

NATIONAL TRANSPORTATION SAFETY BOARD Investigative Hearing



Washington Metropolitan Area Transit Authority Metrorail train 302 that encountered heavy smoke in the tunnel between the L'Enfant Plaza Station and the Potomac River Bridge on January 12, 2015

Agency / Organization

Title

Date: June 30, 2010 Subject: Leak Repair Program Sta # Remaining # Comp Leak 07/01/10 to 07/03/10 1,700 1,700 From: TRST- Larry Lee Grout To: TRST- Clay Bunting 5,000 5,000 **Drains** Tunnel Leak Locations: **Total Completed** 100,000 100,000 0 Joints 0 0 0 0 0 0 0 0 Tunnel Total Station Leak Locations: **Total Completed** 0 0 0 0 0 0 0 0 0 **0** Station Total 0 Weekly Total **O Yearly Station Total** 0 Yearly Tunnel Total 0 Overall Leak Total Year to Date use **Chemical Grout Used:** Gallon Used: 0.00 Gallons 0.00 Gallons DeNeef Flex LV 0.00 Gallons 0.00 Gallons DeNeef Sealfoam NF 0.00 Gallons 0.00 Gallons Fox Jet Set 1

eak Locations	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Total	Division Total
					01	02	03		
outh Region									-
,	0	0	0	0	0.	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
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	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	to the contract of the contract of
	5770 5								0 Total
lorth Region									
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	0	0	0	0	0	0	0	0	
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	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	energian bayan
									0 Total 0 Overall T

Track # ID at Station Platforms # Station #Comp St # Sign Install

 SHAFT DOOR WARNING SIGNS
Vent Shafts
Sign Installed
Comp

Clearence	Point Signs
#Yards	
#Comp St	
# Sign Inst	all

Grout Pad	Completed								
		Sun	Mon	Tue	Wed	Thur	Fri	Sat	Total
Location						01	02	03	
		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0

0 Weekly Total 0 Yearly Total

Drains Com	pleted								
		Sun		Tue	Wed	Thur	Fri		Total
Location						01	02	03	
		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0

0 Weekly Total 0 Yearly Total

Joints Completed

		Mon		Wed	Thur	Fri	Sat	Total
Location					01	02	03	
<u> </u>	0	0	0	0	0	0	0	C
	0	0	0	0	0	0	0	C
	0	0	0	0	0	0	0	C
	0	0	0	0	0	0	0	C
	0	0	0	0	0	0	0	C

0 Weekly Total 0 Yearly Total

DATE	DISNESSEE	XLV						
	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Total
LOCATION	27	28	29	30				
<u> </u>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
					····			0.00

0.00 Weekly Total

DENEEF SEALFOAM

	DENEELSE	4FLOWIAL	I								
	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Total			
LOCATION					01	02	03				
<u> </u>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
	<u> </u>		•	<u> </u>	S			0.00			

0.00 Weekly Total

	FOXJET SE	F1 -						
	Sun	Мол	Tue	Wed	Thur	Fri	Sat	Total
LOCATION					01	02	03	
(0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				<u> </u>				

Date: June 30, 2010 Subject: Leak Repair Program Sta Leak # Remaining # Comp 08/01/10 to 08/07/10 1,700 1,606 From: TRST- Larry Lee Grout To: TRST- Clay Bunting 3,061 1,939 5,000 Drains 6,051 Tunnel Leak Locations: 100,000 93,949 **Total Completed** Joints A10-A09/TRK1 8 0 7 A11-A10/TRK2 4 A10-A09/TRK2 14 A01-B02/TRK2 0 0 0 0 0 0 33 Tunnel Total Station Leak Locations: **Total Completed** 0 0 0 0 0 0 0 0 0 0 O Station Total 33 Weekly Total **0 Yearly Station Total** 94 Yearly Tunnel Total 94 Overall Leak Total Gallon Used: Year to Date use **Chemical Grout Used:** 1.00 Gallons 1.00 Gallons DeNeef Flox IV 0.00 Gallons 0.00 Gallons

8.50 Gallons

0.00 Gallons

DeNeef Sealfoam NF

Leak Locations	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Total	Division Total
	01	02	03	04	05	06	07		
South Region									
	0	0	0	0	0	0	0	0	
[0	0	0	0	0	0	0	0	
[0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
_	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0			0	0	0	
	0	0	0	0	0	0	0	0	on the state than to
									0 Total
North Region									1
\10-A09/TRK1	4	0	4	0	0		0	8	
\11-A10/TRK2	0	0	7	0	0	0	0	7	
\10-A09/TRK2	0	0	0	0	4	0	0	4	
01-B02/TRK2	0	0	0	0	0	14	0	14	
1	0	0	0	0	0	0	0	0	
ļ	0	0	0	O	0	0	0	0	
[0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
 	0	0	0	0	0	0	0	0	
ļ						0	O!	0	
- - -	0	0	0	0	0	0	0	0	

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Graphic	: Marker Signs	Completed:

Track # ID at Station Platforms	SHAFT DOOR WARNING SIGNS
# Station 0	Vent Shaft 0
#Comp St 0	Sign Install 0
# Sign Insta	# Comp 0

Clearence	Point Signs
#Yards	0
#Comp St	0
# Sign Insta	0

Grout Pad	Completed								
		Sun	Mon	Tue	Wed		Fri	Sat	Total
Location		01	02	03	04	05	06	07	
B04-B05/TRK 2		230	0	0	0	0	0	0	230
		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0
		[·		

230 Weekly Total 1,939 Yearly Total

Drains Compl	leted							
	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Total
Location	01	02	03	04	05	06	07	
A09-A08/TRK	1 0	0	1018	0	0	0	O	1018
A10-A09/TRK	1 0	0	0	410	650	0	0	1060
A02 TRK2	0	0	0	0	0	420	941	1361
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0

3439 Weekly Total 6,051 Yearly Total

Joints Completed

	Sun	Мов		Wed	Thur		Sat	Total
Location	01	02	03	04	05	06	07	
' 	C	0	0	0	0	0	0	(
	C	0	0	0	0	0	0	(
	O	0	0	0	0	0	0	(
	0	0	0	0	0	0	0	(
	0	0	0	0	0	0	0	(

0 Weekiy Total 0 Yearly Total

DATE

LOCATION A10-A09/TRK1

DENEEF FLEX LV												
=	Sun	Mon	Tue	Wed	Thur		Sat	Total				
_	01	02	03	04	05	06	07					
_	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00				
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				

0.00

0.00

0.00

0.00

0.00

0.00

1.00 Weekly Total

0.00

0.00

0.00

0.00

DENEEF SEALFOAM

0.00

0.00

0.00

0.00

	DENEEL 3C	DENEEP SCALFOAM						
	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Total
LOCATION	01	02	03	04	05	06	07	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				 				0.00

0.00

0.00

0.00 Weekly Total

COV IET SET 1

	F6)XJEFSE	[1						
	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Total
LOCATION	01	02	03	04	05	06	07	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Date: June 30, 2010 Subject: Leak Repair Program Sta # Remaining # Comp 08/29/10 to 09/04/10 Leak 1,700 217 1,483 From: TRST- Larry Lee Grout To: TRST- Clay Bunting 2,219 2,781 **Drains** Tunnel Leak Locations: **Total Completed** 100,000 91,269 8,731 B08-B09/TRK2 48 Joints 0 - 0 B09/TRK2 1 0 A10-A10 PORTAL/TRK17 14 0 0 0 0 0 0 0 63 Tunnel Total Station Leak Locations: **Total Completed** 0 0 0 0 0 0 0 0 0 0 **O Station Total** 63 Weekly Total 3 Yearly Station Total 214 Yearly Tunnel Total 217 Overall Leak Total Year to Date use

2.00 Gallons

8.50 Gallons

0.00 Gallons

Gallon Used: 0.00 Gallons

0.00 Gallons

0.00 Gallons

Chemical Grout Used:

DeNeef Flex LV

DeNeef Sealfoam NF

Leak Locations	Sun	Моп	Tue	Wed	Thur	Frî	Sat	Total	Division Total
	29	30	31	01	02	03	04		
South Region				<u> </u>	<u> </u>		1		4
B08-B09/TRK2	0	0	0	0	0	0	20	20	
·	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	·
[0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
									20 Total
North Region	· · · · · · · · · · · · · · · · · · ·	·····			·				
308-B09/TRK2	0	0	0	0	0	0	28	28	
309/TRK2	0	0	1	0	0	0	0	1	
110-A10 PORTAL/TRK		7	0	0	0	0	0	14	
1	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	.0	0	0	0	0	0	0	
_	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
<u> </u>	0	0	0	0	0	0	0	. 0	
_	0	0	0	0	0	0	0	0	
L	0	0	0	0	0	0	0	0	31 Pa 48 TO 45027
									43 Total 63 Overall To

Track # ID	at Station Platforms
# Station	0
#Comp St	0
# Sign Inst	0

Graphic I	larker Signs Completed
1	SHAFT DOOR WARNING SIGNS
-	Vent Shaft 0
	Sign Install 0
	# Comp 0

Clearence	Point Signs
#Yards	0
#Comp St	0
#Sign Inst	0

Grout Pad Complete	#							
		Mon	Tue	Wed	Thur	Fri	Sat	Total
Location	29	30	31	01	02	03	04	
	0	0	0	0	0	0	0	O
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	C
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0

0 Weekly Total 2,219 Yearly Total

Drains Completed								
	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Total
Location	29	30	31	01	02	03	04	
D04-D05/TRK1	0	0	0	700	0	0	0	700
D04-D03/TRK2	0	0	0	0	500	0	0	500
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0

1200 Weekly Total 8,731 Yearly Total

Joints Completed

	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Total
Location	29	30	31	01	02	03	04	
	0	0	0	0	0	0	0	(
	0	0	0	0	0	0	0	(
	0	0	0	0	0	. 0	0	(
	0	0	0	0	0	0	0	C
	0	0	0	0	0	0	0	C

0 Weekly Total 0 Yearly Total

DATE

5 = 1		

	Sun	Mon	Tue	Wed	Thur	Frî	Sat	Total
LOCATION	29	30	31	01	02	03	04	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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0.00 Weekly Total

DENEEF SEALFOAM

0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00		 								
0.00 0.00 <th< th=""><th><u> </u></th><th>Sun</th><th>Mon</th><th>Tue</th><th>Wed</th><th>Thur</th><th>Fri</th><th>Sat</th><th>Total</th></th<>	<u> </u>	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Total	
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	LOCATION	29	30	31	01	02	03	04		
0.00 0.00 <th< td=""><td></td><td>0.00</td><td>0.00</td><td>0.00</td><td>0.00</td><td>0.00</td><td>0.00</td><td>0.00</td><td>0.00</td></th<>		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00 0.00 0.00 0.00 0.00 0.00 0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Species of the specie		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
and the second s									0.00	

30.0	1000		(1982)	2 102		2.25	1.026
25	440	State 5	مغمع	Marin Sa	0.000		2.00
ε≥.	1.63	4.00	Do la	A 1885			

	EOX JET SE	FOX JET SET 1							
		Mon	Tue	Wed	Thur		Sat	Total	
LOCATION	29	30	31	01	02	03	04		
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
			 						

Subject: Leak Repair Program Sta Date: June 30, 2010 09/26/10 to 10/02/10 # Comp Leak # Remaining From: TRST- Larry Lee 1,411 289 1,700 To: TRST- Clay Bunting Grout 5,000 1,802 3,198 **Drains** Tunnel Leak Locations: 100,000 **Total Completed** 87,624 12,376 A04 - A05/TRK 2 7 Joints A04 - A05/TRK 1 8 0 0 0 0 0 0 0 0 0 0 15 Tunnel Total Station Leak Locations: **Total Completed** 0 0 0 0 0 0 0 0 0 0 **0** Station Total 15 Weekly Total 3 Yearly Station Total 286 Yearly Tunnel Total 289 Overall Leak Total **Chemical Grout Used:** Gallon Used: Year to Date use DeNeef Flex LV 0.00 Gallons 2.00 Gallons DeNeef Sealfoam NF 0.00 Gallons 0.00 Gallons Fox Jet Set 1 0.00 Gallons 8.50 Gallons

eak Locations	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Total	Division Total
	26	27	28	29	30	01	02		
outh Region									•
	0	0	0	0	0	0	0	0	
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				<u> </u>	<u>. </u>	<u> </u>			0 Tc
orth Region									
04 - A05/TRK 2	6	0	1	0	0	0	0	7	
04 - A05/TRK 1	0	8	0	0	0	0	0	8	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	 	
	0	0	0		0	0	0		
	0		0		0	0			
	0				0				
	0		0		0		0		
	0		0		0	0	0		
	0		0		0				

15 Total 15 Overall Total

Track # ID	at Station Pla	atforms
# Station	0	
#Comp St	0	
# Sign Inst	0	

Graphic	Marker Signs Completed	
]	SHAFT DOOR WARNING SIGNS	
•	Vent Shaft: 0	
	Sign Install 0	
	# Comp 0	

Clearence	Point Signs
#Yards	o
#Comp St	0
# Sign Inst	0

Grout Pad	Completed								
			Mon	Tue	Wed	Thur	Fri	Sat	Total
Location		26	27	28	29	30	01	02	
CO2/TRK1		0	16	0	0	0	0	0	16
E01-02/TRI	K2	0	0	0	0	185	0	0	185
A10-A11B	sw	0	0	0	0	0	14	0	14
B04/TRK 2		0	0	0	0	0	0	300	300
E02-11B SV	v	0	0	0	0	0	0	10	10

525 Weekly Total 3,198 Yearly Total

Drains Co	mpleted								
		Sun	Mon	Tue	Wed	Thur		Sat	Total
Location		26	27	28	29	30	01	02	
A04-A05/TRK2		0	0	0	0	700	0	0	700
		0	0	0	0	0	0	. 0	0
		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0

700 Weekly Total 12,376 Yearly Total

Joints Completed

	Sun	Mon	Tue	Wed	Thur		Sat	Total
Location	26	27	28	29	30	01	02	
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0

0 Weekly Total 0 Yearly Total

DATE	DENEEF FLE	XW .						
	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Total
LOCATION	26	27	28	29	30	01	02	
<u> </u>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	L							0.00

0.00 Weekly Total

DENEEF SEALFOAM

	DENEET 3E	DENEER SEALFORING						
	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Total
LOCATION	26	27	28	29	30	01	02	
,	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
								

0.00 Weekly Total

	_
FOX JET SET 1	53
(× +) ' // (−) × 4 × 4 × 64 × 65 × 65 × 65 × 65 × 65 ×	124
FUNDAL PLANE	10.
	8.

	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Total
LOCATION	26	27	28	29	30	01	02	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Subject: Leak Repair Program Sta Date: June 30, 2010 10/31/10 to 11/06/10 # Remaining # Сотр Leak From: TRST- Larry Lee 1,700 545 1,155 To: TRST- Clay Bunting Grout 802 5,000 4,198 Drains Tunnel Leak Locations: 100,000 **Total Completed** 80,874 19,126 0 Joints 0 0 0 0 0 0 0 0 0 O Tunnel Total Station Leak Locations: **Total Completed Medical Station** 50 0 0 0 0 0 0 0 **50 Station Total** 50 Weekly Total 220 Yearly Station Total 325 Yearly Tunnel Total 545 Overall Leak Total **Chemical Grout Used:** Gallon Used: Year to Date use 0.00 Gallons DeNeef Flex LV 2.00 Gallons DeNeef Sealfoam NF 0.00 Gallons 8.50 Gallons 0.00 Gallons 11.00 Gallons

	le	I	-	Wed	Thur	Fri	lc-+	Total	Division Total
Leak Locations			Tue				Sat	rotar	DIVISION TOTAL
	31	01	02	03	04	05	06]
South Region							,		•
	0	0	0	0	0	ļ		0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
									0 Total
North Region									
A10	0	50	0	0	0	0	0	50	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	o	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	<u>_</u>	- 9	<u></u>			<u>v</u> l			////////////////////////////////////

50 Total 50 Overall Total

Track # ID at Station Platforms
Station 0 #Comp St 0 # Sign Insta

Graphic	Marker Signs Completed
	SHAFT DOOR WARNING SIGNS
	Vent Shaft 0
	Sign Install 0
	# Comp 0

Clearence	Point Signs
#Yards	0
#Comp St	0
# Sign Insta	0

Group Pad Com	pleted							
	Sun	Mon	Tue	Wed	Thur		Sat	Total
Location	31	01	02	03	04	05	06	
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	Ð	0
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0

0 Weekly Total 4,198 Yearly Total

Drains Completed								
	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Total
Location	31	01	02	03	04	05	06	
A06 to A05/trk1	0	400	0	0	0	0	0	400
F06/trk1	0	0	0	0	850	0	0	850
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0

1250 Weekly Total 19,126 Yearly Total

Joints Completed

	Sun	Mon	Tue		Thur	Frî		Total
Location	31	01	02	03	04	05	06	
		0 0	0	0	0	0	0	0
	(0 0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0
		0	0	0	0	0	0	0

0 Weekly Total 0 Yearly Total

DATE

DATE	DEMEEL LE	JA LV						
	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Total
LOCATION	31	01	02	03	04	05	06	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
					<u> </u>			0.00

0.00 Weekly Total

DENEEF SEALFOAM

	OCITECI OE	TEI OFTITE						
	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Total
LOCATION	31	31 01	02	03	04	05	06	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	<u> </u>						A	0.00

0.00 Weekly Total

02000	25,013	196234	128	15.23	62.2	Ė
#30°	Y#	200	76	3	100	I

	FUAUELDE							
	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Total
LOCATION	31	01	02	03	04	05	06	
h	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Date: June 30, 2010 Subject: Leak Repair Program Sta # Remaining # Comp 11/28/10 to 12/04/10 Leak 1,700 1,035 665 From: TRST- Larry Lee Grout To: TRST- Clay Bunting 5,194 5,000 -194 **Drains** 30,812 Tunnel Leak Locations: 100,000 69,188 **Total Completed** Cleveland Park to VanNess/Trk1 3 Joints 7 VanNess To Tenleytown/Trk1 Medical to Grosvenor/Trk1 1 5 VanNess To Tenleytown/Trk2 9 VanNess to Friedship Hghts/Trk 2 0 0 0 25 Tunnel Total Station Leak Locations: **Total Completed** 0 0 0 0 0 0 0 **0** Station Total 25 Weekly Total 271 Yearly Station Total 394 Yearly Tunnel Total 665 Overall Leak Total Gallon Used: Year to Date use Chemical Grout Used: 2 00 Gallons 0.00 Gallons DeNeef Flex LV 0.00 Gallons 8.50 Gallons DeNeef Sealfoam NF 11.00 Gallons

0.00 Gallons

Leak Locations	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Total	Division Tota
	28	29	30	01	02	03	04		
South Region									-
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0		0	-i
	0	0						0	4
	0								-{
	0							0	4
	0	<u> </u>		0		 		0	4
	0				<u> </u>		<u> </u>	0	-
	0							0	4
	0							0	4
	0	0	0	0	0	0	0	0	
	20m)								0 T
North Region				·	T	 			1
405 to A06/Trk1	3							3	1
A06 to A07/Trk1	0			2		0		7	ł
110 to A11/Trk1	0	0						1	
\06 to A07/Trk2	0	0	0	0				5	ł
\06 to A08/Trk2	0	0	0	0	0	<u> </u>	 		ŧ
	0	0	0	0	0	0	0		}
	0	0	0	0	0	0	0	0	}
	0	0	0	0	0	0	0	0	1
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	N CONTRACTOR

25 Total 25 Overall Total

Graphic Marker Signs Completed

Track # ID at Station Platforms # Station #Comp St # Sign Insta

•	TILLER ANDRES		6.00
	SHAFT DOG	OR WARNI	NG SIGN:
	Vent Shaft		0
	Sign Install	-699-6	0
	# Comn		n

Clearence	Point Signs
#Yards	0
#Comp St	0
# Sign Insta	0

Grout Pad Completed								
	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Total
Location	28	29	30	01	02	03	04	
B09/Trk1	0	0	0	196	0	0	0	196
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
	0	0	0	0	٥	0	0	0

196 Weekly Total 5,194 Yearly Total

Drains Completed								
		Mon	Tue	Wed	Thur	Fri	Sat	Total
Location	28	29	30	01	02	03	04	
CO4/Trk2	1000	0	0	900	0	0	0	1900
E08 to E09/Trk1	900	0	0	0	0	0	0	900
A07 to A06/Trk1	0	700	0	0	0	1020	0	1720
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0

4520 Weekly Total 30,812 Yearly Total

Joints Completed

	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Total
Location	28	29	30	01	02	03	04	
	0	0	0	0	0	0	0	(
	0	0	0	0	0	0	0	(
	0	0	0	0	0	0	0	(
	0	0	0	0	0	0	0	(
	0	0	0	0	0	0	0	0

0 Weekly Total 0 Yearly Total

DATE	DENEERFLE	XEV						
	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Total
LOCATION	28	29	30	01	02	03	04	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	ļ				<u> </u>			0.00

0.00 Weekly Total

DENEEF SEALFOAM

	Sun	Mon	Tue	Wed	11	Fri	Sat	Total
LOCATION	28	29	30	01	02	03	04	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
						<u></u>		0.00

0.00 Weekly Total

COX IET SET 1

	Sun	Mon	Tue		Thur	Fri	Sat	Total
LOCATION	28	29	30	01	02	03	04	
<u> </u>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
								73 73 7 V

Subject: Leak Repair Program Sta Date: June 30, 2010 12/26/10 to 01/01/11 # Remaining Leak # Comp From: TRST- Larry Lee 894 1,700 806 To: TRST- Clay Bunting Grout -1,513 6,513 5,000 **Drains** Tunnel Leak Locations: **Total Completed** 100,000 68,348 31,652 Medical Center To Grosvenor/Trk 1 23 Joints 0 0 0 0 0 0 0 0 0 0 23 Tunnel Total Station Leak Locations: **Total Completed** 0 0 0 0 0 0 0 0 0 0 **0** Station Total 23 Weekly Total 333 Yearly Station Total 473 Yearly Tunnel Total 806 Overall Leak Total Year to Date use **Chemical Grout Used:** Gallon Used: DeNeef Flex LV 0.00 Gallons 2.00 Gallons DeNeef Sealfoam NF 0.00 Gallons 8.50 Gallons

11.00 Gallons

0.00 Gallons

Leak Locations	Sun	Mon	Tue	Wed	Thur	Frî	Sat	Total	Division Total
	26	27	28	29	30	31	01		
South Region									_
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	ļ
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	ļ
	0	0	0	0	0		0		
	0	0	0	0	0		0	0	
	0	0	0	0	0		0		
	0	0	0	0	0		0		
	0	0		0	0	0	0		
	0	0	0	0	0	0	0	0	
	70000								0 To
Vorth Region									Ī
110 to A11/Trk1	0	5	8		7	0	0	23	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	. 0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	sa nasi nasi ziz a

23 Total 23 Overall Total

Track # ID	at Station Platforms
# Station	0
#Comp St	0
# Sign Insta	0

Graphic	Marker Signs Completed
	SHAFT DOOR WARNING SIGNS
ı	Vent Shaft 0
	Sign Install 0
	# Comp 0

Clearence	Point Signs
#Yards	0
#Comp St	0
# Sign Insta	0

	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Total
Location	26	27	28	29	30	31	01	
	0	0	0	0	0	0	0	0
	0	0	0	0	0			0
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0

kly Total 6,513 Yearly Total

Drains Completed						·		
	Sun	Mon	Tue	Wed	Thur	Fri		Total
Location	26	27	28	29	30	31	01	
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	. 0

0 Weekly Total 31,652 Yearly Total

Joints Completed

		Mon		Wed	Thur	Fri	Sat	Total
Location	19	20	21	22	23	24	25	
· · · · · · · · · · · · · · · · · · ·	0	0	0	0	. 0	0	0	C
	0	0	0	0	0	0	0	(
	0	0	0	0	0	0	0	C
	0	0	0	0	0	0	0	C
	0	0	0	0	0	0	0	C

0 Weekly Total 0 Yearly Total

DATE	DENEEFEL	XLV						
	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Total
LOCATION	26	27	28	29	30	31	01	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			• • • • • • • • • • • • • • • • • • • •					

0.00 Weekly Total

DENEEF SEALFOAM

- 1 								
	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Total
LOCATION	26	27	28	29	30	31	01	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
								0.00

	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Total
LOCATION	26	27	28	29	30	31	01	
•	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00