



205 Tunnel Drive

719-269-1173

Canon City, CO 81212

719-269-1148 (Fax)

Equal Opportunity Employer

January 20, 2014

Mr. Tim Cazier, P.E.  
Environmental Protection Specialist  
Colorado Division of Reclamation, Mining and Safety  
1313 Sherman Street, Rm. 215  
Denver, CO 80203

Subject: Permit #M-77-193, Amendment 05

RE: DRMS request for quarterly Blast Reports: 2013 Calendar Year, 4<sup>th</sup> quarter summary.

Mr. Cazier,

Listed below is the 2013, 4<sup>th</sup> quarter Blast Report summary, using a quarterly format. All Blast Reports from October 2013 thru December 2013 are attached for review. The date summary of all 2013, 4<sup>th</sup> quarter Blast Reports are as follows:

2013: 4<sup>th</sup> Quarter: October 15, 2013  
October 23, 2013  
November 1, 2013  
November 14, 2013  
November 15, 2013  
December 11, 2013  
December 18, 2013 (#1 of 2 shots)  
December 18, 2013 (#2 of 2 shots)

Should you have any questions concerning this documentation, please contact me.

Randy DiLuzio  
General Manager  
Tezak Heavy Equipment Co., Inc.  
205 Tunnel Dr.  
Canon City, CO. 81212  
[rdiluzio@tezakheavyequipment.com](mailto:rdiluzio@tezakheavyequipment.com)

## BLAST REPORT

Name of Company: T.H.E. Aggregate Source  
 Blaster Name: Randy DiLuzio Date: October 15, 2013  
 Signature of Blaster: \_\_\_\_\_ Permit # 101-5234  
 Location / Address 205 Tunnel Drive, Canon City, Colorado

### WEATHER CONDITIONS

Clear XXX Overcast XXX Temperature 42 °  
 XXX Wind Direction N S W E NW NE SW SE None  
XXX Wind Velocity 0 MPH (no wind)

DETONATIONS	Direction to Nearest Structure	Distance to Nearest Structure
Number <u>1</u>	East West North <u>South</u>	1800ft. (Tezak Office)
Time <u>3:00 PM</u>		

### MATERIAL BLASTED

Type  Granite  Dolomite  Other Cubic Yards: 19,655 39,310 Tons @ 2.0 Density

### BORE HOLES

Diameter: 4" & 6" Number of Holes: 4"=7 & 6"=60 Average Depth of Hole (ft): 4"=7' & 6"=39'  
 Burden: 15' Spacing: 15' Average Stemming (ft) 11' Type of Stemming: Fines

**POWDER FACTOR:** 26,740 lbs. of explosives/19,655 cu.yds of rock = 1.36 lbs/cu.yd.

### 8 MILLISECOND PERIOD

Max Weight Detonated: 891 lbs. Max Number of Holes Detonated: 2

### INITIATION SYSTEM

Electric  Non-Electric XXX Cap and Fuse  Other

### DELAYS

Number: 80 Type: 24', 60' & 80'E-Z DET's.- Periods: 17MS, 25MS & 42MS Surface/350MS In Hole  
17 & 42MS EZTL Delay's

Mats and/or protection used XXXXX  None

Types of Explosives	Description/Brand	Date Code	Amount Used
<b>High Explosives</b>			
	Spartan 450Gr Booster	16JY13J1	67 each
	Primer Cord – 18 Grain	26NO12G1	20 feet
<b>Blasting Agents</b>			
Buckley Powder: Bulk Emulsion (Denver)	Anfo – 50# Bags Titan 1000G Emulsion	07AU13F1 Bulk - Buckley Powder	1 bag (50 lbs. for 4" holes) 26,740 lbs.
<b>Detonators</b>	#8 Fuse Caps	26MA08	2 each
	24 Ft. E-Z DET	29AP13W1	7 each (4" holes)
	60 Ft. E-Z DET	10JU13X1	60 each (6" holes)
	80 Ft. E-Z DET	03SE12X1	2 each (blast initiation to limit primer cord length)
	30Ft-17MS EZTL Delay	13AU12W1	2 each (blast hole/row timing)
	30Ft-42MS EZTL Delay	30JA12X1	9 each (blast hole/row timing)
<b>Other :</b>	Pull Wire Fuse Lighters	506 JN-AK-28	2 each
	Sword Safety Fuse	08-DE-97-G3-0355	4 feet

This was a production shot. This shot was done to create material for processing. All product shot can be inventoried.

Hole No.	Shot No.	Hole Depth	High Explosives(lbs)	Blasting Agent (lbs)	Stemming	Delay (ms)
1	1	39 ft.(average) 6" Holes	1.0 lb. (450Gr booster)	445.5 lbs. (average per/hole)	11 ft. 6" Holes	17, 25 & 42ms surface/350ms in hole.
2						
3						
4						
5						
6						
7						
8						
9						
10						
THRU 60						
61		7 ft. (average)		7 lbs. (average	5.5 ft.	
THRU		4" Holes		per/hole)	4" Holes	
67						

**NOTE:** Seismograph was set-up on the north side of Tezak office at 205 Tunnel Drive to monitor blast on October 15, 2013 @ 3:00p.m. Seismograph being used was a rental unit as owned unit was being repaired/calibrated. Rental seismograph registered .003 in/s @ 32HZ (peak particle velocity) and 105.5 decibels @ N/A HZ (air blast).

## BLAST REPORT

Name of Company: T.H.E. Aggregate Source  
 Blaster Name: Randy DiLuzio Date: October 23, 2013  
 Signature of Blaster: \_\_\_\_\_ Permit # 101-5234  
 Location / Address 205 Tunnel Drive, Canon City, Colorado

WEATHER CONDITIONS			
<input type="checkbox"/> XXXX Clear	<input type="checkbox"/> Overcast	<input type="checkbox"/> XXX Temperature <u>65 °</u>	
<input type="checkbox"/> XXX Wind Direction	N    S    W    E    NW    NE    SW    SE	<u>None</u>	
<input type="checkbox"/> XXX Wind Velocity <u>0 MPH (no wind)</u>			
DETONATIONS		Direction to Nearest Structure	Distance to Nearest Structure
Number <u>1</u>		East West North <u>South</u>	1800ft. (Tezak Office)
Time <u>5:15 PM</u>			
MATERIAL BLASTED			
Type <input checked="" type="checkbox"/> Granite	<input type="checkbox"/> Dolomite	<input type="checkbox"/> Other	Cubic Yards: <u>4,110</u> 8,220 Tons @ 2.0 Density
BORE HOLES			
Diameter: <u>4.5"</u>	Number of Holes: <u>133 (of 133 total holes, 32 were wet holes)</u>		Average Depth of Hole (ft): <u>10.30'</u>
Burden: <u>9'</u>	Spacing: <u>9'</u>	Average Stemming (ft) <u>6.5'</u>	Type of Stemming: <u>Fines</u>
<b>POWDER FACTOR:</b> <u>3,400 lbs. of explosives/4,110 cu.yds of rock = .83 lbs/cu.yd.</u>			
8 MILLISECOND PERIOD			
Max Weight Detonated: <u>26 lbs.</u>		Max Number of Holes Detonated: <u>1</u>	
INITIATION SYSTEM			
<input type="checkbox"/> Electric	<input type="checkbox"/> Non-Electric	<input type="checkbox"/> XXX Cap and Fuse	<input type="checkbox"/> Other
DELAYS			
Number: <u>133</u>	Type: <u>24' E-Z DET's.- 17MS EZTL Delay's</u>	Periods: <u>17MS &amp; 25MS Surface/350MS In Hole</u>	
Mats and/or protection used			XXXXX <input type="checkbox"/> None

Types of Explosives	Description/Brand	Date Code	Amount Used
<b>High Explosives</b>			
	Spartan 450Gr Booster Dyno Unimax 1 1/4" x 8"	16JY13J1 27MA13J1 17JY13J1	32 each (used to ignite Blastex prod.) 18 each (used to ignite Anfo) 83 each (used to ignite Anfo)
	Primer Cord – 18 Grain	26NO12G1	40 feet
<b>Blasting Agents</b>			
	Anfo – 50# Bags	07AU13F1 31JY13F1 11SE13J2	54 bags (2,700 lbs.) 6 bags (300 lbs.) 80 tubes (400 lbs. for 32 wet holes)
	Blastex 3" X 16" (5 lb. tubes)		
<b>Detonators</b>			
	#8 Fuse Caps	26MA08	2 each
	24 Ft. E-Z DET	29AP13W1 24JU13W1	41 each 92 each
	30Ft-17MS EZTL Delay	13AU12W1	12 each
<b>Other :</b>			
	Pull Wire Fuse Lighters	506 JN-AK-28	2 each
	Sword Safety Fuse	08-DE-97-G3-0355	3 feet

**This was a Clean-up shot. This shot was done to level the floor of an existing bench to be used as a future load-out point. This material can be used for processing. All product shot can be inventoried.**

Hole No.	Shot No.	Hole Depth	High Explosives(lbs)	Blasting Agent (lbs)	Stemming	Delay (ms)
1	1	10.3 ft.(average)	.5 lb. Dyno Sick or 1.0 lb. (450Gr booster)	26 lbs. (average per/hole)	6.5' (average/per hole)	17 & 25ms surface/350ms in hole.
2						
3						
4						
5						
6						
7						
8						
9						
10						
THRU						
133	▼	▼	▼	▼	▼	▼

**NOTE:** Seismograph was set-up on the north side of Tezak office at 205 Tunnel Drive to monitor blast on October 23, 2013 @ 5:15p.m. Seismograph being used was a rental unit as owned unit was being repaired/calibrated. Rental seismograph registered .004 in/s @ 200HZ (peak particle velocity) and 103.5 decibels @ 11.5 HZ (air blast).

## BLAST REPORT

Name of Company: T.H.E. Aggregate Source  
 Blaster Name: Randy DiLuzio Date: November 1, 2013  
 Signature of Blaster: *Randy DiLuzio* Permit # 101-5234  
 Location / Address 205 Tunnel Drive, Canon City, Colorado

### WEATHER CONDITIONS

XXXX Clear  Overcast  XXX Temperature 50 °  
 XXX Wind Direction N S W E NW NE SW SE None  
 XXX Wind Velocity 0 - 5 MPH

DETONATIONS	Direction to Nearest Structure	Distance to Nearest Structure
Number <u>1</u>	East West North <u>South</u>	1850ft. (Tezak Office)
Time <u>2:30 PM</u>		

### MATERIAL BLASTED

Type  Granite  Dolomite  Other Cubic Yards: 15,517 31,034 Tons @ 2.0 Density

### BORE HOLES

Diameter: 6" Number of Holes: 45 Average Depth of Hole (ft): 41.4'  
 Burden: 15' Spacing: 15' Average Stemming (ft) 12' Type of Stemming: Fines

**POWDER FACTOR:** 14,030 lbs. of explosives/15,517 cu.yds. of rock = .90 lbs./cu.yd.

### 8 MILLISECOND PERIOD

Max Weight Detonated: 624 lbs. Max Number of Holes Detonated: 2

### INITIATION SYSTEM

Electric  Non-Electric  XXX Cap and Fuse  Other

### DELAYS

Number: 73 Type: 40', 60' & 80' E-Z DET's.- Periods: 25MS & 42MS Surface/350MS In Hole  
42MS EZTL Delay's

Mats and/or protection used XXXXXX  None

Types of Explosives	Description/Brand	Date Code	Amount Used
<b>High Explosives</b>			
	Spartan 450Gr Booster	16JY13J1 04OC13J3	20 each 48 each (double primed wet holes & any hole having over 32' of powder column)
	Primer Cord - 18 Grain	26NO12G1	25 feet
<b>Blasting Agents</b>			
	Anfo - 50# Bags Water Gel - 5" x 30#	31JY13F1 SEP 20 2012 13JU13C1	262 bags (13,100 lbs.) 20 tubes (600 lbs.) ( 9 wet holes) 11 tubes (330 lbs.)
<b>Detonators</b>			
	#8 Fuse Caps	26MA08	2 each
	40 Ft. E-Z DET	24SE12W1	3 each
	60 Ft. E-Z DET	10JU13X1 01JY13X1	2 each 36 each
	80 Ft. E-Z DET	03SE12X1	28 each (1 used for shot initiation)
	30Ft-42MS EZTL Delay	30JA12X1	4 each
<b>Other :</b>			
	Pull Wire Fuse Lighters	506 JN-AK-28	2 each
	Sword Safety Fuse	08-DE-97-G3-0355	3 feet

**This was a production shot. This material can be used for processing. All product shot can be inventoried.**

Hole No.	Shot No.	Hole Depth	High Explosives(lbs.)	Blasting Agent (lbs)	Stemming	Delay (ms)
1	1	41.4 ft.(average)	1.0 lb. (450Gr booster)	312 lbs. (average per/hole)	12' (average/per hole)	25ms & 42ms surface/350ms in hole.
2						
3						
4						
5						
6						
7						
8						
9						
10						
THRU						
45	↓	↓	↓	↓	↓	↓

**NOTE:** Seismograph was set-up on the north side of Tezak office at 205 Tunnel Drive to monitor blast on November 1, 2013 @ 2:30p.m. Seismograph being used was a rental unit as owned unit was being repaired/calibrated. Rental seismograph registered .002 in/s @ 200HZ (peak particle velocity) and 106.5 decibels @ 12.8 HZ (air blast).

## BLAST REPORT

Name of Company: T.H.E. Aggregate Source  
 Blaster Name: Randy DiLuzio Date: November 14, 2013  
 Signature of Blaster: *Randy DiLuzio* Permit # 101-5234  
 Location / Address 205 Tunnel Drive, Canon City, Colorado

WEATHER CONDITIONS			
<input type="checkbox"/> XXX Clear	<input type="checkbox"/> Overcast	<input type="checkbox"/> XXX Temperature <u>50°</u>	
<input type="checkbox"/> XXX Wind Direction	N <u>S</u> W    E    NW    NE    SW    SE    None		
<input type="checkbox"/> XXX Wind Velocity <u>5 – 10 MPH</u>			
DETONATIONS		Direction to Nearest Structure	Distance to Nearest Structure
Number <u>1</u>	East West North <u>South</u>	1900ft. (Tezak Office)	
Time <u>1:07 PM</u>			
MATERIAL BLASTED			
Type <input checked="" type="checkbox"/> Granite	<input type="checkbox"/> Dolomite	<input type="checkbox"/> Other	Cubic Yards: <u>4,089</u> 8,178 Tons @ 2.0 Density
BORE HOLES			
Diameter: <u>3 5/8" &amp; 4 1/2"</u>	Number of Holes: <u>18 – 3 5/8" &amp; 46 – 4 1/2" (64 holes total)</u>	Average Depth of Hole (ft): <u>16'</u>	
Burden: <u>3 5/8" holes=7' 4 1/2" holes=11'</u>	Spacing: <u>3 5/8" holes=7' 4 1/2" holes=11'</u>	Average Stemming (ft) <u>3 5/8" holes =6', 4 1/2" hole = 11'</u>	Type of Stemming: <u>Fines</u>
<b>POWDER FACTOR:</b> <u>3,400 lbs. of explosives/4,089 cu.yds. of rock = .83 lbs./cu.yd.</u>			
8 MILLISECOND PERIOD			
Max Weight Detonated: <u>106 lbs.</u>		Max Number of Holes Detonated: <u>2</u>	
INITIATION SYSTEM			
<input type="checkbox"/> Electric	<input type="checkbox"/> Non-Electric	<input type="checkbox"/> XXX Cap and Fuse	<input type="checkbox"/> Other
DELAYS			
Number: <u>71</u>	Type: <u>40' &amp; 60' E-Z DET's.- 42MS EZTL Delay's</u>	Periods: <u>25MS &amp; 42MS Surface/350MS In Hole</u>	
Mats and/or protection used			XXXXX <input type="checkbox"/> None

Types of Explosives	Description/Brand	Date Code	Amount Used
<b>High Explosives</b>			
	Spartan 450Gr Booster	04OC13J3	46 each (used to prime 4 1/2" holes)
	Dyno Unimax 1 1/4 x 8	17JY13J1	18 each (used to prime 3 5/8" holes)
	Primer Cord – 18 Grain	26NO12G1	50 feet
<b>Blasting Agents</b>			
	Anfo – 50# Bags	31JY13F1	68 bags (3,400 lbs.)
<b>Detonators</b>			
	#8 Fuse Caps	26MA08	2 each
	40 Ft. E-Z DET	24SE12W1	8 each
	60 Ft. E-Z DET	01JY13X1	56 each
	30Ft-42MS EZTL Delay	30JA12X1	7 each
<b>Other :</b>			
	Pull Wire Fuse Lighters	506 JN-AK-28	2 each
	Sword Safety Fuse	08-DE-97-G3-0355	3 feet

**This was a clearing as well as a production shot. 50% of the material shot will be wasted for fill and 50% will be processing. 50% or 4,089 tons can be inventoried.**



Hole No.	Shot No.	Hole Depth	High Explosives(lbs.)	Blasting Agent (lbs)	Stemming	Delay (ms)
1	1	16 ft.(average)	.5 lb.(stick) & 1.0 lb. (450Gr booster)	53 lbs. (average per/hole)	6' to 11' (average/per hole)	25ms & 42ms surface/350ms in hole.
2						
3						
4						
5						
6						
7						
8						
9						
10						
THRU						
64	↓	↓	↓	↓	↓	↓

**NOTE:** Seismograph was set-up on the north side of Tezak office at 205 Tunnel Drive to monitor blast on November 14, 2013 @ 1:07p.m. Seismograph being used was Tezak owned and recently repaired and calibrated. Seismograph registered .005 in/s @ 100HZ (peak particle velocity) and 116.2 decibels @ 11 HZ (air blast).

## BLAST REPORT

Name of Company: T.H.E. Aggregate Source  
 Blaster Name: Randy DiLuzio Date: November 15, 2013  
 Signature of Blaster: *Randy DiLuzio* Permit # 101-5234  
 Location / Address 205 Tunnel Drive, Canon City, Colorado

WEATHER CONDITIONS			
<input type="checkbox"/> XXXX Clear	<input type="checkbox"/> Overcast	<input type="checkbox"/> XXX Temperature <u>55 °</u>	
<input type="checkbox"/> XXX Wind Direction      N      S      W <u>E</u> NW      NE      SW      SE      None			
<input type="checkbox"/> XXX Wind Velocity <u>5 – 10 MPH</u>			
DETONATIONS		Direction to Nearest Structure	Distance to Nearest Structure
Number: <u>1 shot</u>		<u>East</u> West North South	500 ft. (Tezak Office)
Time: <u>3:30pm</u>			
MATERIAL BLASTED			
Type <input checked="" type="checkbox"/> Granite	<input type="checkbox"/> Dolomite	<input type="checkbox"/> Other	Cubic Yards: <u>N/A</u> "Boulders" – <u>13 each</u>
BORE HOLES			
Diameter: <u>4"</u>	Number of Holes: <u>39 (all boulders had multi holes due to size of Boulders)</u>		Average Depth of Hole (ft): <u>3.5'</u>
Burden: <u>N/A</u>	Spacing: <u>N/A</u>	Average Stemming (ft) <u>3.5'</u>	Type of Stemming: <u>3/8" rock</u>
<b>POWDER FACTOR:</b> <u>N/A</u>			
8 MILLISECOND PERIOD			
Max Weight Detonated: <u>6 lbs.</u>		Max Number of Holes Detonated: <u>3</u>	
INITIATION SYSTEM			
<input type="checkbox"/> Electric	<input type="checkbox"/> Non-Electric	<input type="checkbox"/> XXX Cap and Fuse	<input type="checkbox"/> Other
DELAYS			
Number: <u>39</u>	Type: <u>24', 60' &amp; 80' E-Z DET's.</u>	Periods: <u>25MS Surface/350MS In Hole</u>	
Mats and/or protection used			XXXXXX <input type="checkbox"/> None

Types of Explosives	Description/Brand	Date Code	Amount Used
<b>High Explosives</b>			
	Spartan 450GR Booster	04OC13J3	6 each (used in wet vertical holes)
	Dyno Unimax 1 1/4 X 8	17JY13J1	
	Primer Cord – 18 Grain	26NO12G1	17 each (1/2 stick per/hole + 1 hole with 1 full stick)
			30 feet
<b>Blasting Agents</b>			
	ANFO – 50# Bag	31JY13F1	1/2 bag (25 lbs.)
<b>Detonators</b>	#8 Fuse Caps	26MA08	2 each
	24 Ft. E-Z DET	24JU13W1	28 each
	60 Ft. E-Z DET	01JY13X1	8 each
	80 Ft. E-Z DET	03SE12X1	3 each
<b>Other :</b>			
	Pull Wire Fuse Lighters	506 JN-AK-28	2 each
	Sword Safety Fuse	08-DE-97-G3-0355	3 feet

**This shot was performed to split oversized boulders to a more manageable size. Do not inventory.**

Hole No.	Shot No.	Hole Depth	High Explosives(lbs)	Blasting Agent (lbs)	Stemming	Delay (ms)
1	#1	3.5 ft.(average)	.25 lb., .5 lb. & 1 lb. (1/2 & full sticks of Dyno Unimax 1¼x8 and 450GR Boosters)	.75 lbs. (12oz.) ANFO (average per/hole)	3.5 ft.	25ms surface/350ms in hole.
2						
3						
4						
5						
6						
7						
8						
9						
10						
THRU						
39						

**NOTE:** Seismograph was set-up at Tezak Office at 205 Tunnel Dr. to monitor shot. Seismograph registered .10 in/s @ 100HZ (peak particle velocity) and 125 decibels @ 21HZ (air blast).

## BLAST REPORT

Name of Company: T.H.E. Aggregate Source  
 Blaster Name: Randy DiLuzio Date: December 11, 2013  
 Signature of Blaster: \_\_\_\_\_ Permit # 101-5234  
 Location / Address 205 Tunnel Drive, Canon City, Colorado

WEATHER CONDITIONS			
<input type="checkbox"/> XXX Clear	<input type="checkbox"/> Overcast	<input type="checkbox"/> XXX Temperature <u>39 °</u>	
<input type="checkbox"/> XXX Wind Direction	N S W E NW NE SW SE	<u>None</u>	
<input type="checkbox"/> XXX Wind Velocity <u>0 MPH</u>			
DETONATIONS		Direction to Nearest Structure	Distance to Nearest Structure
Number <u>1</u>		East West North <u>South</u>	1850ft. (Tezak Office)
Time <u>3:36 PM</u>			
MATERIAL BLASTED			
Type <input checked="" type="checkbox"/> Granite <input type="checkbox"/> Dolomite <input type="checkbox"/> Other	Cubic Yards: <u>13,269</u>	26,538 Tons @ 2.0 Density	
BORE HOLES			
Diameter: <u>6"</u>	Number of Holes: <u>41</u>	Average Depth of Hole (ft): <u>41'</u>	
Burden: <u>15'</u>	Spacing: <u>15'</u>	Average Stemming (ft) <u>10'</u>	Type of Stemming: <u>Fines</u>
<b>POWDER FACTOR:</b> 13,305 lbs. of explosives/13,269 cu.yds. of rock = 1.0 lbs./cu.yd.			
8 MILLISECOND PERIOD			
Max Weight Detonated: <u>650 lbs.</u>		Max Number of Holes Detonated: <u>2</u>	
INITIATION SYSTEM			
<input type="checkbox"/> Electric	<input type="checkbox"/> Non-Electric	<input type="checkbox"/> XXX Cap and Fuse	<input type="checkbox"/> Other
DELAYS			
Number: <u>53</u>	Type: <u>60' &amp; 80' E-Z DET's.- 42MS EZTL Delay's</u>	Periods: <u>25MS &amp; 42MS Surface/350MS In Hole</u>	
Mats and/or protection used		<u>XXXXX</u> <input type="checkbox"/> None	

Types of Explosives	Description/Brand	Date Code	Amount Used
<b>High Explosives</b>			
	Spartan 450Gr Booster	04OC13J3	44 each(20 wet holes, 4 w/double boosters)
	Primer Cord – 18 Grain	12OC13J3 26NO12G1	1 each 10 feet
<b>Blasting Agents</b>			
	Anfo – 50# Bags	31JY13F1 04OC13F1	63.5 bags (3,175 lbs.) 172 bags (8,600 lbs.)
	Water Gel – 5" x 30#	21AU13C3 26SE13C3	39 tubes (1,170 lbs.)(20 wet holes) 12 tubes (360 lbs.)
<b>Detonators</b>	#8 Fuse Caps	26MA08	2 each
	60 Ft. E-Z DET	23SE13X1	43 each
	80 Ft. E-Z DET	03SE12X1	2 each
	30Ft-42MS EZTL Delay	30JA12X1	8 each
<b>Other :</b>	Pull Wire Fuse Lighters	506 JN-AK-28	2 each
	Sword Safety Fuse	08-DE-97-G3-0355	4 feet
	Shock Tube (Trunkline)	02SE13W1	250 feet

**This was a production shot. This material can be used for processing. All product shot can be inventoried.**

Hole No.	Shot No.	Hole Depth	High Explosives(lbs.)	Blasting Agent (lbs)	Stemming	Delay (ms)
1	1	41 ft.(average)	1.0 lb. (450Gr booster)	325 lbs. (average per/hole)	10' (average/per hole)	25ms & 42ms surface/350ms in hole.
2						
3						
4						
5						
6						
7						
8						
9						
10						
THRU						
41	▼	▼	▼	▼	▼	▼

**NOTE:** Seismograph was set-up on the north side of Tezak office at 205 Tunnel Drive to monitor blast on December 11, 2013 @ 3:36p.m. Seismograph registered .005 in/s @ N/A HZ (peak particle velocity) and 131.9 decibels @ 13.0 HZ (air blast).

Shot # 1 of 2

**BLAST REPORT**

Name of Company: T.H.E. Aggregate Source  
 Blaster Name: Randy DiLuzio Date: December 18, 2013  
 Signature of Blaster: [Signature] Permit # 101-5234  
 Location / Address 205 Tunnel Drive, Canon City, Colorado

WEATHER CONDITIONS			
<input type="checkbox"/> XXX Clear	<input type="checkbox"/> Overcast	<input type="checkbox"/> XXX Temperature <u>45°</u>	
<input type="checkbox"/> XXX Wind Direction	N S W E NW NE SW SE	<u>None</u>	
<input type="checkbox"/> XXX Wind Velocity <u>0 MPH</u>			
DETONATIONS		Direction to Nearest Structure	Distance to Nearest Structure
Number <u>1</u>		East West North <u>South</u>	1700ft. (Tezak Office)
Time <u>10:11 AM</u>			
MATERIAL BLASTED			
Type <input checked="" type="checkbox"/> Granite	<input type="checkbox"/> Dolomite	<input type="checkbox"/> Other	Cubic Yards: <u>8,000</u> 16,000 Tons @ 2.0 Density
BORE HOLES			
Diameter: <u>6"</u>	Number of Holes: <u>24</u>	Average Depth of Hole (ft): <u>40'</u>	
Burden: <u>15'</u>	Spacing: <u>15'</u>	Average Stemming (ft) <u>11'</u>	Type of Stemming: <u>3/4" rock</u>
<b>POWDER FACTOR:</b> 11,000 lbs. of explosives/8,000 cu.yds. of rock = 1.375 lbs./cu.yd.			
8 MILLISECOND PERIOD			
Max Weight Detonated: <u>916 lbs.</u>		Max Number of Holes Detonated: <u>2</u>	
INITIATION SYSTEM			
<input type="checkbox"/> Electric	<input type="checkbox"/> Non-Electric	<input type="checkbox"/> XXX Cap and Fuse	<input type="checkbox"/> Other
DELAYS			
Number: <u>24</u>	Type: <u>60' E-Z DET's.- 17MS &amp; 42MS EZTL Delay's</u>	Periods: <u>17MS, 25MS &amp; 42MS Surface/350MS In Hole</u>	
Mats and/or protection used			<u>XXXXXX</u> <input type="checkbox"/> None

Types of Explosives	Description/Brand	Date Code	Amount Used
<b>High Explosives</b>			
	Spartan 450Gr Booster Primer Cord – 18 Grain	12OC13J3 26NO12G1	24 each (majority were wet holes) 20 feet
<b>Blasting Agents</b>			
Buckley Powder – Bulk Emulsion	Titan 1000 - Bulk Emulsion	Bulk Product – delivered by Buckley on bulk truck.	12,000 lbs. (This was part of a total order of 32,920 lbs. due to 2 shot's being initiated on the same day)
<b>Detonators</b>	#8 Fuse Caps	26MA08	2 each
	60 Ft. E-Z DET	23SE13X1 07OC13X1	7 each (one used for shot initiation) 18 each
	30Ft-17MS EZTL Delay	13AU12W1	3 each
	30Ft-42MS EZTL Delay	30JA12X1	4 each
<b>Other :</b>	Pull Wire Fuse Lighters	506 JN-AK-28	2 each
	Sword Safety Fuse	08-DE-97-G3-0355	3 feet

This was a production shot. This material can be used for processing. All product shot can be inventoried.

Hole No.	Shot No.	Hole Depth	High Explosives(lbs.)	Blasting Agent (lbs)	Stemming	Delay (ms)
1	1	40 ft.(average)	1.0 lb. (450Gr booster)	458 lbs. (average per/hole)	11' (average/per hole)	17ms, 25ms & 42ms surface/350ms in hole.
2						
3						
4						
5						
6						
7						
8						
9						
10						
THRU						
24	↓	↓	↓	↓	↓	↓

**NOTE:** Seismograph was set-up on the north side of Tezak office at 205 Tunnel Drive to monitor blast on December 18, 2013 @ 10:11a.m. Seismograph registered .005 in/s @ N/A HZ (peak particle velocity) and 127.6 decibels @ 8.3 HZ (air blast).

Shot # 2 of 2

**BLAST REPORT**

Name of Company: T.H.E. Aggregate Source  
 Blaster Name: Randy DiLuzio Date: December 18, 2013  
 Signature of Blaster: Randy DiLuzio Permit # 101-5234  
 Location / Address 205 Tunnel Drive, Canon City, Colorado

WEATHER CONDITIONS			
<input type="checkbox"/> XXX Clear	<input type="checkbox"/> Overcast	<input type="checkbox"/> XXX Temperature <u>57 °</u>	
<input type="checkbox"/> XXX Wind Direction	N S W E NW NE SW SE	<u>None</u>	
<input type="checkbox"/> XXX Wind Velocity <u>0 MPH</u>			
DETONATIONS		Direction to Nearest Structure	Distance to Nearest Structure
Number <u>1</u>		East West North <u>South</u>	850ft. (Tezak Shop)
Time <u>2:38 PM</u>			
MATERIAL BLASTED			
Type <input checked="" type="checkbox"/> Granite	<input type="checkbox"/> Dolomite	<input type="checkbox"/> Other	Cubic Yards: <u>18,900</u> 37,800 Tons @ 2.0 Density
BORE HOLES			
Diameter: <u>6"</u>	Number of Holes: <u>71</u>	Average Depth of Hole (ft): <u>32'</u>	
Burden: <u>15'</u>	Spacing: <u>15'</u>	Average Stemming (ft) <u>12'</u>	Type of Stemming: <u>3/4" rock</u>
<b>POWDER FACTOR:</b> 21,500 lbs. of explosives/18,900 cu.yds. of rock = 1.14 lbs./cu.yd.			
8 MILLISECOND PERIOD			
Max Weight Detonated: <u>606 lbs.</u>		Max Number of Holes Detonated: <u>2</u>	
INITIATION SYSTEM			
<input type="checkbox"/> Electric	<input type="checkbox"/> Non-Electric	<input type="checkbox"/> XXX Cap and Fuse	<input type="checkbox"/> Other
DELAYS			
Number: <u>75</u>	Type: <u>60' E-Z DET's.- 42MS EZTL Delay's</u>	Periods: <u>25MS &amp; 42MS Surface/350MS In Hole</u>	
Mats and/or protection used			<u>XXXXXX</u> <input type="checkbox"/> None

Types of Explosives	Description/Brand	Date Code	Amount Used
<b>High Explosives</b>			
	Spartan 450Gr Booster Primer Cord – 18 Grain	12OC13J3 26NO12G1	71 each(majority were wet holes) 30 feet
<b>Blasting Agents</b>			
Buckley Powder – Bulk Emulsion	Titan 1000 - Bulk Emulsion  ANFO - #50 Bag Water Gel – 5" X 30#	Bulk Product – delivered by Buckley on bulk truck. 11NO13F1 26SE13C3	20,920 lbs.(This was part of a total order of 32,920 lbs. due to 2 shot's being initiated on the same day) 11 bags (550 lbs.) 1 tube (30 lbs.)
<b>Detonators</b>	#8 Fuse Caps	26MA08	2 each
	60 Ft. E-Z DET	07OC13X1	71 each
	30Ft-42MS EZTL Delay	28OC13X1	4 each
<b>Other :</b>	Pull Wire Fuse Lighters Sword Safety Fuse	506 JN-AK-28 08-DE-97-G3-0355	2 each 3 feet

**This was a production shot. This material can be used for processing. All product shot can be inventoried.**

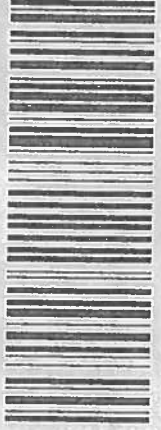


Hole No.	Shot No.	Hole Depth	High Explosives(lbs.)	Blasting Agent (lbs)	Stemming	Delay (ms)
1	1	32 ft.(average)	1.0 lb. (450Gr booster)	303 lbs. (average per/hole)	12'(average/per hole)	25ms & 42ms surface/350ms in hole.
2						
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4						
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7						
8						
9						
10						
THRU						
71						
	▼	▼	▼	▼	▼	▼

**NOTE:** Seismograph was set-up at Tezak's shop at 201 Tunnel Drive to monitor blast on December 18, 2013 @ 2:38 PM. Seismograph registered .005 in/s @ 100 HZ (peak particle velocity) and 130.0 decibels @ 1.0 HZ (air blast).

OF THE RETURN ADDRESS, FOLD AT DOTTED LINE

**CERTIFIED MAIL™**



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205 Tunnel Drive • Canon City, CO 81212

Mr. Tim Cazier, P. E.  
Environmental Protection Specialist  
Colo Division of Reclamation, Mining & Safety  
1313 Sherman Street, RM. 215  
Denver, CO 80203

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