:58 / dmf
RADIONUCLIDES - GAMMA							
Potassium 40	0.0	pCi/g-dry	U	0.5	E901.1		05/22/12 13:10 / dpb
Potassium 40 precision (\pm)	0.5	pCi/g-dry			E901.1		05/22/12 13:10 / dpb
Radium 226	0.8	pCi/g-dry		0.3	E901.1		05/22/12 13:10 / dpb
Radium 226 precision (\pm)	0.3	pCi/g-dry			E901.1		05/22/12 13:10 / dpb

Report Definitions:	RL - Analyte reporting limit.	MCL - Maximum contaminant level.
	QCL - Quality control limit.	ND - Not detected at the reporting limit.
	MDC - Minimum detectable concentration	U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation

Report Date: 06/01/12

Project: Mt. Taylor Mine

Work Order: C12041338

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0	Batch: R159328									
Sample ID: MB-R159328	2	Method Blank		Run: G5000W_120502A						05/02/12 12:00
Gross Alpha		-0.03	pCi/g-dry							U
Gross Alpha precision (\pm)		0.6	pCi/g-dry							
Sample ID: LCS-R159328	Laboratory Control Sample				Run: G5000W_120502A					
Gross Alpha		487	pCi/g-dry	96		70	130			05/02/12 12:00
Sample ID: C12040820-001ADUP	2	Sample Duplicate		Run: G5000W_120502A						05/02/12 12:00
Gross Alpha		3.28	pCi/g-dry			70	130	14		20
Gross Alpha precision (\pm)		0.660	pCi/g-dry							
- Duplicate RPD for Gross Beta is outside of the acceptance range for this analysis.										
Sample ID: C12041338-010ADUP	2	Sample Duplicate		Run: G5000W_120502A						05/02/12 12:00
Gross Alpha		6.25	pCi/g-dry			70	130	13		20
Gross Alpha precision (\pm)		0.750	pCi/g-dry							

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation

Report Date: 06/01/12

Project: Mt. Taylor Mine

Work Order: C12041338

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E901.1	Batch: R160127									
Sample ID: LCS-R160127	Laboratory Control Sample						Run: GAM-HPGE_120522B	05/22/12 13:10		
Bismuth 214		2.30	pCi/g-dry	0.30	89	70	130			
Sample ID: MB-R160127	Method Blank									
Potassium 40		ND	pCi/g-dry							U
Potassium 40 precision (\pm)		ND	pCi/g-dry							
Radium 226		ND	pCi/g-dry							U
Radium 226 precision (\pm)		ND	pCi/g-dry							
Sample ID: C12041338-010ADUP	4	Sample Duplicate						Run: GAM-HPGE_120522B	05/22/12 13:10	
Potassium 40		ND	pCi/g-dry	0.50					20	U
Potassium 40 precision (\pm)		ND	pCi/g-dry							
Radium 226		1.80	pCi/g-dry	0.30				40	20	R
Radium 226 precision (\pm)		0.400	pCi/g-dry							
- Duplicate RPD for Ra226 is outside of the acceptance range for this analysis.										
Sample ID: C12041338-016ADUP	4	Sample Duplicate						Run: GAM-HPGE_120522B	05/22/12 13:10	
Potassium 40		ND	pCi/g-dry	0.50					20	U
Potassium 40 precision (\pm)		ND	pCi/g-dry							
Radium 226		1.00	pCi/g-dry	0.30				22	20	R
Radium 226 precision (\pm)		0.300	pCi/g-dry							
- Duplicate RPD for Ra226 is outside of the acceptance range for this analysis.										

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

R - RPD exceeds advisory limit.

U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation

Report Date: 06/01/12

Project: Mt. Taylor Mine

Work Order: C12041338

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E908.0										Batch: 33540
Sample ID: C12041338-016AMS	2	Sample Matrix Spike						Run: EGG-ORTEC_120504B		05/08/12 13:12
Uranium 234		29.3	pCi/g-dry	105		70	130			
Uranium 238		31.8	pCi/g-dry	112		70	130			
Sample ID: C12041338-016AMSD	2	Sample Matrix Spike Duplicate						Run: EGG-ORTEC_120504B		05/08/12 13:12
Uranium 234		30.7	pCi/g-dry	109		70	130	4.3		28.4
Uranium 238		31.8	pCi/g-dry	111		70	130	0.1		28.1
Sample ID: LCS-33540	2	Laboratory Control Sample						Run: EGG-ORTEC_120504B		05/08/12 13:12
Uranium 234		2.44	pCi/g-dry	105		80	120			
Uranium 238		2.53	pCi/g-dry	107		80	120			
Sample ID: MB-33540	9	Method Blank						Run: EGG-ORTEC_120504B		05/08/12 13:12
Uranium 234		0.002	pCi/g-dry							U
Uranium 234 precision (\pm)		0.02	pCi/g-dry							
Uranium 234 MDC		0.03	pCi/g-dry							
Uranium 235		-0.004	pCi/g-dry							U
Uranium 235 precision (\pm)		0.01	pCi/g-dry							
Uranium 235 MDC		0.03	pCi/g-dry							
Uranium 238		0.0001	pCi/g-dry							U
Uranium 238 precision (\pm)		0.009	pCi/g-dry							
Uranium 238 MDC		0.02	pCi/g-dry							

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration

Workorder Receipt Checklist



Rio Grande Resources Corporation

C12041338

Login completed by: Corinne Wagner

Date Received: 4/30/2012

Reviewed by: BL2000\cwagner

Received by: tj

Reviewed Date: 5/2/2012

Carrier Ground
name:

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature:	14.2°C		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" type="checkbox"/>

Contact and Corrective Action Comments:

None



Chain of Custody and Analytical Request Record

PLEASE PRINT - Provide as much information as possible.

Company Name: Rio Grande Resources Corporation #C11115	Contact Name: Mt. Taylor Mine	Phone/Fax: (505) 287-7971	Sample Origin State: NM	EPA/State Compliance: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Report Mail Address: PO Box 1150 Grants, NM 87020-1150	Invoice Contact & Phone: Joe Lister, Manager Joe Lister 505-287-7971	Purchase Order:	Sampler: (Please Print) Stan Fitch	
Invoice Address: Rio Grande Resources PO Box 1150 Grants, New Mexico 87020			Quote/Bottle Order: Soil Samples	
Special Report/Formats – ELI must be notified prior to sample submittal for the following:		<input type="checkbox"/> DW <input type="checkbox"/> A2LA <input type="checkbox"/> GSA <input type="checkbox"/> EDD/EDT (Electronic Data) <input type="checkbox"/> POTW/WWTP Format: _____ <input type="checkbox"/> State: _____ <input type="checkbox"/> LEVEL IV <input type="checkbox"/> Other: _____ <input type="checkbox"/> NELAC		
SEE ATTACHED				
ANALYTICAL REQUEST Number of Containers: _____ Sample Type: A WS V B O Sample Container: Armer Water Solids/Solids/Biosolids Other Vegetation: _____		R Contact ELI prior to RUSH sample submittal for charges and scheduling – See Instruction Page U Comments: _____ S Sample results needed within 30 days. H Normal Turnaround (TAT)		
		R Contact ELI prior to RUSH sample submittal for charges and scheduling – See Instruction Page U Comments: _____ S Sample results needed within 30 days. H Normal Turnaround (TAT)		
SAMPLE IDENTIFICATION (Name, Location, Interval, etc.) 1 MTE-1 2 MTE-2 3 MTE-3 4 MTE-4 5 MTE-5 6 MTE-6 7 MTE-7 8 MTE-8 9 MTE-9 10 MTE-10		Collection Date	Collection Time	MATRIX
		04/23/12	10:20	soil
		04/23/12	10:25	soil
		04/23/12	10:50	soil
		04/23/12	10:58	soil
		04/23/12	11:05	soil
		04/23/12	11:10	soil
		04/23/12	11:30	soil
		04/23/12	12:37	soil
		04/23/12	12:40	soil
		04/23/12	12:52	soil
		Date/Time: 04/26/12 11:00	Signature: <i>Stan Fitch</i>	Received by (print): Stan Fitch
Custody Record MUST be Signed		Retirnished by (print): Stan Fitch	Signature: <i>Stan Fitch</i>	Received by (print): Stan Fitch
Sample Disposal: Return to Client: Retirnished by (print):		Lab Disposal: XXXXX	Received by Laboratory: 4-20-12 9:20	Received by (print): 4-20-12 9:20
LABORATORY USE ONLY Receipt Temp: 14.2 °C On Ice: Yes <input checked="" type="radio"/> No <input type="radio"/> Custody Seal: N Intact: N Signature Match: Y				

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested.

This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.

Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, and links.



Chain of Custody and Analytical Request Record

PLEASE PRINT. Provide as much information as possible.

Company Name:

Rio Grande Resources Corporation #C11115

Report Mail Address: PO Box 1150
Grants, NM 87020-1150

Invoice Address: PO Box 1150
Grants, New Mexico 87020

Special Report/Formats – ELI must be notified prior to sample submittal for the following:

<input type="checkbox"/> DW	<input type="checkbox"/> GSA	<input type="checkbox"/> POTW/WWTP	State: _____	Other: _____
<input type="checkbox"/> A2LA	<input type="checkbox"/> EDDIEDT (Electronic Data)	Format: _____	<input type="checkbox"/> LEVEL IV	<input type="checkbox"/> NEI AC

SAMPLE IDENTIFICATION
(Name, Location, Interval, etc.)

1	MTE-11	04/23/12	12:56
2	MTE-12	04/23/12	13:40

MTE-13	04/23/12	13:55
MTE-14	04/23/12	14:05

5	MTE-15	04/23/12	14:45
3	MTE-16	04/23/12	14:50

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Custody Record

Relinquished by (print): **Stan Fitch** Date/Time: **04/26/12 11:00**

Relinquished by (print): _____ Date/Time: _____

Signed _____ Sample Disposal: _____ Return to Client: _____

5

amples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly noted on your analytical report. Visit our web site at www.energylab.com for additional information. downloadable fee schedule form and line

TABLE 1
Soil Physical Properties Analytical Results - April 2012
RIO GRANDE RESOURCES SOIL SAMPLING AND TESTING FOR CLOSEOUT PLAN
MT. TAYLOR MINE, SAN MATEO, NEW MEXICO

Boring ID	Approximate Collection Depth (inches bgs)	Collection Date	Soil Classification	Atterberg Limits		Moisture Content (%)
Analytical Method			USCS	PI	LL	D2216A
MT-WP-SM1	0-6	4/10/2012	SC	24	37	7.1
MT-WP-SM2	0-6	4/10/2012	CL	27	43	7.9
MT-WP-SM3	0-6	4/10/2012	SC	21	34	2.5
BORROW	24-66	4/10/2012	CL	13	37	10.7
MT-1-F	0-6	4/10/2012	SC	15	35	13.7
MT-2-D	0-6	4/10/2012	CL	14	33	16.4
MT-3-F	0-6	4/10/2012	CL	17	35	17.3
MT-4-F	0-6	4/10/2012	CL	13	34	10.5
MT-5-F	0-6	4/10/2012	CL	17	37	17.6
MT-7-C	0-6	4/10/2012	CL	17	39	17.9
MT-8-F	0-6	4/10/2012	SC	13	27	12.9
MT-OP-E	0-6	4/10/2012	CL	12	31	10.3

Notes:

bgs = below ground surface

PI = Plastic Index

LL = Liquid Limit

TABLE 2
Soil Chemical Analytical Results - April 2012
Total Metals by SW 6010/SW 6020 and Radiochemistry by E903.0/RA-05
RIO GRANDE RESOURCES SOIL SAMPLING AND TESTING FOR CLOSEOUT PLAN
MT. TAYLOR MINE, SAN MATEO, NEW MEXICO

Sample ID	Location	Collection Depth (inches bgs)	Collection Date	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Radium 226	Radium 228	Selenium	Silver	Uranium		
	CONCENTRATION				mg/L				pCi/g				mg/L			
Analytical Method				SW 6020	SW 6010B	SW 6010B	SW 6010B	SW 6020	SW 7470A	E903.0	RA-85	SW 6020	SW 6020	SW 6020		
NMED SSL DAF 1				1.31E-02	3.01E+02	1.37E+00	9.86E+07	NA	5.71E-01	30*	9.65E+01	1.57E+00	4.93E+01			
S1-01-01	MT-1-E	0-4	4/10/2012	0.014	0.28	<0.001	0.014 B	0.014	<0.002	124	1.8	0.26	<0.002 D	2.2 D		
S1-01-02	MT-1-E	16-18	4/10/2012	0.048	3.8	0.001	0.040 B	0.078	<0.002	113	1.3	0.49	<0.002 D	5.3 D		
S1-01-03	MT-1-E	44-48	4/10/2012	0.010	0.34	<0.001	0.027 B	0.023	<0.002	12.6	0.8	0.14	0.002 D	0.094 D		
S1-02-01	MT-1-D	0-4	4/10/2012	0.023	0.39	<0.001	0.014 B	0.021	<0.002	224	2.3	0.19	<0.002 D	1.5 D		
S1-02-02	MT-1-D	26-30	4/10/2012	0.003	<0.05	<0.001	0.007 B	0.004	<0.002	0.9	0.8	0.11	<0.002 D	0.24 D		
S1-02-03	MT-1-D	44-48	4/10/2012	0.003	<0.05	<0.001	0.006 B	0.003	<0.002	0.6	0.6	0.012	<0.002 D	0.050 D		
S3-01-01	MT-3-E	0-12	4/10/2012	0.007	0.31	0.002	<0.005	0.002	<0.002	21.0	1.5	0.19	<0.001	9.7 B		
S3-01-02	MT-3-E	20-26	4/10/2012	0.014	2.3	0.001	0.050	0.064	<0.002	6.2	0.7	0.036	<0.001	5.7 B		
S3-01-03	MT-3-E	26-36	4/10/2012	0.005	0.14	<0.001	0.013	0.012	<0.002	4.5	0.8	0.053	<0.001	0.47 B		
S3-01-04	MT-3-E	64-75	4/10/2012	0.003	0.07	<0.001	0.011	0.005	<0.002	1.7	0.7	0.032	<0.001	0.036 B		
S3-02-01	MT-3-D	0-12	4/10/2012	0.018	6.6	0.002	0.015	0.028	<0.002	6.4	2.2	0.15	<0.001	7.8 B		
S3-02-02	MT-3-D	26-30	4/10/2012	0.002	<0.05	<0.001	0.009	0.001	<0.002	3.0	0.7	0.023	<0.001	0.18 B		
S3-02-03	MT-3-D	50-54	4/10/2012	0.006	0.27	<0.001	0.018	0.016	<0.002	2.4	0.3	0.003	<0.001	0.022 B		
S5-01-01	MT-5-E	0-12	4/10/2012	0.009	5.5	<0.001	0.027 B	0.028	<0.002	11.3	0.3	0.010	<0.002 D	0.11		
S5-01-02	MT-5-E	36-37	4/10/2012	0.004	0.07	<0.001	0.012	0.005	<0.002	1.7	0.6	0.004	<0.002	0.0054		
S5-02-01	MT-5-D	0-12	4/10/2012	<0.001	0.10	<0.001	0.008	<0.001	<0.002	0.8	0.2	0.40	<0.002	1.5		
S5-02-02	MT-5-D	17-24	4/10/2012	<0.001	0.08	<0.001	0.005	<0.001	<0.002	2.1	0.2	0.15	<0.002	1.1		
S5-02-03	MT-5-D	40-44	4/10/2012	0.006	0.62	<0.001	0.017	0.013	<0.002	4.1	0.5	0.012	<0.002	0.011 D		
S7-01-01	MT-7-A	0-12	4/10/2012	0.004	0.06	<0.001	0.005	<0.001	<0.002	10.4	0.1	0.26	<0.002	0.37		
S7-01-02	MT-7-A	24-30	4/10/2012	0.002	0.06	<0.001	0.009	0.003	<0.002	1.1	0.6	0.002	<0.002	0.0047		
S7-01-03	MT-7-A	30-35	4/10/2012	<0.001	0.05	<0.001	0.009	0.001	<0.002	1.5	0.2	0.002	<0.002	0.0049		
S7-02-01	MT-7-B	0-12	4/10/2012	0.013	0.76	<0.001	0.006	0.001	<0.002	2.6	0.5	0.22	<0.001	0.18		
S7-02-02	MT-7-B	23-43	4/10/2012	0.007	0.31	<0.001	0.013	0.020	<0.002	1.9	0.2	0.13	<0.001	0.014		
S7-02-03	MT-7-B	43-46	4/10/2012	0.003	0.16	<0.001	0.010	0.005	<0.002	1.1	0.3	0.003	<0.001	0.0053		
S8-01-01	MT-8-E	0-8	4/10/2012	0.008	0.91	<0.001	0.012	0.009	<0.002	27.2	0.2	0.007	<0.002	0.016		
S8-01-02	MT-8-E	17-30	4/10/2012	0.004	0.09	<0.001	0.006	<0.001	<0.002	2.5	0.6	0.30	<0.002	3.8		
S8-01-03	MT-8-E	36-40	4/10/2012	0.032	0.16	<0.001	0.010	0.006	<0.002	24.5	0.5	0.036	<0.002	0.022		
S8-02-01	MT-8-D	0-12	4/10/2012	0.004	0.12	<0.001	0.009	0.005	<0.002	10.6	0.1	0.22	<0.002	0.12		
S8-02-02	MT-8-D	18-24	4/10/2012	0.006	0.06	<0.001	0.006	<0.001	<0.002	1.7	1.5	1.0	<0.002	6.7		
S8-02-03	MT-8-D	40-50	4/10/2012	0.011	0.98	<0.001	0.028	0.013	<0.002	14.0	0.2	0.063	<0.002	0.19		
S8-02-04	MT-8-D	56-62	4/10/2012	0.004	0.15	<0.001	0.011	0.005	<0.002	2.0	0.6	<0.001	<0.002	0.0056 D		
SA-01-01	MT-A-AA	0-4	4/10/2012	0.036	0.31	<0.001	0.014 B	0.021	<0.002	152	1.8	0.046	<0.002 D	0.44 D		
SA-01-02	MT-A-AA	6-8	4/10/2012	0.006	0.11	<0.001	0.010 B	0.009	<0.002	8.7	0.7	0.051	<0.002 D	0.45 D		
SA-01-03	MT-A-AA	28-30	4/10/2012	0.003	<0.05	<0.001	0.005 B	0.003	<0.002	1.7	0.6	0.095	<0.002 D	0.030 D		
SA-02-01	MT-A-AB	0-4	4/10/2012	0.025	0.25	<0.001	0.011 B	0.010	<0.002	275	3.5	0.014	<0.002 D	0.37 D		
SA-02-02	MT-A-B	8-10	4/10/2012	0.006	0.15	<0.001	0.013 B	0.010	<0.002	5.4	0.7	0.003	<0.002 D	0.11 D		
SA-02-03	MT-A-B	30-33	4/10/2012	0.006	0.09	<0.001	0.013 B	0.006	<0.002	29.3	1.3	0.003	<0.002 D	0.088 D		
MT-1-F (6" B.G.)	MT-1-F	6	4/10/2012	0.006	0.17	<0.001	0.014	0.016	<0.002	2.0	0.6	0.005	<0.001	0.077 B		
MT-2-D (6" B.G.)	MT-2-D	6	4/10/2012	0.002	0.06	<0.001	0.005	0.003	<0.002	0.6	0.6	<0.001	<0.001	0.0098 B		
MT-3-F (6" B.G.)	MT-3-F	6	4/10/2012	0.002	<0.05	<0.001	<0.005	0.001	<0.002	0.9	0.5	0.001	<0.002 D	0.0090 D		
MT-4-D-S1 (0-6" B.G.)	MT-4-D	0-6	4/10/2012	0.008	1.0	<0.001	0.008	0.003	<0.002	18.1	0.9	0.015	<0.002 D	0.033 D		
MT-4-D-S2 (14" B.G.)	MT-4-D	14	4/10/2012	0.007	<0.05	<0.001	0.006	0.001	<0.002	2.8	0.2	0.39	<0.002 D	0.20 D		

TABLE 2
Soil Chemical Analytical Results - April 2012
Total Metals by SW 6010/SW 6020 and Radiochemistry by E903.0/RA-05
RIO GRANDE RESOURCES SOIL SAMPLING AND TESTING FOR CLOSEOUT PLAN
MT. TAYLOR MINE, SAN MATEO, NEW MEXICO

Sample ID	Location	Collection Depth	Collection Date	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Radium 226	Radium 228	Selenium	Silver	Uranium	
		(inches bgs)				mg/L				pCi/g	pCi/g		mg/L		
		CONCENTRATION		SW 6020	SW 6010B	SW 6010B	SW 6010B	SW 6020	SW 7470A	E903.0	RA-05	SW 6020	SW 6020	SW 6020	
Analytical Method		NMED SSL DAF 1		1.31E-02	3.01E+02	1.37E+00	9.86E+07	NA	5.71E-01	30*		9.65E-01	1.57E+00	4.93E+01	
MT-4-D-S3 (48" B.S.)	MT-4-D	48	4/10/2012	0.003	0.88	<0.001	0.009	0.003	<0.002	6.7	0.8	0.020	<0.002 D	0.013 D	
MT-4-E-S1 (0-4" B.G.)	MT-4-E	0-4	4/10/2012	0.034	34	<0.001	0.007	0.008	<0.002	8.7	1.5	0.15	<0.002 D	0.39 D	
MT-4-E-S2 (10-12" B.G.)	MT-4-E	10-12	4/10/2012	0.005	0.22	<0.001	0.011	0.005	<0.002	4.8	0.4	0.072	<0.002 D	0.014 D	
MT-4-E-S3 (36" B.G.)	MT-4-E	36	4/10/2012	0.003	0.13	<0.001	0.007	0.003	<0.002	2.9	0.7	0.026	0.003 D	0.0043 D	
MT-4-E-S4 (84" B.G.)	MT-4-E	48	4/10/2012	0.005 B	0.06	<0.001	0.006	0.002	<0.002	6.2	0.4	0.011	<0.001	0.027	
MT-4-F (6" B.G.)	MT-4-F	6	4/10/2012	0.005	<0.05	<0.001	<0.005	0.003	<0.002	0.8	1.0	0.002	<0.002 D	0.0027 D	
MT-5-F (6" B.G.)	MT-5-F	6	4/10/2012	0.002	<0.05	<0.001	<0.005	0.001	<0.002	2.0	0.8	0.001	0.003 D	0.0029 D	
MT-6-A-S1 (0-5" B.G.)	MT-6-A	0-5	4/10/2012	0.012	7.3	<0.001	0.007	0.016	<0.002	6.4	0.2	0.007	<0.001	0.044	
MT-6-A-S2 (12-20" B.G.)	MT-6-B	12-20	4/10/2012	0.003 B	0.05	<0.001	0.007	<0.001	<0.002	0.4	0.1	0.15	<0.001	0.26 U	
MT-6-B-S1 (8-10" B.G.)	MT-6-B	8-10	4/10/2012	0.004 B	0.05	<0.001	0.007	<0.001	<0.002	0.8	0.2	0.16	<0.001	0.26	
MT-6-B-S2 (30" B.G.)	MT-6-B	30	4/10/2012	0.002 B	0.06	<0.001	<0.005	<0.001	<0.002	4.1	0.8	0.003	<0.001	0.014	
MT-7-C (6" B.G.)	MT-7-C	6	4/10/2012	0.002	<0.05	<0.001	0.006	0.002	<0.002	0.6	0.8	<0.001	<0.002 D	0.0023 D	
MT-8-F (6" B.G.)	MT-8-F	6	4/10/2012	0.001	0.05	0.001	0.005	0.001	0.002	-1000	-1000	0.001	0.002 D	0.0006 D	
MT-A-C (6" B.G.)	MT-A-C	6	4/10/2012	0.003	<0.05	<0.001	<0.005	0.001	<0.002	1.7	0.5	0.044	<0.002 D	0.14	
MT-Borrow/Background		MT-Borrow	24-66	4/10/2012	0.001	<0.05	<0.001	<0.005	<0.001	<0.002	0.7	0.7	0.001	<0.002 D	0.0007
MT-OP-C-S1 (0-6" B.G.)	MT-OP-C	0-6	4/10/2012	0.015	0.05	<0.001	0.010	0.001	<0.002	53.3	2.1	0.052	<0.001	1.8	
MT-OP-C-S2 (20" B.G.)	MT-OP-C	20	4/10/2012	0.005	0.05	<0.001	0.007	0.002	<0.002	1.7	0.6	0.018	<0.002 D	0.14	
MT-OP-C-S3 (48-50" B.G.)	MT-OP-C	48-50	4/10/2012	0.004	<0.05	<0.001	<0.005	<0.001	<0.002	0.8	0.8	0.028	<0.002 D	0.049	
MT-OP-C-S4 (72" B.G.)	MT-OP-C	72	4/10/2012	0.004	<0.05	<0.001	<0.005	<0.001	<0.002	1.5	0.6	0.025	<0.002 D	0.0064	
MT-OP-D-S1 (0-6" B.G.)	MT-OP-D	0-6	4/10/2012	0.013	1.3	<0.001	0.007	0.008	<0.002	51.9	0.5	0.009	<0.002 D	0.23	
MT-OP-D-S2 (48-50" B.G.)	MT-OP-D	48-50	4/10/2012	0.001	0.05	<0.001	<0.005	<0.001	<0.002	1.9	0.6	0.005	<0.002 D	0.10	
MT-OP-D-S3 (76" B.G.)	MT-OP-D	76	4/10/2012	0.006	0.11	<0.001	0.012	0.009	<0.002	0.6	0.5	0.002	<0.002 D	0.0034	
MT-OP-E-S1 (6" B.G.)	MT-OP-E	6	4/10/2012	0.004	0.05	<0.001	0.006	0.003	<0.002	1.1	0.8	0.005	<0.002 D	0.0056	

Notes:

bgs = below ground surface

mg/Kg = milligrams per kilogram

DAF=Dilution Attenuation Factor

NA = No DAF values available; NMF

NA - No DAF values available, NMED 2012, rev6

Total metals concentrations should be compared to background soil sample concentrations before comparing to Soil Screening

Levels (SSL). Only metal concentrations above background should be considered for comparison to SSLs.

NMED considers a DAF=20 to be protective of groundwater for a 0.5-acre source. SSL values are included for reference only.

as they are applicable for reclamation, not for mines that are active or on stand-by status.

B = The analyte was detected in the method blank.

TABLE 3
Sediment Analytical Results
Chloride and Sulfate Detections - April 2012
RIO GRANDE RESOURCES SOIL SAMPLING AND TESTING FOR CLOSEOUT PLAN
MT. TAYLOR MINE, SAN MATEO, NEW MEXICO

ClientSampID	Location	Sample Interval (inches below grade)	Method	Analyte	Value (mg/kg)	Analyte	Value (mg/kg)
Berms							
MT-4-F	MT-4-F	6	E300.1	Chloride	51.2	Sulfate	405
MT-5-F	MT-5-F	6	E300.2	Chloride	37.0	Sulfate	183
MT-8F	MT-8F	6	E300.3	Chloride	14.2	Sulfate	28.9
Ponds							
MT-4-D-S1	MT-4-D	0-6	E300.0	Chloride	7.76	Sulfate	77
MT-4-D-S2	MT-4-D	14	E300.0	Chloride	92.00	Sulfate	1840
MT-4-D-S3	MT-4-D	48	E300.0	Chloride	6.49	Sulfate	132
MT-4-E-S1	MT-4-E	0-4	E300.0	Chloride	46.40	Sulfate	853
MT-4-E-S2	MT-4-E	10-12	E300.0	Chloride	34.10	Sulfate	1150
MT-4-E-S3	MT-4-E	36	E300.0	Chloride	13.10	Sulfate	184
MT-4-E-S4	MT-4-E	48	E300.0	Chloride	4.51	Sulfate	131
S5-01-01	MT-5-E	0-12	E300.0	Chloride	9.64	Sulfate	113
S5-01-02	MT-5-E	30-37	E300.0	Chloride	7.87	Sulfate	261
S5-02-01	MT-5-D	0-12	E300.1	Chloride	17.2	Sulfate	2860
S5-02-02	MT-5-D	17-24	E300.2	Chloride	23.1	Sulfate	2530
S5-02-03	MT-5-D	40-44	E300.3	Chloride	5.10	Sulfate	279
S8-01-01	MT-8-E	0-8	E300.0	Chloride	29.3	Sulfate	35.3
S8-01-02	MT-8-E	17-30	E300.0	Chloride	39.6	Sulfate	2750
S8-01-03	MT-8-E	36-40	E300.0	Chloride	12.0	Sulfate	197
S8-02-01	MT-8-D	0-12	E300.0	Chloride	58.6	Sulfate	1660
S8-02-02	MT-8-D	18-24	E300.0	Chloride	44.6	Sulfate	2480
S8-02-03	MT-8-D	40-50	E300.0	Chloride	9.13	Sulfate	536
S8-02-04	MT-8-D	56-62	E300.0	Chloride	3.01	Sulfate	31.2

ANALYTICAL SUMMARY REPORT

July 05, 2012

Rio Grande Resources Corporation
PO Box 1150
Grants, NM 87020

Workorder No.: C12040804 Quote ID: C3778 - Mt Taylor Mine Closure Plan

Project Name: Mt. Taylor Mine Closure Plan

Energy Laboratories, Inc. Casper WY received the following 37 samples for Rio Grande Resources Corporation on 4/13/2012 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C12040804-001	S1-01-01	04/10/12 10:45	04/13/12	Sediment	Metals, SPLP Extractable Mercury, SPLP Mercury Analysis Prep Filterability Digestion, Total Metals Digestion For RadioChemistry Radium 226 Radium 228 SPLP Extraction, Regular
C12040804-002	S1-01-02	04/10/12 10:50	04/13/12	Sediment	Same As Above
C12040804-003	S1-01-03	04/10/12 11:00	04/13/12	Sediment	Same As Above
C12040804-004	S1-02-01	04/10/12 11:40	04/13/12	Sediment	Same As Above
C12040804-005	S1-02-02	04/10/12 11:43	04/13/12	Sediment	Same As Above
C12040804-006	S1-02-03	04/10/12 11:45	04/13/12	Sediment	Same As Above
C12040804-007	SA-01-01	04/10/12 11:30	04/13/12	Sediment	Same As Above
C12040804-008	SA-01-02	04/10/12 11:35	04/13/12	Sediment	Same As Above
C12040804-009	SA-01-03	04/10/12 11:45	04/13/12	Sediment	Same As Above
C12040804-010	SA-02-01	04/10/12 11:48	04/13/12	Sediment	Same As Above
C12040804-011	SA-02-02	04/10/12 11:48	04/13/12	Sediment	Same As Above
C12040804-012	SA-02-03	04/10/12 11:48	04/13/12	Sediment	Same As Above
C12040804-013	S8-01-01	04/10/12 13:00	04/13/12	Sediment	Metals, SPLP Extractable Mercury, SPLP Mercury Analysis Prep Filterability E300.0 Anions Digestion, Total Metals Digestion For RadioChemistry DI Water Soil Extract Radium 226 Radium 228 SPLP Extraction, Regular
C12040804-014	S8-01-02	04/10/12 13:09	04/13/12	Sediment	Same As Above
C12040804-015	S8-01-03	04/10/12 13:09	04/13/12	Sediment	Same As Above
C12040804-016	S8-02-01	04/10/12 13:26	04/13/12	Sediment	Same As Above

ANALYTICAL SUMMARY REPORT

C12040804-017	S8-02-02	04/10/12 13:36	04/13/12	Sediment	Same As Above
C12040804-018	S8-02-03	04/10/12 13:36	04/13/12	Sediment	Same As Above
C12040804-019	S8-02-04	04/10/12 13:39	04/13/12	Sediment	Same As Above
C12040804-020	S5-01-01	04/10/12 14:05	04/13/12	Sediment	Same As Above
C12040804-021	S7-01-01	04/10/12 15:12	04/13/12	Sediment	Metals, SPLP Extractable Mercury, SPLP Mercury Analysis Prep Filterability Digestion, Total Metals Digestion For RadioChemistry Radium 226 Radium 228 SPLP Extraction, Regular
C12040804-022	S7-01-02	04/10/12 15:17	04/13/12	Sediment	Same As Above
C12040804-023	S7-01-03	04/10/12 15:22	04/13/12	Sediment	Same As Above
C12040804-024	S5-02-02	04/10/12 14:15	04/13/12	Sediment	Metals, SPLP Extractable Mercury, SPLP Mercury Analysis Prep Filterability E300.0 Anions Digestion, Total Metals Digestion For RadioChemistry DI Water Soil Extract Radium 226 Radium 228 SPLP Extraction, Regular
C12040804-025	S5-02-03	04/10/12 14:20	04/13/12	Sediment	Same As Above
C12040804-026	S5-02-01	04/10/12 14:30	04/13/12	Sediment	Same As Above
C12040804-027	S5-01-02	04/10/12 14:09	04/13/12	Sediment	Same As Above
C12040804-028	S3-01-01	04/10/12 9:15	04/13/12	Sediment	Metals, SPLP Extractable Mercury, SPLP Mercury Analysis Prep Filterability Digestion, Total Metals Digestion For RadioChemistry Radium 226 Radium 228 SPLP Extraction, Regular
C12040804-029	S3-01-02	04/10/12 8:50	04/13/12	Sediment	Same As Above
C12040804-030	S3-01-03	04/10/12 9:40	04/13/12	Sediment	Same As Above
C12040804-031	S3-02-01	04/10/12 10:22	04/13/12	Sediment	Same As Above
C12040804-032	S3-02-02	04/10/12 10:30	04/13/12	Sediment	Same As Above
C12040804-033	S3-02-03	04/10/12 10:30	04/13/12	Sediment	Same As Above
C12040804-034	S7-02-01	04/10/12 15:45	04/13/12	Sediment	Same As Above
C12040804-035	S7-02-02	04/10/12 15:50	04/13/12	Sediment	Same As Above
C12040804-036	S7-02-03	04/10/12 15:55	04/13/12	Sediment	Same As Above
C12040804-037	S3-01-04	04/10/12 9:46	04/13/12	Sediment	Same As Above

ANALYTICAL SUMMARY REPORT

The results as reported relate only to the item(s) submitted for testing. The analyses presented in this report were performed at Energy Laboratories, Inc., 2393 Salt Creek Hwy., Casper, WY 82601, unless otherwise noted. Radiochemistry analyses were performed at Energy Laboratories, Inc., 2325 Kerzell Lane, Casper, WY 82601, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these test results, please call.

Report Approved By:

CLIENT: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Sample Delivery Group: C12040804

Revised Date: 07/05/12

Report Date: 06/13/12

CASE NARRATIVE

REVISED/SUPPLEMENTAL REPORT

The attached analytical report has been revised from a previously submitted report due to the request by the client for the analysis of Radium 226 and Radium 228 on the Sediment on all samples and Chloride and Sulfate on the Sediment on samples -013 through -020 and -024 through -027. The data presented here is from that analysis.

PREP COMMENTS

The prep hold time for Mercury analysis was exceeded by up to 10.2 days.
The prep hold time for Chloride and Sulfate analysis was exceeded by 38.8 days.

ORIGINAL SAMPLE SUBMITTAL(S)

All original sample submittals have been returned with the data package.

SAMPLE TEMPERATURE COMPLIANCE: 4°C ($\pm 2^\circ\text{C}$)

Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

GROSS ALPHA ANALYSIS

Method 900.0 for gross alpha and gross beta is intended as a drinking water method for low TDS waters. Data provided by this method for non potable waters should be viewed as inconsistent.

RADON IN AIR ANALYSIS

The desired exposure time is 48 hours (2 days). The time delay in returning the canister to the laboratory for processing should be as short as possible to avoid excessive decay. Maximum recommended delay between end of exposure to beginning of counting should not exceed 8 days.

SOIL/SOLID SAMPLES

All samples reported on an as received basis unless otherwise indicated.

ATRAZINE, SIMAZINE AND PCB ANALYSIS

Data for PCBs, Atrazine and Simazine are reported from EPA 525.2. PCB data reported by ELI reflects the results for seven individual Aroclors. When the results for all seven are ND (not detected), the sample meets EPA compliance criteria for PCB monitoring.

SUBCONTRACTING ANALYSIS

Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

BRANCH LABORATORY LOCATIONS

eli-b - Energy Laboratories, Inc. - Billings, MT
eli-g - Energy Laboratories, Inc. - Gillette, WY
eli-h - Energy Laboratories, Inc. - Helena, MT
eli-r - Energy Laboratories, Inc. - Rapid City, SD
eli-t - Energy Laboratories, Inc. - College Station, TX

CERTIFICATIONS:

USEPA: WY00002, Radiochemical WY00937; FL-DOH NELAC: E87641, Radiochemical E871017; California: 02118CA;
Oregon: WY200001, Radiochemical WY200002; Utah: WY00002; Virginia: 00057; Washington: C836

ISO 17025 DISCLAIMER:

The results of this Analytical Report relate only to the items submitted for analysis.

ENERGY LABORATORIES, INC. - CASPER,WY certifies that certain method selections contained in this report meet requirements as set forth by the above accrediting authorities. Some results requested by the client may not be covered under these certifications. All analysis data to be submitted for regulatory enforcement should be certified in the sample state of origin. Please verify ELI's certification coverage by visiting www.energylab.com

ELI appreciates the opportunity to provide you with this analytical service. For additional information and services visit our web page www.energylab.com.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-001
Client Sample ID: S1-01-01

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 10:45
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.014	mg/L		0.001	SW6020	04/20/12 13:36 / smm	
Barium	0.28	mg/L		0.05	SW6020	04/20/12 13:36 / smm	
Cadmium	ND	mg/L		0.001	SW6020	04/20/12 13:36 / smm	
Chromium	0.014	mg/L	B	0.005	SW6020	04/20/12 13:36 / smm	
Lead	0.014	mg/L		0.001	SW6020	04/20/12 13:36 / smm	
Mercury	ND	mg/L		0.002	SW7470A	05/19/12 07:52 / rdw	
Selenium	0.26	mg/L		0.001	SW6020	04/20/12 13:36 / smm	
Silver	ND	mg/L	D	0.002	SW6020	04/20/12 13:36 / smm	
Uranium	2.2	mg/L	D	0.0006	SW6020	04/20/12 13:36 / smm	
RADIONUCLIDES							
Radium 226	124	pCi/g-dry			E903.0	07/02/12 22:18 / plj	
Radium 226 precision (\pm)	1	pCi/g-dry			E903.0	07/02/12 22:18 / plj	
Radium 226 MDC	0.03	pCi/g-dry			E903.0	07/02/12 22:18 / plj	
Radium 228	1.8	pCi/g-dry			RA-05	06/25/12 12:20 / plj	
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05	06/25/12 12:20 / plj	
Radium 228 MDC	0.3	pCi/g-dry			RA-05	06/25/12 12:20 / plj	

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-002
Client Sample ID: S1-01-02

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 10:50
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.048	mg/L		0.001	SW6020	04/20/12 12:57 / smm	
Barium	3.8	mg/L		0.05	SW6020	04/20/12 12:57 / smm	
Cadmium	0.001	mg/L		0.001	SW6020	04/20/12 12:57 / smm	
Chromium	0.040	mg/L	B	0.005	SW6020	04/20/12 12:57 / smm	
Lead	0.078	mg/L		0.001	SW6020	04/20/12 12:57 / smm	
Mercury	ND	mg/L		0.002	SW7470A	05/19/12 07:56 / rdw	
Selenium	0.49	mg/L		0.001	SW6020	04/20/12 12:57 / smm	
Silver	ND	mg/L	D	0.002	SW6020	04/20/12 12:57 / smm	
Uranium	5.3	mg/L	D	0.0006	SW6020	04/20/12 12:57 / smm	
RADIONUCLIDES							
Radium 226	113	pCi/g-dry			E903.0	07/02/12 22:18 / plj	
Radium 226 precision (\pm)	0.9	pCi/g-dry			E903.0	07/02/12 22:18 / plj	
Radium 226 MDC	0.03	pCi/g-dry			E903.0	07/02/12 22:18 / plj	
Radium 228	1.3	pCi/g-dry			RA-05	06/25/12 12:20 / plj	
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05	06/25/12 12:20 / plj	
Radium 228 MDC	0.2	pCi/g-dry			RA-05	06/25/12 12:20 / plj	

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-003
Client Sample ID: S1-01-03

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 11:00
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.010	mg/L		0.001	SW6020	04/20/12 13:14 / smm	
Barium	0.34	mg/L		0.05	SW6020	04/20/12 13:14 / smm	
Cadmium	ND	mg/L		0.001	SW6020	04/20/12 13:14 / smm	
Chromium	0.027	mg/L	B	0.005	SW6020	04/20/12 13:14 / smm	
Lead	0.023	mg/L		0.001	SW6020	04/20/12 13:14 / smm	
Mercury	ND	mg/L		0.002	SW7470A	05/19/12 07:57 / rdw	
Selenium	0.14	mg/L		0.001	SW6020	04/20/12 13:14 / smm	
Silver	0.002	mg/L	D	0.002	SW6020	04/20/12 13:14 / smm	
Uranium	0.094	mg/L	D	0.0006	SW6020	04/20/12 13:14 / smm	
RADIONUCLIDES							
Radium 226	12.6	pCi/g-dry			E903.0	07/02/12 22:18 / plj	
Radium 226 precision (\pm)	0.3	pCi/g-dry			E903.0	07/02/12 22:18 / plj	
Radium 226 MDC	0.03	pCi/g-dry			E903.0	07/02/12 22:18 / plj	
Radium 228	0.8	pCi/g-dry			RA-05	06/25/12 12:20 / plj	
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05	06/25/12 12:20 / plj	
Radium 228 MDC	0.3	pCi/g-dry			RA-05	06/25/12 12:20 / plj	

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-004
Client Sample ID: S1-02-01

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 11:40
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.023	mg/L		0.001	SW6020	04/20/12 13:17 / smm	
Barium	0.39	mg/L		0.05	SW6020	04/20/12 13:17 / smm	
Cadmium	ND	mg/L		0.001	SW6020	04/20/12 13:17 / smm	
Chromium	0.014	mg/L	B	0.005	SW6020	04/20/12 13:17 / smm	
Lead	0.021	mg/L		0.001	SW6020	04/20/12 13:17 / smm	
Mercury	ND	mg/L		0.002	SW7470A	05/19/12 07:58 / rdw	
Selenium	0.19	mg/L		0.001	SW6020	04/20/12 13:17 / smm	
Silver	ND	mg/L	D	0.002	SW6020	04/20/12 13:17 / smm	
Uranium	1.5	mg/L	D	0.0006	SW6020	04/20/12 13:17 / smm	
RADIONUCLIDES							
Radium 226	224	pCi/g-dry			E903.0	07/02/12 22:18 / plj	
Radium 226 precision (\pm)	1.3	pCi/g-dry			E903.0	07/02/12 22:18 / plj	
Radium 226 MDC	0.03	pCi/g-dry			E903.0	07/02/12 22:18 / plj	
Radium 228	2.3	pCi/g-dry			RA-05	06/25/12 12:20 / plj	
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05	06/25/12 12:20 / plj	
Radium 228 MDC	0.3	pCi/g-dry			RA-05	06/25/12 12:20 / plj	

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-005
Client Sample ID: S1-02-02

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 11:43
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.003	mg/L		0.001	SW6020	04/20/12 13:19 / smm	
Barium	ND	mg/L		0.05	SW6020	04/20/12 13:19 / smm	
Cadmium	ND	mg/L		0.001	SW6020	04/20/12 13:19 / smm	
Chromium	0.007	mg/L	B	0.005	SW6020	04/20/12 13:19 / smm	
Lead	0.004	mg/L		0.001	SW6020	04/20/12 13:19 / smm	
Mercury	ND	mg/L		0.002	SW7470A	05/19/12 08:00 / rdw	
Selenium	0.11	mg/L		0.001	SW6020	04/20/12 13:19 / smm	
Silver	ND	mg/L	D	0.002	SW6020	04/20/12 13:19 / smm	
Uranium	0.24	mg/L	D	0.0006	SW6020	04/20/12 13:19 / smm	
RADIONUCLIDES							
Radium 226	0.9	pCi/g-dry			E903.0	07/02/12 22:18 / plj	
Radium 226 precision (\pm)	0.09	pCi/g-dry			E903.0	07/02/12 22:18 / plj	
Radium 226 MDC	0.03	pCi/g-dry			E903.0	07/02/12 22:18 / plj	
Radium 228	0.8	pCi/g-dry			RA-05	06/25/12 12:20 / plj	
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05	06/25/12 12:20 / plj	
Radium 228 MDC	0.3	pCi/g-dry			RA-05	06/25/12 12:20 / plj	

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-006
Client Sample ID: S1-02-03

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 11:45
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.003	mg/L		0.001	SW6020	04/20/12 13:22 / smm	
Barium	ND	mg/L		0.05	SW6020	04/20/12 13:22 / smm	
Cadmium	ND	mg/L		0.001	SW6020	04/20/12 13:22 / smm	
Chromium	0.006	mg/L	B	0.005	SW6020	04/20/12 13:22 / smm	
Lead	0.003	mg/L		0.001	SW6020	04/20/12 13:22 / smm	
Mercury	ND	mg/L		0.002	SW7470A	05/19/12 08:20 / rdw	
Selenium	0.012	mg/L		0.001	SW6020	04/20/12 13:22 / smm	
Silver	ND	mg/L	D	0.002	SW6020	04/20/12 13:22 / smm	
Uranium	0.050	mg/L	D	0.0006	SW6020	04/20/12 13:22 / smm	
RADIONUCLIDES							
Radium 226	0.6	pCi/g-dry			E903.0	07/02/12 22:18 / plj	
Radium 226 precision (\pm)	0.07	pCi/g-dry			E903.0	07/02/12 22:18 / plj	
Radium 226 MDC	0.03	pCi/g-dry			E903.0	07/02/12 22:18 / plj	
Radium 228	0.6	pCi/g-dry			RA-05	06/25/12 12:20 / plj	
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05	06/25/12 12:20 / plj	
Radium 228 MDC	0.3	pCi/g-dry			RA-05	06/25/12 12:20 / plj	

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-007
Client Sample ID: SA-01-01

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 11:30
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.036	mg/L		0.001	SW6020	04/20/12 13:25 / smm	
Barium	0.31	mg/L		0.05	SW6020	04/20/12 13:25 / smm	
Cadmium	ND	mg/L		0.001	SW6020	04/20/12 13:25 / smm	
Chromium	0.014	mg/L	B	0.005	SW6020	04/20/12 13:25 / smm	
Lead	0.021	mg/L		0.001	SW6020	04/20/12 13:25 / smm	
Mercury	ND	mg/L		0.002	SW7470A	05/19/12 08:22 / rdw	
Selenium	0.046	mg/L		0.001	SW6020	04/20/12 13:25 / smm	
Silver	ND	mg/L	D	0.002	SW6020	04/20/12 13:25 / smm	
Uranium	0.44	mg/L	D	0.0006	SW6020	04/20/12 13:25 / smm	
RADIOMUCIDES							
Radium 226	152	pCi/g-dry			E903.0	07/02/12 22:18 / plj	
Radium 226 precision (\pm)	1.1	pCi/g-dry			E903.0	07/02/12 22:18 / plj	
Radium 226 MDC	0.03	pCi/g-dry			E903.0	07/02/12 22:18 / plj	
Radium 228	1.8	pCi/g-dry			RA-05	06/25/12 12:20 / plj	
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05	06/25/12 12:20 / plj	
Radium 228 MDC	0.3	pCi/g-dry			RA-05	06/25/12 12:20 / plj	

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-008
Client Sample ID: SA-01-02

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 11:35
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.006	mg/L		0.001	SW6020	04/20/12 13:28 / smm	
Barium	0.11	mg/L		0.05	SW6020	04/20/12 13:28 / smm	
Cadmium	ND	mg/L		0.001	SW6020	04/20/12 13:28 / smm	
Chromium	0.010	mg/L	B	0.005	SW6020	04/20/12 13:28 / smm	
Lead	0.009	mg/L		0.001	SW6020	04/20/12 13:28 / smm	
Mercury	ND	mg/L		0.002	SW7470A	05/19/12 08:23 / rdw	
Selenium	0.051	mg/L		0.001	SW6020	04/20/12 13:28 / smm	
Silver	ND	mg/L	D	0.002	SW6020	04/20/12 13:28 / smm	
Uranium	0.45	mg/L	D	0.0006	SW6020	04/20/12 13:28 / smm	
RADIONUCLIDES							
Radium 226	8.7	pCi/g-dry			E903.0	07/02/12 23:06 / plj	
Radium 226 precision (\pm)	0.4	pCi/g-dry			E903.0	07/02/12 23:06 / plj	
Radium 226 MDC	0.05	pCi/g-dry			E903.0	07/02/12 23:06 / plj	
Radium 228	0.7	pCi/g-dry			RA-05	06/25/12 12:20 / plj	
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05	06/25/12 12:20 / plj	
Radium 228 MDC	0.3	pCi/g-dry			RA-05	06/25/12 12:20 / plj	

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-009
Client Sample ID: SA-01-03

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 11:45
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.003	mg/L		0.001	SW6020	04/20/12 13:31 / smm	
Barium	ND	mg/L		0.05	SW6020	04/20/12 13:31 / smm	
Cadmium	ND	mg/L		0.001	SW6020	04/20/12 13:31 / smm	
Chromium	0.005	mg/L	B	0.005	SW6020	04/20/12 13:31 / smm	
Lead	0.003	mg/L		0.001	SW6020	04/20/12 13:31 / smm	
Mercury	ND	mg/L		0.002	SW7470A	05/19/12 08:24 / rdw	
Selenium	0.095	mg/L		0.001	SW6020	04/20/12 13:31 / smm	
Silver	ND	mg/L	D	0.002	SW6020	04/20/12 13:31 / smm	
Uranium	0.030	mg/L	D	0.0006	SW6020	04/20/12 13:31 / smm	
RADIONUCLIDES							
Radium 226	1.7	pCi/g-dry			E903.0	07/02/12 23:06 / plj	
Radium 226 precision (\pm)	0.2	pCi/g-dry			E903.0	07/02/12 23:06 / plj	
Radium 226 MDC	0.05	pCi/g-dry			E903.0	07/02/12 23:06 / plj	
Radium 228	0.6	pCi/g-dry			RA-05	06/25/12 12:20 / plj	
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05	06/25/12 12:20 / plj	
Radium 228 MDC	0.3	pCi/g-dry			RA-05	06/25/12 12:20 / plj	

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-010
Client Sample ID: SA-02-01

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 11:48
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.025	mg/L		0.001	SW6020	04/20/12 13:33 / smm	
Barium	0.25	mg/L		0.05	SW6020	04/20/12 13:33 / smm	
Cadmium	ND	mg/L		0.001	SW6020	04/20/12 13:33 / smm	
Chromium	0.011	mg/L	B	0.005	SW6020	04/20/12 13:33 / smm	
Lead	0.010	mg/L		0.001	SW6020	04/20/12 13:33 / smm	
Mercury	ND	mg/L		0.002	SW7470A	05/19/12 08:26 / rdw	
Selenium	0.014	mg/L		0.001	SW6020	04/20/12 13:33 / smm	
Silver	ND	mg/L	D	0.002	SW6020	04/20/12 13:33 / smm	
Uranium	0.37	mg/L	D	0.0006	SW6020	04/20/12 13:33 / smm	
RADIONUCLIDES							
Radium 226	275	pCi/g-dry			E903.0	07/02/12 23:06 / plj	
Radium 226 precision (\pm)	2.0	pCi/g-dry			E903.0	07/02/12 23:06 / plj	
Radium 226 MDC	0.05	pCi/g-dry			E903.0	07/02/12 23:06 / plj	
Radium 228	3.5	pCi/g-dry			RA-05	06/25/12 12:20 / plj	
Radium 228 precision (\pm)	0.3	pCi/g-dry			RA-05	06/25/12 12:20 / plj	
Radium 228 MDC	0.2	pCi/g-dry			RA-05	06/25/12 12:20 / plj	

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-011
Client Sample ID: SA-02-02

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 11:48
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.006	mg/L		0.001	SW6020	04/20/12 14:40 / smm	
Barium	0.15	mg/L		0.05	SW6020	04/20/12 14:40 / smm	
Cadmium	ND	mg/L		0.001	SW6020	04/20/12 14:40 / smm	
Chromium	0.013	mg/L	B	0.005	SW6020	04/20/12 14:40 / smm	
Lead	0.010	mg/L		0.001	SW6020	04/20/12 14:40 / smm	
Mercury	ND	mg/L		0.002	SW7470A	05/19/12 08:31 / rdw	
Selenium	0.003	mg/L		0.001	SW6020	04/20/12 14:40 / smm	
Silver	ND	mg/L	D	0.002	SW6020	04/20/12 14:40 / smm	
Uranium	0.11	mg/L	D	0.0006	SW6020	04/20/12 14:40 / smm	
RADIONUCLIDES							
Radium 226	5.4	pCi/g-dry			E903.0	07/02/12 23:06 / plj	
Radium 226 precision (\pm)	0.3	pCi/g-dry			E903.0	07/02/12 23:06 / plj	
Radium 226 MDC	0.05	pCi/g-dry			E903.0	07/02/12 23:06 / plj	
Radium 228	0.7	pCi/g-dry			RA-05	06/25/12 13:54 / plj	
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05	06/25/12 13:54 / plj	
Radium 228 MDC	0.3	pCi/g-dry			RA-05	06/25/12 13:54 / plj	

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-012
Client Sample ID: SA-02-03

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 11:48
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.006	mg/L		0.001	SW6020	04/20/12 14:06 / smm	
Barium	0.09	mg/L		0.05	SW6020	04/20/12 14:06 / smm	
Cadmium	ND	mg/L		0.001	SW6020	04/20/12 14:06 / smm	
Chromium	0.013	mg/L	B	0.005	SW6020	04/20/12 14:06 / smm	
Lead	0.006	mg/L		0.001	SW6020	04/20/12 14:06 / smm	
Mercury	ND	mg/L		0.002	SW7470A	05/19/12 08:37 / rdw	
Selenium	0.003	mg/L		0.001	SW6020	04/20/12 14:06 / smm	
Silver	ND	mg/L	D	0.002	SW6020	04/20/12 14:06 / smm	
Uranium	0.088	mg/L	D	0.0006	SW6020	04/20/12 14:06 / smm	
RADIONUCLIDES							
Radium 226	29.3	pCi/g-dry			E903.0	07/02/12 23:06 / plj	
Radium 226 precision (\pm)	0.7	pCi/g-dry			E903.0	07/02/12 23:06 / plj	
Radium 226 MDC	0.05	pCi/g-dry			E903.0	07/02/12 23:06 / plj	
Radium 228	1.3	pCi/g-dry			RA-05	06/25/12 13:54 / plj	
Radium 228 precision (\pm)	0.3	pCi/g-dry			RA-05	06/25/12 13:54 / plj	
Radium 228 MDC	0.3	pCi/g-dry			RA-05	06/25/12 13:54 / plj	

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-013
Client Sample ID: S8-01-01

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 13:00
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE EXTRACT							
Chloride	29.3	mg/kg		1.00	E300.0	06/27/12 21:54 / ljl	
Chloride, 1:1	0.827	meq/L		0.0282	E300.0	06/27/12 21:54 / ljl	
Sulfate	35.3	mg/kg		1.00	E300.0	06/27/12 21:54 / ljl	
Sulfate, 1:1	0.735	meq/L		0.0208	E300.0	06/27/12 21:54 / ljl	
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311	04/18/12 08:51 / dcj	
METALS - SPLP EXTRACTABLE							
Arsenic	0.008	mg/L		0.001	SW6020	04/20/12 14:12 / smm	
Barium	0.91	mg/L		0.05	SW6020	04/20/12 14:12 / smm	
Cadmium	ND	mg/L		0.001	SW6020	04/20/12 14:12 / smm	
Chromium	0.012	mg/L	B	0.005	SW6020	04/20/12 14:12 / smm	
Lead	0.009	mg/L		0.001	SW6020	04/20/12 14:12 / smm	
Mercury	ND	mg/L		0.002	SW7470A	05/19/12 08:39 / rdw	
Selenium	0.007	mg/L		0.001	SW6020	04/20/12 14:12 / smm	
Silver	ND	mg/L	D	0.002	SW6020	04/20/12 14:12 / smm	
Uranium	0.016	mg/L	D	0.0006	SW6020	04/20/12 14:12 / smm	
RADIONUCLIDES							
Radium 226	27.2	pCi/g-dry			E903.0	07/02/12 23:06 / plj	
Radium 226 precision (\pm)	0.6	pCi/g-dry			E903.0	07/02/12 23:06 / plj	
Radium 226 MDC	0.04	pCi/g-dry			E903.0	07/02/12 23:06 / plj	
Radium 228	0.2	pCi/g-dry	U		RA-05	06/25/12 13:54 / plj	
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05	06/25/12 13:54 / plj	
Radium 228 MDC	0.3	pCi/g-dry			RA-05	06/25/12 13:54 / plj	

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-014
Client Sample ID: S8-01-02

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 13:09
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE EXTRACT							
Chloride	38.9	mg/kg		1.00	E300.0		06/27/12 22:10 / ljl
Chloride, 1:1	1.10	meq/L		0.0282	E300.0		06/27/12 22:10 / ljl
Sulfate	2750	mg/kg		1.00	E300.0		06/28/12 13:59 / ljl
Sulfate, 1:1	57.2	meq/L		0.0208	E300.0		06/28/12 13:59 / ljl
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.004	mg/L		0.001	SW6020		04/20/12 14:26 / smm
Barium	0.09	mg/L		0.05	SW6020		04/20/12 14:26 / smm
Cadmium	ND	mg/L		0.001	SW6020		04/20/12 14:26 / smm
Chromium	0.006	mg/L	B	0.005	SW6020		04/20/12 14:26 / smm
Lead	ND	mg/L		0.001	SW6020		04/20/12 14:26 / smm
Mercury	ND	mg/L		0.002	SW7470A		05/19/12 08:40 / rdw
Selenium	0.30	mg/L		0.001	SW6020		04/20/12 14:26 / smm
Silver	0.002	mg/L	D	0.002	SW6020		04/20/12 14:26 / smm
Uranium	3.8	mg/L	D	0.0006	SW6020		04/20/12 14:26 / smm
RADIONUCLIDES							
Radium 226	2.5	pCi/g-dry			E903.0		07/02/12 23:06 / plj
Radium 226 precision (\pm)	0.2	pCi/g-dry			E903.0		07/02/12 23:06 / plj
Radium 226 MDC	0.05	pCi/g-dry			E903.0		07/02/12 23:06 / plj
Radium 228	0.6	pCi/g-dry			RA-05		06/25/12 13:54 / plj
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05		06/25/12 13:54 / plj
Radium 228 MDC	0.3	pCi/g-dry			RA-05		06/25/12 13:54 / plj

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-015
Client Sample ID: S8-01-03

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 13:09
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE EXTRACT							
Chloride	12.0	mg/kg		1.00	E300.0		06/27/12 22:27 / ljl
Chloride, 1:1	0.340	meq/L		0.0282	E300.0		06/27/12 22:27 / ljl
Sulfate	197	mg/kg		1.00	E300.0		06/27/12 22:27 / ljl
Sulfate, 1:1	4.11	meq/L		0.0208	E300.0		06/27/12 22:27 / ljl
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.032	mg/L		0.001	SW6020		04/20/12 14:29 / smm
Barium	0.16	mg/L		0.05	SW6020		04/20/12 14:29 / smm
Cadmium	ND	mg/L		0.001	SW6020		04/20/12 14:29 / smm
Chromium	0.010	mg/L	B	0.005	SW6020		04/20/12 14:29 / smm
Lead	0.006	mg/L		0.001	SW6020		04/20/12 14:29 / smm
Mercury	ND	mg/L		0.002	SW7470A		05/19/12 08:41 / rdw
Selenium	0.036	mg/L		0.001	SW6020		04/20/12 14:29 / smm
Silver	ND	mg/L	D	0.002	SW6020		04/20/12 14:29 / smm
Uranium	0.022	mg/L	D	0.0006	SW6020		04/20/12 14:29 / smm
RADIONUCLIDES							
Radium 226	24.5	pCi/g-dry			E903.0		07/02/12 23:06 / plj
Radium 226 precision (\pm)	0.6	pCi/g-dry			E903.0		07/02/12 23:06 / plj
Radium 226 MDC	0.05	pCi/g-dry			E903.0		07/02/12 23:06 / plj
Radium 228	0.5	pCi/g-dry			RA-05		06/25/12 13:54 / plj
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05		06/25/12 13:54 / plj
Radium 228 MDC	0.3	pCi/g-dry			RA-05		06/25/12 13:54 / plj

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-016
Client Sample ID: S8-02-01

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 13:26
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE EXTRACT							
Chloride	58.6	mg/kg		1.00	E300.0	06/27/12 22:43 / ljl	
Chloride, 1:1	1.65	meq/L		0.0282	E300.0	06/27/12 22:43 / ljl	
Sulfate	1660	mg/kg		1.00	E300.0	06/27/12 22:43 / ljl	
Sulfate, 1:1	34.5	meq/L		0.0208	E300.0	06/27/12 22:43 / ljl	
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311	04/18/12 08:51 / dcj	
METALS - SPLP EXTRACTABLE							
Arsenic	0.004	mg/L		0.001	SW6020	04/20/12 14:32 / smm	
Barium	0.12	mg/L		0.05	SW6020	04/20/12 14:32 / smm	
Cadmium	ND	mg/L		0.001	SW6020	04/20/12 14:32 / smm	
Chromium	0.009	mg/L	B	0.005	SW6020	04/20/12 14:32 / smm	
Lead	0.005	mg/L		0.001	SW6020	04/20/12 14:32 / smm	
Mercury	ND	mg/L		0.002	SW7470A	05/19/12 08:43 / rdw	
Selenium	0.22	mg/L		0.001	SW6020	04/20/12 14:32 / smm	
Silver	ND	mg/L	D	0.002	SW6020	04/20/12 14:32 / smm	
Uranium	0.12	mg/L	D	0.0006	SW6020	04/20/12 14:32 / smm	
RADIONUCLIDES							
Radium 226	10.6	pCi/g-dry			E903.0	07/02/12 23:06 / plj	
Radium 226 precision (\pm)	0.4	pCi/g-dry			E903.0	07/02/12 23:06 / plj	
Radium 226 MDC	0.05	pCi/g-dry			E903.0	07/02/12 23:06 / plj	
Radium 228	0.1	pCi/g-dry	U		RA-05	06/25/12 13:54 / plj	
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05	06/25/12 13:54 / plj	
Radium 228 MDC	0.3	pCi/g-dry			RA-05	06/25/12 13:54 / plj	

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-017
Client Sample ID: S8-02-02

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 13:36
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE EXTRACT							
Chloride	44.6	mg/kg		1.00	E300.0		06/27/12 23:00 / ljl
Chloride, 1:1	1.26	meq/L		0.0282	E300.0		06/27/12 23:00 / ljl
Sulfate	2480	mg/kg		1.00	E300.0		06/27/12 23:00 / ljl
Sulfate, 1:1	51.7	meq/L		0.0208	E300.0		06/27/12 23:00 / ljl
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.006	mg/L		0.001	SW6020		04/20/12 14:34 / smm
Barium	0.06	mg/L		0.05	SW6020		04/20/12 14:34 / smm
Cadmium	ND	mg/L		0.001	SW6020		04/20/12 14:34 / smm
Chromium	0.006	mg/L	B	0.005	SW6020		04/20/12 14:34 / smm
Lead	ND	mg/L		0.001	SW6020		04/20/12 14:34 / smm
Mercury	ND	mg/L		0.002	SW7470A		05/19/12 08:44 / rdw
Selenium	1.0	mg/L		0.001	SW6020		04/20/12 14:34 / smm
Silver	ND	mg/L	D	0.002	SW6020		04/20/12 14:34 / smm
Uranium	6.7	mg/L	D	0.0006	SW6020		04/20/12 14:34 / smm
RADIONUCLIDES							
Radium 226	1.7	pCi/g-dry			E903.0		07/02/12 23:06 / plj
Radium 226 precision (\pm)	0.2	pCi/g-dry			E903.0		07/02/12 23:06 / plj
Radium 226 MDC	0.05	pCi/g-dry			E903.0		07/02/12 23:06 / plj
Radium 228	1.5	pCi/g-dry			RA-05		06/25/12 13:54 / plj
Radium 228 precision (\pm)	0.3	pCi/g-dry			RA-05		06/25/12 13:54 / plj
Radium 228 MDC	0.3	pCi/g-dry			RA-05		06/25/12 13:54 / plj

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-018
Client Sample ID: S8-02-03

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 13:36
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE EXTRACT							
Chloride	9.13	mg/kg		1.00	E300.0		06/27/12 23:49 / ljl
Chloride, 1:1	0.258	meq/L		0.0282	E300.0		06/27/12 23:49 / ljl
Sulfate	536	mg/kg		1.00	E300.0		06/27/12 23:49 / ljl
Sulfate, 1:1	11.2	meq/L		0.0208	E300.0		06/27/12 23:49 / ljl
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.011	mg/L		0.001	SW6020		04/20/12 14:37 / smm
Barium	0.98	mg/L		0.05	SW6020		04/20/12 14:37 / smm
Cadmium	ND	mg/L		0.001	SW6020		04/20/12 14:37 / smm
Chromium	0.028	mg/L	B	0.005	SW6020		04/20/12 14:37 / smm
Lead	0.013	mg/L		0.001	SW6020		04/20/12 14:37 / smm
Mercury	ND	mg/L		0.002	SW7470A		05/19/12 08:45 / rdw
Selenium	0.063	mg/L		0.001	SW6020		04/20/12 14:37 / smm
Silver	ND	mg/L	D	0.002	SW6020		04/20/12 14:37 / smm
Uranium	0.19	mg/L	D	0.0006	SW6020		04/20/12 14:37 / smm
RADIONUCLIDES							
Radium 226	14.0	pCi/g-dry			E903.0		07/03/12 01:58 / plj
Radium 226 precision (\pm)	0.3	pCi/g-dry			E903.0		07/03/12 01:58 / plj
Radium 226 MDC	0.03	pCi/g-dry			E903.0		07/03/12 01:58 / plj
Radium 228	0.2	pCi/g-dry	U		RA-05		06/25/12 13:54 / plj
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05		06/25/12 13:54 / plj
Radium 228 MDC	0.3	pCi/g-dry			RA-05		06/25/12 13:54 / plj

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-019
Client Sample ID: S8-02-04

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 13:39
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE EXTRACT							
Chloride	3.01	mg/kg		1.00	E300.0		06/28/12 14:14 / ljl
Chloride, 1:1	0.0850	meq/L		0.0282	E300.0		06/28/12 14:14 / ljl
Sulfate	31.2	mg/kg		1.00	E300.0		06/28/12 14:14 / ljl
Sulfate, 1:1	0.650	meq/L		0.0208	E300.0		06/28/12 14:14 / ljl
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.004	mg/L		0.001	SW6020		04/26/12 19:47 / smm
Barium	0.15	mg/L		0.05	SW6020		04/26/12 19:47 / smm
Cadmium	ND	mg/L		0.001	SW6020		04/26/12 19:47 / smm
Chromium	0.011	mg/L	B	0.005	SW6020		04/26/12 19:47 / smm
Lead	0.005	mg/L		0.001	SW6020		04/26/12 19:47 / smm
Mercury	ND	mg/L		0.002	SW7470A		05/19/12 08:53 / rdw
Selenium	ND	mg/L		0.001	SW6020		04/26/12 19:47 / smm
Silver	ND	mg/L	D	0.002	SW6020		04/26/12 19:47 / smm
Uranium	0.0056	mg/L	D	0.0006	SW6020		05/02/12 14:20 / smm
RADIONUCLIDES							
Radium 226	2.0	pCi/g-dry			E903.0		07/03/12 01:58 / plj
Radium 226 precision (\pm)	0.1	pCi/g-dry			E903.0		07/03/12 01:58 / plj
Radium 226 MDC	0.03	pCi/g-dry			E903.0		07/03/12 01:58 / plj
Radium 228	0.6	pCi/g-dry			RA-05		06/25/12 12:20 / plj
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05		06/25/12 12:20 / plj
Radium 228 MDC	0.3	pCi/g-dry			RA-05		06/25/12 12:20 / plj

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-020
Client Sample ID: S5-01-01

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 14:05
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE EXTRACT							
Chloride	9.64	mg/kg		1.00	E300.0		06/28/12 00:22 / ljl
Chloride, 1:1	0.272	meq/L		0.0282	E300.0		06/28/12 00:22 / ljl
Sulfate	113	mg/kg		1.00	E300.0		06/28/12 00:22 / ljl
Sulfate, 1:1	2.35	meq/L		0.0208	E300.0		06/28/12 00:22 / ljl
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.009	mg/L		0.001	SW6020		04/26/12 19:13 / smm
Barium	5.5	mg/L		0.05	SW6020		04/26/12 19:13 / smm
Cadmium	ND	mg/L		0.001	SW6020		04/26/12 19:13 / smm
Chromium	0.027	mg/L	B	0.005	SW6020		04/26/12 19:13 / smm
Lead	0.028	mg/L		0.001	SW6020		04/26/12 19:13 / smm
Mercury	ND	mg/L		0.002	SW7470A		05/19/12 08:57 / rdw
Selenium	0.010	mg/L		0.001	SW6020		04/26/12 19:13 / smm
Silver	ND	mg/L	D	0.002	SW6020		04/26/12 19:13 / smm
Uranium	0.11	mg/L	D	0.0006	SW6020		05/02/12 14:00 / smm
RADIONUCLIDES							
Radium 226	11.3	pCi/g-dry			E903.0		07/02/12 23:59 / plj
Radium 226 precision (\pm)	0.3	pCi/g-dry			E903.0		07/02/12 23:59 / plj
Radium 226 MDC	0.02	pCi/g-dry			E903.0		07/02/12 23:59 / plj
Radium 228	0.3	pCi/g-dry			RA-05		06/25/12 15:52 / plj
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05		06/25/12 15:52 / plj
Radium 228 MDC	0.2	pCi/g-dry			RA-05		06/25/12 15:52 / plj

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-021
Client Sample ID: S7-01-01

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 15:12
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.004	mg/L		0.001	SW6020	04/26/12 19:18 / smm	
Barium	0.06	mg/L		0.05	SW6020	04/26/12 19:18 / smm	
Cadmium	ND	mg/L		0.001	SW6020	04/26/12 19:18 / smm	
Chromium	0.005	mg/L	B	0.005	SW6020	04/26/12 19:18 / smm	
Lead	ND	mg/L		0.001	SW6020	04/26/12 19:18 / smm	
Mercury	ND	mg/L		0.002	SW7470A	05/19/12 08:59 / rdw	
Selenium	0.26	mg/L		0.001	SW6020	04/26/12 19:18 / smm	
Silver	ND	mg/L	D	0.002	SW6020	04/26/12 19:18 / smm	
Uranium	0.37	mg/L	D	0.0006	SW6020	05/02/12 14:04 / smm	
RADIONUCLIDES							
Radium 226	10.4	pCi/g-dry			E903.0	07/02/12 23:59 / plj	
Radium 226 precision (\pm)	0.2	pCi/g-dry			E903.0	07/02/12 23:59 / plj	
Radium 226 MDC	0.02	pCi/g-dry			E903.0	07/02/12 23:59 / plj	
Radium 228	0.1	pCi/g-dry	U		RA-05	06/25/12 15:52 / plj	
Radium 228 precision (\pm)	0.1	pCi/g-dry			RA-05	06/25/12 15:52 / plj	
Radium 228 MDC	0.2	pCi/g-dry			RA-05	06/25/12 15:52 / plj	

Report Definitions:	RL - Analyte reporting limit.	MCL - Maximum contaminant level.
	QCL - Quality control limit.	ND - Not detected at the reporting limit.
	MDC - Minimum detectable concentration	B - The analyte was detected in the method blank.
	D - RL increased due to sample matrix.	U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-022
Client Sample ID: S7-01-02

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 15:17
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.002	mg/L		0.001	SW6020	04/26/12 19:21 / smm	
Barium	0.06	mg/L		0.05	SW6020	04/26/12 19:21 / smm	
Cadmium	ND	mg/L		0.001	SW6020	04/26/12 19:21 / smm	
Chromium	0.009	mg/L	B	0.005	SW6020	04/26/12 19:21 / smm	
Lead	0.003	mg/L		0.001	SW6020	04/26/12 19:21 / smm	
Mercury	ND	mg/L		0.002	SW7470A	05/19/12 09:00 / rdw	
Selenium	0.002	mg/L		0.001	SW6020	04/26/12 19:21 / smm	
Silver	ND	mg/L	D	0.002	SW6020	04/26/12 19:21 / smm	
Uranium	0.0047	mg/L	D	0.0006	SW6020	05/02/12 14:12 / smm	
RADIOMUCIDES							
Radium 226	1.1	pCi/g-dry			E903.0	07/02/12 23:59 / plj	
Radium 226 precision (\pm)	0.08	pCi/g-dry			E903.0	07/02/12 23:59 / plj	
Radium 226 MDC	0.02	pCi/g-dry			E903.0	07/02/12 23:59 / plj	
Radium 228	0.6	pCi/g-dry			RA-05	06/25/12 15:52 / plj	
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05	06/25/12 15:52 / plj	
Radium 228 MDC	0.2	pCi/g-dry			RA-05	06/25/12 15:52 / plj	

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-023
Client Sample ID: S7-01-03

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 15:22
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	ND	mg/L		0.001	SW6020	05/01/12 16:45 / cp	
Barium	0.05	mg/L		0.05	SW6020	05/01/12 16:45 / cp	
Cadmium	ND	mg/L		0.001	SW6020	05/01/12 16:45 / cp	
Chromium	0.009	mg/L	B	0.005	SW6020	05/01/12 16:45 / cp	
Lead	0.001	mg/L		0.001	SW6020	05/01/12 16:45 / cp	
Mercury	ND	mg/L		0.002	SW7470A	05/19/12 09:01 / rdw	
Selenium	0.002	mg/L		0.001	SW6020	05/01/12 16:45 / cp	
Silver	ND	mg/L	D	0.002	SW6020	05/01/12 16:45 / cp	
Uranium	0.0049	mg/L	D	0.0006	SW6020	05/01/12 16:45 / cp	
RADIOMUCIDES							
Radium 226	1.5	pCi/g-dry			E903.0	07/02/12 23:59 / plj	
Radium 226 precision (\pm)	0.1	pCi/g-dry			E903.0	07/02/12 23:59 / plj	
Radium 226 MDC	0.02	pCi/g-dry			E903.0	07/02/12 23:59 / plj	
Radium 228	0.2	pCi/g-dry	U		RA-05	06/25/12 15:52 / plj	
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05	06/25/12 15:52 / plj	
Radium 228 MDC	0.2	pCi/g-dry			RA-05	06/25/12 15:52 / plj	

Report Definitions:	RL - Analyte reporting limit.	MCL - Maximum contaminant level.
	QCL - Quality control limit.	ND - Not detected at the reporting limit.
	MDC - Minimum detectable concentration	B - The analyte was detected in the method blank.
	D - RL increased due to sample matrix.	U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-024
Client Sample ID: S5-02-02

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 14:15
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE EXTRACT							
Chloride	23.1	mg/kg		1.00	E300.0		06/28/12 00:38 / ljl
Chloride, 1:1	0.653	meq/L		0.0282	E300.0		06/28/12 00:38 / ljl
Sulfate	2530	mg/kg		1.00	E300.0		06/28/12 00:38 / ljl
Sulfate, 1:1	52.7	meq/L		0.0208	E300.0		06/28/12 00:38 / ljl
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	ND	mg/L		0.001	SW6020		04/26/12 19:24 / smm
Barium	0.08	mg/L		0.05	SW6020		04/26/12 19:24 / smm
Cadmium	ND	mg/L		0.001	SW6020		04/26/12 19:24 / smm
Chromium	0.005	mg/L	B	0.005	SW6020		04/26/12 19:24 / smm
Lead	ND	mg/L		0.001	SW6020		04/26/12 19:24 / smm
Mercury	ND	mg/L		0.002	SW7470A		05/19/12 09:03 / rdw
Selenium	0.15	mg/L		0.001	SW6020		04/26/12 19:24 / smm
Silver	ND	mg/L	D	0.002	SW6020		04/26/12 19:24 / smm
Uranium	1.1	mg/L	D	0.0006	SW6020		05/02/12 14:14 / smm
RADIONUCLIDES							
Radium 226	2.1	pCi/g-dry			E903.0		07/02/12 23:59 / plj
Radium 226 precision (\pm)	0.1	pCi/g-dry			E903.0		07/02/12 23:59 / plj
Radium 226 MDC	0.02	pCi/g-dry			E903.0		07/02/12 23:59 / plj
Radium 228	0.2	pCi/g-dry	U		RA-05		06/25/12 15:52 / plj
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05		06/25/12 15:52 / plj
Radium 228 MDC	0.3	pCi/g-dry			RA-05		06/25/12 15:52 / plj

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-025
Client Sample ID: S5-02-03

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 14:20
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE EXTRACT							
Chloride	5.10	mg/kg		1.00	E300.0		06/28/12 00:55 / ljl
Chloride, 1:1	0.144	meq/L		0.0282	E300.0		06/28/12 00:55 / ljl
Sulfate	279	mg/kg		1.00	E300.0		06/28/12 00:55 / ljl
Sulfate, 1:1	5.80	meq/L		0.0208	E300.0		06/28/12 00:55 / ljl
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.006	mg/L		0.001	SW6020		04/26/12 19:38 / smm
Barium	0.62	mg/L		0.05	SW6020		04/26/12 19:38 / smm
Cadmium	ND	mg/L		0.001	SW6020		04/26/12 19:38 / smm
Chromium	0.017	mg/L	B	0.005	SW6020		04/26/12 19:38 / smm
Lead	0.013	mg/L		0.001	SW6020		04/26/12 19:38 / smm
Mercury	ND	mg/L		0.002	SW7470A		05/19/12 09:04 / rdw
Selenium	0.012	mg/L		0.001	SW6020		04/26/12 19:38 / smm
Silver	ND	mg/L	D	0.002	SW6020		04/26/12 19:38 / smm
Uranium	0.011	mg/L	D	0.0006	SW6020		05/02/12 14:15 / smm
RADIONUCLIDES							
Radium 226	4.1	pCi/g-dry			E903.0		07/02/12 23:59 / plj
Radium 226 precision (\pm)	0.2	pCi/g-dry			E903.0		07/02/12 23:59 / plj
Radium 226 MDC	0.02	pCi/g-dry			E903.0		07/02/12 23:59 / plj
Radium 228	0.5	pCi/g-dry			RA-05		06/25/12 15:52 / plj
Radium 228 precision (\pm)	0.1	pCi/g-dry			RA-05		06/25/12 15:52 / plj
Radium 228 MDC	0.2	pCi/g-dry			RA-05		06/25/12 15:52 / plj

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-026
Client Sample ID: S5-02-01

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 14:30
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE EXTRACT							
Chloride	17.2	mg/kg		1.00	E300.0	06/28/12 01:11 / ljl	
Chloride, 1:1	0.485	meq/L		0.0282	E300.0	06/28/12 01:11 / ljl	
Sulfate	2860	mg/kg		1.00	E300.0	06/28/12 01:11 / ljl	
Sulfate, 1:1	59.6	meq/L		0.0208	E300.0	06/28/12 01:11 / ljl	
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311	04/18/12 08:51 / dcj	
METALS - SPLP EXTRACTABLE							
Arsenic	ND	mg/L		0.001	SW6020	04/26/12 19:41 / smm	
Barium	0.10	mg/L		0.05	SW6020	04/26/12 19:41 / smm	
Cadmium	ND	mg/L		0.001	SW6020	04/26/12 19:41 / smm	
Chromium	0.008	mg/L	B	0.005	SW6020	04/26/12 19:41 / smm	
Lead	ND	mg/L		0.001	SW6020	04/26/12 19:41 / smm	
Mercury	ND	mg/L		0.002	SW7470A	05/19/12 09:08 / rdw	
Selenium	0.40	mg/L		0.001	SW6020	04/26/12 19:41 / smm	
Silver	ND	mg/L	D	0.002	SW6020	04/26/12 19:41 / smm	
Uranium	1.5	mg/L	D	0.0006	SW6020	05/02/12 14:17 / smm	
RADIONUCLIDES							
Radium 226	0.8	pCi/g-dry			E903.0	07/02/12 23:59 / plj	
Radium 226 precision (\pm)	0.07	pCi/g-dry			E903.0	07/02/12 23:59 / plj	
Radium 226 MDC	0.02	pCi/g-dry			E903.0	07/02/12 23:59 / plj	
Radium 228	0.2	pCi/g-dry	U		RA-05	06/25/12 15:52 / plj	
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05	06/25/12 15:52 / plj	
Radium 228 MDC	0.2	pCi/g-dry			RA-05	06/25/12 15:52 / plj	

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.
U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-027
Client Sample ID: S5-01-02

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 14:09
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE EXTRACT							
Chloride	7.87	mg/kg		1.00	E300.0	06/28/12 01:44 / ljl	
Chloride, 1:1	0.222	meq/L		0.0282	E300.0	06/28/12 01:44 / ljl	
Sulfate	261	mg/kg		1.00	E300.0	06/28/12 01:44 / ljl	
Sulfate, 1:1	5.43	meq/L		0.0208	E300.0	06/28/12 01:44 / ljl	
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311	04/18/12 08:51 / dcj	
METALS - SPLP EXTRACTABLE							
Arsenic	0.004	mg/L		0.001	SW6020	04/26/12 19:44 / smm	
Barium	0.07	mg/L		0.05	SW6020	04/26/12 19:44 / smm	
Cadmium	ND	mg/L		0.001	SW6020	04/26/12 19:44 / smm	
Chromium	0.012	mg/L	B	0.005	SW6020	04/26/12 19:44 / smm	
Lead	0.005	mg/L		0.001	SW6020	04/26/12 19:44 / smm	
Mercury	ND	mg/L		0.002	SW7470A	05/19/12 09:09 / rdw	
Selenium	0.004	mg/L		0.001	SW6020	04/26/12 19:44 / smm	
Silver	ND	mg/L	D	0.002	SW6020	04/26/12 19:44 / smm	
Uranium	0.0054	mg/L	D	0.0006	SW6020	05/02/12 14:19 / smm	
RADIONUCLIDES							
Radium 226	1.7	pCi/g-dry			E903.0	07/03/12 01:40 / plj	
Radium 226 precision (\pm)	0.1	pCi/g-dry			E903.0	07/03/12 01:40 / plj	
Radium 226 MDC	0.02	pCi/g-dry			E903.0	07/03/12 01:40 / plj	
Radium 228	0.6	pCi/g-dry			RA-05	06/25/12 15:52 / plj	
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05	06/25/12 15:52 / plj	
Radium 228 MDC	0.2	pCi/g-dry			RA-05	06/25/12 15:52 / plj	

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
D - RL increased due to sample matrix.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-028
Client Sample ID: S3-01-01

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 09:15
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.007	mg/L		0.001	SW6020	04/25/12 20:23 / smm	
Barium	0.31	mg/L		0.05	SW6020	04/25/12 20:23 / smm	
Cadmium	0.002	mg/L		0.001	SW6020	04/25/12 20:23 / smm	
Chromium	ND	mg/L		0.005	SW6020	04/25/12 20:23 / smm	
Lead	0.002	mg/L		0.001	SW6020	04/25/12 20:23 / smm	
Mercury	ND	mg/L		0.002	SW7470A	05/19/12 09:15 / rdw	
Selenium	0.19	mg/L		0.001	SW6020	04/25/12 20:23 / smm	
Silver	ND	mg/L		0.001	SW6020	04/25/12 20:23 / smm	
Uranium	9.7	mg/L	B	0.0003	SW6020	04/25/12 20:23 / smm	
RADIONUCLIDES							
Radium 226	21.0	pCi/g-dry			E903.0	07/03/12 01:40 / plj	
Radium 226 precision (\pm)	0.4	pCi/g-dry			E903.0	07/03/12 01:40 / plj	
Radium 226 MDC	0.02	pCi/g-dry			E903.0	07/03/12 01:40 / plj	
Radium 228	1.5	pCi/g-dry			RA-05	06/25/12 15:52 / plj	
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05	06/25/12 15:52 / plj	
Radium 228 MDC	0.2	pCi/g-dry			RA-05	06/25/12 15:52 / plj	

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-029
Client Sample ID: S3-01-02

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 08:50
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.014	mg/L		0.001	SW6020	04/25/12 20:37 / smm	
Barium	2.3	mg/L		0.05	SW6020	04/25/12 20:37 / smm	
Cadmium	0.001	mg/L		0.001	SW6020	04/25/12 20:37 / smm	
Chromium	0.050	mg/L		0.005	SW6020	04/25/12 20:37 / smm	
Lead	0.064	mg/L		0.001	SW6020	04/25/12 20:37 / smm	
Mercury	ND	mg/L		0.002	SW7470A	05/19/12 09:19 / rdw	
Selenium	0.036	mg/L		0.001	SW6020	04/25/12 20:37 / smm	
Silver	ND	mg/L		0.001	SW6020	04/25/12 20:37 / smm	
Uranium	5.7	mg/L	B	0.0003	SW6020	04/25/12 20:37 / smm	
RADIONUCLIDES							
Radium 226	6.2	pCi/g-dry			E903.0	07/03/12 01:40 / plj	
Radium 226 precision (\pm)	0.2	pCi/g-dry			E903.0	07/03/12 01:40 / plj	
Radium 226 MDC	0.02	pCi/g-dry			E903.0	07/03/12 01:40 / plj	
Radium 228	0.7	pCi/g-dry			RA-05	06/25/12 15:52 / plj	
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05	06/25/12 15:52 / plj	
Radium 228 MDC	0.2	pCi/g-dry			RA-05	06/25/12 15:52 / plj	

Report Definitions: RL - Analyte reporting limit.

MCL - Maximum contaminant level.

QCL - Quality control limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-030
Client Sample ID: S3-01-03

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 09:40
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.005	mg/L		0.001	SW6020	04/25/12 20:41 / smm	
Barium	0.14	mg/L		0.05	SW6020	04/25/12 20:41 / smm	
Cadmium	ND	mg/L		0.001	SW6020	04/25/12 20:41 / smm	
Chromium	0.013	mg/L		0.005	SW6020	04/25/12 20:41 / smm	
Lead	0.012	mg/L		0.001	SW6020	04/25/12 20:41 / smm	
Mercury	ND	mg/L		0.002	SW7470A	05/19/12 09:20 / rdw	
Selenium	0.053	mg/L		0.001	SW6020	04/25/12 20:41 / smm	
Silver	ND	mg/L		0.001	SW6020	04/25/12 20:41 / smm	
Uranium	0.47	mg/L	B	0.0003	SW6020	04/25/12 20:41 / smm	
RADIONUCLIDES							
Radium 226	4.5	pCi/g-dry			E903.0	07/03/12 01:40 / plj	
Radium 226 precision (\pm)	0.2	pCi/g-dry			E903.0	07/03/12 01:40 / plj	
Radium 226 MDC	0.02	pCi/g-dry			E903.0	07/03/12 01:40 / plj	
Radium 228	0.8	pCi/g-dry			RA-05	06/25/12 17:32 / plj	
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05	06/25/12 17:32 / plj	
Radium 228 MDC	0.3	pCi/g-dry			RA-05	06/25/12 17:32 / plj	

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-031
Client Sample ID: S3-02-01

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 10:22
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.018	mg/L		0.001	SW6020	04/25/12 21:04 / smm	
Barium	6.6	mg/L		0.05	SW6020	04/25/12 21:04 / smm	
Cadmium	0.002	mg/L		0.001	SW6020	04/25/12 21:04 / smm	
Chromium	0.015	mg/L		0.005	SW6020	04/25/12 21:04 / smm	
Lead	0.028	mg/L		0.001	SW6020	04/25/12 21:04 / smm	
Mercury	ND	mg/L		0.002	SW7470A	05/19/12 09:24 / rdw	
Selenium	0.15	mg/L		0.001	SW6020	04/25/12 21:04 / smm	
Silver	ND	mg/L		0.001	SW6020	04/25/12 21:04 / smm	
Uranium	7.8	mg/L	B	0.0003	SW6020	04/25/12 21:04 / smm	
RADIONUCLIDES							
Radium 226	6.4	pCi/g-dry			E903.0	07/03/12 01:40 / plj	
Radium 226 precision (\pm)	0.2	pCi/g-dry			E903.0	07/03/12 01:40 / plj	
Radium 226 MDC	0.02	pCi/g-dry			E903.0	07/03/12 01:40 / plj	
Radium 228	2.2	pCi/g-dry			RA-05	06/25/12 17:32 / plj	
Radium 228 precision (\pm)	0.3	pCi/g-dry			RA-05	06/25/12 17:32 / plj	
Radium 228 MDC	0.3	pCi/g-dry			RA-05	06/25/12 17:32 / plj	

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-032
Client Sample ID: S3-02-02

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 10:30
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.002	mg/L		0.001	SW6020	04/25/12 21:08 / smm	
Barium	ND	mg/L		0.05	SW6020	04/25/12 21:08 / smm	
Cadmium	ND	mg/L		0.001	SW6020	04/25/12 21:08 / smm	
Chromium	0.009	mg/L		0.005	SW6020	04/25/12 21:08 / smm	
Lead	0.001	mg/L		0.001	SW6020	04/25/12 21:08 / smm	
Mercury	ND	mg/L		0.002	SW7470A	05/19/12 09:25 / rdw	
Selenium	0.023	mg/L		0.001	SW6020	04/25/12 21:08 / smm	
Silver	ND	mg/L		0.001	SW6020	04/25/12 21:08 / smm	
Uranium	0.18	mg/L	B	0.0003	SW6020	04/25/12 21:08 / smm	
RADIONUCLIDES							
Radium 226	3.0	pCi/g-dry			E903.0	07/03/12 01:40 / plj	
Radium 226 precision (\pm)	0.2	pCi/g-dry			E903.0	07/03/12 01:40 / plj	
Radium 226 MDC	0.02	pCi/g-dry			E903.0	07/03/12 01:40 / plj	
Radium 228	0.7	pCi/g-dry			RA-05	06/25/12 17:32 / plj	
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05	06/25/12 17:32 / plj	
Radium 228 MDC	0.3	pCi/g-dry			RA-05	06/25/12 17:32 / plj	

Report Definitions: RL - Analyte reporting limit.

MCL - Maximum contaminant level.

QCL - Quality control limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-033
Client Sample ID: S3-02-03

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 10:30
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.006	mg/L		0.001	SW6020	04/25/12 21:13 / smm	
Barium	0.27	mg/L		0.05	SW6020	04/25/12 21:13 / smm	
Cadmium	ND	mg/L		0.001	SW6020	04/25/12 21:13 / smm	
Chromium	0.018	mg/L		0.005	SW6020	04/25/12 21:13 / smm	
Lead	0.016	mg/L		0.001	SW6020	04/25/12 21:13 / smm	
Mercury	ND	mg/L		0.002	SW7470A	05/19/12 09:27 / rdw	
Selenium	0.003	mg/L		0.001	SW6020	04/25/12 21:13 / smm	
Silver	ND	mg/L		0.001	SW6020	04/25/12 21:13 / smm	
Uranium	0.022	mg/L	B	0.0003	SW6020	04/25/12 21:13 / smm	
RADIONUCLIDES							
Radium 226	2.4	pCi/g-dry			E903.0	07/03/12 01:40 / plj	
Radium 226 precision (\pm)	0.1	pCi/g-dry			E903.0	07/03/12 01:40 / plj	
Radium 226 MDC	0.02	pCi/g-dry			E903.0	07/03/12 01:40 / plj	
Radium 228	0.3	pCi/g-dry			RA-05	06/25/12 17:32 / plj	
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05	06/25/12 17:32 / plj	
Radium 228 MDC	0.3	pCi/g-dry			RA-05	06/25/12 17:32 / plj	

Report Definitions: RL - Analyte reporting limit.

MCL - Maximum contaminant level.

QCL - Quality control limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-034
Client Sample ID: S7-02-01

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 15:45
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.013	mg/L		0.001	SW6020	04/25/12 21:17 / smm	
Barium	0.76	mg/L		0.05	SW6020	04/25/12 21:17 / smm	
Cadmium	ND	mg/L		0.001	SW6020	04/25/12 21:17 / smm	
Chromium	0.006	mg/L		0.005	SW6020	04/25/12 21:17 / smm	
Lead	0.001	mg/L		0.001	SW6020	04/25/12 21:17 / smm	
Mercury	ND	mg/L		0.002	SW7470A	05/19/12 09:28 / rdw	
Selenium	0.22	mg/L		0.001	SW6020	04/25/12 21:17 / smm	
Silver	ND	mg/L		0.001	SW6020	04/25/12 21:17 / smm	
Uranium	0.18	mg/L	B	0.0003	SW6020	04/25/12 21:17 / smm	
RADIONUCLIDES							
Radium 226	2.6	pCi/g-dry			E903.0	07/03/12 01:40 / plj	
Radium 226 precision (\pm)	0.1	pCi/g-dry			E903.0	07/03/12 01:40 / plj	
Radium 226 MDC	0.02	pCi/g-dry			E903.0	07/03/12 01:40 / plj	
Radium 228	0.5	pCi/g-dry			RA-05	06/25/12 17:32 / plj	
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05	06/25/12 17:32 / plj	
Radium 228 MDC	0.3	pCi/g-dry			RA-05	06/25/12 17:32 / plj	

Report Definitions: RL - Analyte reporting limit.

MCL - Maximum contaminant level.

QCL - Quality control limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-035
Client Sample ID: S7-02-02

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 15:50
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.007	mg/L		0.001	SW6020	04/25/12 21:22 / smm	
Barium	0.31	mg/L		0.05	SW6020	04/25/12 21:22 / smm	
Cadmium	ND	mg/L		0.001	SW6020	04/25/12 21:22 / smm	
Chromium	0.013	mg/L		0.005	SW6020	04/25/12 21:22 / smm	
Lead	0.020	mg/L		0.001	SW6020	04/25/12 21:22 / smm	
Mercury	ND	mg/L		0.002	SW7470A	05/19/12 09:29 / rdw	
Selenium	0.13	mg/L		0.001	SW6020	04/25/12 21:22 / smm	
Silver	ND	mg/L		0.001	SW6020	04/25/12 21:22 / smm	
Uranium	0.014	mg/L	B	0.0003	SW6020	04/25/12 21:22 / smm	
RADIONUCLIDES							
Radium 226	1.9	pCi/g-dry			E903.0	07/03/12 01:40 / plj	
Radium 226 precision (\pm)	0.1	pCi/g-dry			E903.0	07/03/12 01:40 / plj	
Radium 226 MDC	0.02	pCi/g-dry			E903.0	07/03/12 01:40 / plj	
Radium 228	0.2	pCi/g-dry	U		RA-05	06/25/12 17:32 / plj	
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05	06/25/12 17:32 / plj	
Radium 228 MDC	0.3	pCi/g-dry			RA-05	06/25/12 17:32 / plj	

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-036
Client Sample ID: S7-02-03

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 15:55
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.003	mg/L		0.001	SW6020	04/25/12 21:26 / smm	
Barium	0.16	mg/L		0.05	SW6020	04/25/12 21:26 / smm	
Cadmium	ND	mg/L		0.001	SW6020	04/25/12 21:26 / smm	
Chromium	0.010	mg/L		0.005	SW6020	04/25/12 21:26 / smm	
Lead	0.005	mg/L		0.001	SW6020	04/25/12 21:26 / smm	
Mercury	ND	mg/L		0.002	SW7470A	05/19/12 09:31 / rdw	
Selenium	0.003	mg/L		0.001	SW6020	04/25/12 21:26 / smm	
Silver	ND	mg/L		0.001	SW6020	04/25/12 21:26 / smm	
Uranium	0.0053	mg/L	B	0.0003	SW6020	04/25/12 21:26 / smm	
RADIONUCLIDES							
Radium 226	1.1	pCi/g-dry			E903.0	07/03/12 01:40 / plj	
Radium 226 precision (\pm)	0.09	pCi/g-dry			E903.0	07/03/12 01:40 / plj	
Radium 226 MDC	0.02	pCi/g-dry			E903.0	07/03/12 01:40 / plj	
Radium 228	0.3	pCi/g-dry			RA-05	06/25/12 17:32 / plj	
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05	06/25/12 17:32 / plj	
Radium 228 MDC	0.3	pCi/g-dry			RA-05	06/25/12 17:32 / plj	

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12040804-037
Client Sample ID: S3-01-04

Revised Date: 07/05/12
Report Date: 06/13/12
Collection Date: 04/10/12 09:46
DateReceived: 04/13/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/18/12 08:51 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.003	mg/L		0.001	SW6020	04/25/12 21:31 / smm	
Barium	0.07	mg/L		0.05	SW6020	04/25/12 21:31 / smm	
Cadmium	ND	mg/L		0.001	SW6020	04/25/12 21:31 / smm	
Chromium	0.011	mg/L		0.005	SW6020	04/25/12 21:31 / smm	
Lead	0.005	mg/L		0.001	SW6020	04/25/12 21:31 / smm	
Mercury	ND	mg/L		0.002	SW7470A	05/19/12 09:32 / rdw	
Selenium	0.032	mg/L		0.001	SW6020	04/25/12 21:31 / smm	
Silver	ND	mg/L		0.001	SW6020	04/25/12 21:31 / smm	
Uranium	0.036	mg/L	B	0.0003	SW6020	04/25/12 21:31 / smm	
RADIONUCLIDES							
Radium 226	1.7	pCi/g-dry			E903.0	07/03/12 03:34 / plj	
Radium 226 precision (\pm)	0.1	pCi/g-dry			E903.0	07/03/12 03:34 / plj	
Radium 226 MDC	0.02	pCi/g-dry			E903.0	07/03/12 03:34 / plj	
Radium 228	0.7	pCi/g-dry			RA-05	06/25/12 17:32 / plj	
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05	06/25/12 17:32 / plj	
Radium 228 MDC	0.3	pCi/g-dry			RA-05	06/25/12 17:32 / plj	

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 07/05/12

Client: Rio Grande Resources Corporation

Report Date: 06/13/12

Project: Mt. Taylor Mine Closure Plan

Work Order: C12040804

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual			
Method: E300.0										Analytical Run: IC2-C_120626A			
Sample ID: ICV-062612-10	2	Initial Calibration Verification Standard										06/26/12 15:31	
Chloride		9.60	mg/L	1.0	96	90	110						
Sulfate		38.7	mg/L	1.0	97	90	110						
Method: E300.0										Batch: 34002			
Sample ID: MB-34002	2	Method Blank										Run: IC2-C_120626A	06/27/12 21:21
Chloride		ND	mg/kg	1.0									
Sulfate		0.0820	mg/kg	1.0									
Sample ID: LCS1-34002	2	Laboratory Control Sample										Run: IC2-C_120626A	06/27/12 21:37
Chloride		42.9	mg/kg	1.0	121	70	130						
Sulfate		1910	mg/kg	1.0	105	70	130						
Sample ID: C12040804-026CPDS	2	Post Digestion/Distillation Spike										Run: IC2-C_120626A	06/28/12 01:27
Chloride		487	mg/kg	1.0	94	80	120						
Sulfate		4670	mg/kg	1.0	90	80	120						
Sample ID: C12040804-027CDUP	2	Sample Duplicate										Run: IC2-C_120626A	06/28/12 02:00
Chloride		7.34	mg/kg	1.0				6.9	20				
Sulfate		251	mg/kg	1.0				3.8	20				

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 07/05/12

Client: Rio Grande Resources Corporation

Report Date: 06/13/12

Project: Mt. Taylor Mine Closure Plan

Work Order: C12040804

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0	Batch: 34003									
Sample ID: MB-34003	3	Method Blank				Run: BERTHOLD 770-1_120620B		07/02/12 22:18		
Radium 226		0.003	pCi/g-dry							U
Radium 226 precision (\pm)		0.005	pCi/g-dry							
Radium 226 MDC		0.007	pCi/g-dry							
Sample ID: LCS-34003		Laboratory Control Sample				Run: BERTHOLD 770-1_120620B		07/02/12 22:18		
Radium 226		2.4	pCi/g-dry	793		70	130			S
- LCS response is outside of the acceptance range for this analysis due to a very small amount of the precipitate from C12040804-001B being transferred to the planchet.										
Since the MB, MS, and MSD are acceptable the batch is approved.										
Sample ID: C12040804-019BMS		Sample Matrix Spike				Run: BERTHOLD 770-1_120620B		07/03/12 01:58		
Radium 226		3.2	pCi/g-dry	83		70	130			
Sample ID: C12040804-019BMSD		Sample Matrix Spike Duplicate				Run: BERTHOLD 770-1_120620B		07/03/12 01:58		
Radium 226		3.3	pCi/g-dry	90		70	130	2.6	19.7	
Method: E903.0	Batch: 34004									
Sample ID: MB-34004	3	Method Blank				Run: BERTHOLD 770-2_120620A		07/02/12 23:59		
Radium 226		0.1	pCi/g-dry							
Radium 226 precision (\pm)		0.03	pCi/g-dry							
Radium 226 MDC		0.02	pCi/g-dry							
Sample ID: LCS-34004		Laboratory Control Sample				Run: BERTHOLD 770-2_120620A		07/02/12 23:59		
Radium 226		1.4	pCi/g-dry	87		70	130			
Sample ID: C12041044-003BMS		Sample Matrix Spike				Run: BERTHOLD 770-2_120620A		07/03/12 03:34		
Radium 226		2.5	pCi/g-dry	104		70	130			
Sample ID: C12041044-003BMSD		Sample Matrix Spike Duplicate				Run: BERTHOLD 770-2_120620A		07/03/12 03:34		
Radium 226		2.2	pCi/g-dry	87		70	130	12	20.8	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

S - Spike recovery outside of advisory limits.

U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 07/05/12

Report Date: 06/13/12

Work Order: C12040804

Client: Rio Grande Resources Corporation

Project: Mt. Taylor Mine Closure Plan

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RA-05										Batch: 34003
Sample ID: LCS-34003		Laboratory Control Sample						Run: TENNELEC-3_120620A		
Radium 228		1.5	pCi/g-dry	104		70	130			06/25/12 12:20
Sample ID: MB-34003	3	Method Blank						Run: TENNELEC-3_120620A		
Radium 228		-0.02	pCi/g-dry							U
Radium 228 precision (\pm)		0.2	pCi/g-dry							
Radium 228 MDC		0.3	pCi/g-dry							
Sample ID: C12040804-019BMS		Sample Matrix Spike						Run: TENNELEC-3_120620A		
Radium 228		2.1	pCi/g-dry	109		70	130			06/25/12 12:20
Sample ID: C12040804-019BMSD		Sample Matrix Spike Duplicate						Run: TENNELEC-3_120620A		
Radium 228		1.9	pCi/g-dry	94		70	130	10		33.9
Method: RA-05										Batch: 34004
Sample ID: LCS-34004		Laboratory Control Sample						Run: TENNELEC-3_120620B		
Radium 228		1.5	pCi/g-dry	104		70	130			06/25/12 15:52
Sample ID: MB-34004	3	Method Blank						Run: TENNELEC-3_120620B		
Radium 228		0.07	pCi/g-dry							U
Radium 228 precision (\pm)		0.2	pCi/g-dry							
Radium 228 MDC		0.3	pCi/g-dry							
Sample ID: C12041044-003BMS		Sample Matrix Spike						Run: TENNELEC-3_120620B		
Radium 228		1.8	pCi/g-dry	93		70	130			06/25/12 15:52
Sample ID: C12041044-003BMSD		Sample Matrix Spike Duplicate						Run: TENNELEC-3_120620B		
Radium 228		1.9	pCi/g-dry	101		70	130	6.0		33.5

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 07/05/12

Client: Rio Grande Resources Corporation

Report Date: 06/13/12

Project: Mt. Taylor Mine Closure Plan

Work Order: C12040804

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020								Analytical Run: ICPMS2-C_120420A		
Sample ID: ICV	8	Initial Calibration Verification Standard								
Arsenic		0.0502	mg/L	0.0010	100	90	110			04/20/12 12:15
Barium		0.0500	mg/L	0.0010	100	90	110			
Cadmium		0.0501	mg/L	0.0010	100	90	110			
Chromium		0.0508	mg/L	0.0010	102	90	110			
Lead		0.0492	mg/L	0.0010	98	90	110			
Selenium		0.0513	mg/L	0.0010	103	90	110			
Silver		0.0206	mg/L	0.0010	103	90	110			
Uranium		0.0506	mg/L	0.00030	101	90	110			
Sample ID: ICSA	8	Interference Check Sample A								
Arsenic		2.10E-05	mg/L	0.0010						04/20/12 12:18
Barium		2.84E-05	mg/L	0.0010						
Cadmium		4.02E-05	mg/L	0.0010						
Chromium		0.000116	mg/L	0.0010						
Lead		3.52E-05	mg/L	0.0010						
Selenium		-0.000115	mg/L	0.0010						
Silver		0.000711	mg/L	0.0010						
Uranium		8.01E-05	mg/L	0.00030						
Sample ID: ICSAB	8	Interference Check Sample AB								
Arsenic		0.0101	mg/L	0.0010	101	70	130			04/20/12 12:21
Barium		1.24E-05	mg/L	0.0010						
Cadmium		0.0102	mg/L	0.0010	102	70	130			
Chromium		0.0102	mg/L	0.0010	102	70	130			
Lead		1.20E-05	mg/L	0.0010						
Selenium		5.51E-05	mg/L	0.0010						
Silver		0.0101	mg/L	0.0010	101	70	130			
Uranium		2.09E-05	mg/L	0.00030						
Method: SW6020								Batch: 33385		
Sample ID: MB-33385	8	Method Blank								
Arsenic		0.0007	mg/L	6E-05				Run: ICPMS2-C_120420A		
Barium		0.002	mg/L	3E-05						04/20/12 12:46
Cadmium		ND	mg/L	1E-05						
Chromium		0.005	mg/L	4E-05						
Lead		0.0001	mg/L	3E-05						
Selenium		ND	mg/L	0.0002						
Silver		0.001	mg/L	3E-05						
Uranium		5E-05	mg/L	1E-05						
Sample ID: LCS3-33385	8	Laboratory Control Sample								
Arsenic		0.47	mg/L	0.0010	95	80	120			04/20/12 12:49
Barium		0.50	mg/L	0.050	99	80	120			
Cadmium		0.24	mg/L	0.0010	98	80	120			
Chromium		0.49	mg/L	0.0050	98	80	120			
Lead		0.51	mg/L	0.0010	102	80	120			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 07/05/12

Client: Rio Grande Resources Corporation

Report Date: 06/13/12

Project: Mt. Taylor Mine Closure Plan

Work Order: C12040804

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020										Batch: 33385
Sample ID: LCS3-33385	8	Laboratory Control Sample				Run: ICPMS2-C_120420A				04/20/12 12:49
Selenium		0.46	mg/L	0.0010	91	80	120			
Silver		0.052	mg/L	0.0020	101	80	120			
Uranium		0.52	mg/L	0.00060	105	80	120			
Sample ID: LCSD3-33385	8	Laboratory Control Sample Duplicate				Run: ICPMS2-C_120420A				04/20/12 12:52
Arsenic		0.48	mg/L	0.0010	96	80	120	1.3	20	
Barium		0.50	mg/L	0.050	100	80	120	1.0	20	
Cadmium		0.25	mg/L	0.0010	98	80	120	0.7	20	
Chromium		0.50	mg/L	0.0050	98	80	120	0.4	20	
Lead		0.52	mg/L	0.0010	104	80	120	1.2	20	
Selenium		0.46	mg/L	0.0010	92	80	120	1.2	20	
Silver		0.053	mg/L	0.0020	105	80	120	3.3	20	
Uranium		0.53	mg/L	0.00060	106	80	120	0.9	20	
Sample ID: C12040804-002ADIL	8	Serial Dilution				Run: ICPMS2-C_120420A				04/20/12 13:00
Arsenic		0.052	mg/L	0.0050		0	0	8.3	20	
Barium		4.0	mg/L	0.050		0	0	5.3	20	
Cadmium		0.0015	mg/L	0.0050		0	0	20	N	
Chromium		0.044	mg/L	0.0050		0	0	9.3	20	
Lead		0.080	mg/L	0.0050		0	0	1.4	20	
Selenium		0.57	mg/L	0.0050		0	0	14	20	
Silver		ND	mg/L	0.010		0	0		20	
Uranium		5.3	mg/L	0.0030		0	0	1.4	20	
Sample ID: C12040804-001AMS3	8	Sample Matrix Spike				Run: ICPMS2-C_120420A				04/20/12 13:50
Arsenic		0.49	mg/L	0.0010	96	75	125			
Barium		1.8	mg/L	0.050	303	75	125		S	
Cadmium		0.25	mg/L	0.0010	99	75	125			
Chromium		0.49	mg/L	0.0050	96	75	125			
Lead		0.57	mg/L	0.0010	111	75	125			
Selenium		0.71	mg/L	0.0010	90	75	125			
Silver		0.054	mg/L	0.0020	22	75	125		S	
Uranium		4.5	mg/L	0.00060		75	125		A	
Method: SW6020										Batch: 33386
Sample ID: MB-33386	8	Method Blank				Run: ICPMS2-C_120420A				04/20/12 13:56
Arsenic		0.0006	mg/L	6E-05						
Barium		0.003	mg/L	3E-05						
Cadmium		2E-05	mg/L	1E-05						
Chromium		0.006	mg/L	4E-05						
Lead		0.0001	mg/L	3E-05						
Selenium		0.0002	mg/L	0.0002						
Silver		0.0009	mg/L	3E-05						
Uranium		0.0004	mg/L	1E-05						

Qualifiers:

RL - Analyte reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 07/05/12

Client: Rio Grande Resources Corporation

Report Date: 06/13/12

Project: Mt. Taylor Mine Closure Plan

Work Order: C12040804

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020										
Sample ID: LCS3-33386	Batch: 33386									
Arsenic	8	0.49	mg/L	0.0010	98	80	120	0.2	20	
Barium		0.51	mg/L	0.050	101	80	120	0.4	20	
Cadmium		0.25	mg/L	0.0010	100	80	120	0.1	20	
Chromium		0.50	mg/L	0.0050	100	80	120	0.0	20	
Lead		0.52	mg/L	0.0010	105	80	120	0.6	20	
Selenium		0.48	mg/L	0.0010	95	80	120	0.2	20	
Silver		0.054	mg/L	0.0020	105	80	120	2.1	20	
Uranium		0.53	mg/L	0.00060	106	80	120	0.9	20	
Sample ID: LCSD3-33386	Run: ICPMS2-C_120420A									
Arsenic	8	0.49	mg/L	0.0010	97	80	120	0.2	20	
Barium		0.51	mg/L	0.050	102	80	120	0.4	20	
Cadmium		0.25	mg/L	0.0010	100	80	120	0.1	20	
Chromium		0.50	mg/L	0.0050	100	80	120	0.0	20	
Lead		0.53	mg/L	0.0010	105	80	120	0.6	20	
Selenium		0.48	mg/L	0.0010	95	80	120	0.2	20	
Silver		0.055	mg/L	0.0020	107	80	120	2.1	20	
Uranium		0.54	mg/L	0.00060	107	80	120	0.9	20	
Sample ID: C12040804-012ADIL	Run: ICPMS2-C_120420A									
Arsenic	8	0.0075	mg/L	0.0050	0	0	0	20	N	
Barium		0.094	mg/L	0.050	0	0	0	4.2	20	
Cadmium		0.00049	mg/L	0.0050	0	0	0	20	N	
Chromium		0.013	mg/L	0.0050	0	0	0	4.1	20	
Lead		0.0069	mg/L	0.0050	0	0	0	9.6	20	
Selenium		0.0044	mg/L	0.0050	0	0	0	20	N	
Silver		ND	mg/L	0.010	0	0	0	20		
Uranium		0.086	mg/L	0.0030	0	0	0	1.5	20	
Sample ID: C12040804-011AMS3	Run: ICPMS2-C_120420A									
Arsenic	8	0.49	mg/L	0.0010	98	75	125			
Barium		0.61	mg/L	0.050	92	75	125			
Cadmium		0.25	mg/L	0.0010	101	75	125			
Chromium		0.49	mg/L	0.0050	95	75	125			
Lead		0.53	mg/L	0.0010	104	75	125			
Selenium		0.48	mg/L	0.0010	96	75	125			
Silver		0.053	mg/L	0.0020	21	75	125			
Uranium		0.62	mg/L	0.00060	100	75	125			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

N - The analyte concentration was not sufficiently high to calculate a RPD for the serial dilution test.

S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 07/05/12

Client: Rio Grande Resources Corporation

Report Date: 06/13/12

Project: Mt. Taylor Mine Closure Plan

Work Order: C12040804

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020								Analytical Run: ICPMS2-C_120426A		
Sample ID: ICV	7	Initial Calibration Verification Standard								
Arsenic		0.0480	mg/L	0.0010	96	90	110			04/26/12 16:00
Barium		0.0492	mg/L	0.0010	98	90	110			
Cadmium		0.0490	mg/L	0.0010	98	90	110			
Chromium		0.0481	mg/L	0.0010	96	90	110			
Lead		0.0491	mg/L	0.0010	98	90	110			
Selenium		0.0483	mg/L	0.0010	97	90	110			
Silver		0.0200	mg/L	0.0010	100	90	110			
Sample ID: ICSA	7	Interference Check Sample A								
Arsenic		7.41E-05	mg/L	0.0010						04/26/12 16:03
Barium		5.47E-05	mg/L	0.0010						
Cadmium		4.03E-05	mg/L	0.0010						
Chromium		7.06E-05	mg/L	0.0010						
Lead		4.98E-05	mg/L	0.0010						
Selenium		0.000241	mg/L	0.0010						
Silver		0.000479	mg/L	0.0010						
Sample ID: ICSAB	7	Interference Check Sample AB								
Arsenic		0.0107	mg/L	0.0010	107	70	130			04/26/12 16:06
Barium		2.06E-05	mg/L	0.0010						
Cadmium		0.0108	mg/L	0.0010	107	70	130			
Chromium		0.0106	mg/L	0.0010	106	70	130			
Lead		1.68E-05	mg/L	0.0010						
Selenium		0.000166	mg/L	0.0010						
Silver		0.0101	mg/L	0.0010	101	70	130			
Method: SW6020								Batch: 33455		
Sample ID: MB-33455	7	Method Blank								
Arsenic		0.0002	mg/L	6E-05				Run: ICPMS2-C_120426A		
Barium		0.007	mg/L	3E-05				04/26/12 19:02		
Cadmium		2E-05	mg/L	1E-05						
Chromium		0.005	mg/L	4E-05						
Lead		ND	mg/L	3E-05						
Selenium		ND	mg/L	0.0002						
Silver		0.001	mg/L	3E-05						
Sample ID: LCS3-33455	7	Laboratory Control Sample								
Arsenic		0.46	mg/L	0.0010	91	80	120			04/26/12 19:05
Barium		0.50	mg/L	0.050	99	80	120			
Cadmium		0.23	mg/L	0.0010	92	80	120			
Chromium		0.49	mg/L	0.0050	96	80	120			
Lead		0.51	mg/L	0.0010	102	80	120			
Selenium		0.42	mg/L	0.0010	83	80	120			
Silver		0.050	mg/L	0.0020	97	80	120			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 07/05/12

Client: Rio Grande Resources Corporation

Report Date: 06/13/12

Project: Mt. Taylor Mine Closure Plan

Work Order: C12040804

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020										Batch: 33455
Sample ID: LCSD3-33455	7	Laboratory Control Sample Duplicate			Run: ICPMS2-C_120426A			04/26/12 19:07		
Arsenic		0.44	mg/L	0.0010	89	80	120	2.9	20	
Barium		0.49	mg/L	0.050	97	80	120	2.8	20	
Cadmium		0.23	mg/L	0.0010	90	80	120	1.6	20	
Chromium		0.47	mg/L	0.0050	94	80	120	2.4	20	
Lead		0.49	mg/L	0.0010	98	80	120	3.6	20	
Selenium		0.40	mg/L	0.0010	80	80	120	3.7	20	
Silver		0.050	mg/L	0.0020	96	80	120	1.0	20	
Sample ID: C12040804-020ADIL	7	Serial Dilution			Run: ICPMS2-C_120426A			04/26/12 19:16		
Arsenic		0.0094	mg/L	0.0050		0	0	7.4	20	
Barium		5.7	mg/L	0.050		0	0	4.0	20	
Cadmium		0.00065	mg/L	0.0050		0	0	20	N	
Chromium		0.030	mg/L	0.0050		0	0	11	20	
Lead		0.027	mg/L	0.0050		0	0	1.5	20	
Selenium		0.011	mg/L	0.0050		0	0	20	N	
Silver		ND	mg/L	0.010		0	0	20		
Sample ID: C12040804-019AMS3	7	Sample Matrix Spike			Run: ICPMS2-C_120426A			04/26/12 19:49		
Arsenic		0.45	mg/L	0.0010	89	75	125			
Barium		0.65	mg/L	0.050	100	75	125			
Cadmium		0.23	mg/L	0.0010	93	75	125			
Chromium		0.45	mg/L	0.0050	87	75	125			
Lead		0.51	mg/L	0.0010	102	75	125			
Selenium		0.41	mg/L	0.0010	81	75	125			
Silver		0.049	mg/L	0.0020	20	75	125			S

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

N - The analyte concentration was not sufficiently high to calculate a RPD for the serial dilution test.

S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 07/05/12

Client: Rio Grande Resources Corporation

Report Date: 06/13/12

Project: Mt. Taylor Mine Closure Plan

Work Order: C12040804

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020								Analytical Run: ICPMS2-C_120501A		
Sample ID: ICV	8	Initial Calibration Verification Standard								
Arsenic		0.0490	mg/L	0.0010	98	90	110			
Barium		0.0486	mg/L	0.0010	97	90	110			
Cadmium		0.0491	mg/L	0.0010	98	90	110			
Chromium		0.0501	mg/L	0.0010	100	90	110			
Lead		0.0483	mg/L	0.0010	97	90	110			
Selenium		0.0501	mg/L	0.0010	100	90	110			
Silver		0.0207	mg/L	0.0010	103	90	110			
Uranium		0.0485	mg/L	0.00030	97	90	110			
Sample ID: ICSA	8	Interference Check Sample A								
Arsenic		0.0103	mg/L	0.0010						
Barium		3.16E-05	mg/L	0.0010						
Cadmium		0.0104	mg/L	0.0010						
Chromium		0.0104	mg/L	0.0010						
Lead		3.39E-05	mg/L	0.0010						
Selenium		8.30E-06	mg/L	0.0010						
Silver		0.0108	mg/L	0.0010						
Uranium		6.80E-05	mg/L	0.00030						
Sample ID: ICSAB	8	Interference Check Sample AB								
Arsenic		0.0103	mg/L	0.0010	103	70	130			
Barium		4.64E-05	mg/L	0.0010						
Cadmium		0.0106	mg/L	0.0010	106	70	130			
Chromium		0.0105	mg/L	0.0010	105	70	130			
Lead		3.92E-05	mg/L	0.0010						
Selenium		1.39E-05	mg/L	0.0010						
Silver		0.0107	mg/L	0.0010	107	70	130			
Uranium		1.47E-05	mg/L	0.00030						
Method: SW6020								Batch: 33487		
Sample ID: MB-33487	8	Method Blank								
Arsenic		0.0005	mg/L	6E-05				Run: ICPMS2-C_120501A		
Barium		0.008	mg/L	3E-05				05/01/12 16:23		
Cadmium		0.0001	mg/L	1E-05						
Chromium		0.006	mg/L	4E-05						
Lead		0.0006	mg/L	3E-05						
Selenium		0.0003	mg/L	0.0002						
Silver		0.001	mg/L	3E-05						
Uranium		0.002	mg/L	1E-05						
Sample ID: LCS3-33487	8	Laboratory Control Sample								
Arsenic		0.48	mg/L	0.0010	95	80	120			
Barium		0.52	mg/L	0.050	102	80	120			
Cadmium		0.25	mg/L	0.0010	99	80	120			
Chromium		0.50	mg/L	0.0050	98	80	120			
Lead		0.52	mg/L	0.0010	103	80	120			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 07/05/12

Client: Rio Grande Resources Corporation

Report Date: 06/13/12

Project: Mt. Taylor Mine Closure Plan

Work Order: C12040804

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020										
Sample ID: LCS3-33487	Batch: 33487									
Selenium	8	0.45	mg/L	0.0010	90	80	120	2.4	20	
Silver		0.058	mg/L	0.0020	113	80	120	0.7	20	
Uranium		0.52	mg/L	0.00060	105	80	120	3.5	20	
Sample ID: LCSD3-33487	Run: ICPMS2-C_120501A									
Arsenic	8	0.47	mg/L	0.0010	93	80	120	2.0	20	
Barium		0.52	mg/L	0.050	102	80	120	0.7	20	
Cadmium		0.24	mg/L	0.0010	97	80	120	2.0	20	
Chromium		0.49	mg/L	0.0050	98	80	120	0.3	20	
Lead		0.51	mg/L	0.0010	101	80	120	1.6	20	
Selenium		0.44	mg/L	0.0010	89	80	120	1.9	20	
Silver		0.056	mg/L	0.0020	109	80	120	3.5	20	
Uranium		0.51	mg/L	0.00060	102	80	120	2.2	20	
Sample ID: C12040804-023ADIL	Run: ICPMS2-C_120501A									
Arsenic	8	0.0014	mg/L	0.0050	0	0	0	20	N	
Barium		0.060	mg/L	0.050	0	0	10	20		
Cadmium		0.00043	mg/L	0.0050	0	0	0	20	N	
Chromium		0.011	mg/L	0.0050	0	0	19	20		
Lead		0.0016	mg/L	0.0050	0	0	0	20	N	
Selenium		0.0027	mg/L	0.0050	0	0	0	20	N	
Silver		ND	mg/L	0.010	0	0	0	20		
Uranium		0.0056	mg/L	0.0030	0	0	13	20		
Sample ID: C12040804-023AMS3	Run: ICPMS2-C_120501A									
Arsenic	8	0.56	mg/L	0.0010	112	75	125			
Barium		0.65	mg/L	0.050	119	75	125			
Cadmium		0.29	mg/L	0.0010	115	75	125			
Chromium		0.57	mg/L	0.0050	112	75	125			
Lead		0.60	mg/L	0.0010	119	75	125			
Selenium		0.53	mg/L	0.0010	105	75	125			
Silver		0.063	mg/L	0.0020	25	75	125			
Uranium		0.52	mg/L	0.00060	102	75	125			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

N - The analyte concentration was not sufficiently high to calculate a RPD for the serial dilution test.

S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 07/05/12

Client: Rio Grande Resources Corporation

Report Date: 06/13/12

Project: Mt. Taylor Mine Closure Plan

Work Order: C12040804

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020								Analytical Run: ICPMS2-C_120502A		
Sample ID: ICV		Initial Calibration Verification Standard								
Uranium		0.0486	mg/L	0.00030	97	90	110			05/02/12 11:37
Method: SW6020		Batch: 33505								
Sample ID: MB-33505		Run: ICPMS2-C_120502A								
Uranium		0.002	mg/L	1E-05						05/02/12 13:54
Sample ID: LCS3-33505		Run: ICPMS2-C_120502A								
Uranium		0.47	mg/L	0.00060	93	80	120			05/02/12 13:55
Sample ID: LCSD3-33505		Run: ICPMS2-C_120502A								
Uranium		0.48	mg/L	0.00060	96	80	120	2.7	20	05/02/12 13:57
Sample ID: C12040804-020ADIL		Run: ICPMS2-C_120502A								
Uranium		0.12	mg/L	0.0030		0	0	1.9	20	05/02/12 14:02
Sample ID: C12040804-019AMS3		Run: ICPMS2-C_120502A								
Uranium		0.50	mg/L	0.00060	98	75	125			05/02/12 14:22

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 07/05/12

Client: Rio Grande Resources Corporation

Report Date: 06/13/12

Project: Mt. Taylor Mine Closure Plan

Work Order: C12040804

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020								Analytical Run: ICPMS4-C_120425B		
Sample ID: ICV	8	Initial Calibration Verification Standard								
Arsenic		0.0486	mg/L	0.0010	97	90	110			04/25/12 11:08
Barium		0.0497	mg/L	0.0010	99	90	110			
Cadmium		0.0501	mg/L	0.0010	100	90	110			
Chromium		0.0491	mg/L	0.0010	98	90	110			
Lead		0.0497	mg/L	0.0010	99	90	110			
Selenium		0.0485	mg/L	0.0010	97	90	110			
Silver		0.0193	mg/L	0.0010	97	90	110			
Uranium		0.0481	mg/L	0.00030	96	90	110			
Sample ID: ICSA	8	Interference Check Sample A								
Arsenic		2.21E-05	mg/L	0.0010						04/25/12 11:12
Barium		2.39E-05	mg/L	0.0010						
Cadmium		4.21E-05	mg/L	0.0010						
Chromium		2.05E-05	mg/L	0.0010						
Lead		1.30E-05	mg/L	0.0010						
Selenium		7.84E-05	mg/L	0.0010						
Silver		-0.000229	mg/L	0.0010						
Uranium		2.36E-05	mg/L	0.00030						
Sample ID: ICSAB	8	Interference Check Sample AB								
Arsenic		0.0113	mg/L	0.0010	113	70	130			04/25/12 11:17
Barium		1.46E-05	mg/L	0.0010						
Cadmium		0.0109	mg/L	0.0010	109	70	130			
Chromium		0.0115	mg/L	0.0010	115	70	130			
Lead		5.40E-06	mg/L	0.0010						
Selenium		7.00E-07	mg/L	0.0010						
Silver		0.00988	mg/L	0.0010	99	70	130			
Uranium		8.30E-06	mg/L	0.00030						
Method: SW6020								Batch: 33440		
Sample ID: MB-33440	8	Method Blank								
Arsenic		0.0004	mg/L	7E-05				Run: ICPMS4-C_120425B		
Barium		0.01	mg/L	0.0001				04/25/12 19:38		
Cadmium		0.0001	mg/L	4E-05						
Chromium		ND	mg/L	0.001						
Lead		0.0002	mg/L	3E-05						
Selenium		0.0001	mg/L	6E-05						
Silver		0.001	mg/L	2E-05						
Uranium		0.004	mg/L	5E-05						
Sample ID: LCS3-33440	8	Laboratory Control Sample								
Arsenic		0.46	mg/L	0.0010	91	80	120			04/25/12 19:43
Barium		0.50	mg/L	0.050	98	80	120			
Cadmium		0.24	mg/L	0.0010	97	80	120			
Chromium		0.50	mg/L	0.0050	101	80	120			
Lead		0.51	mg/L	0.0010	103	80	120			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 07/05/12

Client: Rio Grande Resources Corporation

Report Date: 06/13/12

Project: Mt. Taylor Mine Closure Plan

Work Order: C12040804

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020										Batch: 33440
Sample ID: LCS3-33440	8	Laboratory Control Sample				Run: ICPMS4-C_120425B				04/25/12 19:43
Selenium		0.44	mg/L	0.0010	87	80	120			
Silver		0.053	mg/L	0.0010	104	80	120			
Uranium		0.50	mg/L	0.00030	99	80	120			
Sample ID: LCSD3-33440	8	Laboratory Control Sample Duplicate				Run: ICPMS4-C_120425B				04/25/12 20:05
Arsenic		0.47	mg/L	0.0010	94	80	120	2.8	20	
Barium		0.50	mg/L	0.050	99	80	120	1.0	20	
Cadmium		0.25	mg/L	0.0010	98	80	120	1.0	20	
Chromium		0.52	mg/L	0.0050	104	80	120	3.4	20	
Lead		0.51	mg/L	0.0010	103	80	120	0.0	20	
Selenium		0.44	mg/L	0.0010	89	80	120	1.5	20	
Silver		0.054	mg/L	0.0010	106	80	120	1.7	20	
Uranium		0.51	mg/L	0.00030	100	80	120	1.0	20	
Sample ID: C12041044-002ADIL	8	Serial Dilution				Run: ICPMS4-C_120425B				04/25/12 20:19
Arsenic		0.0017	mg/L	0.0010		0	0	20	N	
Barium		0.065	mg/L	0.050		0	0	2.8	20	
Cadmium		ND	mg/L	0.0010		0	0		20	
Chromium		ND	mg/L	0.011		0	0		20	
Lead		0.0028	mg/L	0.0010		0	0	20	N	
Selenium		ND	mg/L	0.0010		0	0		20	
Silver		ND	mg/L	0.0010		0	0		20	
Uranium		0.010	mg/L	0.00052		0	0	5.8	20	
Sample ID: C12040804-028AMS3	8	Sample Matrix Spike				Run: ICPMS4-C_120425B				04/25/12 20:28
Arsenic		0.49	mg/L	0.0010	97	75	125			
Barium		0.77	mg/L	0.050	91	75	125			
Cadmium		0.25	mg/L	0.0010	101	75	125			
Chromium		0.54	mg/L	0.0050	107	75	125			
Lead		0.53	mg/L	0.0010	105	75	125			
Selenium		0.68	mg/L	0.0010	97	75	125			
Silver		0.054	mg/L	0.0010	22	75	125		S	
Uranium		11	mg/L	0.00030		75	125		A	
Sample ID: C12041044-001AMS3	8	Sample Matrix Spike				Run: ICPMS4-C_120425B				04/25/12 21:40
Arsenic		0.48	mg/L	0.0010	94	75	125			
Barium		0.68	mg/L	0.050	102	75	125			
Cadmium		0.25	mg/L	0.0010	98	75	125			
Chromium		0.55	mg/L	0.0050	107	75	125			
Lead		0.54	mg/L	0.0010	105	75	125			
Selenium		0.46	mg/L	0.0010	92	75	125			
Silver		0.053	mg/L	0.0010	21	75	125		S	
Uranium		0.60	mg/L	0.00030	104	75	125			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 07/05/12

Client: Rio Grande Resources Corporation

Report Date: 06/13/12

Project: Mt. Taylor Mine Closure Plan

Work Order: C12040804

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW7470A										Analytical Run: CVAA_C203_120519A
Sample ID: ICV										05/19/12 07:43
Mercury		0.00500	mg/L	0.00010	100	90	110			
Method: SW7470A										Batch: 33699
Sample ID: MB-33699										05/19/12 07:48
Mercury		ND	mg/L	3E-05						
Sample ID: LCS-33699										05/19/12 07:49
Mercury		0.0052	mg/L	0.0020	103	85	115			
Sample ID: LCSD-33699										05/19/12 07:50
Mercury		0.0052	mg/L	0.0020	104	85	115	0.9	10	
Sample ID: C12040804-001ASD										05/19/12 07:53
Mercury		ND	mg/L	0.0020						10
Sample ID: C12040804-001AMS										05/19/12 07:54
Mercury		0.0051	mg/L	0.0020	102	85	115			
Method: SW7470A										Batch: 33700
Sample ID: MB-33700										05/19/12 08:27
Mercury		ND	mg/L	3E-05						
Sample ID: LCS-33700										05/19/12 08:28
Mercury		0.0050	mg/L	0.0020	100	85	115			
Sample ID: LCSD-33700										05/19/12 08:29
Mercury		0.0053	mg/L	0.0020	107	85	115	6.0	10	
Sample ID: C12040804-011ASD										05/19/12 08:32
Mercury		ND	mg/L	0.0020						10
Sample ID: C12040804-011AMS										05/19/12 08:36
Mercury		0.0050	mg/L	0.0020	101	85	115			
Method: SW7470A										Batch: 33701
Sample ID: MB-33701										05/19/12 08:47
Mercury		ND	mg/L	3E-05						
Sample ID: LCS-33701										05/19/12 08:48
Mercury		0.0050	mg/L	0.0020	100	85	115			
Sample ID: LCSD-33701										05/19/12 08:52
Mercury		0.0050	mg/L	0.0020	100	85	115	0.0	10	
Sample ID: C12040804-019ASD										05/19/12 08:55
Mercury		ND	mg/L	0.0020						10
Sample ID: C12040804-019AMS										05/19/12 08:56
Mercury		0.0053	mg/L	0.0020	105	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 07/05/12

Client: Rio Grande Resources Corporation

Report Date: 06/13/12

Project: Mt. Taylor Mine Closure Plan

Work Order: C12040804

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW7470A										Batch: 33702
Sample ID: MB-33702	Method Blank				Run: CVAA_C203_120519A				05/19/12 09:11	
Mercury		ND	mg/L	3E-05						
Sample ID: LCS-33702	Laboratory Control Sample				Run: CVAA_C203_120519A				05/19/12 09:12	
Mercury		0.0051	mg/L	0.0020	103	85	115			
Sample ID: LCSD-33702	Laboratory Control Sample Duplicate				Run: CVAA_C203_120519A				05/19/12 09:13	
Mercury		0.0051	mg/L	0.0020	101	85	115	1.8	10	
Sample ID: C12040804-028ASD	Serial Dilution				Run: CVAA_C203_120519A				05/19/12 09:16	
Mercury		ND	mg/L	0.0020						10
Sample ID: C12040804-028AMS	Sample Matrix Spike				Run: CVAA_C203_120519A				05/19/12 09:17	
Mercury		0.0052	mg/L	0.0020	103	85	115			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

Standard Reporting Procedures

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Workorder Receipt Checklist

Rio Grande Resources Corporation

C12040804

Login completed by: Kristy Gisse

Date Received: 4/13/2012

Reviewed by: BL2000\tedwards

Received by: kg

Reviewed Date: 4/24/2012

Carrier FedEx
name:

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature:	18.2°C		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" type="checkbox"/>

Contact and Corrective Action Comments:

None



Chain of Custody and Analytical Request Record

Company Name:
Rio Grande Resources Corp

PLEASE PRINT- Provide as much information as possible

Request Record	
PLEASE PRINT- Provide as much information as possible.	
Project Name, PWS, Permit, Etc.	Sample Origin
Mt Taylor Mine Closure Plan	EPA/Santa Fe
Page <u>1</u> of _____	

Report Mail Address: PO Box 1150
Grants, NM 87020
Additional e-mail copy to beverett@klein

Invoice Address:
PO Box 1150
Grants, NM 87020

Special Report/Formats – ELI must be notified prior to sample submittal for the following:



Chain of Custody and Analytical Request Record

PLEASE PRINT. Provide as much information as possible.

C-3886

C-3088

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ENERGY ATOMIES

ENERGY ATOMS/ECS

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In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be subject to audit.



Chain of Custody and Analytical Request Record

PLEASE PRINT- Provide as much information as possible.

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In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly noted on your analytical report.

ANALYTICAL SUMMARY REPORT

July 10, 2012

Rio Grande Resources Corporation
PO Box 1150
Grants, NM 87020

Workorder No.: C12041044 Quote ID: C3778 - Mt Taylor Mine Closure Plan

Project Name: Mt. Taylor Mine Closure Plan

Energy Laboratories, Inc. Casper WY received the following 28 samples for Rio Grande Resources Corporation on 4/20/2012 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C12041044-001	MT-1-F (6" B.G.)	04/10/12 10:45	04/20/12	Sediment	Metals, SPLP Extractable Mercury, SPLP Mercury Analysis Prep Filterability Digestion, Total Metals Digestion For RadioChemistry Radium 226 Radium 228 SPLP Extraction, Regular
C12041044-002	MT-2-D (6" B.G.)	04/10/12 10:15	04/20/12	Sediment	Same As Above
C12041044-003	MT-3-F (6" B.G.)	04/10/12 11:10	04/20/12	Sediment	Same As Above
C12041044-004	MT-4-F (6" B.G.)	04/10/12 9:35	04/20/12	Sediment	Metals, SPLP Extractable Mercury, SPLP Mercury Analysis Prep Filterability E300.0 Anions Digestion, Total Metals Digestion For RadioChemistry DI Water Soil Extract Radium 226 Radium 228 SPLP Extraction, Regular
C12041044-005	MT-5-F (6" B.G.)	04/10/12 10:00	04/20/12	Sediment	Same As Above
C12041044-006	MT-7-C (6" B.G.)	04/10/12 9:45	04/20/12	Sediment	Metals, SPLP Extractable Mercury, SPLP Mercury Analysis Prep Filterability Digestion, Total Metals Digestion For RadioChemistry Radium 226 Radium 228 SPLP Extraction, Regular
C12041044-007	MT-OP-E (6" B.G.)	04/10/12 9:00	04/20/12	Sediment	Same As Above
C12041044-008	MT-A-C (6" B.G.)	04/10/12 10:55	04/20/12	Sediment	Same As Above
C12041044-009	MT-Borrow/Background	04/10/12 11:00	04/20/12	Sediment	Same As Above

ANALYTICAL SUMMARY REPORT

C12041044-010	MT-4-D-S1 (0-6" B.G.)	04/10/12 14:05	04/20/12	Sediment	Metals, SPLP Extractable Mercury, SPLP Mercury Analysis Prep Filterability E300.0 Anions Digestion, Total Metals Digestion For RadioChemistry DI Water Soil Extract Radium 226 Radium 228 SPLP Extraction, Regular
C12041044-011	MT-4-D-S2 (14" B.G.)	04/10/12 14:10	04/20/12	Sediment	Same As Above
C12041044-012	MT-4-D-S3 (48" B.G.)	04/10/12 14:20	04/20/12	Sediment	Same As Above
C12041044-013	MT-4-E-S1 (0-4" B.G.)	04/10/12 13:35	04/20/12	Sediment	Same As Above
C12041044-014	MT-4-E-S2 (10-12" B.G.)	04/10/12 13:40	04/20/12	Sediment	Same As Above
C12041044-015	MT-4-E-S3 (36" B.G.)	04/10/12 13:42	04/20/12	Sediment	Same As Above
C12041044-016	MT-4-E-S4 (48" B.G.)	04/10/12 13:45	04/20/12	Sediment	Same As Above
C12041044-017	MT-6-A-S1 (0-5" B.G.)	04/10/12 15:05	04/20/12	Sediment	Metals, SPLP Extractable Mercury, SPLP Mercury Analysis Prep Filterability Digestion, Total Metals Digestion For RadioChemistry Radium 226 Radium 228 SPLP Extraction, Regular
C12041044-018	MT-6-A-S2 (12-20" B.G.)	04/10/12 15:10	04/20/12	Sediment	Same As Above
C12041044-019	MT-6-B-S1 (8-10" B.G.)	04/10/12 14:30	04/20/12	Sediment	Same As Above
C12041044-020	MT-6-B-S2 (30" B.G.)	04/10/12 14:35	04/20/12	Sediment	Same As Above
C12041044-021	MT-OP-C-S1 (0-6" B.G.)	04/10/12 13:20	04/20/12	Sediment	Same As Above
C12041044-022	MT-OP-C-S2 (20" B.G.)	04/10/12 13:25	04/20/12	Sediment	Same As Above
C12041044-023	MT-OP-C-S3 (48-50' B.G.)	04/10/12 13:25	04/20/12	Sediment	Same As Above
C12041044-024	MT-OP-C-S4 (72" B.G.)	04/10/12 13:30	04/20/12	Sediment	Same As Above
C12041044-025	MT-OP-D-S1 (0-6" B.G.)	04/10/12 12:45	04/20/12	Sediment	Same As Above
C12041044-026	MT-OP-D-S2 (48-50" B.G.)	04/10/12 12:45	04/20/12	Sediment	Same As Above
C12041044-027	MT-OP-D-S3 (76" B.G.)	04/10/12 12:50	04/20/12	Sediment	Same As Above
C12041044-028	MT-8-F (6" B.G.)	04/10/12 9:25	04/20/12	Sediment	Metals, SPLP Extractable Mercury, SPLP Mercury Analysis Prep Filterability E300.0 Anions Digestion, Total Metals Digestion For RadioChemistry DI Water Soil Extract Radium 226 Radium 228 SPLP Extraction, Regular

ANALYTICAL SUMMARY REPORT

The results as reported relate only to the item(s) submitted for testing. The analyses presented in this report were performed at Energy Laboratories, Inc., 2393 Salt Creek Hwy., Casper, WY 82601, unless otherwise noted. Radiochemistry analyses were performed at Energy Laboratories, Inc., 2325 Kerzell Lane, Casper, WY 82601, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these test results, please call.

Report Approved By:

CLIENT: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Sample Delivery Group: C12041044

Revised Date: 07/10/12

Report Date: 06/13/12

CASE NARRATIVE

REVISED/SUPPLEMENTAL REPORT

The attached analytical report has been revised from a previously submitted report due to the request by the client for the analysis of Radium 226 and Radium 228 on the Sediment on all samples and Chloride and Sulfate on the Sediment on samples -004 through -005, -010 through -016, and -028. The data presented here is from that analysis.

PREP COMMENTS

The prep hold time for the SPLP extraction was exceeded by up to 6 days.
The prep hold time for Chloride and Sulfate analysis was exceeded by 39 days.

ORIGINAL SAMPLE SUBMITTAL(S)

All original sample submittals have been returned with the data package.

SAMPLE TEMPERATURE COMPLIANCE: 4°C ($\pm 2^\circ\text{C}$)

Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

GROSS ALPHA ANALYSIS

Method 900.0 for gross alpha and gross beta is intended as a drinking water method for low TDS waters. Data provided by this method for non potable waters should be viewed as inconsistent.

RADON IN AIR ANALYSIS

The desired exposure time is 48 hours (2 days). The time delay in returning the canister to the laboratory for processing should be as short as possible to avoid excessive decay. Maximum recommended delay between end of exposure to beginning of counting should not exceed 8 days.

SOIL/SOLID SAMPLES

All samples reported on an as received basis unless otherwise indicated.

ATRAZINE, SIMAZINE AND PCB ANALYSIS

Data for PCBs, Atrazine and Simazine are reported from EPA 525.2. PCB data reported by ELI reflects the results for seven individual Aroclors. When the results for all seven are ND (not detected), the sample meets EPA compliance criteria for PCB monitoring.

SUBCONTRACTING ANALYSIS

Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

BRANCH LABORATORY LOCATIONS

eli-b - Energy Laboratories, Inc. - Billings, MT
eli-g - Energy Laboratories, Inc. - Gillette, WY
eli-h - Energy Laboratories, Inc. - Helena, MT
eli-r - Energy Laboratories, Inc. - Rapid City, SD
eli-t - Energy Laboratories, Inc. - College Station, TX

CERTIFICATIONS:

USEPA: WY00002, Radiochemical WY00937; FL-DOH NELAC: E87641, Radiochemical E871017; California: 02118CA;
Oregon: WY200001, Radiochemical WY200002; Utah: WY00002; Virginia: 00057; Washington: C836

ISO 17025 DISCLAIMER:

The results of this Analytical Report relate only to the items submitted for analysis.

ENERGY LABORATORIES, INC. - CASPER,WY certifies that certain method selections contained in this report meet requirements as set forth by the above accrediting authorities. Some results requested by the client may not be covered under these certifications. All analysis data to be submitted for regulatory enforcement should be certified in the sample state of origin. Please verify ELI's certification coverage by visiting www.energylab.com

ELI appreciates the opportunity to provide you with this analytical service. For additional information and services visit our web page www.energylab.com.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12041044-001
Client Sample ID: MT-1-F (6" B.G.)

Revised Date: 07/10/12
Report Date: 06/13/12
Collection Date: 04/10/12 10:45
DateReceived: 04/20/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/24/12 16:14 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.006	mg/L		0.001	SW6020	04/25/12 21:35 / smm	
Barium	0.17	mg/L		0.05	SW6020	04/25/12 21:35 / smm	
Cadmium	ND	mg/L		0.001	SW6020	04/25/12 21:35 / smm	
Chromium	0.014	mg/L		0.005	SW6020	04/25/12 21:35 / smm	
Lead	0.016	mg/L		0.001	SW6020	04/25/12 21:35 / smm	
Mercury	ND	mg/L		0.002	SW7470A	04/26/12 12:36 / rdw	
Selenium	0.005	mg/L		0.001	SW6020	04/25/12 21:35 / smm	
Silver	ND	mg/L		0.001	SW6020	04/25/12 21:35 / smm	
Uranium	0.077	mg/L	B	0.0003	SW6020	04/25/12 21:35 / smm	
RADIONUCLIDES							
Radium 226	2.0	pCi/g-dry			E903.0	07/10/12 13:40 / trs	
Radium 226 precision (\pm)	0.1	pCi/g-dry			E903.0	07/10/12 13:40 / trs	
Radium 226 MDC	0.03	pCi/g-dry			E903.0	07/10/12 13:40 / trs	
Radium 228	0.6	pCi/g-dry			RA-05	07/05/12 21:06 / gb	
Radium 228 precision (\pm)	0.1	pCi/g-dry			RA-05	07/05/12 21:06 / gb	
Radium 228 MDC	0.2	pCi/g-dry			RA-05	07/05/12 21:06 / gb	

Report Definitions: RL - Analyte reporting limit.

MCL - Maximum contaminant level.

QCL - Quality control limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12041044-002
Client Sample ID: MT-2-D (6" B.G.)

Revised Date: 07/10/12
Report Date: 06/13/12
Collection Date: 04/10/12 10:15
DateReceived: 04/20/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/24/12 16:14 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.002	mg/L		0.001	SW6020	04/25/12 20:14 / smm	
Barium	0.06	mg/L		0.05	SW6020	04/25/12 20:14 / smm	
Cadmium	ND	mg/L		0.001	SW6020	04/25/12 20:14 / smm	
Chromium	0.005	mg/L		0.005	SW6020	04/25/12 20:14 / smm	
Lead	0.003	mg/L		0.001	SW6020	04/25/12 20:14 / smm	
Mercury	ND	mg/L		0.002	SW7470A	04/26/12 12:43 / rdw	
Selenium	ND	mg/L		0.001	SW6020	04/25/12 20:14 / smm	
Silver	ND	mg/L		0.001	SW6020	04/25/12 20:14 / smm	
Uranium	0.0098	mg/L	B	0.0003	SW6020	04/25/12 20:14 / smm	
RADIONUCLIDES							
Radium 226	0.6	pCi/g-dry			E903.0	07/03/12 03:34 / plj	
Radium 226 precision (\pm)	0.07	pCi/g-dry			E903.0	07/03/12 03:34 / plj	
Radium 226 MDC	0.02	pCi/g-dry			E903.0	07/03/12 03:34 / plj	
Radium 228	0.6	pCi/g-dry			RA-05	06/25/12 17:32 / plj	
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05	06/25/12 17:32 / plj	
Radium 228 MDC	0.3	pCi/g-dry			RA-05	06/25/12 17:32 / plj	

Report Definitions: RL - Analyte reporting limit.

MCL - Maximum contaminant level.

QCL - Quality control limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12041044-003
Client Sample ID: MT-3-F (6" B.G.)

Revised Date: 07/10/12
Report Date: 06/13/12
Collection Date: 04/10/12 11:10
DateReceived: 04/20/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/24/12 16:14 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.002	mg/L		0.001	SW6020	05/01/12 14:24 / cp	
Barium	ND	mg/L		0.05	SW6020	05/01/12 14:24 / cp	
Cadmium	ND	mg/L		0.001	SW6020	05/01/12 14:24 / cp	
Chromium	ND	mg/L		0.005	SW6020	05/01/12 14:24 / cp	
Lead	0.001	mg/L		0.001	SW6020	05/01/12 14:24 / cp	
Mercury	ND	mg/L		0.002	SW7470A	04/30/12 15:16 / rdw	
Selenium	0.001	mg/L		0.001	SW6020	05/01/12 14:24 / cp	
Silver	ND	mg/L	D	0.002	SW6020	05/01/12 14:24 / cp	
Uranium	0.0090	mg/L	D	0.0006	SW6020	05/01/12 14:24 / cp	
RADIONUCLIDES							
Radium 226	0.9	pCi/g-dry			E903.0	07/03/12 03:34 / plj	
Radium 226 precision (\pm)	0.08	pCi/g-dry			E903.0	07/03/12 03:34 / plj	
Radium 226 MDC	0.02	pCi/g-dry			E903.0	07/03/12 03:34 / plj	
Radium 228	0.5	pCi/g-dry			RA-05	06/25/12 15:52 / plj	
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05	06/25/12 15:52 / plj	
Radium 228 MDC	0.3	pCi/g-dry			RA-05	06/25/12 15:52 / plj	

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12041044-004
Client Sample ID: MT-4-F (6" B.G.)

Revised Date: 07/10/12
Report Date: 06/13/12
Collection Date: 04/10/12 09:35
DateReceived: 04/20/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE EXTRACT							
Chloride	51.2	mg/kg		1.00	E300.0		06/28/12 03:22 / ljl
Chloride, 1:1	1.44	meq/L		0.0282	E300.0		06/28/12 03:22 / ljl
Sulfate	405	mg/kg		1.00	E300.0		06/28/12 03:22 / ljl
Sulfate, 1:1	8.43	meq/L		0.0208	E300.0		06/28/12 03:22 / ljl
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/24/12 16:14 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.005	mg/L		0.001	SW6020		05/01/12 13:55 / cp
Barium	ND	mg/L		0.05	SW6020		05/01/12 13:55 / cp
Cadmium	ND	mg/L		0.001	SW6020		05/01/12 13:55 / cp
Chromium	ND	mg/L		0.005	SW6020		05/02/12 21:42 / smm
Lead	0.003	mg/L		0.001	SW6020		05/01/12 13:55 / cp
Mercury	ND	mg/L		0.002	SW7470A		04/30/12 15:20 / rdw
Selenium	0.002	mg/L		0.001	SW6020		05/01/12 13:55 / cp
Silver	ND	mg/L	D	0.002	SW6020		05/01/12 13:55 / cp
Uranium	0.0027	mg/L	D	0.0006	SW6020		05/01/12 13:55 / cp
RADIONUCLIDES							
Radium 226	0.8	pCi/g-dry			E903.0		07/10/12 13:40 / trs
Radium 226 precision (\pm)	0.08	pCi/g-dry			E903.0		07/10/12 13:40 / trs
Radium 226 MDC	0.03	pCi/g-dry			E903.0		07/10/12 13:40 / trs
Radium 228	1.0	pCi/g-dry			RA-05		07/05/12 21:06 / gb
Radium 228 precision (\pm)	0.1	pCi/g-dry			RA-05		07/05/12 21:06 / gb
Radium 228 MDC	0.2	pCi/g-dry			RA-05		07/05/12 21:06 / gb

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12041044-005
Client Sample ID: MT-5-F (6" B.G.)

Revised Date: 07/10/12
Report Date: 06/13/12
Collection Date: 04/10/12 10:00
DateReceived: 04/20/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE EXTRACT							
Chloride	37.0	mg/kg		1.00	E300.0		06/28/12 03:39 / ljl
Chloride, 1:1	1.04	meq/L		0.0282	E300.0		06/28/12 03:39 / ljl
Sulfate	183	mg/kg		1.00	E300.0		06/28/12 03:39 / ljl
Sulfate, 1:1	3.82	meq/L		0.0208	E300.0		06/28/12 03:39 / ljl
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/24/12 16:14 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.002	mg/L		0.001	SW6020		05/01/12 14:12 / cp
Barium	ND	mg/L		0.05	SW6020		05/01/12 14:12 / cp
Cadmium	ND	mg/L		0.001	SW6020		05/01/12 14:12 / cp
Chromium	ND	mg/L		0.005	SW6020		05/02/12 22:05 / smm
Lead	0.001	mg/L		0.001	SW6020		05/01/12 14:12 / cp
Mercury	ND	mg/L		0.002	SW7470A		04/30/12 15:22 / rdw
Selenium	0.001	mg/L		0.001	SW6020		05/01/12 14:12 / cp
Silver	0.003	mg/L	D	0.002	SW6020		05/01/12 14:12 / cp
Uranium	0.0029	mg/L	D	0.0006	SW6020		05/01/12 14:12 / cp
RADIONUCLIDES							
Radium 226	2.0	pCi/g-dry			E903.0		07/10/12 13:40 / trs
Radium 226 precision (\pm)	0.1	pCi/g-dry			E903.0		07/10/12 13:40 / trs
Radium 226 MDC	0.03	pCi/g-dry			E903.0		07/10/12 13:40 / trs
Radium 228	0.8	pCi/g-dry			RA-05		07/05/12 21:06 / gb
Radium 228 precision (\pm)	0.1	pCi/g-dry			RA-05		07/05/12 21:06 / gb
Radium 228 MDC	0.2	pCi/g-dry			RA-05		07/05/12 21:06 / gb

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12041044-006
Client Sample ID: MT-7-C (6" B.G.)

Revised Date: 07/10/12
Report Date: 06/13/12
Collection Date: 04/10/12 09:45
DateReceived: 04/20/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/24/12 16:14 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.002	mg/L		0.001	SW6020	05/01/12 14:15 / cp	
Barium	ND	mg/L		0.05	SW6020	05/01/12 14:15 / cp	
Cadmium	ND	mg/L		0.001	SW6020	05/01/12 14:15 / cp	
Chromium	0.006	mg/L		0.005	SW6020	05/01/12 14:15 / cp	
Lead	0.002	mg/L		0.001	SW6020	05/01/12 14:15 / cp	
Mercury	ND	mg/L		0.002	SW7470A	04/30/12 15:23 / rdw	
Selenium	ND	mg/L		0.001	SW6020	05/01/12 14:15 / cp	
Silver	ND	mg/L	D	0.002	SW6020	05/01/12 14:15 / cp	
Uranium	0.0023	mg/L	D	0.0006	SW6020	05/01/12 14:15 / cp	
RADIONUCLIDES							
Radium 226	0.6	pCi/g-dry			E903.0	07/10/12 13:40 / trs	
Radium 226 precision (\pm)	0.07	pCi/g-dry			E903.0	07/10/12 13:40 / trs	
Radium 226 MDC	0.03	pCi/g-dry			E903.0	07/10/12 13:40 / trs	
Radium 228	0.8	pCi/g-dry			RA-05	07/05/12 21:06 / gb	
Radium 228 precision (\pm)	0.1	pCi/g-dry			RA-05	07/05/12 21:06 / gb	
Radium 228 MDC	0.1	pCi/g-dry			RA-05	07/05/12 21:06 / gb	

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12041044-007
Client Sample ID: MT-OP-E (6" B.G.)

Revised Date: 07/10/12

Report Date: 06/13/12

Collection Date: 04/10/12 09:00

DateReceived: 04/20/12

Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/24/12 16:14 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.004	mg/L		0.001	SW6020	05/01/12 14:18 / cp	
Barium	0.05	mg/L		0.05	SW6020	05/01/12 14:18 / cp	
Cadmium	ND	mg/L		0.001	SW6020	05/01/12 14:18 / cp	
Chromium	0.006	mg/L		0.005	SW6020	05/01/12 14:18 / cp	
Lead	0.003	mg/L		0.001	SW6020	05/01/12 14:18 / cp	
Mercury	ND	mg/L		0.002	SW7470A	04/30/12 15:24 / rdw	
Selenium	0.005	mg/L		0.001	SW6020	05/01/12 14:18 / cp	
Silver	ND	mg/L	D	0.002	SW6020	05/01/12 14:18 / cp	
Uranium	0.0056	mg/L	D	0.0006	SW6020	05/01/12 14:18 / cp	
RADIONUCLIDES							
Radium 226	1.1	pCi/g-dry			E903.0	07/10/12 13:40 / trs	
Radium 226 precision (\pm)	0.1	pCi/g-dry			E903.0	07/10/12 13:40 / trs	
Radium 226 MDC	0.03	pCi/g-dry			E903.0	07/10/12 13:40 / trs	
Radium 228	0.8	pCi/g-dry			RA-05	07/05/12 21:06 / gb	
Radium 228 precision (\pm)	0.1	pCi/g-dry			RA-05	07/05/12 21:06 / gb	
Radium 228 MDC	0.2	pCi/g-dry			RA-05	07/05/12 21:06 / gb	

Report Definitions: RL - Analyte reporting limit.

MCL - Maximum contaminant level.

QCL - Quality control limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12041044-008
Client Sample ID: MT-A-C (6" B.G.)

Revised Date: 07/10/12
Report Date: 06/13/12
Collection Date: 04/10/12 10:55
DateReceived: 04/20/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/24/12 16:14 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.003	mg/L		0.001	SW6020	05/01/12 14:21 / cp	
Barium	ND	mg/L		0.05	SW6020	05/01/12 14:21 / cp	
Cadmium	ND	mg/L		0.001	SW6020	05/01/12 14:21 / cp	
Chromium	ND	mg/L		0.005	SW6020	05/01/12 14:21 / cp	
Lead	0.001	mg/L		0.001	SW6020	05/01/12 14:21 / cp	
Mercury	ND	mg/L		0.002	SW7470A	04/30/12 15:28 / rdw	
Selenium	0.044	mg/L		0.001	SW6020	05/01/12 14:21 / cp	
Silver	ND	mg/L	D	0.002	SW6020	05/01/12 14:21 / cp	
Uranium	0.14	mg/L	D	0.0006	SW6020	05/01/12 14:21 / cp	
RADIONUCLIDES							
Radium 226	1.7	pCi/g-dry			E903.0	07/10/12 13:40 / trs	
Radium 226 precision (\pm)	0.1	pCi/g-dry			E903.0	07/10/12 13:40 / trs	
Radium 226 MDC	0.03	pCi/g-dry			E903.0	07/10/12 13:40 / trs	
Radium 228	0.5	pCi/g-dry			RA-05	07/05/12 21:06 / gb	
Radium 228 precision (\pm)	0.1	pCi/g-dry			RA-05	07/05/12 21:06 / gb	
Radium 228 MDC	0.2	pCi/g-dry			RA-05	07/05/12 21:06 / gb	

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12041044-009
Client Sample ID: MT-Borrow/Background

Revised Date: 07/10/12
Report Date: 06/13/12
Collection Date: 04/10/12 11:00
DateReceived: 04/20/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/24/12 16:14 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.001	mg/L		0.001	SW6020	05/01/12 15:27 / cp	
Barium	ND	mg/L		0.05	SW6020	05/01/12 15:27 / cp	
Cadmium	ND	mg/L		0.001	SW6020	05/01/12 15:27 / cp	
Chromium	ND	mg/L		0.005	SW6020	05/01/12 15:27 / cp	
Lead	ND	mg/L		0.001	SW6020	05/01/12 15:27 / cp	
Mercury	ND	mg/L		0.002	SW7470A	04/30/12 15:34 / rdw	
Selenium	0.001	mg/L		0.001	SW6020	05/01/12 15:27 / cp	
Silver	ND	mg/L	D	0.002	SW6020	05/01/12 15:27 / cp	
Uranium	0.0007	mg/L	D	0.0006	SW6020	05/01/12 15:27 / cp	
RADIOMUCIDES							
Radium 226	0.7	pCi/g-dry			E903.0	07/10/12 13:40 / trs	
Radium 226 precision (\pm)	0.07	pCi/g-dry			E903.0	07/10/12 13:40 / trs	
Radium 226 MDC	0.03	pCi/g-dry			E903.0	07/10/12 13:40 / trs	
Radium 228	0.7	pCi/g-dry			RA-05	07/05/12 22:57 / gb	
Radium 228 precision (\pm)	0.1	pCi/g-dry			RA-05	07/05/12 22:57 / gb	
Radium 228 MDC	0.2	pCi/g-dry			RA-05	07/05/12 22:57 / gb	

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12041044-010
Client Sample ID: MT-4-D-S1 (0-6" B.G.)

Revised Date: 07/10/12
Report Date: 06/13/12
Collection Date: 04/10/12 14:05
DateReceived: 04/20/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE EXTRACT							
Chloride	7.76	mg/kg		1.00	E300.0		06/28/12 03:55 / ljl
Chloride, 1:1	0.219	meq/L		0.0282	E300.0		06/28/12 03:55 / ljl
Sulfate	77.0	mg/kg		1.00	E300.0		06/28/12 03:55 / ljl
Sulfate, 1:1	1.60	meq/L		0.0208	E300.0		06/28/12 03:55 / ljl
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/24/12 16:14 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.008	mg/L		0.001	SW6020		05/01/12 14:56 / cp
Barium	1.0	mg/L		0.05	SW6020		05/01/12 14:56 / cp
Cadmium	ND	mg/L		0.001	SW6020		05/01/12 14:56 / cp
Chromium	0.008	mg/L		0.005	SW6020		05/01/12 14:56 / cp
Lead	0.003	mg/L		0.001	SW6020		05/01/12 14:56 / cp
Mercury	ND	mg/L		0.002	SW7470A		04/30/12 15:38 / rdw
Selenium	0.015	mg/L		0.001	SW6020		05/01/12 14:56 / cp
Silver	ND	mg/L	D	0.002	SW6020		05/01/12 14:56 / cp
Uranium	0.033	mg/L	D	0.0006	SW6020		05/01/12 14:56 / cp
RADIONUCLIDES							
Radium 226	18.1	pCi/g-dry			E903.0		07/10/12 13:40 / trs
Radium 226 precision (\pm)	0.3	pCi/g-dry			E903.0		07/10/12 13:40 / trs
Radium 226 MDC	0.02	pCi/g-dry			E903.0		07/10/12 13:40 / trs
Radium 228	0.9	pCi/g-dry			RA-05		07/05/12 22:57 / gb
Radium 228 precision (\pm)	0.1	pCi/g-dry			RA-05		07/05/12 22:57 / gb
Radium 228 MDC	0.2	pCi/g-dry			RA-05		07/05/12 22:57 / gb

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12041044-011
Client Sample ID: MT-4-D-S2 (14" B.G.)

Revised Date: 07/10/12
Report Date: 06/13/12
Collection Date: 04/10/12 14:10
DateReceived: 04/20/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE EXTRACT							
Chloride	92.0	mg/kg		1.00	E300.0		06/28/12 04:12 / ljl
Chloride, 1:1	2.60	meq/L		0.0282	E300.0		06/28/12 04:12 / ljl
Sulfate	1840	mg/kg		1.00	E300.0		06/28/12 04:12 / ljl
Sulfate, 1:1	38.2	meq/L		0.0208	E300.0		06/28/12 04:12 / ljl
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/24/12 16:14 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.007	mg/L		0.001	SW6020		05/01/12 15:02 / cp
Barium	ND	mg/L		0.05	SW6020		05/01/12 15:02 / cp
Cadmium	ND	mg/L		0.001	SW6020		05/01/12 15:02 / cp
Chromium	0.006	mg/L		0.005	SW6020		05/01/12 15:02 / cp
Lead	0.001	mg/L		0.001	SW6020		05/01/12 15:02 / cp
Mercury	ND	mg/L		0.002	SW7470A		04/30/12 15:39 / rdw
Selenium	0.39	mg/L		0.001	SW6020		05/01/12 15:02 / cp
Silver	ND	mg/L	D	0.002	SW6020		05/01/12 15:02 / cp
Uranium	0.20	mg/L	D	0.0006	SW6020		05/01/12 15:02 / cp
RADIONUCLIDES							
Radium 226	2.8	pCi/g-dry			E903.0		07/10/12 13:40 / trs
Radium 226 precision (\pm)	0.1	pCi/g-dry			E903.0		07/10/12 13:40 / trs
Radium 226 MDC	0.03	pCi/g-dry			E903.0		07/10/12 13:40 / trs
Radium 228	0.2	pCi/g-dry			RA-05		07/05/12 22:57 / gb
Radium 228 precision (\pm)	0.1	pCi/g-dry			RA-05		07/05/12 22:57 / gb
Radium 228 MDC	0.2	pCi/g-dry			RA-05		07/05/12 22:57 / gb

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12041044-012
Client Sample ID: MT-4-D-S3 (48" B.G.)

Revised Date: 07/10/12
Report Date: 06/13/12
Collection Date: 04/10/12 14:20
DateReceived: 04/20/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE EXTRACT							
Chloride	6.49	mg/kg		1.00	E300.0		06/28/12 04:44 / ljl
Chloride, 1:1	0.183	meq/L		0.0282	E300.0		06/28/12 04:44 / ljl
Sulfate	132	mg/kg		1.00	E300.0		06/28/12 04:44 / ljl
Sulfate, 1:1	2.74	meq/L		0.0208	E300.0		06/28/12 04:44 / ljl
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/24/12 16:14 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.003	mg/L		0.001	SW6020		05/01/12 15:05 / cp
Barium	0.88	mg/L		0.05	SW6020		05/01/12 15:05 / cp
Cadmium	ND	mg/L		0.001	SW6020		05/01/12 15:05 / cp
Chromium	0.009	mg/L		0.005	SW6020		05/01/12 15:05 / cp
Lead	0.003	mg/L		0.001	SW6020		05/01/12 15:05 / cp
Mercury	ND	mg/L		0.002	SW7470A		04/30/12 15:41 / rdw
Selenium	0.020	mg/L		0.001	SW6020		05/01/12 15:05 / cp
Silver	ND	mg/L	D	0.002	SW6020		05/01/12 15:05 / cp
Uranium	0.013	mg/L	D	0.0006	SW6020		05/01/12 15:05 / cp
RADIONUCLIDES							
Radium 226	6.7	pCi/g-dry			E903.0		07/10/12 14:44 / trs
Radium 226 precision (\pm)	0.2	pCi/g-dry			E903.0		07/10/12 14:44 / trs
Radium 226 MDC	0.02	pCi/g-dry			E903.0		07/10/12 14:44 / trs
Radium 228	0.8	pCi/g-dry			RA-05		07/05/12 22:57 / gb
Radium 228 precision (\pm)	0.1	pCi/g-dry			RA-05		07/05/12 22:57 / gb
Radium 228 MDC	0.2	pCi/g-dry			RA-05		07/05/12 22:57 / gb

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12041044-013
Client Sample ID: MT-4-E-S1 (0-4" B.G.)

Revised Date: 07/10/12
Report Date: 06/13/12
Collection Date: 04/10/12 13:35
DateReceived: 04/20/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE EXTRACT							
Chloride	46.4	mg/kg		1.00	E300.0		06/28/12 05:01 / ljl
Chloride, 1:1	1.31	meq/L		0.0282	E300.0		06/28/12 05:01 / ljl
Sulfate	853	mg/kg		1.00	E300.0		06/28/12 05:01 / ljl
Sulfate, 1:1	17.8	meq/L		0.0208	E300.0		06/28/12 05:01 / ljl
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/24/12 16:14 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.034	mg/L		0.001	SW6020		05/01/12 15:08 / cp
Barium	34	mg/L		0.05	SW6020		05/01/12 15:08 / cp
Cadmium	ND	mg/L		0.001	SW6020		05/01/12 15:08 / cp
Chromium	0.007	mg/L		0.005	SW6020		05/02/12 22:19 / smm
Lead	0.008	mg/L		0.001	SW6020		05/01/12 15:08 / cp
Mercury	ND	mg/L		0.002	SW7470A		04/30/12 15:48 / rdw
Selenium	0.15	mg/L		0.001	SW6020		05/01/12 15:08 / cp
Silver	ND	mg/L	D	0.002	SW6020		05/01/12 15:08 / cp
Uranium	0.39	mg/L	D	0.0006	SW6020		05/01/12 15:08 / cp
RADIONUCLIDES							
Radium 226	8.7	pCi/g-dry			E903.0		07/10/12 14:44 / trs
Radium 226 precision (\pm)	0.2	pCi/g-dry			E903.0		07/10/12 14:44 / trs
Radium 226 MDC	0.02	pCi/g-dry			E903.0		07/10/12 14:44 / trs
Radium 228	1.5	pCi/g-dry			RA-05		07/05/12 22:57 / gb
Radium 228 precision (\pm)	0.1	pCi/g-dry			RA-05		07/05/12 22:57 / gb
Radium 228 MDC	0.1	pCi/g-dry			RA-05		07/05/12 22:57 / gb

- Sample matrix interference resulted in high chemical recoveries which has likely biased the Ra226 and Ra228 results low.

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12041044-014
Client Sample ID: MT-4-E-S2 (10-12" B.G.)

Revised Date: 07/10/12
Report Date: 06/13/12
Collection Date: 04/10/12 13:40
DateReceived: 04/20/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE EXTRACT							
Chloride	34.1	mg/kg		1.00	E300.0		06/28/12 05:17 / ljl
Chloride, 1:1	0.963	meq/L		0.0282	E300.0		06/28/12 05:17 / ljl
Sulfate	1150	mg/kg		1.00	E300.0		06/28/12 05:17 / ljl
Sulfate, 1:1	23.8	meq/L		0.0208	E300.0		06/28/12 05:17 / ljl
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/24/12 16:14 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.005	mg/L		0.001	SW6020		05/01/12 15:10 / cp
Barium	0.22	mg/L		0.05	SW6020		05/01/12 15:10 / cp
Cadmium	ND	mg/L		0.001	SW6020		05/01/12 15:10 / cp
Chromium	0.011	mg/L		0.005	SW6020		05/01/12 15:10 / cp
Lead	0.005	mg/L		0.001	SW6020		05/01/12 15:10 / cp
Mercury	ND	mg/L		0.002	SW7470A		04/30/12 15:49 / rdw
Selenium	0.072	mg/L		0.001	SW6020		05/01/12 15:10 / cp
Silver	ND	mg/L	D	0.002	SW6020		05/01/12 15:10 / cp
Uranium	0.014	mg/L	D	0.0006	SW6020		05/01/12 15:10 / cp
RADIONUCLIDES							
Radium 226	4.8	pCi/g-dry			E903.0		07/10/12 14:44 / trs
Radium 226 precision (\pm)	0.2	pCi/g-dry			E903.0		07/10/12 14:44 / trs
Radium 226 MDC	0.02	pCi/g-dry			E903.0		07/10/12 14:44 / trs
Radium 228	0.4	pCi/g-dry			RA-05		07/05/12 22:57 / gb
Radium 228 precision (\pm)	0.1	pCi/g-dry			RA-05		07/05/12 22:57 / gb
Radium 228 MDC	0.2	pCi/g-dry			RA-05		07/05/12 22:57 / gb

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12041044-015
Client Sample ID: MT-4-E-S3 (36" B.G.)

Revised Date: 07/10/12
Report Date: 06/13/12
Collection Date: 04/10/12 13:42
DateReceived: 04/20/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE EXTRACT							
Chloride	13.1	mg/kg		1.00	E300.0		06/28/12 05:34 / ljl
Chloride, 1:1	0.371	meq/L		0.0282	E300.0		06/28/12 05:34 / ljl
Sulfate	184	mg/kg		1.00	E300.0		06/28/12 05:34 / ljl
Sulfate, 1:1	3.84	meq/L		0.0208	E300.0		06/28/12 05:34 / ljl
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/24/12 16:14 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.003	mg/L		0.001	SW6020		05/01/12 15:24 / cp
Barium	0.13	mg/L		0.05	SW6020		05/01/12 15:24 / cp
Cadmium	ND	mg/L		0.001	SW6020		05/01/12 15:24 / cp
Chromium	0.007	mg/L		0.005	SW6020		05/01/12 15:24 / cp
Lead	0.003	mg/L		0.001	SW6020		05/01/12 15:24 / cp
Mercury	ND	mg/L		0.002	SW7470A		04/30/12 15:51 / rdw
Selenium	0.026	mg/L		0.001	SW6020		05/01/12 15:24 / cp
Silver	0.003	mg/L	D	0.002	SW6020		05/01/12 15:24 / cp
Uranium	0.0043	mg/L	D	0.0006	SW6020		05/01/12 15:24 / cp
RADIONUCLIDES							
Radium 226	2.9	pCi/g-dry			E903.0		07/10/12 14:44 / trs
Radium 226 precision (\pm)	0.1	pCi/g-dry			E903.0		07/10/12 14:44 / trs
Radium 226 MDC	0.02	pCi/g-dry			E903.0		07/10/12 14:44 / trs
Radium 228	0.7	pCi/g-dry			RA-05		07/05/12 22:57 / gb
Radium 228 precision (\pm)	0.1	pCi/g-dry			RA-05		07/05/12 22:57 / gb
Radium 228 MDC	0.2	pCi/g-dry			RA-05		07/05/12 22:57 / gb

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12041044-016
Client Sample ID: MT-4-E-S4 (48" B.G.)

Revised Date: 07/10/12
Report Date: 06/13/12
Collection Date: 04/10/12 13:45
DateReceived: 04/20/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE EXTRACT							
Chloride	4.51	mg/kg		1.00	E300.0		06/28/12 05:50 / ljl
Chloride, 1:1	0.127	meq/L		0.0282	E300.0		06/28/12 05:50 / ljl
Sulfate	131	mg/kg		1.00	E300.0		06/28/12 05:50 / ljl
Sulfate, 1:1	2.72	meq/L		0.0208	E300.0		06/28/12 05:50 / ljl
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/24/12 16:14 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.005	mg/L	B	0.001	SW6020		05/02/12 21:10 / smm
Barium	0.06	mg/L		0.05	SW6020		05/02/12 21:10 / smm
Cadmium	ND	mg/L		0.001	SW6020		05/02/12 21:10 / smm
Chromium	0.006	mg/L		0.005	SW6020		05/02/12 21:10 / smm
Lead	0.002	mg/L		0.001	SW6020		05/02/12 21:10 / smm
Mercury	ND	mg/L		0.002	SW7470A		04/30/12 16:01 / rdw
Selenium	0.011	mg/L		0.001	SW6020		05/02/12 21:10 / smm
Silver	ND	mg/L		0.001	SW6020		05/02/12 21:10 / smm
Uranium	0.027	mg/L		0.0003	SW6020		05/02/12 21:10 / smm
RADIONUCLIDES							
Radium 226	6.2	pCi/g-dry			E903.0		07/10/12 14:44 / trs
Radium 226 precision (\pm)	0.2	pCi/g-dry			E903.0		07/10/12 14:44 / trs
Radium 226 MDC	0.02	pCi/g-dry			E903.0		07/10/12 14:44 / trs
Radium 228	0.4	pCi/g-dry			RA-05		07/05/12 22:57 / gb
Radium 228 precision (\pm)	0.1	pCi/g-dry			RA-05		07/05/12 22:57 / gb
Radium 228 MDC	0.1	pCi/g-dry			RA-05		07/05/12 22:57 / gb

- Sample matrix interference resulted in high chemical recoveries which has likely biased the Ra226 and Ra228 results low.

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12041044-017
Client Sample ID: MT-6-A-S1 (0-5" B.G.)

Revised Date: 07/10/12

Report Date: 06/13/12

Collection Date: 04/10/12 15:05

DateReceived: 04/20/12

Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/24/12 16:14 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.012	mg/L		0.001	SW6020	05/02/12 20:29 / smm	
Barium	7.3	mg/L		0.05	SW6020	05/02/12 20:29 / smm	
Cadmium	ND	mg/L		0.001	SW6020	05/02/12 20:29 / smm	
Chromium	0.007	mg/L		0.005	SW6020	05/02/12 20:29 / smm	
Lead	0.016	mg/L		0.001	SW6020	05/02/12 20:29 / smm	
Mercury	ND	mg/L		0.002	SW7470A	04/30/12 16:05 / rdw	
Selenium	0.007	mg/L		0.001	SW6020	05/02/12 20:29 / smm	
Silver	ND	mg/L		0.001	SW6020	05/02/12 20:29 / smm	
Uranium	0.044	mg/L		0.0003	SW6020	05/02/12 20:29 / smm	
RADIONUCLIDES							
Radium 226	6.4	pCi/g-dry			E903.0	07/10/12 14:44 / trs	
Radium 226 precision (\pm)	0.2	pCi/g-dry			E903.0	07/10/12 14:44 / trs	
Radium 226 MDC	0.02	pCi/g-dry			E903.0	07/10/12 14:44 / trs	
Radium 228	0.2	pCi/g-dry			RA-05	07/05/12 22:56 / gb	
Radium 228 precision (\pm)	0.1	pCi/g-dry			RA-05	07/05/12 22:56 / gb	
Radium 228 MDC	0.1	pCi/g-dry			RA-05	07/05/12 22:56 / gb	

Report Definitions: RL - Analyte reporting limit.

MCL - Maximum contaminant level.

QCL - Quality control limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12041044-018
Client Sample ID: MT-6-A-S2 (12-20" B.G.)

Revised Date: 07/10/12
Report Date: 06/13/12
Collection Date: 04/10/12 15:10
DateReceived: 04/20/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/24/12 16:14 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.003	mg/L	B	0.001	SW6020	05/02/12 20:33 / smm	
Barium	0.05	mg/L		0.05	SW6020	05/02/12 20:33 / smm	
Cadmium	ND	mg/L		0.001	SW6020	05/02/12 20:33 / smm	
Chromium	0.007	mg/L		0.005	SW6020	05/02/12 20:33 / smm	
Lead	ND	mg/L		0.001	SW6020	05/02/12 20:33 / smm	
Mercury	ND	mg/L		0.002	SW7470A	04/30/12 16:06 / rdw	
Selenium	0.15	mg/L		0.001	SW6020	05/02/12 20:33 / smm	
Silver	ND	mg/L		0.001	SW6020	05/02/12 20:33 / smm	
Uranium	0.26	mg/L		0.0003	SW6020	05/02/12 20:33 / smm	
RADIONUCLIDES							
Radium 226	0.4	pCi/g-dry			E903.0	07/10/12 14:44 / trs	
Radium 226 precision (\pm)	0.05	pCi/g-dry			E903.0	07/10/12 14:44 / trs	
Radium 226 MDC	0.03	pCi/g-dry			E903.0	07/10/12 14:44 / trs	
Radium 228	0.1	pCi/g-dry	U		RA-05	07/05/12 22:56 / gb	
Radium 228 precision (\pm)	0.1	pCi/g-dry			RA-05	07/05/12 22:56 / gb	
Radium 228 MDC	0.2	pCi/g-dry			RA-05	07/05/12 22:56 / gb	

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration
U - Not detected at minimum detectable concentration

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12041044-019
Client Sample ID: MT-6-B-S1 (8-10" B.G.)

Revised Date: 07/10/12
Report Date: 06/13/12
Collection Date: 04/10/12 14:30
DateReceived: 04/20/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/24/12 16:14 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.004	mg/L	B	0.001	SW6020	05/02/12 20:38 / smm	
Barium	0.05	mg/L		0.05	SW6020	05/02/12 20:38 / smm	
Cadmium	ND	mg/L		0.001	SW6020	05/02/12 20:38 / smm	
Chromium	0.007	mg/L		0.005	SW6020	05/02/12 20:38 / smm	
Lead	ND	mg/L		0.001	SW6020	05/02/12 20:38 / smm	
Mercury	ND	mg/L		0.002	SW7470A	04/30/12 16:08 / rdw	
Selenium	0.16	mg/L		0.001	SW6020	05/02/12 20:38 / smm	
Silver	ND	mg/L		0.001	SW6020	05/02/12 20:38 / smm	
Uranium	0.26	mg/L		0.0003	SW6020	05/02/12 20:38 / smm	
RADIONUCLIDES							
Radium 226	0.8	pCi/g-dry			E903.0	07/10/12 14:44 / trs	
Radium 226 precision (\pm)	0.08	pCi/g-dry			E903.0	07/10/12 14:44 / trs	
Radium 226 MDC	0.03	pCi/g-dry			E903.0	07/10/12 14:44 / trs	
Radium 228	0.2	pCi/g-dry			RA-05	07/05/12 22:56 / gb	
Radium 228 precision (\pm)	0.1	pCi/g-dry			RA-05	07/05/12 22:56 / gb	
Radium 228 MDC	0.2	pCi/g-dry			RA-05	07/05/12 22:56 / gb	

Report Definitions: RL - Analyte reporting limit.

MCL - Maximum contaminant level.

QCL - Quality control limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration.

B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12041044-020
Client Sample ID: MT-6-B-S2 (30" B.G.)

Revised Date: 07/10/12
Report Date: 06/13/12
Collection Date: 04/10/12 14:35
DateReceived: 04/20/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/24/12 16:14 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.002	mg/L	B	0.001	SW6020	05/02/12 20:43 / smm	
Barium	0.06	mg/L		0.05	SW6020	05/02/12 20:43 / smm	
Cadmium	ND	mg/L		0.001	SW6020	05/02/12 20:43 / smm	
Chromium	ND	mg/L		0.005	SW6020	05/02/12 20:43 / smm	
Lead	ND	mg/L		0.001	SW6020	05/02/12 20:43 / smm	
Mercury	ND	mg/L		0.002	SW7470A	04/30/12 16:09 / rdw	
Selenium	0.003	mg/L		0.001	SW6020	05/02/12 20:43 / smm	
Silver	ND	mg/L		0.001	SW6020	05/02/12 20:43 / smm	
Uranium	0.014	mg/L		0.0003	SW6020	05/02/12 20:43 / smm	
RADIONUCLIDES							
Radium 226	4.1	pCi/g-dry			E903.0	07/10/12 14:44 / trs	
Radium 226 precision (\pm)	0.2	pCi/g-dry			E903.0	07/10/12 14:44 / trs	
Radium 226 MDC	0.02	pCi/g-dry			E903.0	07/10/12 14:44 / trs	
Radium 228	0.8	pCi/g-dry			RA-05	07/05/12 22:56 / gb	
Radium 228 precision (\pm)	0.1	pCi/g-dry			RA-05	07/05/12 22:56 / gb	
Radium 228 MDC	0.2	pCi/g-dry			RA-05	07/05/12 22:56 / gb	

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
B - The analyte was detected in the method blank.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12041044-021
Client Sample ID: MT-OP-C-S1 (0-6" B.G.)

Revised Date: 07/10/12
Report Date: 06/13/12
Collection Date: 04/10/12 13:20
DateReceived: 04/20/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/24/12 16:14 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.015	mg/L		0.001	SW6020	05/02/12 21:06 / smm	
Barium	0.05	mg/L		0.05	SW6020	05/02/12 21:06 / smm	
Cadmium	ND	mg/L		0.001	SW6020	05/02/12 21:06 / smm	
Chromium	0.010	mg/L		0.005	SW6020	05/02/12 21:06 / smm	
Lead	0.001	mg/L		0.001	SW6020	05/02/12 21:06 / smm	
Mercury	ND	mg/L		0.002	SW7470A	04/30/12 16:10 / rdw	
Selenium	0.052	mg/L		0.001	SW6020	05/02/12 21:06 / smm	
Silver	ND	mg/L		0.001	SW6020	05/02/12 21:06 / smm	
Uranium	1.8	mg/L		0.0003	SW6020	05/02/12 21:06 / smm	
RADIONUCLIDES							
Radium 226	53.3	pCi/g-dry			E903.0	07/10/12 14:44 / trs	
Radium 226 precision (\pm)	0.6	pCi/g-dry			E903.0	07/10/12 14:44 / trs	
Radium 226 MDC	0.03	pCi/g-dry			E903.0	07/10/12 14:44 / trs	
Radium 228	2.1	pCi/g-dry			RA-05	07/05/12 22:56 / gb	
Radium 228 precision (\pm)	0.2	pCi/g-dry			RA-05	07/05/12 22:56 / gb	
Radium 228 MDC	0.2	pCi/g-dry			RA-05	07/05/12 22:56 / gb	

Report Definitions:	RL - Analyte reporting limit.	MCL - Maximum contaminant level.
	QCL - Quality control limit.	ND - Not detected at the reporting limit.
	MDC - Minimum detectable concentration	

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12041044-022
Client Sample ID: MT-OP-C-S2 (20" B.G.)

Revised Date: 07/10/12
Report Date: 06/13/12
Collection Date: 04/10/12 13:25
DateReceived: 04/20/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/24/12 16:14 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.005	mg/L		0.001	SW6020	05/04/12 14:22 / cp	
Barium	0.05	mg/L		0.05	SW6020	05/04/12 14:22 / cp	
Cadmium	ND	mg/L		0.001	SW6020	05/04/12 14:22 / cp	
Chromium	0.007	mg/L		0.005	SW6020	05/04/12 14:22 / cp	
Lead	0.002	mg/L		0.001	SW6020	05/04/12 14:22 / cp	
Mercury	ND	mg/L		0.002	SW7470A	05/02/12 11:26 / rdw	
Selenium	0.018	mg/L		0.001	SW6020	05/04/12 14:22 / cp	
Silver	ND	mg/L	D	0.002	SW6020	05/04/12 14:22 / cp	
Uranium	0.14	mg/L	D	0.0006	SW6020	05/04/12 14:22 / cp	
RADIOMUCIDES							
Radium 226	1.7	pCi/g-dry			E903.0	07/10/12 16:03 / trs	
Radium 226 precision (\pm)	0.1	pCi/g-dry			E903.0	07/10/12 16:03 / trs	
Radium 226 MDC	0.03	pCi/g-dry			E903.0	07/10/12 16:03 / trs	
Radium 228	0.6	pCi/g-dry			RA-05	07/05/12 21:05 / gb	
Radium 228 precision (\pm)	0.1	pCi/g-dry			RA-05	07/05/12 21:05 / gb	
Radium 228 MDC	0.2	pCi/g-dry			RA-05	07/05/12 21:05 / gb	

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12041044-023
Client Sample ID: MT-OP-C-S3 (48-50' B.G.)

Revised Date: 07/10/12

Report Date: 06/13/12

Collection Date: 04/10/12 13:25

DateReceived: 04/20/12

Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/24/12 16:14 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.004	mg/L		0.001	SW6020	05/04/12 14:41 / cp	
Barium	ND	mg/L		0.05	SW6020	05/04/12 14:41 / cp	
Cadmium	ND	mg/L		0.001	SW6020	05/04/12 14:41 / cp	
Chromium	ND	mg/L		0.005	SW6020	05/04/12 14:41 / cp	
Lead	ND	mg/L		0.001	SW6020	05/04/12 14:41 / cp	
Mercury	ND	mg/L		0.002	SW7470A	05/02/12 11:29 / rdw	
Selenium	0.028	mg/L		0.001	SW6020	05/04/12 14:41 / cp	
Silver	ND	mg/L	D	0.002	SW6020	05/04/12 14:41 / cp	
Uranium	0.049	mg/L	D	0.0006	SW6020	05/04/12 14:41 / cp	
RADIONUCLIDES							
Radium 226	0.8	pCi/g-dry			E903.0	07/03/12 05:26 / trs	
Radium 226 precision (\pm)	0.07	pCi/g-dry			E903.0	07/03/12 05:26 / trs	
Radium 226 MDC	0.02	pCi/g-dry			E903.0	07/03/12 05:26 / trs	
Radium 228	0.8	pCi/g-dry			RA-05	06/26/12 17:02 / plj	
Radium 228 precision (\pm)	0.09	pCi/g-dry			RA-05	06/26/12 17:02 / plj	
Radium 228 MDC	0.1	pCi/g-dry			RA-05	06/26/12 17:02 / plj	

Report Definitions: RL - Analyte reporting limit.

MCL - Maximum contaminant level.

QCL - Quality control limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12041044-024
Client Sample ID: MT-OP-C-S4 (72" B.G.)

Revised Date: 07/10/12
Report Date: 06/13/12
Collection Date: 04/10/12 13:30
DateReceived: 04/20/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/24/12 16:14 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.004	mg/L		0.001	SW6020	05/04/12 14:44 / cp	
Barium	ND	mg/L		0.05	SW6020	05/04/12 14:44 / cp	
Cadmium	ND	mg/L		0.001	SW6020	05/04/12 14:44 / cp	
Chromium	ND	mg/L		0.005	SW6020	05/04/12 14:44 / cp	
Lead	ND	mg/L		0.001	SW6020	05/04/12 14:44 / cp	
Mercury	ND	mg/L		0.002	SW7470A	05/02/12 11:30 / rdw	
Selenium	0.025	mg/L		0.001	SW6020	05/04/12 14:44 / cp	
Silver	ND	mg/L	D	0.002	SW6020	05/04/12 14:44 / cp	
Uranium	0.0064	mg/L	D	0.0006	SW6020	05/04/12 14:44 / cp	
RADIOMUCIDES							
Radium 226	1.5	pCi/g-dry			E903.0	07/03/12 05:26 / trs	
Radium 226 precision (\pm)	0.1	pCi/g-dry			E903.0	07/03/12 05:26 / trs	
Radium 226 MDC	0.02	pCi/g-dry			E903.0	07/03/12 05:26 / trs	
Radium 228	0.6	pCi/g-dry			RA-05	06/26/12 17:02 / plj	
Radium 228 precision (\pm)	0.09	pCi/g-dry			RA-05	06/26/12 17:02 / plj	
Radium 228 MDC	0.1	pCi/g-dry			RA-05	06/26/12 17:02 / plj	

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12041044-025
Client Sample ID: MT-OP-D-S1 (0-6" B.G.)

Revised Date: 07/10/12
Report Date: 06/13/12
Collection Date: 04/10/12 12:45
DateReceived: 04/20/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/24/12 16:14 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.013	mg/L		0.001	SW6020	05/04/12 14:47 / cp	
Barium	1.3	mg/L		0.05	SW6020	05/04/12 14:47 / cp	
Cadmium	ND	mg/L		0.001	SW6020	05/04/12 14:47 / cp	
Chromium	0.007	mg/L		0.005	SW6020	05/04/12 14:47 / cp	
Lead	0.008	mg/L		0.001	SW6020	05/04/12 14:47 / cp	
Mercury	ND	mg/L		0.002	SW7470A	05/02/12 11:31 / rdw	
Selenium	0.009	mg/L		0.001	SW6020	05/04/12 14:47 / cp	
Silver	ND	mg/L	D	0.002	SW6020	05/04/12 14:47 / cp	
Uranium	0.23	mg/L	D	0.0006	SW6020	05/04/12 14:47 / cp	
RADIONUCLIDES							
Radium 226	51.9	pCi/g-dry			E903.0	07/03/12 05:26 / trs	
Radium 226 precision (\pm)	0.5	pCi/g-dry			E903.0	07/03/12 05:26 / trs	
Radium 226 MDC	0.02	pCi/g-dry			E903.0	07/03/12 05:26 / trs	
Radium 228	0.5	pCi/g-dry			RA-05	06/26/12 17:02 / plj	
Radium 228 precision (\pm)	0.07	pCi/g-dry			RA-05	06/26/12 17:02 / plj	
Radium 228 MDC	0.09	pCi/g-dry			RA-05	06/26/12 17:02 / plj	

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12041044-026
Client Sample ID: MT-OP-D-S2 (48-50" B.G.)

Revised Date: 07/10/12
Report Date: 06/13/12
Collection Date: 04/10/12 12:45
DateReceived: 04/20/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/24/12 16:14 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.001	mg/L		0.001	SW6020	05/04/12 14:49 / cp	
Barium	0.05	mg/L		0.05	SW6020	05/04/12 14:49 / cp	
Cadmium	ND	mg/L		0.001	SW6020	05/04/12 14:49 / cp	
Chromium	ND	mg/L		0.005	SW6020	05/04/12 14:49 / cp	
Lead	ND	mg/L		0.001	SW6020	05/04/12 14:49 / cp	
Mercury	ND	mg/L		0.002	SW7470A	05/02/12 11:35 / rdw	
Selenium	0.005	mg/L		0.001	SW6020	05/04/12 14:49 / cp	
Silver	ND	mg/L	D	0.002	SW6020	05/04/12 14:49 / cp	
Uranium	0.10	mg/L	D	0.0006	SW6020	05/04/12 14:49 / cp	
RADIOMUCIDES							
Radium 226	1.9	pCi/g-dry			E903.0	07/03/12 05:26 / trs	
Radium 226 precision (\pm)	0.1	pCi/g-dry			E903.0	07/03/12 05:26 / trs	
Radium 226 MDC	0.02	pCi/g-dry			E903.0	07/03/12 05:26 / trs	
Radium 228	0.6	pCi/g-dry			RA-05	06/26/12 17:02 / plj	
Radium 228 precision (\pm)	0.09	pCi/g-dry			RA-05	06/26/12 17:02 / plj	
Radium 228 MDC	0.1	pCi/g-dry			RA-05	06/26/12 17:02 / plj	

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12041044-027
Client Sample ID: MT-OP-D-S3 (76" B.G.)

Revised Date: 07/10/12
Report Date: 06/13/12
Collection Date: 04/10/12 12:50
DateReceived: 04/20/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/24/12 16:14 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.006	mg/L		0.001	SW6020	05/04/12 14:52 / cp	
Barium	0.11	mg/L		0.05	SW6020	05/04/12 14:52 / cp	
Cadmium	ND	mg/L		0.001	SW6020	05/04/12 14:52 / cp	
Chromium	0.012	mg/L		0.005	SW6020	05/04/12 14:52 / cp	
Lead	0.009	mg/L		0.001	SW6020	05/04/12 14:52 / cp	
Mercury	ND	mg/L		0.002	SW7470A	05/02/12 11:37 / rdw	
Selenium	0.002	mg/L		0.001	SW6020	05/04/12 14:52 / cp	
Silver	ND	mg/L	D	0.002	SW6020	05/04/12 14:52 / cp	
Uranium	0.0034	mg/L	D	0.0006	SW6020	05/04/12 14:52 / cp	
RADIONUCLIDES							
Radium 226	0.6	pCi/g-dry			E903.0	07/03/12 05:26 / trs	
Radium 226 precision (\pm)	0.06	pCi/g-dry			E903.0	07/03/12 05:26 / trs	
Radium 226 MDC	0.02	pCi/g-dry			E903.0	07/03/12 05:26 / trs	
Radium 228	0.5	pCi/g-dry			RA-05	06/26/12 17:02 / plj	
Radium 228 precision (\pm)	0.08	pCi/g-dry			RA-05	06/26/12 17:02 / plj	
Radium 228 MDC	0.1	pCi/g-dry			RA-05	06/26/12 17:02 / plj	

Report Definitions: RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine Closure Plan
Lab ID: C12041044-028
Client Sample ID: MT-8-F (6" B.G.)

Revised Date: 07/10/12
Report Date: 06/13/12
Collection Date: 04/10/12 09:25
DateReceived: 04/20/12
Matrix: Sediment

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
SATURATED PASTE EXTRACT							
Chloride	14.2	mg/kg		1.00	E300.0		06/28/12 06:07 / ljl
Chloride, 1:1	0.402	meq/L		0.0282	E300.0		06/28/12 06:07 / ljl
Sulfate	28.9	mg/kg		1.00	E300.0		06/28/12 06:07 / ljl
Sulfate, 1:1	0.602	meq/L		0.0208	E300.0		06/28/12 06:07 / ljl
PHYSICAL CHARACTERISTICS							
Filterable	No				SW1311		04/24/12 16:14 / dcj
METALS - SPLP EXTRACTABLE							
Arsenic	0.003	mg/L		0.001	SW6020		05/04/12 14:55 / cp
Barium	ND	mg/L		0.05	SW6020		05/04/12 14:55 / cp
Cadmium	ND	mg/L		0.001	SW6020		05/04/12 14:55 / cp
Chromium	ND	mg/L		0.005	SW6020		05/04/12 14:55 / cp
Lead	0.002	mg/L		0.001	SW6020		05/04/12 14:55 / cp
Mercury	ND	mg/L		0.002	SW7470A		05/02/12 11:38 / rdw
Selenium	0.002	mg/L		0.001	SW6020		05/04/12 14:55 / cp
Silver	ND	mg/L	D	0.002	SW6020		05/04/12 14:55 / cp
Uranium	0.010	mg/L	D	0.0006	SW6020		05/04/12 14:55 / cp
RADIONUCLIDES							
Radium 226	2.3	pCi/g-dry			E903.0		07/03/12 05:26 / trs
Radium 226 precision (\pm)	0.1	pCi/g-dry			E903.0		07/03/12 05:26 / trs
Radium 226 MDC	0.02	pCi/g-dry			E903.0		07/03/12 05:26 / trs
Radium 228	0.6	pCi/g-dry			RA-05		06/26/12 17:02 / plj
Radium 228 precision (\pm)	0.09	pCi/g-dry			RA-05		06/26/12 17:02 / plj
Radium 228 MDC	0.1	pCi/g-dry			RA-05		06/26/12 17:02 / plj

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.
D - RL increased due to sample matrix.

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 07/10/12

Client: Rio Grande Resources Corporation

Report Date: 06/13/12

Project: Mt. Taylor Mine Closure Plan

Work Order: C12041044

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0								Analytical Run: IC2-C_120626A		
Sample ID: ICV-062612-10	2	Initial Calibration Verification Standard								
Chloride		9.60	mg/L	1.0	96	90	110			06/26/12 15:31
Sulfate		38.7	mg/L	1.0	97	90	110			
Method: E300.0								Batch: 34007		
Sample ID: MB-34007	2	Method Blank								
Chloride		ND	mg/kg	0.04				Run: IC2-C_120626A		
Sulfate		0.08	mg/kg	0.06				06/28/12 02:17		
Sample ID: LCS1-34007	2	Laboratory Control Sample								
Chloride		35.9	mg/kg	1.0	101	70	130			06/28/12 02:33
Sulfate		1730	mg/kg	1.0	95	70	130			
Sample ID: C12041044-011CPDS	2	Post Digestion/Distillation Spike								
Chloride		280	mg/kg	1.0	94	80	120			06/28/12 04:28
Sulfate		2570	mg/kg	1.0	92	80	120			
Sample ID: C12041044-028CDUP	2	Sample Duplicate								
Chloride		14.0	mg/kg	1.0				1.8	20	06/28/12 06:23
Sulfate		28.1	mg/kg	1.0				2.9	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 07/10/12

Client: Rio Grande Resources Corporation

Report Date: 06/13/12

Project: Mt. Taylor Mine Closure Plan

Work Order: C12041044

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0										Batch: 34025
Sample ID: C12041044-023BMS		Sample Matrix Spike				Run: BERTHOLD 770-1_120621B				07/03/12 05:26
Radium 226		2.9	pCi/g-dry	85		70	130			
Sample ID: C12041044-023BMSD		Sample Matrix Spike Duplicate				Run: BERTHOLD 770-1_120621B				07/03/12 05:26
Radium 226		2.8	pCi/g-dry	85		70	130	3.6		22.9
Sample ID: LCS-34025		Laboratory Control Sample				Run: BERTHOLD 770-1_120621B				07/03/12 05:26
Radium 226		0.41	pCi/g-dry	85		70	130			
Sample ID: MB-34025	3	Method Blank				Run: BERTHOLD 770-1_120621B				07/03/12 07:45
Radium 226		0.0009	pCi/g-dry							U
Radium 226 precision (\pm)		0.004	pCi/g-dry							
Radium 226 MDC		0.006	pCi/g-dry							
Method: E903.0										Batch: 34023
Sample ID: C12041044-022BMS		Sample Matrix Spike				Run: BERTHOLD 770-1_120621C				07/10/12 16:03
Radium 226		3.6	pCi/g-dry	80		70	130			
Sample ID: C12041044-022BMSD		Sample Matrix Spike Duplicate				Run: BERTHOLD 770-1_120621C				07/10/12 16:03
Radium 226		3.7	pCi/g-dry	85		70	130	2.9		22.7
Sample ID: LCS-34023		Laboratory Control Sample				Run: BERTHOLD 770-1_120621C				07/10/12 16:03
Radium 226		0.33	pCi/g-dry	69		70	130			S
- LCS response is outside of the acceptance range for this analysis. Since the MB, MS, and MSD are acceptable the batch is approved.										
Sample ID: MB-34023	3	Method Blank				Run: BERTHOLD 770-1_120621C				07/10/12 16:03
Radium 226		-0.002	pCi/g-dry							U
Radium 226 precision (\pm)		0.006	pCi/g-dry							
Radium 226 MDC		0.01	pCi/g-dry							
Method: E903.0										Batch: 34004
Sample ID: MB-34004	3	Method Blank				Run: BERTHOLD 770-2_120620A				07/02/12 23:59
Radium 226		0.1	pCi/g-dry							
Radium 226 precision (\pm)		0.03	pCi/g-dry							
Radium 226 MDC		0.02	pCi/g-dry							
Sample ID: LCS-34004		Laboratory Control Sample				Run: BERTHOLD 770-2_120620A				07/02/12 23:59
Radium 226		1.4	pCi/g-dry	87		70	130			
Sample ID: C12041044-003BMS		Sample Matrix Spike				Run: BERTHOLD 770-2_120620A				07/03/12 03:34
Radium 226		2.5	pCi/g-dry	104		70	130			
Sample ID: C12041044-003BMSD		Sample Matrix Spike Duplicate				Run: BERTHOLD 770-2_120620A				07/03/12 03:34
Radium 226		2.2	pCi/g-dry	87		70	130	12		20.8

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

S - Spike recovery outside of advisory limits.

U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 07/10/12

Client: Rio Grande Resources Corporation

Report Date: 06/13/12

Project: Mt. Taylor Mine Closure Plan

Work Order: C12041044

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RA-05										Batch: 34004
Sample ID: LCS-34004		Laboratory Control Sample						Run: TENNELEC-3_120620B		
Radium 228		1.5	pCi/g-dry	104		70	130			06/25/12 15:52
Sample ID: MB-34004	3	Method Blank						Run: TENNELEC-3_120620B		
Radium 228		0.07	pCi/g-dry							U
Radium 228 precision (\pm)		0.2	pCi/g-dry							
Radium 228 MDC		0.3	pCi/g-dry							
Sample ID: C12041044-003BMS		Sample Matrix Spike						Run: TENNELEC-3_120620B		
Radium 228		1.8	pCi/g-dry	93		70	130			06/25/12 15:52
Sample ID: C12041044-003BMSD		Sample Matrix Spike Duplicate						Run: TENNELEC-3_120620B		
Radium 228		1.9	pCi/g-dry	101		70	130	6.0		33.5
Method: RA-05										Batch: 34025
Sample ID: LCS-34025		Laboratory Control Sample						Run: TENNELEC-3_120621B		
Radium 228		0.24	pCi/g-dry	83		70	130			06/26/12 17:02
Sample ID: MB-34025	3	Method Blank						Run: TENNELEC-3_120621B		
Radium 228		0.002	pCi/g-dry							U
Radium 228 precision (\pm)		0.03	pCi/g-dry							
Radium 228 MDC		0.04	pCi/g-dry							
Sample ID: C12041044-028BMS		Sample Matrix Spike						Run: TENNELEC-3_120621B		
Radium 228		1.7	pCi/g-dry	71		70	130			06/26/12 17:02
Sample ID: C12041044-028BMSD		Sample Matrix Spike Duplicate						Run: TENNELEC-3_120621B		
Radium 228		1.7	pCi/g-dry	78		70	130	3.0		32.3
Method: RA-05										Batch: Ra228-4136
Sample ID: LCS-34023		Laboratory Control Sample						Run: TENNELEC-3_120621D		
Radium 228		0.36	pCi/g-dry	129		70	130			07/05/12 21:05
Sample ID: MB-34023	3	Method Blank						Run: TENNELEC-3_120621D		
Radium 228		-0.010	pCi/g-dry							U
Radium 228 precision (\pm)		0.04	pCi/g-dry							
Radium 228 MDC		0.06	pCi/g-dry							
Sample ID: C12041044-022BMS		Sample Matrix Spike						Run: TENNELEC-3_120621D		
Radium 228		1.7	pCi/g-dry	80		70	130			07/05/12 21:06
Sample ID: C12041044-022BMSD		Sample Matrix Spike Duplicate						Run: TENNELEC-3_120621D		
Radium 228		2.1	pCi/g-dry	110		70	130	19		36.9

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 07/10/12

Client: Rio Grande Resources Corporation

Report Date: 06/13/12

Project: Mt. Taylor Mine Closure Plan

Work Order: C12041044

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020								Analytical Run: ICPMS2-C_120501A		
Sample ID: ICV	8	Initial Calibration Verification Standard								05/01/12 13:14
Arsenic		0.0490	mg/L	0.0010	98	90	110			
Barium		0.0486	mg/L	0.0010	97	90	110			
Cadmium		0.0491	mg/L	0.0010	98	90	110			
Chromium		0.0501	mg/L	0.0010	100	90	110			
Lead		0.0483	mg/L	0.0010	97	90	110			
Selenium		0.0501	mg/L	0.0010	100	90	110			
Silver		0.0207	mg/L	0.0010	103	90	110			
Uranium		0.0485	mg/L	0.00030	97	90	110			
Sample ID: ICSA	8	Interference Check Sample A								05/01/12 13:16
Arsenic		0.0103	mg/L	0.0010						
Barium		3.16E-05	mg/L	0.0010						
Cadmium		0.0104	mg/L	0.0010						
Chromium		0.0104	mg/L	0.0010						
Lead		3.39E-05	mg/L	0.0010						
Selenium		8.30E-06	mg/L	0.0010						
Silver		0.0108	mg/L	0.0010						
Uranium		6.80E-05	mg/L	0.00030						
Sample ID: ICSAB	8	Interference Check Sample AB								05/01/12 13:19
Arsenic		0.0103	mg/L	0.0010	103	70	130			
Barium		4.64E-05	mg/L	0.0010						
Cadmium		0.0106	mg/L	0.0010	106	70	130			
Chromium		0.0105	mg/L	0.0010	105	70	130			
Lead		3.92E-05	mg/L	0.0010						
Selenium		1.39E-05	mg/L	0.0010						
Silver		0.0107	mg/L	0.0010	107	70	130			
Uranium		1.47E-05	mg/L	0.00030						
Method: SW6020								Batch: 33469		
Sample ID: MB-33469	8	Method Blank								Run: ICPMS2-C_120501A 05/01/12 13:45
Arsenic		ND	mg/L	6E-05						
Barium		0.005	mg/L	3E-05						
Cadmium		0.0001	mg/L	1E-05						
Chromium		0.002	mg/L	4E-05						
Lead		0.0001	mg/L	3E-05						
Selenium		0.0002	mg/L	0.0002						
Silver		0.002	mg/L	3E-05						
Uranium		0.001	mg/L	1E-05						
Sample ID: LCS3-33469	8	Laboratory Control Sample								Run: ICPMS2-C_120501A 05/01/12 13:47
Arsenic		0.47	mg/L	0.0010	93	80	120			
Barium		0.51	mg/L	0.050	100	80	120			
Cadmium		0.24	mg/L	0.0010	96	80	120			
Chromium		0.49	mg/L	0.0050	98	80	120			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 07/10/12

Client: Rio Grande Resources Corporation

Report Date: 06/13/12

Project: Mt. Taylor Mine Closure Plan

Work Order: C12041044

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020										
Sample ID: LCS3-33469	Batch: 33469									
Lead	8	0.51	mg/L	0.0010	101	80	120			
Selenium		0.43	mg/L	0.0010	86	80	120			
Silver		0.054	mg/L	0.0020	104	80	120			
Uranium		0.51	mg/L	0.00060	101	80	120			
Sample ID: LCSD3-33469	Run: ICPMS2-C_120501A									
Arsenic	8	0.47	mg/L	0.0010	94	80	120	0.9	20	
Barium		0.51	mg/L	0.050	101	80	120	1.1	20	
Cadmium		0.24	mg/L	0.0010	96	80	120	0.1	20	
Chromium		0.49	mg/L	0.0050	97	80	120	0.4	20	
Lead		0.51	mg/L	0.0010	102	80	120	0.8	20	
Selenium		0.43	mg/L	0.0010	86	80	120	0.6	20	
Silver		0.055	mg/L	0.0020	106	80	120	2.1	20	
Uranium		0.51	mg/L	0.00060	101	80	120	0.0	20	
Sample ID: C12041044-004ADIL	Run: ICPMS2-C_120501A									
Arsenic	8	0.0054	mg/L	0.0050		0	0	20	N	
Barium		0.037	mg/L	0.050		0	0	20		
Cadmium		0.00042	mg/L	0.0050		0	0	20	N	
Chromium		0.0071	mg/L	0.0050		0	0	5.0	20	
Lead		0.0028	mg/L	0.0050		0	0	20	N	
Selenium		0.0026	mg/L	0.0050		0	0	20	N	
Silver		0.00070	mg/L	0.010		0	0	20	N	
Uranium		0.0029	mg/L	0.0030		0	0	20		
Sample ID: C12041044-003AMS3	Run: ICPMS2-C_120501A									
Arsenic	8	0.47	mg/L	0.0010	94	75	125			
Barium		0.53	mg/L	0.050	103	75	125			
Cadmium		0.24	mg/L	0.0010	98	75	125			
Chromium		0.50	mg/L	0.0050	98	75	125			
Lead		0.52	mg/L	0.0010	103	75	125			
Selenium		0.44	mg/L	0.0010	88	75	125			
Silver		0.054	mg/L	0.0020	22	75	125			S
Uranium		0.54	mg/L	0.00060	106	75	125			
Method: SW6020										
Sample ID: MB-33470	Run: ICPMS2-C_120501A									
Arsenic	8	0.0003	mg/L	6E-05						
Barium		0.005	mg/L	3E-05						
Cadmium		0.0001	mg/L	1E-05						
Chromium		0.004	mg/L	4E-05						
Lead		9E-05	mg/L	3E-05						
Selenium		0.0003	mg/L	0.0002						
Silver		0.0006	mg/L	3E-05						
Uranium		0.0006	mg/L	1E-05						

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

S - Spike recovery outside of advisory limits.

ND - Not detected at the reporting limit.

N - The analyte concentration was not sufficiently high to calculate a RPD for the serial dilution test.

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 07/10/12

Client: Rio Grande Resources Corporation

Report Date: 06/13/12

Project: Mt. Taylor Mine Closure Plan

Work Order: C12041044

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020										
Sample ID: LCS3-33470	8 Laboratory Control Sample									
Arsenic		0.47	mg/L	0.0010	95	80	120			
Barium		0.52	mg/L	0.050	102	80	120			
Cadmium		0.24	mg/L	0.0010	98	80	120			
Chromium		0.49	mg/L	0.0050	97	80	120			
Lead		0.51	mg/L	0.0010	103	80	120			
Selenium		0.45	mg/L	0.0010	89	80	120			
Silver		0.057	mg/L	0.0020	112	80	120			
Uranium		0.52	mg/L	0.00060	104	80	120			
Sample ID: LCSD3-33470	8 Laboratory Control Sample Duplicate									
Arsenic		0.47	mg/L	0.0010	94	80	120	1.1	20	
Barium		0.52	mg/L	0.050	103	80	120	0.4	20	
Cadmium		0.24	mg/L	0.0010	98	80	120	0.0	20	
Chromium		0.49	mg/L	0.0050	98	80	120	1.0	20	
Lead		0.51	mg/L	0.0010	103	80	120	0.2	20	
Selenium		0.44	mg/L	0.0010	89	80	120	0.3	20	
Silver		0.056	mg/L	0.0020	110	80	120	1.9	20	
Uranium		0.52	mg/L	0.00060	103	80	120	0.7	20	
Sample ID: C12041044-010ADIL	8 Serial Dilution									
Arsenic		0.0083	mg/L	0.0050		0	0	8.8	20	
Barium		1.1	mg/L	0.050		0	0	3.4	20	
Cadmium		0.00051	mg/L	0.0050		0	0	20	N	
Chromium		0.0088	mg/L	0.0050		0	0	10	20	
Lead		0.0032	mg/L	0.0050		0	0	20	N	
Selenium		0.019	mg/L	0.0050		0	0	20	N	
Silver		ND	mg/L	0.010		0	0	20		
Uranium		0.033	mg/L	0.0030		0	0	0.5	20	
Sample ID: C12041044-009AMS3	8 Sample Matrix Spike									
Arsenic		0.47	mg/L	0.0010	95	75	125			
Barium		0.54	mg/L	0.050	103	75	125			
Cadmium		0.25	mg/L	0.0010	99	75	125			
Chromium		0.49	mg/L	0.0050	98	75	125			
Lead		0.51	mg/L	0.0010	102	75	125			
Selenium		0.45	mg/L	0.0010	90	75	125			
Silver		0.054	mg/L	0.0020	21	75	125			S
Uranium		0.52	mg/L	0.00060	105	75	125			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

N - The analyte concentration was not sufficiently high to calculate a RPD for the serial dilution test.

S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 07/10/12

Client: Rio Grande Resources Corporation

Report Date: 06/13/12

Project: Mt. Taylor Mine Closure Plan

Work Order: C12041044

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020								Analytical Run: ICPMS2-C_120504A		
Sample ID: ICV	8	Initial Calibration Verification Standard								05/04/12 13:40
Arsenic		0.0494	mg/L	0.0010	99	90	110			
Barium		0.0500	mg/L	0.0010	100	90	110			
Cadmium		0.0497	mg/L	0.0010	99	90	110			
Chromium		0.0490	mg/L	0.0010	98	90	110			
Lead		0.0497	mg/L	0.0010	99	90	110			
Selenium		0.0498	mg/L	0.0010	100	90	110			
Silver		0.0209	mg/L	0.0010	105	90	110			
Uranium		0.0510	mg/L	0.00030	102	90	110			
Sample ID: ICSA	8	Interference Check Sample A								05/04/12 13:43
Arsenic		0.0106	mg/L	0.0010						
Barium		8.40E-06	mg/L	0.0010						
Cadmium		0.0106	mg/L	0.0010						
Chromium		0.0105	mg/L	0.0010						
Lead		3.57E-05	mg/L	0.0010						
Selenium		0.000221	mg/L	0.0010						
Silver		0.0109	mg/L	0.0010						
Uranium		6.77E-05	mg/L	0.00030						
Sample ID: ICSAB	8	Interference Check Sample AB								05/04/12 13:46
Arsenic		0.0104	mg/L	0.0010	104	70	130			
Barium		7.45E-05	mg/L	0.0010						
Cadmium		0.0104	mg/L	0.0010	104	70	130			
Chromium		0.0104	mg/L	0.0010	104	70	130			
Lead		3.87E-05	mg/L	0.0010						
Selenium		3.16E-05	mg/L	0.0010						
Silver		0.0106	mg/L	0.0010	105	70	130			
Uranium		1.56E-05	mg/L	0.00030						
Method: SW6020								Batch: 33541		
Sample ID: MB-33541	8	Method Blank								Run: ICPMS2-C_120504A 05/04/12 14:11
Arsenic		0.0005	mg/L	6E-05						
Barium		0.006	mg/L	3E-05						
Cadmium		0.0001	mg/L	1E-05						
Chromium		0.003	mg/L	4E-05						
Lead		0.0002	mg/L	3E-05						
Selenium		ND	mg/L	0.0002						
Silver		0.002	mg/L	3E-05						
Uranium		0.0003	mg/L	1E-05						
Sample ID: LCS3-33541	8	Laboratory Control Sample								Run: ICPMS2-C_120504A 05/04/12 14:14
Arsenic		0.46	mg/L	0.0010	93	80	120			
Barium		0.49	mg/L	0.050	96	80	120			
Cadmium		0.23	mg/L	0.0010	94	80	120			
Chromium		0.48	mg/L	0.0050	95	80	120			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 07/10/12

Client: Rio Grande Resources Corporation

Report Date: 06/13/12

Project: Mt. Taylor Mine Closure Plan

Work Order: C12041044

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020										
Sample ID: LCS3-33541	Batch: 33541									
Lead	8	0.49	mg/L	0.0010	97	80	120			
Selenium		0.44	mg/L	0.0010	89	80	120			
Silver		0.051	mg/L	0.0020	97	80	120			
Uranium		0.50	mg/L	0.00060	99	80	120			
Sample ID: LCSD3-33541	Run: ICPMS2-C_120504A									
Arsenic	8	0.48	mg/L	0.0010	95	80	120	2.6	20	
Barium		0.50	mg/L	0.050	98	80	120	1.9	20	
Cadmium		0.24	mg/L	0.0010	96	80	120	2.3	20	
Chromium		0.49	mg/L	0.0050	98	80	120	3.7	20	
Lead		0.50	mg/L	0.0010	100	80	120	2.8	20	
Selenium		0.46	mg/L	0.0010	91	80	120	2.4	20	
Silver		0.053	mg/L	0.0020	101	80	120	4.0	20	
Uranium		0.50	mg/L	0.00060	99	80	120	0.1	20	
Sample ID: C12041044-022AMS3	Run: ICPMS2-C_120504A									
Arsenic	8	0.48	mg/L	0.0010	94	75	125			
Barium		0.55	mg/L	0.050	100	75	125			
Cadmium		0.24	mg/L	0.0010	96	75	125			
Chromium		0.48	mg/L	0.0050	95	75	125			
Lead		0.50	mg/L	0.0010	100	75	125			
Selenium		0.47	mg/L	0.0010	91	75	125			
Silver		0.050	mg/L	0.0020	20	75	125			S
Uranium		0.64	mg/L	0.00060	100	75	125			
Sample ID: C12041044-028ADIL	Run: ICPMS2-C_120504A									
Arsenic	8	0.0038	mg/L	0.0050	0	0	0	20	N	
Barium		0.029	mg/L	0.050	0	0	0	20		
Cadmium		0.00016	mg/L	0.0050	0	0	0	20	N	
Chromium		0.0040	mg/L	0.0050	0	0	0	20	N	
Lead		0.0018	mg/L	0.0050	0	0	0	20	N	
Selenium		0.0079	mg/L	0.0050	0	0	0	20	N	
Silver		ND	mg/L	0.010	0	0	0	20		
Uranium		0.011	mg/L	0.0030	0	0	5.0	20		

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

S - Spike recovery outside of advisory limits.

ND - Not detected at the reporting limit.

N - The analyte concentration was not sufficiently high to calculate a RPD for the serial dilution test.

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 07/10/12

Client: Rio Grande Resources Corporation

Report Date: 06/13/12

Project: Mt. Taylor Mine Closure Plan

Work Order: C12041044

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020								Analytical Run: ICPMS4-C_120425B		
Sample ID: ICV	8	Initial Calibration Verification Standard								04/25/12 11:08
Arsenic		0.0486	mg/L	0.0010	97	90	110			
Barium		0.0497	mg/L	0.0010	99	90	110			
Cadmium		0.0501	mg/L	0.0010	100	90	110			
Chromium		0.0491	mg/L	0.0010	98	90	110			
Lead		0.0497	mg/L	0.0010	99	90	110			
Selenium		0.0485	mg/L	0.0010	97	90	110			
Silver		0.0193	mg/L	0.0010	97	90	110			
Uranium		0.0481	mg/L	0.00030	96	90	110			
Sample ID: ICSA	8	Interference Check Sample A								04/25/12 11:12
Arsenic		2.21E-05	mg/L	0.0010						
Barium		2.39E-05	mg/L	0.0010						
Cadmium		4.21E-05	mg/L	0.0010						
Chromium		2.05E-05	mg/L	0.0010						
Lead		1.30E-05	mg/L	0.0010						
Selenium		7.84E-05	mg/L	0.0010						
Silver		-0.000229	mg/L	0.0010						
Uranium		2.36E-05	mg/L	0.00030						
Sample ID: ICSAB	8	Interference Check Sample AB								04/25/12 11:17
Arsenic		0.0113	mg/L	0.0010	113	70	130			
Barium		1.46E-05	mg/L	0.0010						
Cadmium		0.0109	mg/L	0.0010	109	70	130			
Chromium		0.0115	mg/L	0.0010	115	70	130			
Lead		5.40E-06	mg/L	0.0010						
Selenium		7.00E-07	mg/L	0.0010						
Silver		0.00988	mg/L	0.0010	99	70	130			
Uranium		8.30E-06	mg/L	0.00030						
Method: SW6020								Batch: 33440		
Sample ID: MB-33440	8	Method Blank								Run: ICPMS4-C_120425B 04/25/12 19:38
Arsenic		0.0004	mg/L	7E-05						
Barium		0.01	mg/L	0.0001						
Cadmium		0.0001	mg/L	4E-05						
Chromium		ND	mg/L	0.001						
Lead		0.0002	mg/L	3E-05						
Selenium		0.0001	mg/L	6E-05						
Silver		0.001	mg/L	2E-05						
Uranium		0.004	mg/L	5E-05						
Sample ID: LCS3-33440	8	Laboratory Control Sample								Run: ICPMS4-C_120425B 04/25/12 19:43
Arsenic		0.46	mg/L	0.0010	91	80	120			
Barium		0.50	mg/L	0.050	98	80	120			
Cadmium		0.24	mg/L	0.0010	97	80	120			
Chromium		0.50	mg/L	0.0050	101	80	120			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 07/10/12

Client: Rio Grande Resources Corporation

Report Date: 06/13/12

Project: Mt. Taylor Mine Closure Plan

Work Order: C12041044

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020										
Sample ID: LCS3-33440	Batch: 33440									
Lead	8	0.51	mg/L	0.0010	103	80	120			
Selenium		0.44	mg/L	0.0010	87	80	120			
Silver		0.053	mg/L	0.0010	104	80	120			
Uranium		0.50	mg/L	0.00030	99	80	120			
Sample ID: LCSD3-33440	Run: ICPMS4-C_120425B									
Arsenic	8	0.47	mg/L	0.0010	94	80	120	2.8	20	
Barium		0.50	mg/L	0.050	99	80	120	1.0	20	
Cadmium		0.25	mg/L	0.0010	98	80	120	1.0	20	
Chromium		0.52	mg/L	0.0050	104	80	120	3.4	20	
Lead		0.51	mg/L	0.0010	103	80	120	0.0	20	
Selenium		0.44	mg/L	0.0010	89	80	120	1.5	20	
Silver		0.054	mg/L	0.0010	106	80	120	1.7	20	
Uranium		0.51	mg/L	0.00030	100	80	120	1.0	20	
Sample ID: C12041044-002ADIL	Run: ICPMS4-C_120425B									
Arsenic	8	0.0017	mg/L	0.0010		0	0	20	N	
Barium		0.065	mg/L	0.050		0	0	2.8	20	
Cadmium		ND	mg/L	0.0010		0	0		20	
Chromium		ND	mg/L	0.011		0	0		20	
Lead		0.0028	mg/L	0.0010		0	0	20	N	
Selenium		ND	mg/L	0.0010		0	0		20	
Silver		ND	mg/L	0.0010		0	0		20	
Uranium		0.010	mg/L	0.00052		0	0	5.8	20	
Sample ID: C12041044-001AMS3	Run: ICPMS4-C_120425B									
Arsenic	8	0.48	mg/L	0.0010	94	75	125			
Barium		0.68	mg/L	0.050	102	75	125			
Cadmium		0.25	mg/L	0.0010	98	75	125			
Chromium		0.55	mg/L	0.0050	107	75	125			
Lead		0.54	mg/L	0.0010	105	75	125			
Selenium		0.46	mg/L	0.0010	92	75	125			
Silver		0.053	mg/L	0.0010	21	75	125			
Uranium		0.60	mg/L	0.00030	104	75	125			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

N - The analyte concentration was not sufficiently high to calculate a RPD for the serial dilution test.

S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 07/10/12

Client: Rio Grande Resources Corporation

Report Date: 06/13/12

Project: Mt. Taylor Mine Closure Plan

Work Order: C12041044

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020								Analytical Run: ICPMS4-C_120502A		
Sample ID: ICV	8	Initial Calibration Verification Standard								05/02/12 11:40
Arsenic		0.0474	mg/L	0.0010	95	90	110			
Barium		0.0493	mg/L	0.0010	99	90	110			
Cadmium		0.0496	mg/L	0.0010	99	90	110			
Chromium		0.0478	mg/L	0.0010	96	90	110			
Lead		0.0491	mg/L	0.0010	98	90	110			
Selenium		0.0481	mg/L	0.0010	96	90	110			
Silver		0.0199	mg/L	0.0010	99	90	110			
Uranium		0.0480	mg/L	0.00030	96	90	110			
Sample ID: ICSA	8	Interference Check Sample A								05/02/12 11:44
Arsenic		0.00936	mg/L	0.0010						
Barium		2.85E-05	mg/L	0.0010						
Cadmium		0.00986	mg/L	0.0010						
Chromium		0.00959	mg/L	0.0010						
Lead		2.17E-05	mg/L	0.0010						
Selenium		5.69E-05	mg/L	0.0010						
Silver		0.00979	mg/L	0.0010						
Uranium		2.50E-05	mg/L	0.00030						
Sample ID: ICSAB	8	Interference Check Sample AB								05/02/12 11:49
Arsenic		0.0100	mg/L	0.0010	100	70	130			
Barium		4.90E-05	mg/L	0.0010						
Cadmium		0.00995	mg/L	0.0010	99	70	130			
Chromium		0.0102	mg/L	0.0010	102	70	130			
Lead		8.90E-06	mg/L	0.0010						
Selenium		1.01E-05	mg/L	0.0010						
Silver		0.00963	mg/L	0.0010	96	70	130			
Uranium		4.30E-06	mg/L	0.00030						
Method: SW6020								Batch: 33486		
Sample ID: MB-33486	8	Method Blank								Run: ICPMS4-C_120502A 05/02/12 20:11
Arsenic		0.001	mg/L	7E-05						
Barium		0.004	mg/L	0.0001						
Cadmium		0.0001	mg/L	4E-05						
Chromium		0.003	mg/L	0.001						
Lead		0.0001	mg/L	3E-05						
Selenium		0.0001	mg/L	6E-05						
Silver		0.0002	mg/L	2E-05						
Uranium		0.0004	mg/L	5E-05						
Sample ID: LCS3-33486	8	Laboratory Control Sample								Run: ICPMS4-C_120502A 05/02/12 20:16
Arsenic		0.47	mg/L	0.0010	94	80	120			
Barium		0.52	mg/L	0.050	102	80	120			
Cadmium		0.26	mg/L	0.0010	103	80	120			
Chromium		0.53	mg/L	0.0050	104	80	120			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 07/10/12

Client: Rio Grande Resources Corporation

Report Date: 06/13/12

Project: Mt. Taylor Mine Closure Plan

Work Order: C12041044

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020										
Sample ID: LCS3-33486	8 Laboratory Control Sample									
Lead		0.54	mg/L	0.0010	108	80	120			
Selenium		0.45	mg/L	0.0010	90	80	120			
Silver		0.052	mg/L	0.0010	104	80	120			
Uranium		0.51	mg/L	0.00030	101	80	120			
Sample ID: LCSD3-33486	8 Laboratory Control Sample Duplicate									
Arsenic		0.50	mg/L	0.0010	101	80	120	6.7	20	
Barium		0.54	mg/L	0.050	107	80	120	4.1	20	
Cadmium		0.27	mg/L	0.0010	106	80	120	3.5	20	
Chromium		0.58	mg/L	0.0050	115	80	120	9.7	20	
Lead		0.57	mg/L	0.0010	114	80	120	4.6	20	
Selenium		0.48	mg/L	0.0010	96	80	120	7.2	20	
Silver		0.055	mg/L	0.0010	110	80	120	5.5	20	
Uranium		0.52	mg/L	0.00030	104	80	120	3.0	20	
Sample ID: C12041044-016AMS3	8 Sample Matrix Spike									
		Run: ICPMS4-C_120502A								
Arsenic		0.50	mg/L	0.0010	99	75	125			
Barium		0.60	mg/L	0.050	108	75	125			
Cadmium		0.26	mg/L	0.0010	106	75	125			
Chromium		0.57	mg/L	0.0050	113	75	125			
Lead		0.56	mg/L	0.0010	112	75	125			
Selenium		0.49	mg/L	0.0010	96	75	125			
Silver		0.054	mg/L	0.0010	21	75	125			
Uranium		0.56	mg/L	0.00030	106	75	125			

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 07/10/12

Client: Rio Grande Resources Corporation

Report Date: 06/13/12

Project: Mt. Taylor Mine Closure Plan

Work Order: C12041044

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW7470A								Analytical Run: CVAA_C203_120426A		
Sample ID: ICV		Initial Calibration Verification Standard								
Mercury		0.00526	mg/L	0.00010	105	90	110			04/26/12 11:49
Method: SW7470A								Batch: 33421		
Sample ID: MB-33421		Method Blank								
Mercury		ND	mg/L	3E-05				Run: CVAA_C203_120426A		
Sample ID: LCS-33421		Laboratory Control Sample								
Mercury		0.0053	mg/L	0.0020	106	85	115			04/26/12 12:33
Sample ID: LCSD-33421		Laboratory Control Sample Duplicate								
Mercury		0.0054	mg/L	0.0020	108	85	115	1.1	10	04/26/12 12:35
Sample ID: C12041044-001ASD		Serial Dilution								
Mercury		ND	mg/L	0.0020				Run: CVAA_C203_120426A		
Method: SW7470A								Analytical Run: CVAA_C203_120430A		
Sample ID: ICV		Initial Calibration Verification Standard								
Mercury		0.00522	mg/L	0.00010	104	90	110			04/30/12 13:50
Method: SW7470A								Batch: 33433		
Sample ID: MB-33433		Method Blank								
Mercury		ND	mg/L	3E-05				Run: CVAA_C203_120430A		
Sample ID: LCS-33433		Laboratory Control Sample								
Mercury		0.00520	mg/L	0.0020	104	85	115			04/30/12 15:14
Sample ID: C12041044-003AMS		Sample Matrix Spike								
Mercury		0.00519	mg/L	0.0020	104	85	115			04/30/12 15:19
Method: SW7470A								Batch: 33434		
Sample ID: MB-33434		Method Blank								
Mercury		ND	mg/L	3E-05				Run: CVAA_C203_120430A		
Sample ID: C12041044-009AMS		Sample Matrix Spike								
Mercury		0.00996	mg/L	0.0020	100	85	115			04/30/12 15:36
Sample ID: LCS-33434		Laboratory Control Sample								
Mercury		0.00504	mg/L	0.0020	101	85	115			04/30/12 15:45
Method: SW7470A								Batch: 33465		
Sample ID: MB-33465		Method Blank								
Mercury		ND	mg/L	3E-05				Run: CVAA_C203_120430A		
Sample ID: LCS-33465		Laboratory Control Sample								
Mercury		0.00497	mg/L	0.0020	99	85	115			04/30/12 15:55
Sample ID: C12041044-016AMS		Sample Matrix Spike								
Mercury		0.0105	mg/L	0.0020	105	85	115			04/30/12 16:04

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Revised Date: 07/10/12**Client:** Rio Grande Resources Corporation**Report Date:** 06/13/12**Project:** Mt. Taylor Mine Closure Plan**Work Order:** C12041044

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW7470A								Analytical Run: CVAA_C203_120502A		
Sample ID: ICV		Initial Calibration Verification Standard								
Mercury		0.00516	mg/L	0.00010	103	90	110			05/02/12 10:05
Method: SW7470A								Batch: 33523		
Sample ID: MB-33523		Method Blank								
Mercury		ND	mg/L	3E-05				Run: CVAA_C203_120502A		
Sample ID: LCS-33523		Laboratory Control Sample								
Mercury		0.00530	mg/L	0.0020	106	85	115			05/02/12 11:23
Sample ID: LCSD-33523		Laboratory Control Sample Duplicate								
Mercury		0.00541	mg/L	0.0020	108	85	115	2.1		05/02/12 11:25
Sample ID: C12041044-022AMS		Sample Matrix Spike								
Mercury		0.00534	mg/L	0.0020	107	85	115			05/02/12 11:27
Sample ID: C12041044-028ADIL		Serial Dilution								
Mercury		ND	mg/L	0.0020				Run: CVAA_C203_120502A		
								05/02/12 11:39		
								10		

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

Standard Reporting Procedures

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Workorder Receipt Checklist

Rio Grande Resources Corporation

C12041044

Login completed by: Kristy Gisse Date Received: 4/20/2012

Reviewed by: BL2000\kschroeder Received by: kg

Reviewed Date: 4/26/2012 Carrier FedEx
name:

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature:	11.2°C No Ice		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" type="checkbox"/>

Contact and Corrective Action Comments:

Sample MT-6-A-S3 insufficient volume for testing. Cancelled per phone conversation with Barbara Everett.

Chain of Custody and Analytical Request Record

PLEASE PRINT- Provide as much information as possible.

Company Name: Rio Grande Resources Corp		Project Name, PWS, Permit, Etc. Mt. Taylor Mine Closure Plan		Sample Origin State: NM	EPA/State Compliance: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Report Mail Address: PO Box 1150 Grants, NM 87020 Additional e-mail copy to beverett@kleinfelder.com	Contact Name: Barbara Everett (Kleinfelder)	Phone/Fax: (505) 344-7373 (505) 280-1079 (Cell)	Email: beverett@kleinfelder.com	Sampler: (Please Print) Barbara Everett Ed Loescher	
Invoice Address: PO Box 1150 Grants, NM 87020	Invoice Contact & Phone: Jeanette Lister 505-287-7971	Purchase Order: C3778	RUSH sample submittal for charges and scheduling - See Instruction Page	Quote/Bottle Order: C3778	
Special Report/Formats – ELI must be notified prior to sample submittal for the following:		<input type="checkbox"/> DWL <input type="checkbox"/> GSA <input type="checkbox"/> POTW/WWTP <input type="checkbox"/> State: NM _____ <input type="checkbox"/> Other: _____		ANALYSIS REQUESTED Number of Contaminants Sample Type: AW/S V B Air/Water/Solids/Solids/Others Vegetation/Biosassay/Other RCRA Metals + Uranium RA226 & RA228 CI & SO4 by IC 300.0 SLP Extract	
		<input type="checkbox"/> A2LA <input checked="" type="checkbox"/> EDD/EDT(Electronic Data) Format: <u>excel</u> _____ <input type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC		SEE ATTACHED Normal Turnaround (TAT)	
				R U S H Contact ELI prior to shipping by: F - N.D.Y cooler ID(s): <u>6 Buckets</u> Receipt Temp: <u>16.2</u> °C On Ice: <u>Yes</u> <input checked="" type="checkbox"/> No <input type="checkbox"/>	
				Custody Seal <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/> Signature <input checked="" type="checkbox"/> Match <input checked="" type="checkbox"/>	
LABORATORY USE ONLY Received by (print): <u>Barbara Everett</u> Date/Time: <u>4/11/12 15:00</u> Received by (print): <u>Barbara Everett</u> Date/Time: <u>4/11/12 15:00</u> Received by Laboratory: <u>1</u> Lab Disposal: <u>Return to Client</u>					

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly noted on your analytical report. Visit our web site at www.enertech.com for additional information delineable for analytical firms.

ANALYTICAL SUMMARY REPORT

July 05, 2012

Rio Grande Resources Corporation
PO Box 1150
Grants, NM 87020

Workorder No.: C12050924

Project Name: Mt. Taylor Mine

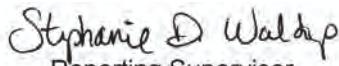
Energy Laboratories, Inc. Casper WY received the following 3 samples for Rio Grande Resources Corporation on 5/24/2012 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C12050924-001	MT-WP-SM1	05/18/12 9:30	05/24/12	Soil	Digestion For RadioChemistry Radium 226 Uranium, Isotopic
C12050924-002	MT-WP-SM2	05/18/12 9:40	05/24/12	Soil	Same As Above
C12050924-003	MT-WP-SM3	05/18/12 10:00	05/24/12	Soil	Same As Above

The results as reported relate only to the item(s) submitted for testing. The analyses presented in this report were performed at Energy Laboratories, Inc., 2393 Salt Creek Hwy., Casper, WY 82601, unless otherwise noted. Radiochemistry analyses were performed at Energy Laboratories, Inc., 2325 Kerzell Lane, Casper, WY 82601, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

If you have any questions regarding these test results, please call.

Report Approved By:


Stephanie D. Waldrop
Reporting Supervisor

Digitally signed by
Stephanie Waldrop
Date: 2012.07.05 16:09:59 -06:00

CLIENT: Rio Grande Resources Corporation
Project: Mt. Taylor Mine
Sample Delivery Group: C12050924

Report Date: 07/05/12

CASE NARRATIVE

ORIGINAL SAMPLE SUBMITTAL(S)
All original sample submittals have been returned with the data package.

SAMPLE TEMPERATURE COMPLIANCE: 4°C ($\pm 2^\circ\text{C}$)

Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

GROSS ALPHA ANALYSIS

Method 900.0 for gross alpha and gross beta is intended as a drinking water method for low TDS waters. Data provided by this method for non potable waters should be viewed as inconsistent.

RADON IN AIR ANALYSIS

The desired exposure time is 48 hours (2 days). The time delay in returning the canister to the laboratory for processing should be as short as possible to avoid excessive decay. Maximum recommended delay between end of exposure to beginning of counting should not exceed 8 days.

SOIL/SOLID SAMPLES

All samples reported on an as received basis unless otherwise indicated.

ATRAZINE, SIMAZINE AND PCB ANALYSIS

Data for PCBs, Atrazine and Simazine are reported from EPA 525.2. PCB data reported by ELI reflects the results for seven individual Aroclors. When the results for all seven are ND (not detected), the sample meets EPA compliance criteria for PCB monitoring.

SUBCONTRACTING ANALYSIS

Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

BRANCH LABORATORY LOCATIONS

eli-b - Energy Laboratories, Inc. - Billings, MT
eli-g - Energy Laboratories, Inc. - Gillette, WY
eli-h - Energy Laboratories, Inc. - Helena, MT
eli-r - Energy Laboratories, Inc. - Rapid City, SD
eli-t - Energy Laboratories, Inc. - College Station, TX

CERTIFICATIONS:

USEPA: WY00002, Radiochemical WY00937; FL-DOH NELAC: E87641, Radiochemical E871017; California: 02118CA;
Oregon: WY200001, Radiochemical WY200002; Utah: WY00002; Virginia: 00057; Washington: C836

ISO 17025 DISCLAIMER:

The results of this Analytical Report relate only to the items submitted for analysis.

ENERGY LABORATORIES, INC. - CASPER,WY certifies that certain method selections contained in this report meet requirements as set forth by the above accrediting authorities. Some results requested by the client may not be covered under these certifications. All analysis data to be submitted for regulatory enforcement should be certified in the sample state of origin. Please verify ELI's certification coverage by visiting www.energylab.com

ELI appreciates the opportunity to provide you with this analytical service. For additional information and services visit our web page www.energylab.com.

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine
Lab ID: C12050924-001
Client Sample ID: MT-WP-SM1

Report Date: 07/05/12
Collection Date: 05/18/12 09:30
DateReceived: 05/24/12
Matrix: Soil

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES							
Radium 226	0.7	pCi/g-dry			E903.0	06/20/12 01:37 / dmf	
Radium 226 precision (\pm)	0.08	pCi/g-dry			E903.0	06/20/12 01:37 / dmf	
Radium 226 MDC	0.04	pCi/g-dry			E903.0	06/20/12 01:37 / dmf	
Uranium 234	0.6	pCi/g-dry			E908.0	06/18/12 08:39 / dmf	
Uranium 234 precision (\pm)	0.3	pCi/g-dry			E908.0	06/18/12 08:39 / dmf	
Uranium 234 MDC	0.3	pCi/g-dry			E908.0	06/18/12 08:39 / dmf	
Uranium 235	0.03	pCi/g-dry	U		E908.0	06/18/12 08:39 / dmf	
Uranium 235 precision (\pm)	0.09	pCi/g-dry			E908.0	06/18/12 08:39 / dmf	
Uranium 235 MDC	0.2	pCi/g-dry			E908.0	06/18/12 08:39 / dmf	
Uranium 238	0.6	pCi/g-dry			E908.0	06/18/12 08:39 / dmf	
Uranium 238 precision (\pm)	0.2	pCi/g-dry			E908.0	06/18/12 08:39 / dmf	
Uranium 238 MDC	0.2	pCi/g-dry			E908.0	06/18/12 08:39 / dmf	

Report Definitions:	RL - Analyte reporting limit.	MCL - Maximum contaminant level.
	QCL - Quality control limit.	ND - Not detected at the reporting limit.
	MDC - Minimum detectable concentration	U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine
Lab ID: C12050924-002
Client Sample ID: MT-WP-SM2

Report Date: 07/05/12
Collection Date: 05/18/12 09:40
DateReceived: 05/24/12
Matrix: Soil

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES							
Radium 226	0.7	pCi/g-dry			E903.0	06/20/12 01:37 / dmf	
Radium 226 precision (\pm)	0.08	pCi/g-dry			E903.0	06/20/12 01:37 / dmf	
Radium 226 MDC	0.03	pCi/g-dry			E903.0	06/20/12 01:37 / dmf	
Uranium 234	0.8	pCi/g-dry			E908.0	06/18/12 08:39 / dmf	
Uranium 234 precision (\pm)	0.3	pCi/g-dry			E908.0	06/18/12 08:39 / dmf	
Uranium 234 MDC	0.3	pCi/g-dry			E908.0	06/18/12 08:39 / dmf	
Uranium 235	0.1	pCi/g-dry	U		E908.0	06/18/12 08:39 / dmf	
Uranium 235 precision (\pm)	0.2	pCi/g-dry			E908.0	06/18/12 08:39 / dmf	
Uranium 235 MDC	0.3	pCi/g-dry			E908.0	06/18/12 08:39 / dmf	
Uranium 238	0.4	pCi/g-dry			E908.0	06/18/12 08:39 / dmf	
Uranium 238 precision (\pm)	0.2	pCi/g-dry			E908.0	06/18/12 08:39 / dmf	
Uranium 238 MDC	0.3	pCi/g-dry			E908.0	06/18/12 08:39 / dmf	

Report Definitions:	RL - Analyte reporting limit.	MCL - Maximum contaminant level.
	QCL - Quality control limit.	ND - Not detected at the reporting limit.
	MDC - Minimum detectable concentration	U - Not detected at minimum detectable concentration

LABORATORY ANALYTICAL REPORT

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation
Project: Mt. Taylor Mine
Lab ID: C12050924-003
Client Sample ID: MT-WP-SM3

Report Date: 07/05/12
Collection Date: 05/18/12 10:00
DateReceived: 05/24/12
Matrix: Soil

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES							
Radium 226	1.1	pCi/g-dry			E903.0	06/20/12 01:37 / dmf	
Radium 226 precision (\pm)	0.09	pCi/g-dry			E903.0	06/20/12 01:37 / dmf	
Radium 226 MDC	0.03	pCi/g-dry			E903.0	06/20/12 01:37 / dmf	
Uranium 234	1.1	pCi/g-dry			E908.0	06/18/12 08:39 / dmf	
Uranium 234 precision (\pm)	0.3	pCi/g-dry			E908.0	06/18/12 08:39 / dmf	
Uranium 234 MDC	0.2	pCi/g-dry			E908.0	06/18/12 08:39 / dmf	
Uranium 235	-0.02	pCi/g-dry	U		E908.0	06/18/12 08:39 / dmf	
Uranium 235 precision (\pm)	0.09	pCi/g-dry			E908.0	06/18/12 08:39 / dmf	
Uranium 235 MDC	0.2	pCi/g-dry			E908.0	06/18/12 08:39 / dmf	
Uranium 238	0.9	pCi/g-dry			E908.0	06/18/12 08:39 / dmf	
Uranium 238 precision (\pm)	0.3	pCi/g-dry			E908.0	06/18/12 08:39 / dmf	
Uranium 238 MDC	0.2	pCi/g-dry			E908.0	06/18/12 08:39 / dmf	

Report Definitions:	RL - Analyte reporting limit.	MCL - Maximum contaminant level.
	QCL - Quality control limit.	ND - Not detected at the reporting limit.
	MDC - Minimum detectable concentration	U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation**Report Date:** 07/05/12**Project:** Mt. Taylor Mine**Work Order:** C12050924

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0										
Sample ID: LCS-33822	Batch: R161002									
Radium 226	Laboratory Control Sample	0.29	pCi/g-dry	60	70	130				06/20/12 01:37
		-	LCS response is outside of the acceptance range for this analysis. Since the MB, MS, and MSD are acceptable the batch is approved.							S
Sample ID: MB-33822	3	Method Blank				Run: BERTHOLD 770-1_120612A				06/20/12 01:37
Radium 226		-0.003	pCi/g-dry							U
Radium 226 precision (\pm)		0.003	pCi/g-dry							
Radium 226 MDC		0.006	pCi/g-dry							
Sample ID: C12050924-003AMS	Run: BERTHOLD 770-1_120612A									
Radium 226	Sample Matrix Spike	4.6	pCi/g-dry	72	70	130				06/20/12 01:37
Sample ID: C12050924-003AMSD	Run: BERTHOLD 770-1_120612A									
Radium 226	Sample Matrix Spike Duplicate	4.5	pCi/g-dry	71	70	130	2.5			06/20/12 01:37
										23.8

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

S - Spike recovery outside of advisory limits.

U - Not detected at minimum detectable concentration

QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Rio Grande Resources Corporation**Report Date:** 07/05/12**Project:** Mt. Taylor Mine**Work Order:** C12050924

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E908.0										Batch: R160930
Sample ID: C12050924-003AMS	2	Sample Matrix Spike				Run: EGG-ORTEC_120614A				06/18/12 08:39
Uranium 234		52.2	pCi/g-dry	115		70	130			
Uranium 238		53.1	pCi/g-dry	115		70	130			
Sample ID: C12050924-003AMSD	2	Sample Matrix Spike Duplicate				Run: EGG-ORTEC_120614A				06/18/12 08:39
Uranium 234		51.9	pCi/g-dry	110		70	130	0.6	28	
Uranium 238		54.9	pCi/g-dry	114		70	130	3.3	27.8	
Sample ID: LCS-33822	2	Laboratory Control Sample				Run: EGG-ORTEC_120614A				06/18/12 08:39
Uranium 234		2.52	pCi/g-dry	108		80	120			
Uranium 238		2.59	pCi/g-dry	109		80	120			
Sample ID: MB-33822	9	Method Blank				Run: EGG-ORTEC_120614A				06/18/12 08:39
Uranium 234		0.01	pCi/g-dry							U
Uranium 234 precision (\pm)		0.02	pCi/g-dry							
Uranium 234 MDC		0.03	pCi/g-dry							
Uranium 235		0.0009	pCi/g-dry							U
Uranium 235 precision (\pm)		0.01	pCi/g-dry							
Uranium 235 MDC		0.03	pCi/g-dry							
Uranium 238		0.007	pCi/g-dry							U
Uranium 238 precision (\pm)		0.01	pCi/g-dry							
Uranium 238 MDC		0.03	pCi/g-dry							

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration

U - Not detected at minimum detectable concentration

Standard Reporting Procedures

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

Workorder Receipt Checklist

Rio Grande Resources Corporation

C12050924

Login completed by: Brian H. Cody Date Received: 5/24/2012

Reviewed by: BL2000\kschroeder Received by: kg

Reviewed Date: 5/25/2012 Carrier Ground
name:

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature:	22.3°C		
Water - VOA vials have zero headspace?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" type="checkbox"/>

Contact and Corrective Action Comments:

None



Chain of Custody and Analytical Request Record

Page 1 of 2

PLEASE PRINT- Provide as much information as possible.

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly noted.

MT. TAYLOR ORE CHEMICAL ANALYSIS
MARCH 18, 1986

% BY WEIGHT

Sodium	1.62
Magnesium	0.605
Aluminum	< 0.01
Silicon	33.40
Sulfur	0.118
Chlorine	0.030
Calcium	1.06
Titanium	0.149
Vanadium	0.091
Chromium	< 0.01
Manganese	0.03
Iron	1.52
Cobalt	< 0.01
Nickel	< 0.01
Copper	< 0.01
Zinc	< 0.01
Arsenic	< 0.01
Selenium	0.009
Bromide	< 0.01
Rubidium	0.016
Strontium	0.012
Zirconium	0.009
Molybdenum	0.003
Lead	0.012
Thorium	0.009
Uranium	0.420

V Vinyard & Associates, Inc.

A

4415-D Hawkins, NE
Albuquerque, New Mexico 87109
(505) 345-1937

Geotechnical Engineering • Materials Testing • Environmental Engineering

November 6, 1995

AK GeoConsult, Inc.
13212 Manitoba Drive, NE
Albuquerque, NM 87111

Attn: Mr. Alan K. Kuhn, PhD, PE

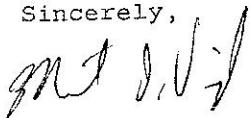
Subject: Mt. Taylor Mine Soil Samples
V & A Project No. 95-1-245

Gentlemen:

Attached are copies of the Proctor, Sieve Analysis and Atterberg
Limits Test Results for the Mt. Taylor Mine Soil Samples.

Should you have any questions regarding this data, please do not
hesitate to call.

Sincerely,



Martin D. Vinyard, PE

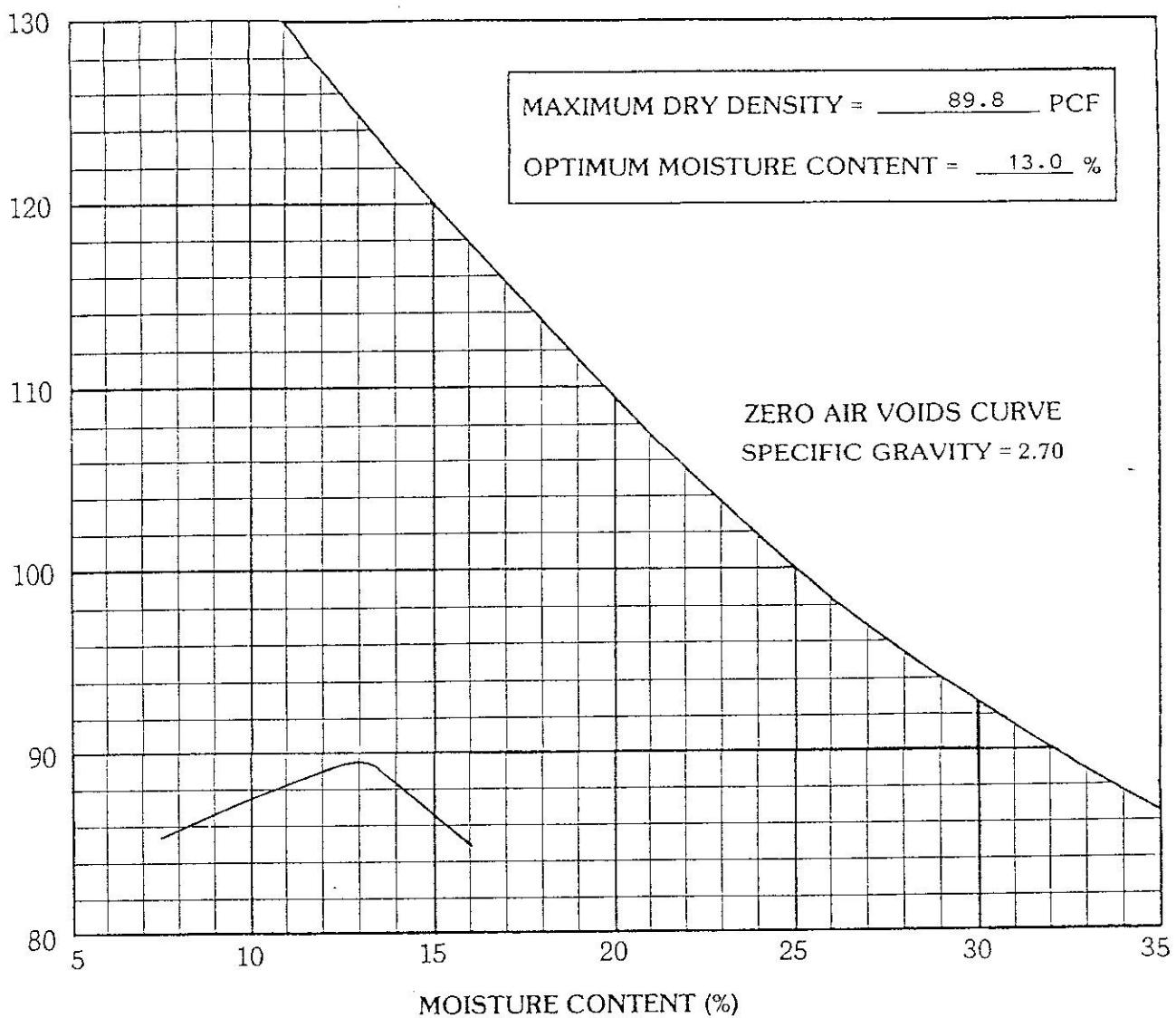
Attachments: Data Sheets (10)

cc: Addressee (1)

V
&
A

COMPACTION TEST RESULTS

DRY DENSITY (PCF)



SAMPLE LOCATION: TP-1

SOIL DESCRIPTION: CLAY, very sandy

UNIFIED SOIL CLASSIFICATION: (CL)

AASHTO SOIL CLASSIFICATION:

TEST METHOD: ASTM D-698

ATTERBERG LIMITS: LL 38 % PI 18 %

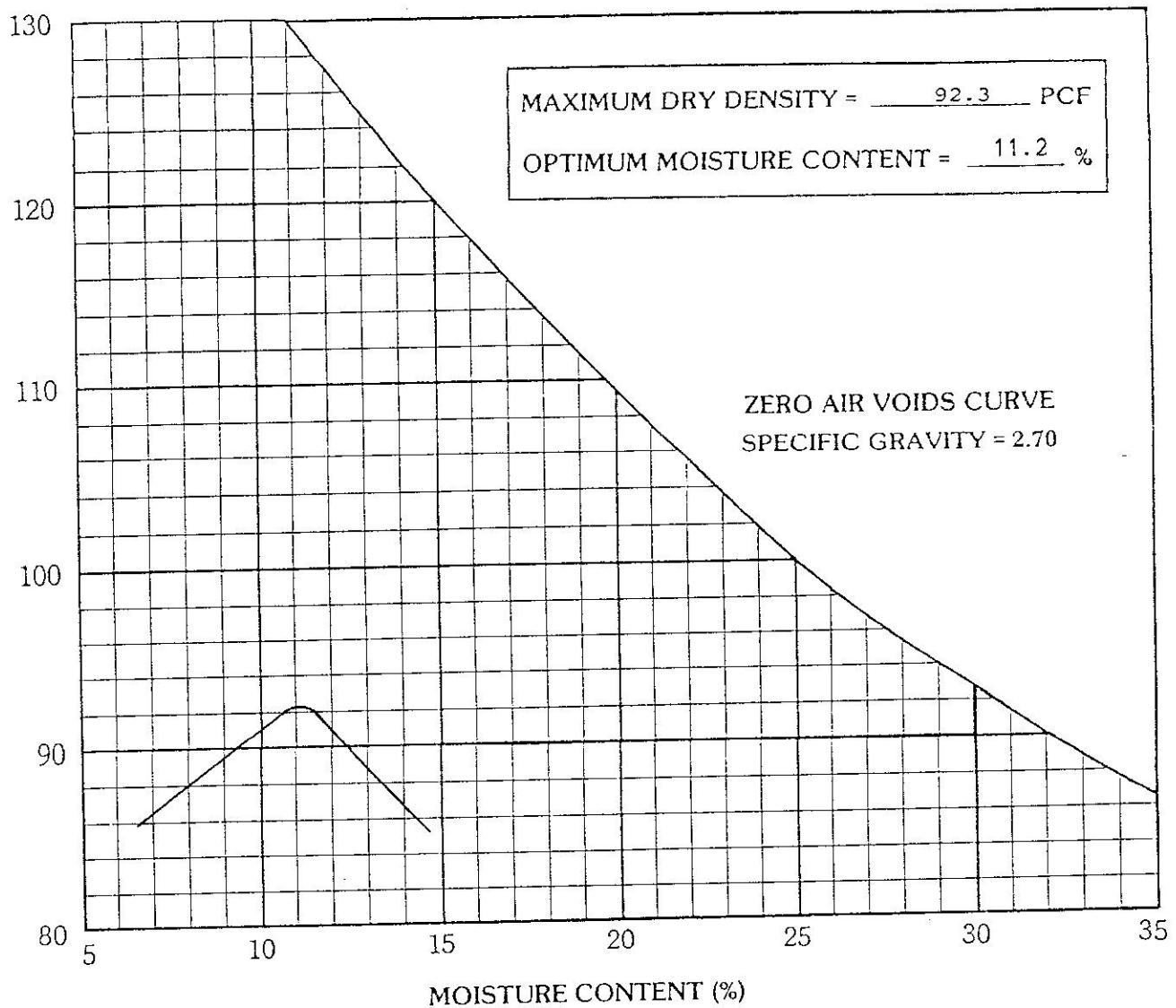
SIEVE ANALYSIS - % PASSING									
1 1/2"	3/4"	3/8"	No. 4	No. 8	No. 16	No. 30	No. 50	No. 100	No. 200
					100	99	96	79	66.4

Project No: 95-1-245
Figure _____

V
&
A

COMPACTION TEST RESULTS

DRY DENSITY (PCF)



SAMPLE LOCATION: TP-4A

SOIL DESCRIPTION: CLAY, very sandy

UNIFIED SOIL CLASSIFICATION: (CL)

AASHTO SOIL CLASSIFICATION:

TEST METHOD: ASTM D-698

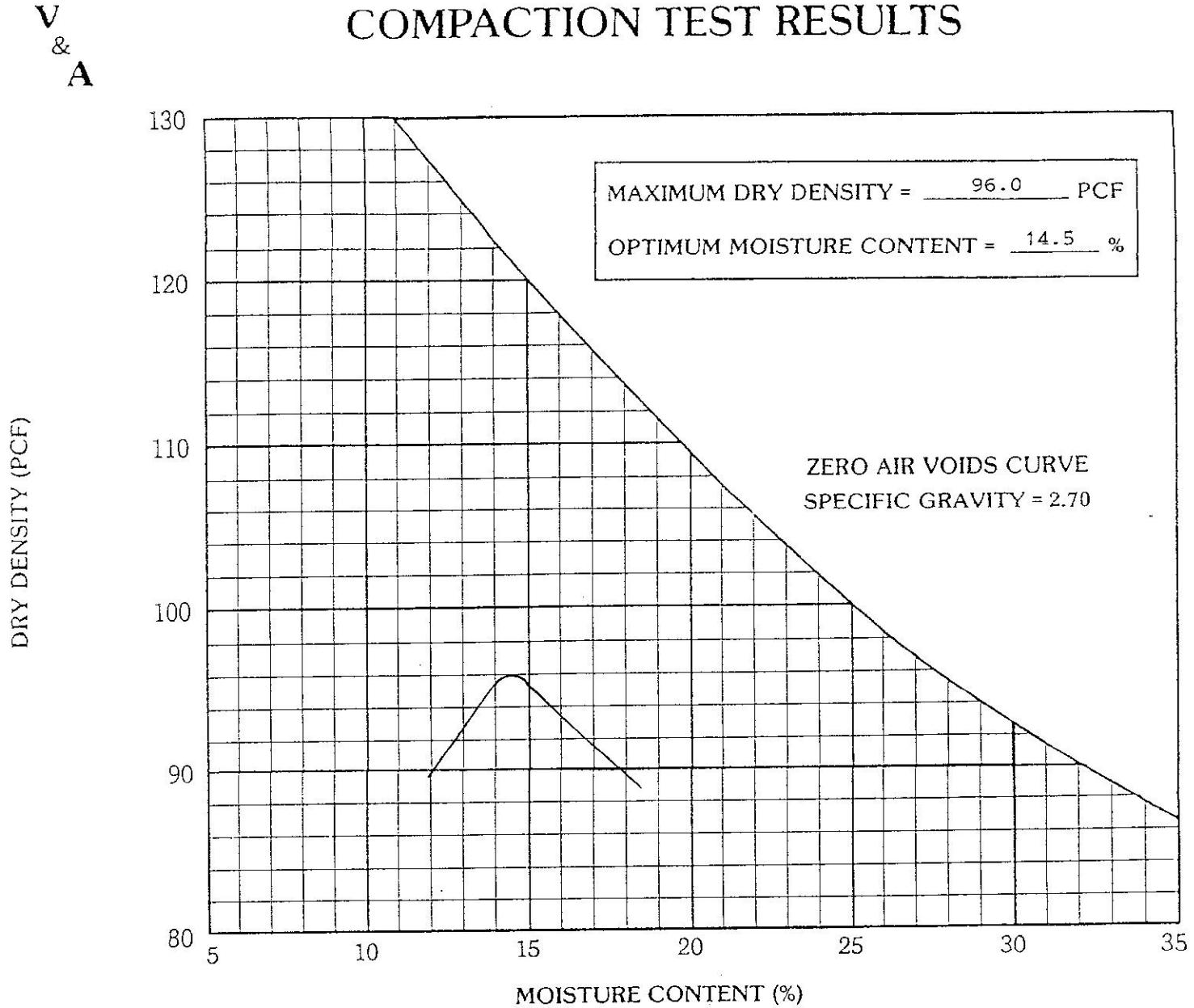
ATTERBERG LIMITS: LL 39 % PI 21 %

SIEVE ANALYSIS - % PASSING									
1 1/2"	3/4"	3/8"	No. 4	No. 8	No. 16	No. 30	No. 50	No. 100	No. 200
				100	99	97	94	80	69.4

Project No: 95-1-245
Figure

V
&
A

COMPACTION TEST RESULTS



SAMPLE LOCATION: TP-6

SOIL DESCRIPTION: SAND, very clayey

UNIFIED SOIL CLASSIFICATION: (SC)

AASHTO SOIL CLASSIFICATION:

TEST METHOD: ASTM D-698

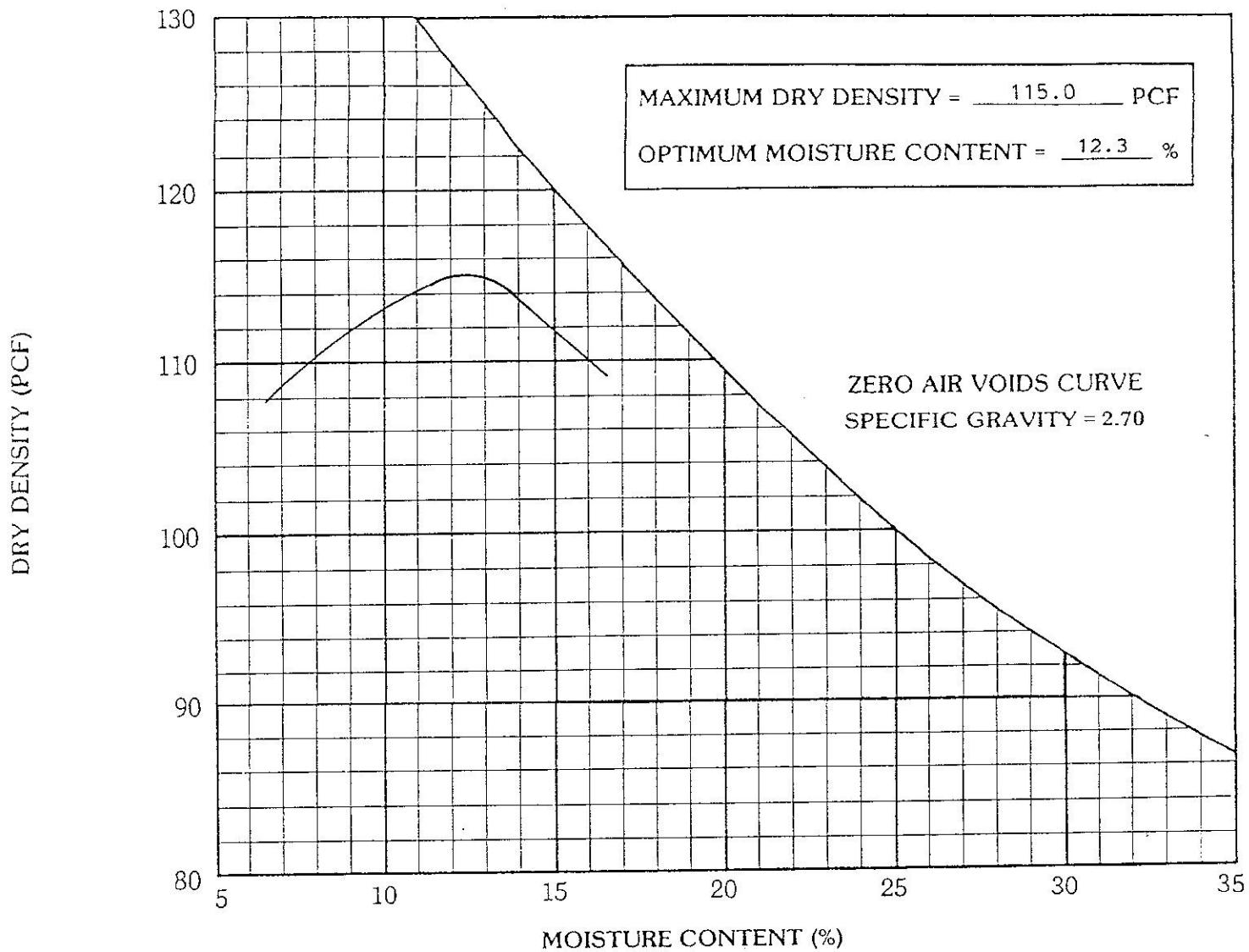
ATTERBERG LIMITS: LL 29 % PI 14 %

SIEVE ANALYSIS - % PASSING									
1 1/2"	3/4"	3/8"	No. 4	No. 8	No. 16	No. 30	No. 50	No. 100	No. 200
		100	99	98	95	93	89	63	48.5

Project No: 95-1-245
Figure _____

V
&
A

COMPACTION TEST RESULTS



SAMPLE LOCATION: TP-7

SOIL DESCRIPTION: CLAY, very sandy

UNIFIED SOIL CLASSIFICATION: (CL)

AASHTO SOIL CLASSIFICATION:

TEST METHOD: ASTM D-698

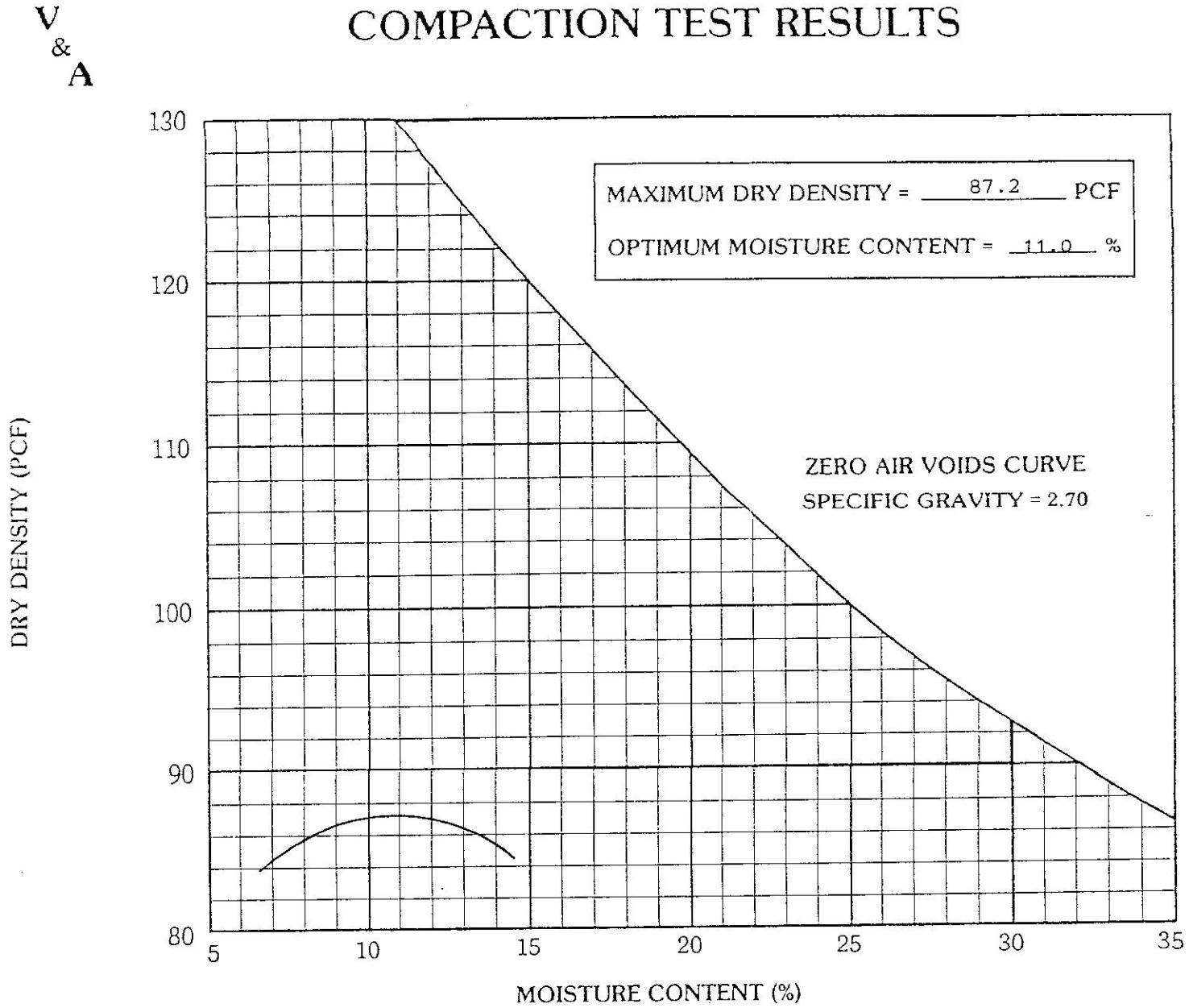
ATTERBERG LIMITS: LL 38 % PI 21 %

SIEVE ANALYSIS - % PASSING									
1 1/2"	3/4"	3/8"	No. 4	No. 8	No. 16	No. 30	No. 50	No. 100	No. 200
				100	99	96	92	76	67.3

Project No: 95-1-245
Figure

V
&
A

COMPACTION TEST RESULTS



SAMPLE LOCATION: TP-8

SOIL DESCRIPTION: CLAY, very sandy

UNIFIED SOIL CLASSIFICATION: (CL)

AASHTO SOIL CLASSIFICATION:

TEST METHOD: ASTM D-698

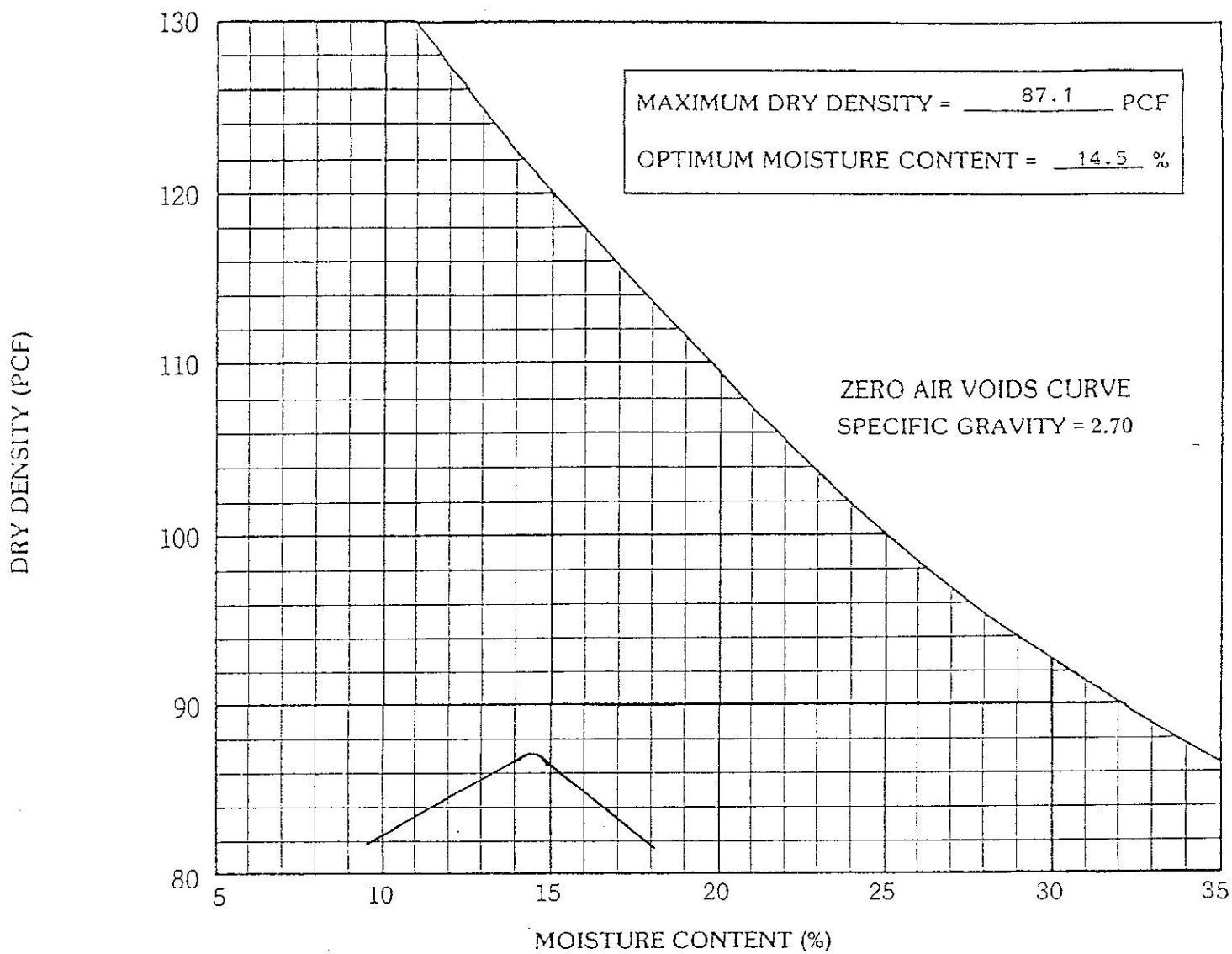
ATTERBERG LIMITS: LL 37 % PI 20 %

SIEVE ANALYSIS - % PASSING									
1 1/2"	3/4"	3/8"	No. 4	No. 8	No. 16	No. 30	No. 50	No. 100	No. 200
				100	99	97	94	78	63.3

Project No: 95-1-245
Figure _____

V
&
A

COMPACTION TEST RESULTS



SAMPLE LOCATION: TP-9

SOIL DESCRIPTION: CLAY, very sandy

UNIFIED SOIL CLASSIFICATION: (CL)

AASHTO SOIL CLASSIFICATION:

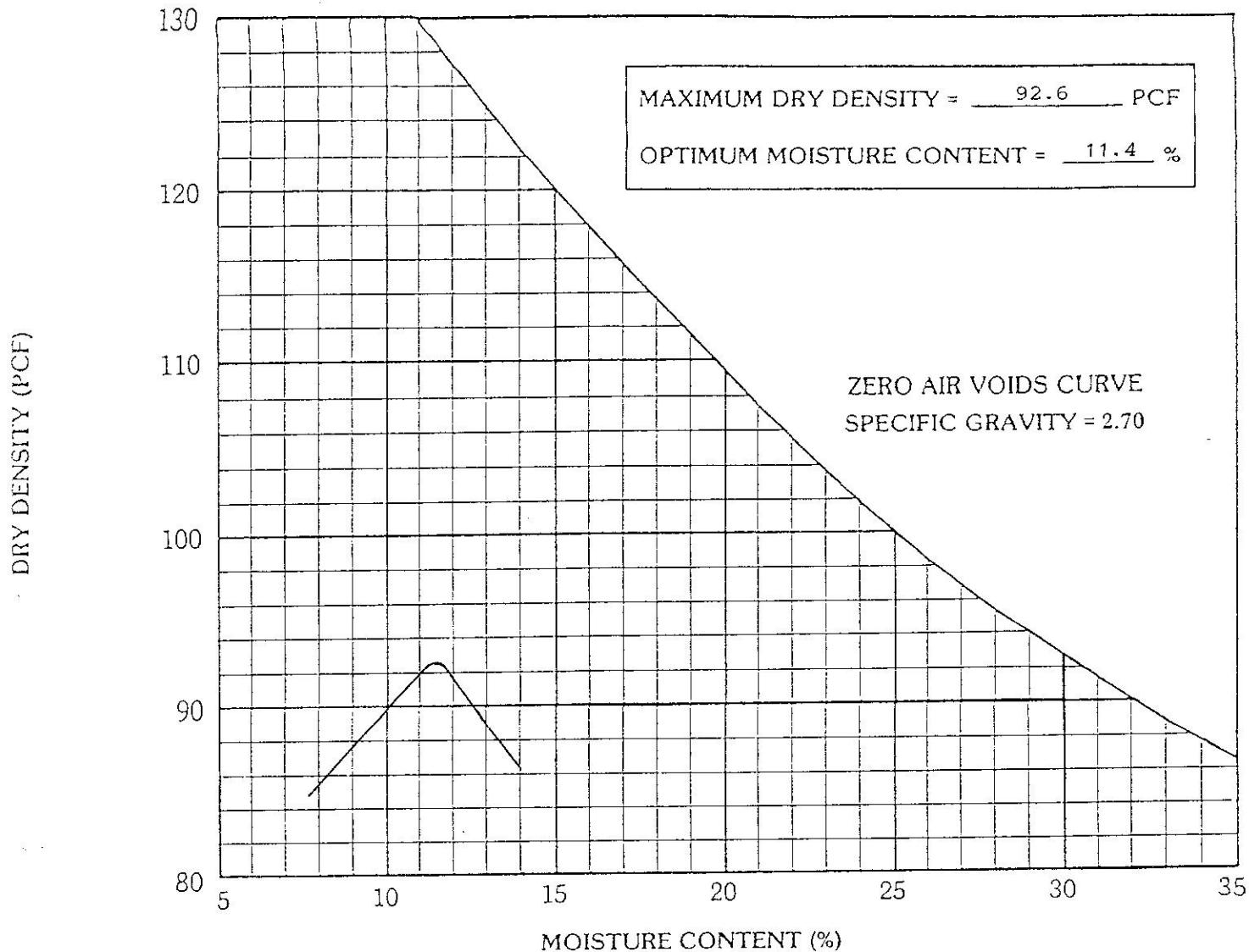
TEST METHOD: ASTM D-698

ATTERBERG LIMITS: LL 44 % PI 26 %

SIEVE ANALYSIS - % PASSING									
1 1/2"	3/4"	3/8"	No. 4	No. 8	No. 16	No. 30	No. 50	No. 100	No. 200
					100	99	97	90	79.5

V
&
A

COMPACTION TEST RESULTS



SAMPLE LOCATION: TP-10

SOIL DESCRIPTION: CLAY, very sandy

UNIFIED SOIL CLASSIFICATION: (CL)

AASHTO SOIL CLASSIFICATION:

TEST METHOD: ASTM D-698

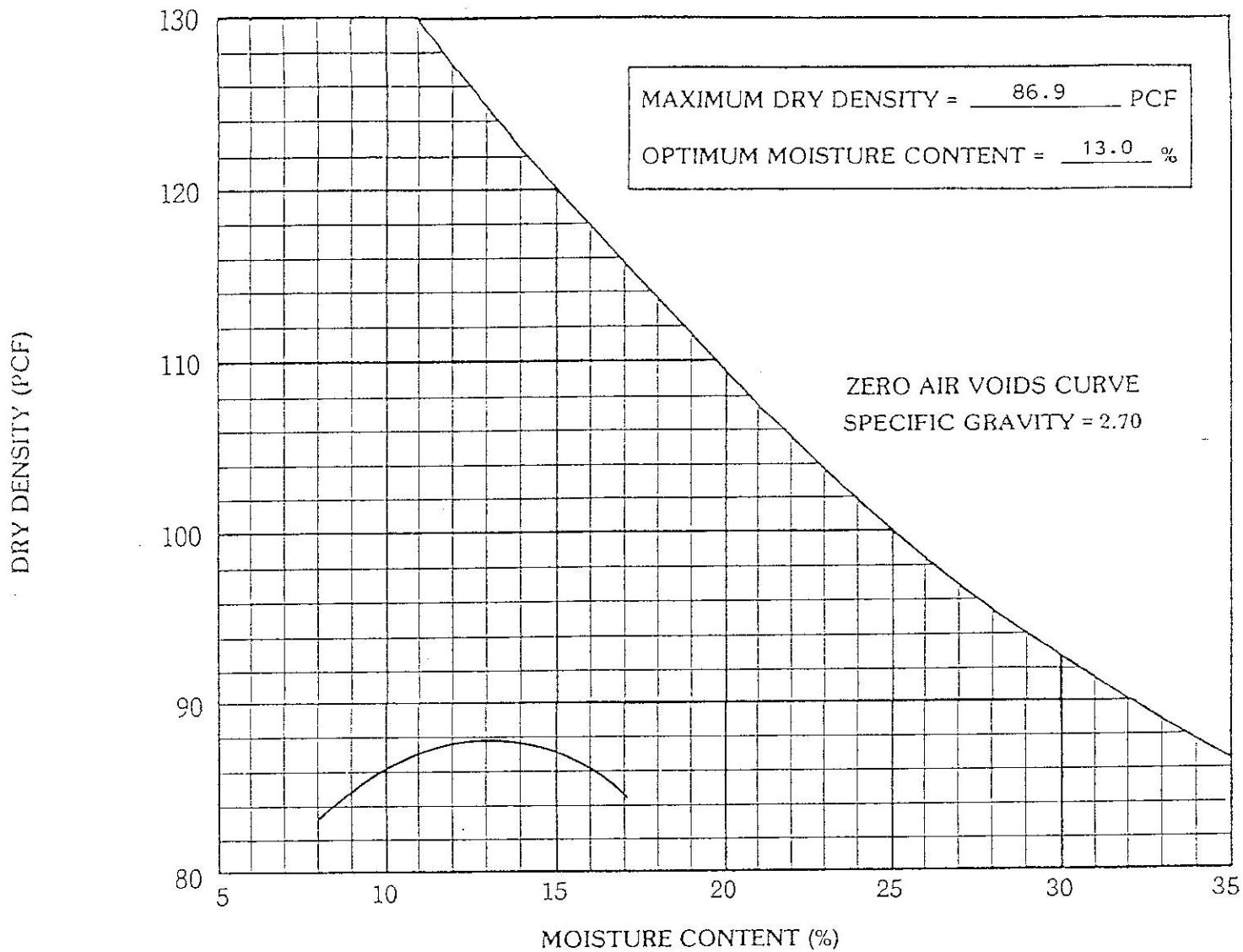
ATTERBERG LIMITS: LL 34 % PI 19 %

SIEVE ANALYSIS - % PASSING									
1 1/2"	3/4"	3/8"	No. 4	No. 8	No. 16	No. 30	No. 50	No. 100	No. 200
			100	99	99	98	95	82	72.8

Project No: 95-1-245
Figure _____

V
&
A

COMPACTION TEST RESULTS



SAMPLE LOCATION: TP-11

SOIL DESCRIPTION: CLAY, sandy

UNIFIED SOIL CLASSIFICATION: (CL)

AASHTO SOIL CLASSIFICATION:

TEST METHOD: ASTM D-698

ATTERBERG LIMITS: LL 44 % PI 25 %

SIEVE ANALYSIS - % PASSING									
1 1/2"	3/4"	3/8"	No. 4	No. 8	No. 16	No. 30	No. 50	No. 100	No. 200
					100	99	97	90	80.3

Project No: 95-1-245
Figure _____

V & A

SUMMARY OF LABORATORY TEST DATA

Test Hole No.	Depth (Feet)	Unified Classification	Natural Dry Density (pcf)	Natural Moisture Content (%)	Atterberg Limits	SIEVE ANALYSIS % PASSING BY WEIGHT							DESCRIPTION					
						L.L.	P.I.	1½"	¾"	¾"	No. 4	No. 8	No. 16	No. 30	No. 50	No. 100	No. 200	
TP1	-	-	-	-	38	18	-	-	-	-	-	100	99	96	79	66.4	CLAY, very sandy	
TP2	-	-	-	-	28	11	-	-	100	99	98	97	96	91	60	45.3	SAND, very clayey	
TP3	-	-	-	-	28	13	-	-	-	100	99	99	98	94	68	51.9	CLAY, very sandy	
TP4A	-	-	-	-	39	21	-	-	-	-	-	100	99	97	94	80	69.4	CLAY, very sandy
TP4B	-	-	-	-	38	21	-	-	-	-	-	100	99	98	97	88	75.7	CLAY, very sandy
TP5	-	-	-	-	30	16	-	-	-	-	-	100	99	98	94	77	65.0	CLAY, very sandy
TP6	-	-	-	-	29	14	-	-	100	99	98	95	93	89	63	48.5	SAND, very clayey	
TP7	-	-	-	-	38	21	-	-	-	-	-	100	99	96	92	76	67.3	CLAY, very sandy
TP8	-	-	-	-	37	20	-	-	-	-	-	100	99	97	94	78	63.3	CLAY, very sandy
TP9	-	-	-	-	44	26	-	-	-	-	-	-	100	99	97	90	79.5	CLAY, very sandy
TP10	-	-	-	-	34	19	-	-	-	-	-	100	99	98	95	82	72.8	CLAY, very sandy
TP11	-	-	-	-	44	25	-	-	-	-	-	-	100	99	97	90	80.3	CLAY, very sandy



SIEVE ANALYSIS TEST RESULTS

<u>Sieve Size</u>	<u>Percent Passing Following Scalping over a 3/4" Sieve</u>	
	<u>WP-1</u>	<u>WP-2</u>
3/4"	100	100
3/8"	94	98
No. 4	91	95
No. 8	89	93
No. 16	87	91
No. 30	81	87
No. 50	43	65
No. 100	23	37
No. 200	17.8	27.7

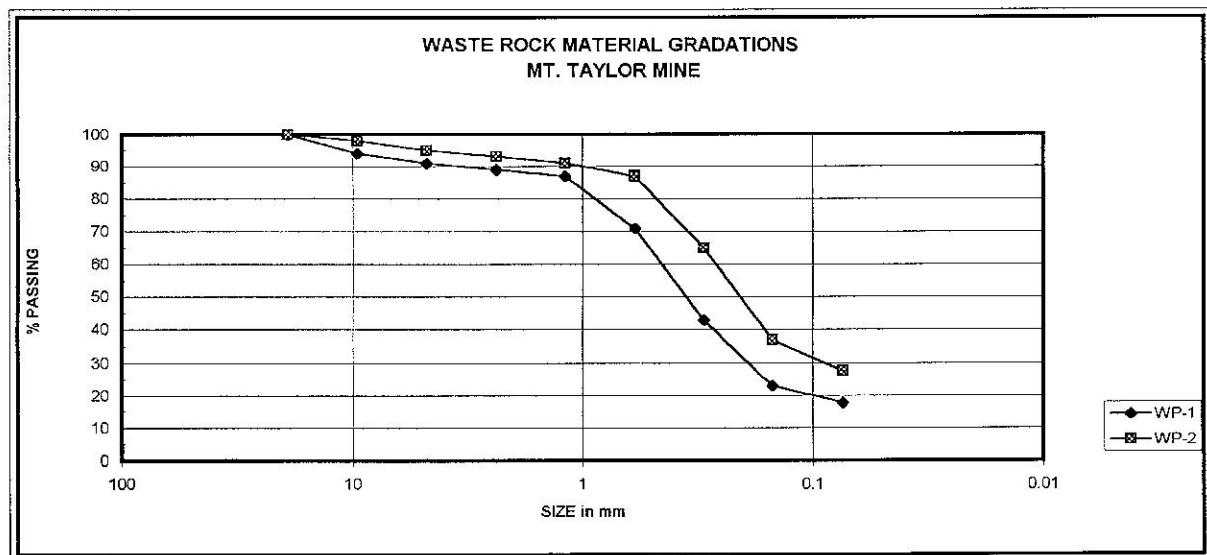
WP-1 + 3/4" material = 2.7% of total sample weight
WP-2 + 3/4" material = 6.8% of total sample weight

WASTE ROCK CHARACTERISTICS
MT. TAYLOR MINE

SIZE GRADATIONS

SIEVE # SIZE in mm % PASSING

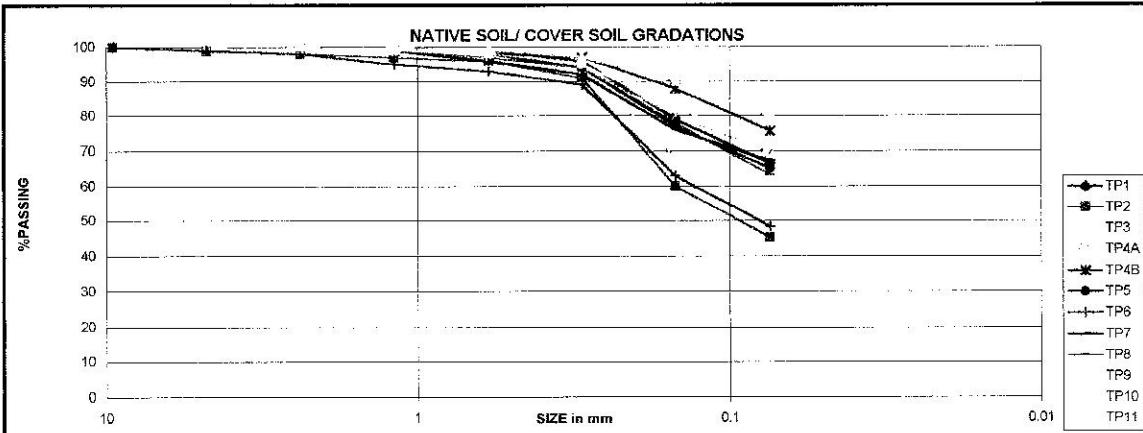
		WP-1	WP-2
3/4"		19.1	100
3/8"		9.52	94
4		4.76	91
8		2.38	89
16		1.19	87
30		0.59	87
50		0.297	65
100		0.149	37
200		0.074	27.7



NATIVE SOIL - COVER SOIL CHARACTERISTICS
MT. TAYLOR MINE

SIZE GRADATIONS

SIEVE #	SIZE in mm	% PASSING FOR SAMPLE #:												
		TP1	TP2	TP3	TP4A	TP4B	TP5	TP6	TP7	TP8	TP9	TP10	TP11	AVERAGE
3/4"	19.1													
3/8"	9.52		100					100						100
4	4.76		99	100				99						99
8	2.38		98	99	100	100	100	98	100	100		100		99
16	1.19	100	97	99	99	99	95	99	99	100	99	100		99
30	0.59	99	96	98	97	98	98	93	96	97	99	98	99	97
50	0.297	96	91	94	94	97	94	89	92	94	97	95	97	94
100	0.149	79	60	68	80	88	77	63	76	78	90	82	90	78
200	0.074	66.4	45.3	51.9	69.4	75.7	65	48.5	67.3	63.3	79.5	72.6	80.3	65
USCS =		CL	SC	CL	CL	CL	SC	CL						
LL =		38	28	28	39	38	30	29	38	37	44	34	44	36
PI =		18	11	13	21	21	16	14	21	20	26	19	25	19
d75 =		0.15	0.2	0.19	0.1	0.06	0.13	0.2	0.14	0.15	0.05	0.09	0.18	0.14



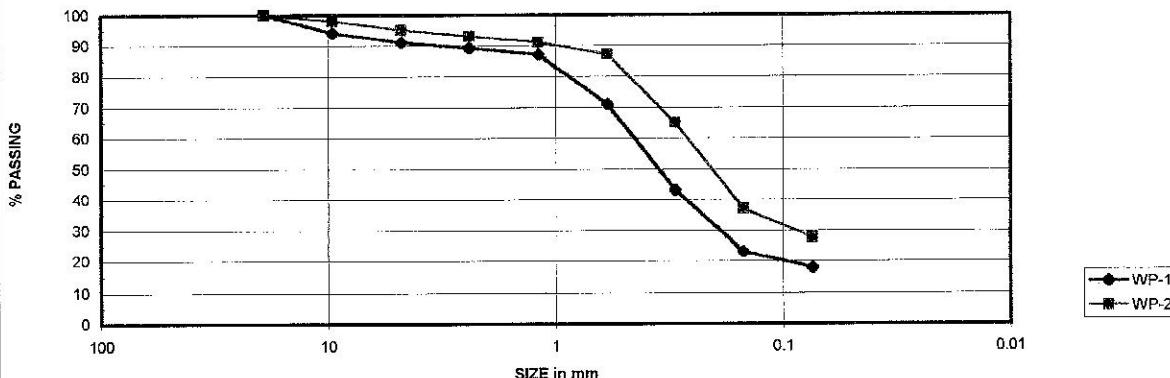
WASTE ROCK CHARACTERISTICS
MT. TAYLOR MINE

SIZE GRADATIONS

SIEVE #	SIZE in mm	% PASSING			
		WP-1	WP-2	AVERAGE	
3/4"	19.1	100	100	100	
3/8"	9.52	94	98	96	
4	4.76	91	95	93	
8	2.38	89	93	91	
16	1.19	87	91	89	
30	0.59	71	87	79	
50	0.297	43	65	54	
100	0.149	23	37	30	
200	0.074	17.8	27.7	23	

d₇₅ = 0.5mm
d₅₀ = 0.3mm

WASTE ROCK MATERIAL GRADATIONS
MT. TAYLOR MINE



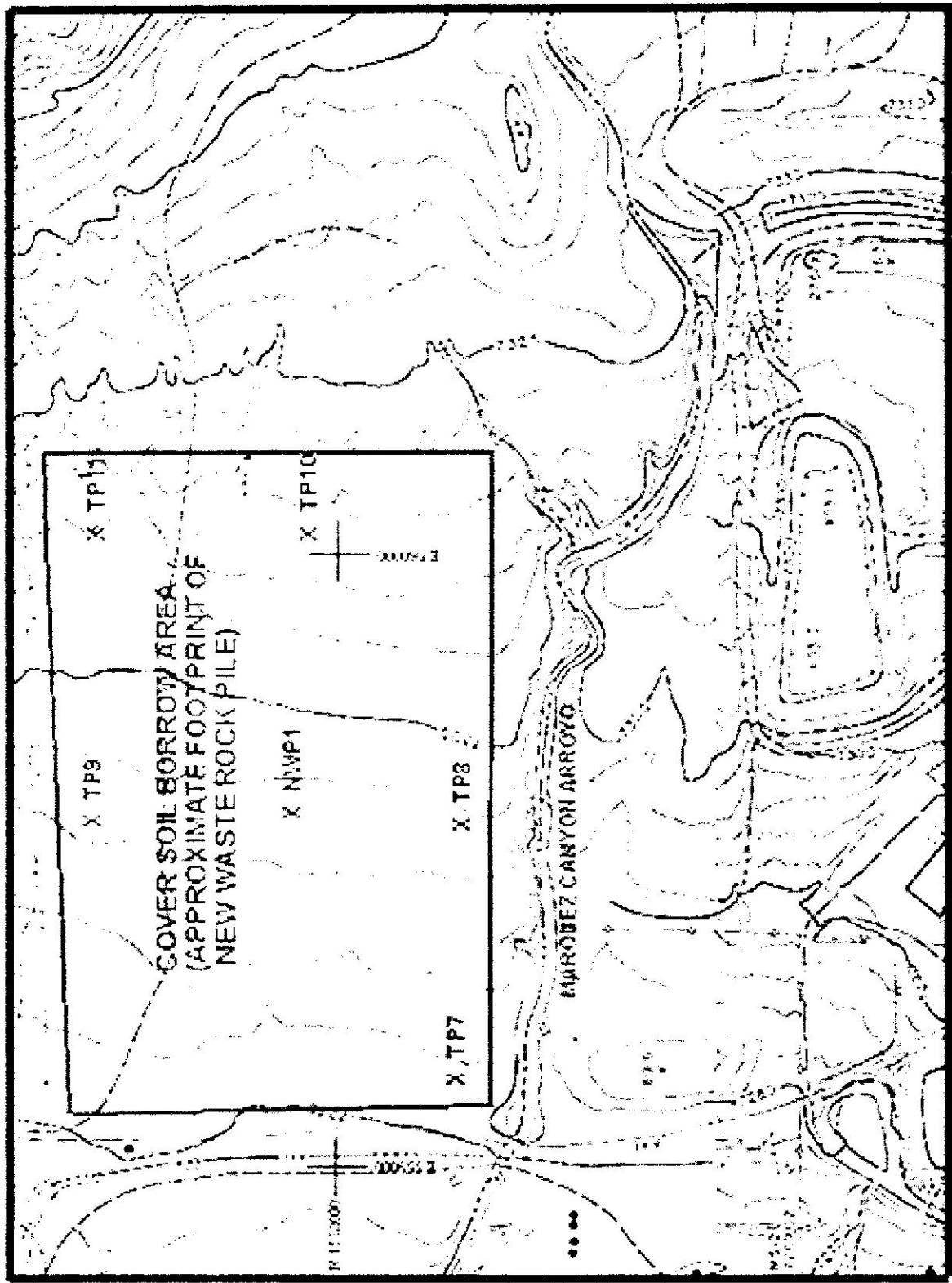


FIGURE A-1 LOCATIONS OF SOIL SAMPLES WITHIN DESIGNATED COVER SOIL BORROW AREA

Inter-Mountain Laboratories, Inc.2506 W. Main Street
Farmington, New Mexico 87401

Client: Rio Grande Resources Corp.
Project: Mt. Taylor Mine
Sample ID: Composite
Lab ID: 0398S05459
Matrix:
Condition:

Date Received: 09/16/98
Date Reported: 09/17/98
Date Sampled: NG

Parameter	Analytical Result	Units		Units
PH	9.2	s.u.		
Solids - Total Dissolved	170	mg/L		
Nitrogen - Nitrate	0.17	mg/L		
Sulfate	11	mg/L		
Arsenic	0.013	mg/L		
Cadmium	<0.004	mg/L		
Chromium	<0.01	mg/L		
Iron	0.92	mg/L		
Lead	<0.05	mg/L		
Molybdenum	0.02	mg/L		
Selenium	0.034	mg/L		
Zinc	0.10	mg/L		

Reference: EPA - "Methods for Chemical Analysis of Water and Wastes (MCAWW)" - EPA/600/4-79-020 - March, 1983.

Reviewed By:



InterMountain Laboratories, Inc.2506 W. Main Street
Farmington, New Mexico 87401

Client: Rio Grande Resources Corp.
Project: Mt. Taylor Mine
Sample ID: WP #3 NW
Lab ID: 0398S04751
Matrix: Soil
Condition: Cool/Intact

Date Received: 08/20/98
Date Reported: 09/17/98
Date Sampled: 08/19/98
Time Sampled: 1000

Parameter	Analytical	Result	Units	Units
Sulfur forms - Total		0.00	%	
Acid Base-TS		0.0	t/kt	
Neutralization Potential (NP)		10	t/kt	
Acid Base Potential-TS		10.2	t/kt	

Reference:

Reviewed By:



Inter-Mountain Laboratories, Inc.2506 W. Main Street
Farmington, New Mexico 87401

Client: Rio Grande Resources Corp.
Project: Mt. Taylor Mine
Sample ID: WP #1 SW
Lab ID: 0398S04749
Matrix: Soil
Condition: Cool/Intact

Date Received: 08/20/98
Date Reported: 09/17/98
Date Sampled: 08/19/98
Time Sampled: 0930

Parameter	Analytical	Result	Units	Units
Sulfur forms - Total		0.01	%	
Acid Base-TS		0.31	t/kt	
Neutralization Potential (NP)		30	t/kt	
Acid Base Potential-TS		29.9	t/kt	

Reference:

Reviewed By:



Inter-Mountain Laboratories, Inc.2506 W. Main Street
Farmington, New Mexico 87401

Client: Rio Grande Resources Corp.
Project: Mt. Taylor Mine
Sample ID: WP #2 Center
Lab ID: 0398S04750
Matrix: Soil
Condition: Cool/Intact

Date Received: 08/20/98
Date Reported: 09/17/98
Date Sampled: 08/19/98
Time Sampled: 0945

Parameter	Analytical Result	Units		Units
Sulfur forms - Total	0.03	%		
Acid Base-TS	0.94	t/kt		
Neutralization Potential (NP)	24	t/kt		
Acid Base Potential-TS	23.1	t/kt		

Reference:

Reviewed By: