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, 4th quarter summary.

Mr. Cazier,

Listed below is the 2013, 4th 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, 4th quarter Blast Reports are as follows:

2013: 4th 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

Name of Company: T.H.E. Aggregate Source

Blaster Name: Randy Di Luzio Date: October 1 Date: October 15, 2013 Signature of Blaster: Permit # 205 Tunnel/Drive, Carron City, Colorado Permit # 101-5234 Location / Address

	WEAT	HER CONDITION	IS			
│ □ Clear	□XXX Ove	reast				40.0
☐ XXX Wind Direction	N S W	E NW	NE	SW	SE None	rature 42 °
□XXX Wind Velocity 0			IVE	000	OL NOILE	
DETONATIO		Nearest Structure	9	Distan	ce to Nearest Stru	ıcture
Number 1	East West N	North South			00ft. (Tezak Office	
Time 3:00 PM					oon. (Tezak Office	-)
	MAT	ERIAL BLASTED				
Type ☑ Granite ☐ [olomite □Other	Cubic Yards: 19,	655	39,31	7 Tons @ 2.0 Den	sity
	E	BORE HOLES				
Diameter: 4" & 6"	Number of Holes	s: 4"=7 & 6"=60	Avera	ge Depti	of Hole (ft):4"=7	" & 6"=39"
Burden: 15'	Spacing: 15'	Average Stemmi	ng (ft) 1	1'	Type of Stemmi	
POWDER FACTOR:	26,740 lbs. of explosives/19	,655 cu.yds of rock	= 1.36 I	bs/cu.yd		
		ISECOND PERIO				
Max Weight Detonated:	891 lbs.	Max Numb	er of Ho	oles Det	onated: 2	
	INIT	IATION SYSTEM				
☐ Electric [□ Non-Electric	□XXX Cap a	and Fus	e		Other
		DELAYS				
	pe: 24', 60' & 80'E-Z DET': & 42MS EZTL Delay's	s Periods: 17M	IS, 25M	S & 42M	S Surface/350MS	In Hole
Mats and/or protection	uead			VVVV	/Cl N	
mais and/or protection	useu			****	□ None	
Types of Explosives	Description/Brand	Date Code		Amour	it Usad	
High Explosives				Amount osed		
	Spartan 450Gr Booster	16JY13J1		67 eacl	1	
	Primer Cord – 18 Grain	26NO12G1		20 feet		
Blasting Agents						
Developed Developed Devile	Anfo – 50# Bags	07AU13F1			50 lbs. for 4" holes)
Buckley Powder: Bulk	Titan 1000G Emulsion	Bulk - Buckley Pov	wder	26,740	lbs.	
Emulsion (Denver) Detonators	#8 Fuse Caps	26MA08		0 1-		
Detoliators	24 Ft. E-Z DET	29AP13W1		2 each	(A"	
	60 Ft. E-Z DET	10JU13X1			(4" holes)	
	80 Ft. E-Z DET	03SE12X1		60 each (6" holes)		imit primar
		- OOOE IZAT		2 each (blast initiation to limit prime cord length)		mur bullet
	30Ft-17MS EZTL Delay	ZTL Delay 13AU12W1		2 each (blast hole/row timing)		ina)
	30Ft-42MS EZTL Delay	30JA12X1			(blast hole/row tim	
Other:	Pull Wire Fuse Lighters	506 JN-AK-28		2 each		
	Sword Safety Fuse	08-DE-97-G3-035	5	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	+	V				

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).

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 Prive, Canon City, Colorado

		WEATHER CONDITIONS							
		WEA	INER	COMBILIO	ИЭ				
□XXXClear		□ Overca					XX Ten	nperature <u>65°</u>	
☐ XXX Wind Direction		S W	1	E NW	NE	SW	SE	None	
□XXX Wind Velocit	y 0 MPH (no wind								
DETONAT	IONS			arest Structu	re	Distan	ce to N	learest Structu	re
Number 1		East West	North	<u>South</u>		18	300ft. (7	Γezak Office)	
Time 5:15 PM				_					
				AL BLASTE					
Type ☑ Granite □	Dolomite 🗆	Other	Cu	bic Yards: 4,	110	8,220	Tons (@ 2.0 Density	
				E HOLES					
Diameter: 4.5"		nber of Hol			Avera	ge Dept	h of Ho	ole (ft): 10.30'	
		I holes, 32							
Burden: 9'	Spacing: 9'			erage Stemm			Туре	of Stemming:	Fines
POWDER FACTO	R: 3,400 lbs. of e	xplosives/4,	110 cı	uyds of rock =	.83 lbs/d	cu.yd.			
		8 MIL	LISE	COND PERI		· · · ·			
Max Weight Detonate	ed: 26 lbs.			Max Num		oles Det	onated	l: 1	
			LIAT!	ON SYSTEM					
□ Electric	□ Non-Elec	ctric		□XXX Cap	and Fus	se		☐ Othe	r
			DE	ELAYS					
	Type: 24' E-Z DI	ET's 17MS	3	Periods: 17	MS & 25	MS Surf	ace/35	0MS In Hole	
	EZTL Delay's								
Mats and/or protection	on used					XXXX	XD No	one	
Types of Explosives	Description	/Brand	Da	te Code		Amou	nt Use	<u> </u>	
High Explosives			-						
	Spartan 450			JY13J1				to ignite Blaste	x prod.)
	Dyno Unima	X 1 ¼" X 8"		27MA13J1				to ignite Anfo)	
			17,	JY13J1		83 eac	h (used	to ignite Anfo)	
	Primer Cord	. 19 Grain	261	NO12G1		40 feet			
Blasting Agents	Trimer Cord	- 10 Grain	201	NO 12G I		40 1661			
Didoting Agonto	Anfo – 50# E	Rans	07/	AU13F1		54 had	s (2,70	O lbs \	
Amo = 50		Jugo		JY13F1			s (2,70 s (300		
Blastex 3")		16" (5 lb.		SE13J2				lbs. for 32 wet h	noles)
	tubes)	(- (-				00 (00)	50 (100	155. 101 02 WCC1	10103)
Detonators	#8 Fuse Car	os	261	MA08		2 each			
	24 Ft. E-Z D			AP13W1		41 eac			
			24.	JU13W1		92 eac	h		
	30Ft-17MS I	EZTL Delay	13/	AU12W1		12 eac	h		
041									
Other:	Pull Wire Fu	se Liahters	- 1.50€	3 JN-AK-28		2 each			

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.

08-DE-97-G3-0355

3 feet

Sword Safety Fuse

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	▼	*	▼	*	▼	*
					4	
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).

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

WEATHER CONDITIONS

		☐ Overcas	□XXXClear □ Overcast				□XXX Temperature 50 °			
☐ XXX Wind Direction		S W	E	NW	NE	SW	SE	None		
□XXX Wind Velocity	0 – 5 MPH									
DETONATIO	ONS	Direction to	Near	st Structur	е	Distan	ce to N	Nearest S	Structure	
Number 1 East West			North S	outh		18	850ft. (Tezak Of	fice)	
Time 2:30 PM	M					,				
	,	MAT	ERIAL	BLASTE)					
Type ☑ Granite □	Dolomite 🛘	Other	Cubi	c Yards: 15	,517	31,03	4 Tons	@ 2.0 D	ensity	
				HOLES						
Diameter: 6"		nber of Holes		-			h of He	ole (ft): 4	1.4'	
Burden: 15'	Spacing: 15	,	Aver	age Stemm	ing (ft) 1	2'	Туре	of Sten	nming: Fines	
POWDER FACTOR:	POWDER FACTOR: 14,030 lbs. of explosives/15,517 cu.yds. of rock = .90 lbs./cu.yd.									
8 MILLISECOND PERIOD										
Max Weight Detonated	Max Weight Detonated: 624 lbs. Max Number of Holes Detonated: 2									
INITIATION SYSTEM										
□ Electric	□ Non-Elec	☐ Electric ☐ Non-Electric ☐XXX Cap and Fuse ☐ Other					Other			
DELAYS										
			DEL							
	ype: 40', 60' &						ace/35		lole	
4:	2MS EZTL Dela			AYS		MS Surf		0MS In H	Hole	
	2MS EZTL Dela			AYS					Hole	
4:	2MS EZTL Dela	ay's	's F	AYS		MS Surf		0MS In F	Hole	
4: Mats and/or protection	2MS EZTL Dela used	ay's	's F	AYS eriods: 25N		MS Surf	X N	0MS In F	Hole	
Mats and/or protection Types of Explosives	2MS EZTL Dela used	ay's //Brand	's F	AYS eriods: 25M Code		MS Surf	X□ N	0MS In F	Hole	
Mats and/or protection Types of Explosives	2MS EZTL Dela used Description	ay's //Brand	Date	AYS eriods: 25M Code		XXXX Amou	X□ Nont Use	0MS In F one	Hole	
Mats and/or protection Types of Explosives	2MS EZTL Dela used Description	ay's //Brand	Date	AYS Periods: 25M Code		XXXX Amou 20 eac 48 eac any ho	nt Use the ch (double having	OMS In Fone		
Mats and/or protection Types of Explosives	Description Spartan 450	Ay's A/Brand Gr Booster	Date	Code 13J1 213J3		XXXX Amou 20 eac 48 eac any ho	nt Use th th double havin	OMS In Fone	ed wet holes &	
Mats and/or protection Types of Explosives High Explosives	2MS EZTL Dela used Description	Ay's A/Brand Gr Booster	Date	AYS Periods: 25M Code		XXXX Amou 20 eac 48 eac any ho	nt Use th th double havin	OMS In Fone	ed wet holes &	
Mats and/or protection Types of Explosives	Description Spartan 450 Primer Cord	Ay's A/Brand Gr Booster – 18 Grain	Date 16JY 04O0	AYS Periods: 25M Code 13J1 213J3		XXXX Amou 20 eac 48 eac any ho column 25 feet	nt Use th (dould ble having)	ome d ble prime	ed wet holes & 32' of powder	
Mats and/or protection Types of Explosives High Explosives	Description Spartan 450 Primer Cord Anfo – 50# E	Ay's A/Brand Gr Booster – 18 Grain	Date 16JY 04OC 26NC	Code 13J1 213J3 212G1		XXXX Amou 20 eac 48 eac any ho column 25 fee	nt Use th (double having) t	oms In Fone d ble prime ng over 3	d wet holes & 32' of powder	
Mats and/or protection Types of Explosives High Explosives	Description Spartan 450 Primer Cord	Ay's A/Brand Gr Booster – 18 Grain	Date 16JY 04OC 26NC	Code 13J1 213J3 212G1 13F1 20 2012		XXXX Amou 20 eac 48 eac any ho column 25 feed 262 ba 20 tube	nt Use th (double having) t	oms in Fone d ble prime ng over 3	ed wet holes & 32' of powder	

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

26MA08

24SE12W1

10JU13X1

01JY13X1

03SE12X1

30JA12X1

506 JN-AK-28

08-DE-97-G3-0355

2 each

3 each

2 each

4 each

2 each

3 feet

36 each

28 each (1 used for shot initiation)

Detonators

Other:

#8 Fuse Caps

40 Ft. E-Z DET

60 Ft. E-Z DET

80 Ft. E-Z DET

30Ft-42MS EZTL Delay

Pull Wire Fuse Lighters

Sword Safety Fuse

Shot No.	Hole Depth	High Explosives(lbs.)	Blasting Agent (lbs)	Stemming	Delay (ms)
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.
*	V	*	*	*	+
<u> </u>		<u> </u>			
		No.	No. Explosives(lbs.) 1 41.4 ft.(average) 1.0 lb. (450Gr	No. Explosives(lbs.) (lbs) 1 41.4 ft.(average) 1.0 lb. (450Gr 312 lbs. (average)	No. Explosives(lbs.) (lbs) 1 41.4 ft.(average) 1.0 lb. (450Gr booster) per/hole) (average/per

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).

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

		WEATI	HER CO	NDITIO	NS					_
□XXXClear		□ Overcast						peratur	e <u>50 °</u>	
☐ XXX Wind Direct		<u>s</u> w	E	NW	NE	SW	SE	None		
	□XXX Wind Velocity 5 – 10 MPH									
DETONA	rions	Direction to	Nearest	Structur	е	Distan	ce to N	earest S	tructure	
Number 1		East West N	lorth Sou	<u>th</u>		19	900ft. (T	ezak Off	ice)	_
Time 1:07 PM									•	
MATERIAL BLASTED										
Type ☑ Granite	☐ Dolomite ☐	Other	Cubic Y	ards: 4,0)89	8,178	Tons @	2.0 Dei	nsitv	_
BORE HOLES						_				
Diameter: 3 5/8" & 4		mber of Holes – 4 ½" (64 hol		5/8" &	Avera	ge Dept	h of Ho	le (ft): 10	6'	
Burden:3 5/8"holes 4 ½" holes=11'	=7' Spacing:3 4 ½" holes	5/8"holes=7' =11'		e Stemm 6', 4 ½" h			Туре	of Stem	ming: Fines	
POWDER FACTO	R: 3,400 lbs. of	explosives/4,08	39 cu.yds.	of rock =	.83 lbs.	/cu.yd.				T
		8 MILL	ISECON	D PERIO	OD					_
Max Weight Detona	ted: 106 lbs.		IV	ax Numb	per of Ho	oles Det	onated	: 2		_
		INITI	ATION :	SYSTEN	1					
□ Electric	☐ Non-Ele	ectric	□XX	X Cap	and Fus	e			Other	_
			DELAY	' S						
Number: 71	Der: 71 Type: 40' & 60' E-Z DET's 42MS EZTL Delay's				Periods: 25MS & 42MS Surface/350MS In Hole					
Mats and/or protect	ion used					XXXX	K No	ne		

Types of Explosives	Description/Brand	Date Code	Amount Used
High Explosives			
	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
Blasting Agents			
	Anfo – 50# Bags	31JY13F1	68 bags (3,400 lbs.)
Detonators	#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
Other:	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			9			
5						
6						
7						
8						
9						
10						
THRU						
64	*	V	*	*	•	₩

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).

Name of Company: __f]H_E Aggregate Source

Blaster Name: Randy DiLuzio Date: November 15, 2013
Signature of Blaster: Permit # 101-5234
Location / Address 205 Tunnel Drive, Canon City, Colorado

WEATHER CONDITIONS □XXXClear □XXX Temperature _55 ° **□**Overcast ☐ XXX Wind Direction NW SW SE None □XXX Wind Velocity 5 – 10 MPH **Direction to Nearest Structure Distance to Nearest Structure DETONATIONS** Number: 1 shot East West North South 500 ft. (Tezak Office) Time: 3:30pm MATERIAL BLASTED Type ☑ Granite □ Dolomite □Other Cubic Yards: N/A "Boulders" - 13 each **BORE HOLES** Diameter: 4" Number of Holes: 39 (all Average Depth of Hole (ft): 3.5' boulders had multi holes due to size of Boulders) Burden: N/A Spacing: N/A Average Stemming (ft) 3.5' Type of Stemming: 3/8" rock **POWDER FACTOR: N/A 8 MILLISECOND PERIOD** Max Weight Detonated: 6 lbs. Max Number of Holes Detonated: 3 **INITIATION SYSTEM** Electric Non-Electric Cap and Fuse Other **DELAYS** Number: 39 Type: 24', 60' & 80' E-Z DET's. Periods: 25MS Surface/350MS In Hole

Types of Explosives	Description/Brand	Date Code	Amount Used
High Explosives			
	Spartan 450GR Booster Dyno Unimax 1 ¼ X 8	04OC13J3 17JY13J1	6 each (used in wet vertical holes) 17 each (1/2 stick per/hole + 1 hole with 1 full stick)
	Primer Cord – 18 Grain	26NO12G1	30 feet
Blasting Agents			
	ANFO - 50# Bag	31JY13F1	1/2 bag (25 lbs.)
Detonators	#8 Fuse Caps	26MA08	2 each
	24 Ft. E-Z DET	24JU13W1	28 each
	60 Ft. E-Z DET	01JY13X1	8 each
27	80 Ft. E-Z DET	03SE12X1	3 each
Other:	Pull Wire Fuse Lighters	506 JN-AK-28	2 each
	Sword Safety Fuse	08-DE-97-G3-0355	3 feet

XXXXX□ None

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

Mats and/or protection used

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						
					*	*
			5			70

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).

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

WEATHER CONDITIONS □XXXClear □ Overcast □XXX Temperature 39 ° ☐ XXX Wind Direction W Ε NW NE SW None SE □XXX Wind Velocity 0 MPH **Direction to Nearest Structure** Distance to Nearest Structure **DETONATIONS** Number 1 East West North South 1850ft. (Tezak Office) Time 3:36 PM **MATERIAL BLASTED** Type ☑ Granite ☐ Dolomite □Other Cubic Yards: 13,269 26,538 Tons @ 2.0 Density **BORE HOLES** Diameter: 6" Number of Holes: 41 Average Depth of Hole (ft): 41' Burden: 15' Spacing: 15' Average Stemming (ft) 10' Type of Stemming: Fines **POWDER FACTOR:** 13,305 lbs. of explosives/13,269 cu.yds. of rock = 1.0 lbs./cu.yd. **8 MILLISECOND PERIOD** Max Weight Detonated: 650 lbs. Max Number of Holes Detonated: 2 **INITIATION SYSTEM**

DELAYS

□XXX Cap and Fuse

Periods: 25MS & 42MS Surface/350MS In Hole

XXXXX□ None

Other

Electric

Mats and/or protection used

Number: 53

Non-Electric

Type: 60' & 80' E-Z DET's .-

42MS EZTL Delay's

Types of Explosives	Description/Brand	Date Code	Amount Used
High Explosives			
	Spartan 450Gr Booster	04OC13J3	44 each(20 wet holes, 4 w/double boosters)
		12OC13J3	1 each
	Primer Cord – 18 Grain	26NO12G1	10 feet
Blasting Agents			
	Anfo – 50# Bags	31JY13F1	63.5 bags (3,175 lbs.)
		04OC13F1	172 bags (8,600 lbs.)
	Water Gel – 5" x 30#	21AU13C3	39 tubes (1,170 lbs.)(20 wet holes)
		26SE13C3	12 tubes (360 lbs.)
Detonators	#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
Other:	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 Hole Depth No.		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			- A					
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: Permit # 101-5234

Location / Address 205 Tunnel Drive, Canon City, Colorado

WEATHER CONDITIONS											
□XXXClear	ian N	□ Overca		_	N 10 4 4				nperatur	e <u>45 °</u>	
☐ XXX Wind Direct		<u> </u>	V	E	NW	NE	SW	SE	None		
□XXX Wind Veloc											
DETONA	TIONS	Direction	to Ne	arest St	tructur	·e	Distan	ce to N	learest S	tructure	
Number 1		East Wes	t North	South			17	700ft. (*	Tezak Off	ice)	
Time 10:11 AM								`		,	
		MA	TERI	AL BL	ASTE)					
Type ☑ Granite	☐ Dolomite ☐	∃Other	Cı	ıbic Yar	ds: 8,0	000	16,000 Tons @ 2.0 Density				
			BOR	E HOL	ES						
Diameter: 6"	Nu	mber of Ho	mber of Holes: 24 Avera					age Depth of Hole (ft): 40'			
Burden: 15'	Spacing: 1	5'	Average Stemming (ft) 11' Type of Stemmi								
POWDER FACTO	DR: 11,000 lbs. of	f explosives/	8,000	cu.yds.	of rock	= 1.375	lbs./cu.y				
		8 MII	LISE	COND	PERI	OD					
Max Weight Detona	ted: 916 lbs.			Max	k Numl	per of H	oles Det	onated	1: 2		
		INI	TIAT	ION SY	STEN	1					
□ Electric	□ Non-Ele	ectric			Сар	and Fu	se			Other	
				ELAYS			·				
Number: 24	Type: 60' E-Z De 42MS EZTL De	S &	Period	ds: 171	VIS, 25N	IS & 42N	IS Surf	ace/350N	/IS In Hole		
Mats and/or protect	ion used						XXXX	XD No	one		
										W	

Types of Explosives	Description/Brand	Date Code	Amount Used
High Explosives			
	Spartan 450Gr Booster Primer Cord – 18 Grain	12OC13J3 26NO12G1	24 each(majority were wet holes) 20 feet
Blasting Agents			
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)
Detonators	#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
Other:	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	40 ft.(averag	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#20F2

BLAST REPORT

	Localic	III / Aut	JI CSS	<u>o runn</u>	el DIIV	e, Ga	HOH CIE	y, Color	ago		
			WEAT	HER C	COND	ITIOI	NS .				
□XXXClear			□ Overcas						XX Ter	nperatur	e_57 °
☐ XXX Wind Direct	ion N	;	S W	Е		NW	NE	SW	SE	None	
□XXX Wind Veloci	ty 0 MPH										
DETONA	TIONS	[Direction t	o Near	est Str	uctur	е	Distan	ce to N	learest S	tructure
Number 1		E	East West I	North S	outh			85	50ft. (Te	ezak Sho	p)
Time 2:38 PM		1						()		F7	
			MAT	ERIAL	BLA	STEE)				
Type ☑ Granite	□ Dolomite	□01	ther	Cubi	c Yard	ls: 18	900	37.80	0 Tons	@ 2.0 D	ensity
				BORE						<u> </u>	
Diameter: 6"		Numb	er of Hole	s: 71			Avera	ge Dept	h of Ho	ole (ft): 3	2'
Burden: 15'	Spacing	g: 15'		Aver	verage Stemming (ft) 12' Type of Stemming:¾"r						
POWDER FACTO	R: 21,500 lb:	s. of ex	plosives/18								3
			8 MILI	LISEC	OND	PERIC	OD				
Max Weight Detonat	ted: 606 lbs.				Max	Numb	er of H	oles Det	onated	1: 2	
				IATIO							
□ Electric	□ Non	-Electi	ric		XXX	Cap	and Fus	se			Other
					AYS						
Number: 75	Type: 60' E EZTL Delay		"s 42MS	F	Period	s: 25N	IS & 42	MS Surf	ace/35	0MS In H	ole
Mats and/or protect	ion used							XXXX	X N	one	
											50:4
Types of Evalorings	Dagaria	-Ai /D	luand.	Data	0-4-				4.11		

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

Shot No.	0.		High Explosives(lbs.)		Blasting /	Agent	Stemming		Delay (ms)						
1		1		1		32 ft.(average)		1.0 lb. (450Gr booster)		303 lbs. (per/h	average iole)	12'(average/per hole)		25ms & 42ms surface/350ms in hole.	
								†							
									 						
•	7		*		▼		▼	ļ — ·	\	,					
		-	_					1							
				1				I		L					
	1	Shot No.	No.	No.	No. Explosive 1 32 ft.(average) 1.0 lb.	No. Explosives(lbs.) 1 32 ft.(average) 1.0 lb. (450Gr	No. Explosives(lbs.) (lbs) 1 32 ft.(average) 1.0 lb. (450Gr 303 lbs. (No. Explosives(lbs.) (lbs) 1 32 ft.(average) 1.0 lb. (450Gr 303 lbs. (average)	No. Explosives(lbs.) (lbs) 1 32 ft.(average) 1.0 lb. (450Gr 303 lbs. (average) 12'(a	No. Explosives(lbs.) (lbs) 1 32 ft.(average) 1.0 lb. (450Gr 303 lbs. (average 12'(average/per	No. Explosives(lbs.) (lbs) 1 32 ft.(average) 1.0 lb. (450Gr booster) 100 booster)				

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).



7205 PPLL 0000 0PAL 5LOY

OF THE RETURN



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