

File. hw. 828044. 1990-5-10. State-Mt. hope - tunnel.
Seeps - lab - report. PdA

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Monroe County



THOMAS R. FREY
COUNTY EXECUTIVE

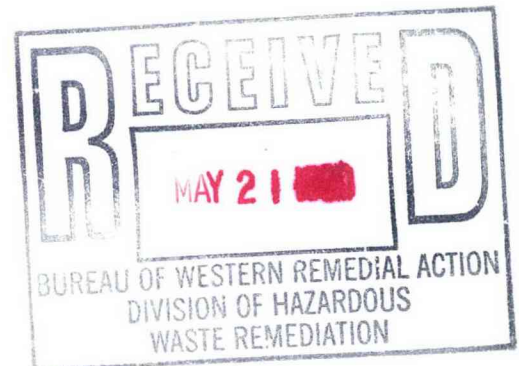
JOHN M. DAVIS, P.E.
DIRECTOR
716 • 274-7630

Department of Engineering

350 East Henrietta Road • Rochester, N.Y. 14620

May 18, 1990

Mr. George Harris
Chief, Remedial Action Section C
Division of Hazardous Waste Remediation
New York State Department of
Environmental Conservation
Room 222
50 Wolf Road
Albany, New York 12233-7010



RE: STATE-MT. HOPE TUNNEL
C-36-745-10
ROCHESTER PURE WATERS DISTRICT

Data from the analysis of air, soil and muck samples for the period from April 30, 1990 to May 4, 1990 are enclosed for your information and use.

Sincerely,

A handwritten signature in black ink that reads "Philip W. Steinfeldt".

Philip W. Steinfeldt
Associate Engineer

/jr
Enclosures

cc: Mr. Mike Khalil, DEC, Avon, w/encl.
Mr. Jim Smith, H & A of New York

DAILY FIELD REPORT

PROJECT:	STATE ST. - MT. HOPE TUNNEL Rochester, New York	DATE: 30 Apr. 1990
CLIENT:	STV/Seelye Stevenson Value & Knecht	PAGE: 1 of 2
CONTRACTOR:	GCF Constructors	FILE: 7433-82
WEATHER:	Partly cloudy 70°	

CONTRACTOR ACTIVITIES:

Mined TBM tunnel from Station 61+40 to Station 62+15 (swing shift), and from 62+15 to 62+51 (graveyard shift). No tunnel mining was conducted during the day shift.

Hauled tunnel muck intermittently during the day shift. Dumped tunnel muck on the spoil pile adjacent to Control Structure 41 intermittently during all three shifts.

FIELD REPRESENTATIVE ACTIVITIES:

P. Micciche (H&A) performed routine air monitoring of the tunnel ventilation exhaust from 0723 to 1458 hrs. Conducted 10 tunnel exhaust air screenings using the Photovac 10s70 gas chromatograph.

Obtained one sample of soil from the excavation for the 24-in. diameter reinforced concrete pipe (east of the railroad tracks) at Site 15, and performed headspace screening using the same instrument.

No tunnel muck samples were obtained as no tunnel mining was conducted during the day shift.

S. Parker (H&A) performed routine air monitoring of the tunnel ventilation exhaust from 1524 to 2254 hrs. Conducted 13 tunnel exhaust air screenings using the Photovac 10s70 gas chromatograph.

Obtained two tunnel muck samples from the spoil pile and performed headspace screening using the same instrument.

W. Lanik (H&A) performed routine air monitoring of the tunnel ventilation exhaust from 2310 to 0630 hrs. Conducted 16 tunnel exhaust air screenings using the Photovac 10s70 gas chromatograph.

Obtained two tunnel muck samples from the spoil pile and performed headspace screening using the same instrument.

PROJECT: STATE ST. - MT. HOPE TUNNEL
Rochester, New York
CLIENT: STV/Seelye Stevenson Value &
Knecht

DATE: 30 Apr. 1990
PAGE: 2 of 2
FILE: 7433-82

TEST DATA SUMMARY:

None of the action threshold levels for the targeted compounds referenced in the 1 March 1990 workplan (benzene, toluene, 1,2-DCE, methylene chloride, and vinyl chloride) were exceeded during the monitoring periods.

FIELD REPRESENTATIVE

P. Micciche

S. Parker

W. Lanik

TIME ON SITE

0700-1500

(8.0 hrs.)

1500-2300

(8.0 hrs.)

2300-0700

(8.0 hrs.)

DISTRIBUTION

STV/Seelye Stevenson: Mr. Richard Richter
Mr. Suki Suresh
Mr. Phil Steinfeldt


H&A OF NEW YORK

SHIFT DATA TABLE

PROJECT: STATE ST. MT. HOPE AVE TUNNEL
 CLIENT: STV/ SEELYE STEVENSON VALUE & KNECHT
 H&A REPRESENTATIVE: P. Micciche
 CHECKED BY: P. Micciche

TUNNEL HEADINGS AT
 START: 61 + 40
 END: 61 + 40
 ADVANCE: 0

FILE: 7433-82
 PAGE: 1 OF 2
 DATE: 30 April 1990
 SHIFT: Day
 DFR NO.: 49

TUNNEL AIR SAMPLES

APPARENT VOLATILE ORGANIC COMPOUNDS DETECTED IN PPM

TIME	TARGET COMPOUNDS					OTHERS						
	VINYL CHLORIDE	METHYLENE CHLORIDE	1,2-DCE	BENZENE	TOLUENE	METHANE (PERCENT)	HYDROGEN SULFIDE	ETHYL BENZENE	M-XYLENE	STYRENE	UNKNOWN*	TOTAL DETECTED
0723	—	—	—	—	—	—	—	—	—	—	0.07	0.07
0841	—	—	—	0.10	—	tr	—	0.70	—	—	—	0.80
0914	—	—	—	—	—	tr	—	—	—	0.14	0.03	0.17
1012	—	—	—	0.10	0.04	0.01	—	—	—	0.20	—	0.34
1053	—	—	—	—	—	0.02	—	—	—	0.17	—	0.17
1115	—	—	—	—	—	0.02	—	—	—	—	—	—
1135	—	—	—	—	—	0.02	—	—	—	—	—	—
1330	—	—	—	—	—	0.01	—	—	—	0.17	—	0.17
1430	—	—	—	—	—	0.02	—	—	—	—	—	—
1458	—	—	—	—	—	0.01	—	—	—	—	0.22	0.22
0955aa	—	—	—	0.30	0.08	—	—	0.06	0.08	0.17	—	0.69
1032cg	—	—	—	0.09	0.04	—	—	—	0.05	—	—	0.18

TUNNEL MUCK/ SHAFT/ GROUNDWATER SAMPLES

APPARENT VOLATILE ORGANIC COMPOUNDS DETECTED IN PPM

SAMPLE TYPE TIME	TARGET COMPOUNDS					OTHERS						
	VINYL CHLORIDE	METHYLENE CHLORIDE	1,2-DCE	BENZENE	TOLUENE	METHANE (PERCENT)	HYDROGEN SULFIDE	ETHYL BENZENE	M-XYLENE	STYRENE	UNKNOWN*	TOTAL DETECTED
SM15/1045	—	—	—	—	—	—	—	—	—	—	0.37	0.37

REMARKS/ VISITORS:

Tunnel muck dumped from approximately 1330 to 1400 hrs.

Tunnel muck hauled from site intermittently until approximately 1330 hrs. during day shift.

No visitors to trailer during day shift.

Collected sample of soil from the excavation for the 24-in. diameter concrete pipe (east of the railroad tracks) at Site 15

at 1045 hrs. Excavation in the trench advanced to approximately 22 ft. below ground surface at time of sampling.

Sample consisted of moist brown fill, visually classified as silty CLAY, with little coarse to fine sand, trace

cinders, trace brick fragments.

ABBREVIATIONS:

SAMPLE TYPE:

TM	TUNNEL MUCK
TS	TUNNEL SEEP
SM#	SHAFT SOIL OR MUCK FROM SITE 15, 27, OR 28

- NOTES:
1. (*) UNIDENTIFIED CHROMATOGRAM PEAKS EXPRESSED IN TOLUENE EQUIVALENTS.
 2. COMPOUNDS LESS THAN 10 PPB NOT REPORTED.
 3. (cg) INDICATES CARRIER GAS BLANK ANALYSIS.
 4. (aa) INDICATES AMBIENT AIR BLANK ANALYSIS.
 5. (tr) INDICATES METHANE DETECTED AT CONCENTRATIONS LESS THAN 0.01 PERCENT.
 6. METHANE CONCENTRATIONS EXPRESSED IN PERCENT BY VOLUME. METHANE CONCENTRATION VALUES NOT INCLUDED IN TOTAL DETECTED COLUMN.

SHIFT DATA TABLE

PROJECT: STATE ST. MT. HOPE AVE TUNNEL
 CLIENT: STV/ SEELYE STEVENSON VALUE & KNECHT
 H&A REPRESENTATIVE: S. Parker
 CHECKED BY: P. Micciche

TUNNEL HEADINGS AT
 START: 61 + 40
 END: 62 + 15
 ADVANCE: 75

FILE: 7433-82
 PAGE: 1 OF 2
 DATE: 30 April 1990
 SHIFT: Swing
 DFR NO.: 49

TUNNEL AIR SAMPLES

APPARENT VOLATILE ORGANIC COMPOUNDS DETECTED IN PPM

TIME	TARGET COMPOUNDS					OTHERS						
	VINYL CHLORIDE	METHYLENE CHLORIDE	1,2-DCE	BENZENE	TOLUENE	METHANE (PERCENT)	HYDROGEN SULFIDE	ETHYL BENZENE	M-XYLENE	STYRENE	UNKNOWN ^S *	TOTAL DETECTED
1524	—	—	—	—	—	0.02	—	—	—	0.11	0.02	0.13
1627	—	—	—	—	0.05	0.02	—	0.03	0.06	0.23	0.70	1.07
1650	—	—	—	0.02	0.08	0.02	—	—	—	0.22	0.68	1.00
1733	—	—	—	0.02	0.08	0.02	—	0.03	0.10	0.35	0.83	1.41
1818	—	—	—	—	0.07	0.02	—	—	0.07	0.31	0.71	1.16
1906	—	—	—	—	0.10	0.02	—	—	0.06	0.38	0.66	1.20
2006	—	—	—	—	0.08	0.01	—	0.14	0.07	0.20	0.70	1.19
2035	—	—	—	0.07	0.52	0.02	—	—	—	0.53	2.53	3.65
2052	—	—	—	—	0.09	0.02	—	—	0.05	0.32	0.76	1.22
2112	—	—	—	—	0.09	0.02	—	—	0.08	0.19	0.66	1.02
2152	—	—	—	—	0.06	0.02	—	—	0.06	0.26	0.56	0.94
2236	—	—	—	—	0.04	tr	—	—	—	0.17	0.08	0.29
2254	—	—	—	—	0.03	0.02	—	—	0.04	0.15	0.09	0.31

TUNNEL MUCK/ SHAFT/ GROUNDWATER SAMPLES

APPARENT VOLATILE ORGANIC COMPOUNDS DETECTED IN PPM

SAMPLE TYPE	TARGET COMPOUNDS					OTHERS						
	VINYL CHLORIDE	METHYLENE CHLORIDE	1,2-DCE	BENZENE	TOLUENE	METHANE (PERCENT)	HYDROGEN SULFIDE	ETHYL BENZENE	M-XYLENE	STYRENE	UNKNOWN ^S *	TOTAL DETECTED
TM/1645	—	—	—	0.17	0.17	—	—	—	0.09	0.10	4.02	4.55
TM/2115	—	—	—	0.07	0.02	—	—	—	0.04	—	4.47	4.60

REMARKS/ VISITORS:

Tunnel muck dumped intermittently after approximately 1630 hrs. during swing shift.

No tunnel muck hauled from site during swing shift.

No visitors to trailer during swing shift.

ABBREVIATIONS:

SAMPLE TYPE:

TM TUNNEL MUCK
TS TUNNEL SEEP
SM# SHAFT SOIL OR MUCK FROM SITE 15, 27, OR 28

NOTES:

1. (*) UNIDENTIFIED CHROMATOGRAM PEAKS EXPRESSED IN TOLUENE EQUIVALENTS.
2. COMPOUNDS LESS THAN 10 PPB NOT REPORTED.
3. (tr) INDICATES METHANE DETECTED AT CONCENTRATIONS LESS THAN 0.01 PERCENT.
4. METHANE CONCENTRATIONS EXPRESSED IN PERCENT BY VOLUME. METHANE CONCENTRATION VALUES NOT INCLUDED IN TOTAL DETECTED COLUMN.

SHIFT DATA TABLE

PROJECT: STATE ST. MT. HOPE AVE TUNNEL
 CLIENT: STV/ SEELYE STEVENSON VALUE & KNECHT
 H&A REPRESENTATIVE: W. Lanik
 CHECKED BY: P. Micciche

TUNNEL HEADINGS AT
 START: 62 + 15
 END: 62 + 51
 ADVANCE: 36

FILE: 7433-82
 PAGE: 1 OF 2
 DATE: 30 April-1 May 199
 SHIFT: Graveyard
 DFR NO.: 49

TUNNEL AIR SAMPLES

APPARENT VOLATILE ORGANIC COMPOUNDS DETECTED IN PPM

TIME	TARGET COMPOUNDS					OTHERS						
	VINYL CHLORIDE	METHYLENE CHLORIDE	1,2-DCE	BENZENE	TOLUENE	METHANE (PERCENT)	HYDROGEN SULFIDE	ETHYL BENZENE	M-XYLENE	STYRENE	UNKNOWN*	TOTAL DETECTED
2310	—	—	—	—	0.03	0.01	—	—	0.02	0.17	—	0.22
2335	—	—	—	—	0.07	0.01	—	—	—	—	0.06	0.23
0005	—	—	—	—	0.03	0.01	—	—	—	0.14	—	0.17
0035	—	—	—	—	0.03	0.01	—	—	—	—	—	0.03
0106	—	—	—	—	0.02	0.02	—	—	—	0.15	—	0.17
0138	—	—	—	—	—	0.01	—	—	—	—	—	—
0215	—	—	—	—	—	0.01	—	—	—	—	—	—
0244	—	—	—	—	—	0.01	—	—	—	0.09	—	0.09
0301	—	—	—	—	—	0.01	—	—	—	0.07	—	0.07
0331	—	—	—	—	—	0.01	—	—	—	—	—	—
0401	—	—	—	0.02	0.06	0.01	—	—	0.07	0.13	0.49	0.77
0431	—	—	—	0.02	0.05	0.01	—	—	0.04	0.39	0.51	1.01
0501	—	—	—	0.02	0.06	0.01	—	—	—	—	0.87	0.75
0531	—	—	—	0.02	0.06	0.01	—	—	—	0.12	0.75	0.95
0601	—	—	—	0.02	0.06	0.02	—	—	0.06	0.11	0.63	0.88
0630	—	—	—	0.02	0.06	0.02	—	—	0.04	0.16	0.51	0.79

TUNNEL MUCK/ SHAFT/ GROUNDWATER SAMPLES

APPARENT VOLATILE ORGANIC COMPOUNDS DETECTED IN PPM

SAMPLE TYPE	TARGET COMPOUNDS					OTHERS						
	VINYL CHLORIDE	METHYLENE CHLORIDE	1,2-DCE	BENZENE	TOLUENE	METHANE (PERCENT)	HYDROGEN SULFIDE	ETHYL BENZENE	M-XYLENE	STYRENE	UNKNOWN*	TOTAL DETECTED
TM/0045	—	—	—	0.10	0.11	—	—	—	0.06	0.05	2.36	2.68
TM/0515	—	—	—	0.05	0.12	—	—	—	—	—	1.59	1.76
2350aa	—	—	—	—	0.05	—	—	0.03	—	—	0.06	0.14
0055cg	—	—	—	—	—	—	—	—	—	—	—	—

REMARKS/ VISITORS:

Tunnel muck dumped intermittently during graveyard shift.

No tunnel muck hauled from site during graveyard shift.

No visitors to trailer during graveyard shift.

ABBREVIATIONS:

SAMPLE TYPE:

TM	TUNNEL MUCK
TS	TUNNEL SEEP
SM#	SHAFT SOIL OR MUCK FROM SITE 15, 27, OR 28

- NOTES:
1. (*) UNIDENTIFIED CHROMATOGRAM PEAKS EXPRESSED IN TOLUENE EQUIVALENTS.
 2. COMPOUNDS LESS THAN 10 PPB NOT REPORTED.
 3. (cg) INDICATES CARRIER GAS BLANK ANALYSIS.
 4. (aa) INDICATES AMBIENT AIR BLANK ANALYSIS.
 5. METHANE CONCENTRATIONS EXPRESSED IN PERCENT BY VOLUME. METHANE CONCENTRATION VALUES NOT INCLUDED IN TOTAL DETECTED COLUMN.

DAILY FIELD REPORT

PROJECT:	STATE ST. - MT. HOPE TUNNEL Rochester, New York	DATE: 1 May 1990
CLIENT:	STV/Seelye Stevenson Value & Knecht	PAGE: 1 of 2
CONTRACTOR:	GCF Constructors	FILE: 7433-82
WEATHER:	Partly cloudy 63°	

CONTRACTOR ACTIVITIES:

Mined TBM tunnel from Station 62+51 to Station 63+05 (day shift), from 63+05 to 63+61 (swing shift), and from 63+61 to 64+35 (graveyard shift).

Hauled tunnel muck intermittently during the day shift and until approximately 1730 hrs. during the swing shift. Dumped tunnel muck on the spoil pile adjacent to Control Structure 41 intermittently during all three shifts.

FIELD REPRESENTATIVE ACTIVITIES:

S. Parker (H&A) performed routine air monitoring of the tunnel ventilation exhaust from 0715 to 1420 hrs. Conducted 11 tunnel exhaust air screenings using the Photovac 10s70 gas chromatograph.

Obtained two tunnel muck samples from the spoil pile and one sample of soil from the excavation for the 24-in. diameter reinforced concrete pipe (east of the railroad tracks) at Site 15, and performed headspace screening using the same instrument.

P. Micciche (H&A) performed routine air monitoring of the tunnel ventilation exhaust from 1505 to 2244 hrs. Conducted 14 tunnel exhaust air screenings using the Photovac 10s70 gas chromatograph.

Obtained two tunnel muck samples from the spoil pile and performed headspace screening using the same instrument.

W. Lanik (H&A) performed routine air monitoring of the tunnel ventilation exhaust from 2301 to 0630 hrs. Conducted 16 tunnel exhaust air screenings using the Photovac 10s70 gas chromatograph.

Obtained two tunnel muck samples from the spoil pile and performed headspace screening using the same instrument.

PROJECT: STATE ST. - MT. HOPE TUNNEL
Rochester, New York
CLIENT: STV/Seelye Stevenson Value &
Knecht

DATE: 1 May 1990
PAGE: 2 of 2
FILE: 7433-82

TEST DATA SUMMARY:

None of the action threshold levels for the targeted compounds referenced in the 1 March 1990 workplan (benzene, toluene, 1,2-DCE, methylene chloride, and vinyl chloride) were exceeded during the monitoring periods.

FIELD REPRESENTATIVE

S. Parker

P. Micciche

W. Lanik

TIME ON SITE

0700-1515

(8.25 hrs.)

1500-2300

(8.0 hrs.)

2300-0700

(8.0 hrs.)

DISTRIBUTION

STV/Seelye Stevenson: Mr. Richard Richter
Mr. Suki Suresh
Mr. Phil Steinfeldt


H&A OF NEW YORK

SHIFT DATA TABLE

PROJECT: STATE ST. MT. HOPE AVE TUNNEL
 CLIENT: STV/ SEELYE STEVENSON VALUE & KNECHT
 H&A REPRESENTATIVE: S. Parker
 CHECKED BY: P. Micciche

TUNNEL HEADINGS AT
 START: 62 + 51
 END: 63 + 05
 ADVANCE: 54

FILE: 7433-82
 PAGE: 1 OF 2
 DATE: 1 May 1990
 SHIFT: Day
 DFR NO.: 50

TUNNEL AIR SAMPLES

APPARENT VOLATILE ORGANIC COMPOUNDS DETECTED IN PPM

TIME	TARGET COMPOUNDS					OTHERS						
	VINYL CHLORIDE	METHYLENE CHLORIDE	1,2-DCE	BENZENE	TOLUENE	METHANE (PERCENT)	HYDROGEN SULFIDE	ETHYL BENZENE	M-XYLENE	STYRENE	UNKNOWN ⁹ *	TOTAL DETECTED
0715	—	—	—	—	0.02	0.01	—	—	—	0.03	—	0.05
0810	—	—	—	—	0.06	0.01	—	0.03	0.06	0.30	0.09	0.54
0851	—	—	—	0.02	0.08	0.01	—	—	—	0.52	0.83	1.45
0933	—	—	—	—	0.02	0.02	—	—	0.06	0.20	—	0.28
1016	—	—	—	0.02	0.07	0.01	—	—	0.06	0.32	0.59	1.06
1104	—	—	—	0.02	0.07	0.01	—	—	0.14	0.47	0.77	1.47
1208	—	—	—	0.02	0.06	0.01	—	—	0.06	0.39	0.60	1.13
1245	—	—	—	—	0.03	0.01	—	—	0.06	0.32	—	0.41
1324	—	—	—	—	0.02	0.01	—	—	—	0.50	—	0.52
1357	—	—	—	0.02	0.06	0.01	—	—	—	0.73	0.59	1.40
1420	—	—	—	0.02	0.07	0.01	—	—	0.06	0.36	0.62	1.13

TUNNEL MUCK/ SHAFT/ GROUNDWATER SAMPLES

APPARENT VOLATILE ORGANIC COMPOUNDS DETECTED IN PPM

SAMPLE TYPE	TARGET COMPOUNDS					OTHERS						
	VINYL CHLORIDE	METHYLENE CHLORIDE	1,2-DCE	BENZENE	TOLUENE	METHANE (PERCENT)	HYDROGEN SULFIDE	M-XYLENE	O-XYLENE	STYRENE	UNKNOWN ⁹ *	TOTAL DETECTED
TM/0815	—	—	—	0.24	0.29	—	—	0.16	0.10	0.31	8.03**	9.13
TM/0815D	—	—	—	0.21	0.22	—	—	0.09	—	0.11	7.97	8.60
SM15/1045	—	—	—	—	—	—	—	—	—	—	0.03	0.03
TM/1230	—	—	—	0.19	0.20	—	—	0.09	—	0.08	4.85	5.41

REMARKS/ VISITORS:

Tunnel muck dumped intermittently during day shift.

Tunnel muck hauled from site intermittently during day shift.

No visitors to trailer during day shift.

Collected sample of soil from the excavation for the 24-in. diameter reinforced concrete pipe (east of the railroad tracks) at

Site 15 at 1045 hrs. Sample obtained from pile of excavated materials located adjacent to the 8-ft. diameter access manhole.

Excavation in trench advanced to approximately 27.8 ft below ground surface at time of sampling. Sample consisted of brown fill, visually classified as silty CLAY, with little coarse to fine sand, trace roots, trace brick, trace gravel, and trace cinders.

ABBREVIATIONS:

SAMPLE TYPE:

TM	TUNNEL MUCK
TS	TUNNEL SEEP
SM#	SHAFT SOIL OR MUCK FROM SITE 15, 27, OR 28

- NOTES:
1. (*) UNIDENTIFIED CHROMATOGRAM PEAKS EXPRESSED IN TOLUENE EQUIVALENTS.
 2. COMPOUNDS LESS THAN 10 PPB NOT REPORTED.
 3. METHANE CONCENTRATIONS EXPRESSED IN PERCENT BY VOLUME. METHANE CONCENTRATION VALUES NOT INCLUDED IN TOTAL DETECTED COLUMN.
 4. (D) INDICATES DUPLICATE ANALYSIS.
 5. (**) INDICATES IMPRECISE RESULT DUE TO OFF-SCALE CHROMATOGRAM FOR UNKNOWN COMPOUNDS. SEE DUPLICATE ANALYSIS FOR MORE PRECISE CONCENTRATION OF UNKNOWN. ALL OTHER CONCENTRATIONS REPORTED IN THE ORIGINAL ANALYSIS ARE BASED ON ON-SCALE CHROMATOGRAM PEAKS, AND THEREFORE ARE MORE PRECISE THAN THOSE IN THE DUPLICATE ANALYSIS.

PROJECT: STATE ST. MT. HOPE AVE TUNNEL
 CLIENT: STV/ SEELYE STEVENSON VALUE & KNECHT
 H&A REPRESENTATIVE: P. Micciche
 CHECKED BY: P. Micciche

TUNNEL HEADINGS AT
 START: 63 + 05
 END: 63 + 61
 ADVANCE: 56

FILE: 7433-82
 PAGE: 1 OF 2
 DATE: 1 May 1990
 SHIFT: Swing
 DFR NO.: 50

TUNNEL AIR SAMPLES

APPARENT VOLATILE ORGANIC COMPOUNDS DETECTED IN PPM

TIME	TARGET COMPOUNDS					OTHERS						
	VINYL CHLORIDE	METHYLENE CHLORIDE	1,2-DCE	BENZENE	TOLUENE	METHANE (PERCENT)	HYDROGEN SULFIDE	ETHYL BENZENE	M-XYLENE	STYRENE	UNKNOWN*	TOTAL DETECTED
1505	—	—	—	—	—	0.01	—	—	—	0.23	—	0.23
1530	—	—	—	—	0.05	0.03	—	—	—	0.31	0.09	0.45
1612	—	—	—	0.02	0.08	0.01	—	—	—	0.56	0.65	1.31
1727	—	—	—	0.02	0.09	—	—	0.56	—	—	1.26	1.93
1814	—	—	—	—	—	tr	—	—	—	0.22	0.04	0.26
1855	—	—	—	—	—	0.02	—	—	0.06	0.37	0.85	1.28
1929	—	—	—	0.03	0.08	0.02	—	—	0.06	0.85	0.77	1.79
2008	—	—	—	—	—	0.01	—	—	—	0.02	0.36	0.38
2032	—	—	—	—	—	0.05	—	—	—	0.19	0.31	0.50
2059	—	—	—	—	—	0.03	—	—	—	—	0.33	0.33
2119	—	—	—	—	—	0.02	—	—	—	0.19	0.27	0.46
2153	—	—	—	—	—	0.02	—	—	0.06	—	0.74	0.80
2227	—	—	—	0.02	—	0.09	—	—	0.03	0.14	1.19	1.38
2244	—	—	—	0.02	0.07	0.11	—	—	0.06	—	1.33	1.48

TUNNEL MUCK/ SHAFT/ GROUNDWATER SAMPLES

APPARENT VOLATILE ORGANIC COMPOUNDS DETECTED IN PPM

SAMPLE TYPE TIME	TARGET COMPOUNDS					OTHERS						
	VINYL CHLORIDE	METHYLENE CHLORIDE	1,2-DCE	BENZENE	TOLUENE	METHANE (PERCENT)	HYDROGEN SULFIDE	ETHYL BENZENE	M-XYLENE	STYRENE	UNKNOWN*	TOTAL DETECTED
TM/1546	—	—	—	0.11	0.13	—	—	—	0.06	0.31	3.46**	4.07
TM/1546D	—	—	—	0.12	0.12	—	—	—	0.05	0.02	3.85	4.16
TM/1824	—	—	—	0.11	0.12	—	—	—	0.05	0.02	2.62	2.92
1651cg	—	—	0.02	—	0.05	—	—	—	0.02	0.15	—	0.24
1709cg	—	—	—	—	0.03	—	—	0.05	0.05	0.19	0.02	0.34
2136cg	—	—	—	—	—	—	—	—	—	—	—	—
2207aa	—	—	—	—	—	—	—	—	—	—	—	—

REMARKS/ VISITORS:

Tunnel muck dumped intermittently during swing shift.

Tunnel muck hauled from site intermittently until approximately 1730 hrs. during swing shift.

No visitors to trailer during swing shift.

ABBREVIATIONS:

SAMPLE TYPE:

TM	TUNNEL MUCK
TS	TUNNEL SEEP
SM#	SHAFT MUCK FROM SITE 15, 27, OR 28

- NOTES:
1. (*) UNIDENTIFIED CHROMATOGRAM PEAKS EXPRESSED IN TOLUENE EQUIVALENTS.
 2. COMPOUNDS LESS THAN 10 PPB NOT REPORTED.
 3. (cg) INDICATES CARRIER GAS BLANK ANALYSIS.
 4. (aa) INDICATES AMBIENT AIR BLANK ANALYSIS.
 5. (tr) INDICATES METHANE DETECTED AT CONCENTRATIONS LESS THAN 0.01 PERCENT.
 6. METHANE CONCENTRATIONS EXPRESSED IN PERCENT BY VOLUME. METHANE CONCENTRATION VALUES NOT INCLUDED IN TOTAL DETECTED COLUMN.
 7. (D) INDICATES DUPLICATE ANALYSIS.
 8. (**) INDICATES IMPRECISE RESULT DUE TO OFFSCALE CHROMATOGRAM FOR UNKNOWN COMPOUNDS. SEE DUPLICATE ANALYSIS FOR MORE PRECISE CONCENTRATION OF UNKNOWN9. ALL OTHER CONCENTRATIONS REPORTED IN THE ORIGINAL ANALYSIS ARE BASED ON ON-SCALE CHROMATOGRAM PEAKS, AND THEREFORE ARE MORE PRECISE THAN THOSE IN THE DUPLICATE ANALYSIS.

SHIFT DATA TABLE

PROJECT: STATE ST. MT. HOPE AVE TUNNEL
 CLIENT: STV/ SEELYE STEVENSON VALUE & KNECHT
 H&A REPRESENTATIVE: W. Lanik
 CHECKED BY: P. Micciche

TUNNEL HEADINGS AT
 START: 63 + 61
 END: 64 + 35
 ADVANCE: 74

FILE: 7433-82
 PAGE: 1 OF 2
 DATE: 1-2 May 1990
 SHIFT: Graveyard
 DFR NO.: 50

TUNNEL AIR SAMPLES

APPARENT VOLATILE ORGANIC COMPOUNDS DETECTED IN PPM

TIME	TARGET COMPOUNDS					OTHERS						
	VINYL CHLORIDE	METHYLENE CHLORIDE	1,2-DCE	BENZENE	TOLUENE	METHANE (PERCENT)	HYDROGEN SULFIDE	ETHYL BENZENE	M-XYLENE	STYRENE	UNKNOWN*	TOTAL DETECTED
2301	—	—	—	0.02	0.07	0.08	—	—	—	0.39	0.98	1.46
2330	—	—	—	—	0.04	0.06	—	—	—	0.19	0.43	0.66
0000	—	—	—	0.02	0.07	0.05	—	—	—	—	0.78	0.87
0030	—	—	—	—	—	0.01	—	—	—	0.07	0.25	0.32
0100	—	—	—	0.02	0.06	tr	—	—	0.04	—	0.57	0.69
0130	—	—	—	0.02	0.07	0.01	—	—	0.04	0.15	0.49	0.77
0200	—	—	—	0.02	0.06	0.01	—	—	—	0.05	0.33	0.46
0230	—	—	—	—	0.02	0.02	—	—	—	0.11	0.02	0.15
0300	—	—	—	—	0.07	0.01	—	—	—	0.04	0.24	0.35
0330	—	—	—	0.02	0.07	0.01	—	—	0.05	—	0.69	0.83
0400	—	—	—	0.02	0.06	0.02	—	—	—	0.13	0.41	0.62
0430	—	—	—	0.03	0.10	0.02	—	—	—	0.13	0.62	0.88
0500	—	—	—	0.03	0.09	0.01	—	—	—	0.15	0.91	1.18
0530	—	—	—	0.02	0.07	0.02	—	—	—	—	0.55	0.64
0600	—	—	—	0.02	0.08	0.02	—	—	0.05	0.14	0.67	0.96
0630	—	—	—	0.03	0.09	0.01	—	—	0.06	0.12	0.75	1.05

TUNNEL MUCK/ SHAFT/ GROUNDWATER SAMPLES

APPARENT VOLATILE ORGANIC COMPOUNDS DETECTED IN PPM

SAMPLE TYPE TIME	TARGET COMPOUNDS					OTHERS						
	VINYL CHLORIDE	METHYLENE CHLORIDE	1,2-DCE	BENZENE	TOLUENE	METHANE (PERCENT)	HYDROGEN SULFIDE	ETHYL BENZENE	M-XYLENE	STYRENE	UNKNOWN*	TOTAL DETECTED
TM/0100	—	—	—	0.13	0.15	—	—	—	0.07	—	2.82	3.17
TM/0445	—	—	—	0.12	0.15	—	—	—	0.07	—	1.72	2.06

REMARKS/ VISITORS:

Tunnel muck dumped intermittently during graveyard shift.

No tunnel muck hauled from site during graveyard shift.

No visitors to trailer during graveyard shift.

ABBREVIATIONS:

SAMPLE TYPE:

TM	TUNNEL MUCK
TS	TUNNEL SEEP
SM#	SHAFT SOIL OR MUCK FROM SITE 15, 27, OR 28

- NOTES:
1. (*) UNIDENTIFIED CHROMATOGRAM PEAKS EXPRESSED IN TOLUENE EQUIVALENTS.
 2. COMPOUNDS LESS THAN 10 PPB NOT REPORTED.
 3. (tr) INDICATES METHANE DETECTED AT CONCENTRATIONS LESS THAN 0.01 PERCENT.
 4. METHANE CONCENTRATIONS EXPRESSED IN PERCENT BY VOLUME. METHANE CONCENTRATION VALUES NOT INCLUDED IN TOTAL DETECTED COLUMN.

DAILY FIELD REPORT

PROJECT:	STATE ST. - MT. HOPE TUNNEL	DATE:	2 May 1990
	Rochester, New York	PAGE:	1 of 2
CLIENT:	STV/Seelye Stevenson Value &	FILE:	7433-82
	Knecht		
CONTRACTOR:	GCF Constructors		
WEATHER:	Partly cloudy 48°		

CONTRACTOR ACTIVITIES:

Mined TBM tunnel from Station 64+35 to Station 64+90 (day shift), from 64+90 to 65+35 (swing shift), and from 65+35 to 66+00 (graveyard shift).

Hauled tunnel muck intermittently during the day shift and until approximately 1610 hrs. during the swing shift. Dumped tunnel muck on the spoil pile adjacent to Control Structure 41 intermittently during all three shifts.

FIELD REPRESENTATIVE ACTIVITIES:

S. Parker (H&A) performed routine air monitoring of the tunnel ventilation exhaust from 0703 to 1454 hrs. Conducted 13 tunnel exhaust air screenings using the Photovac 10s70 gas chromatograph.

Obtained two tunnel muck samples from the spoil pile and one sample of soil from the excavation for the 24-in. diameter reinforced concrete pipe (east of the railroad tracks) at Site 15, and performed headspace screening using the same instrument.

P. Micciche (H&A) performed routine air monitoring of the tunnel ventilation exhaust from 1519 to 2236 hrs. Conducted 14 tunnel exhaust air screenings using the Photovac 10s70 gas chromatograph.

Obtained two tunnel muck samples from the spoil pile and one sample of soil excavated from the 12-ft. diameter drop structure at Site 27, and performed headspace screening using the same instrument.

W. Lanik (H&A) performed routine air monitoring of the tunnel ventilation exhaust from 2305 to 0630 hrs. Conducted 16 tunnel exhaust air screenings using the Photovac 10s70 gas chromatograph.

Obtained two tunnel muck samples from the spoil pile and performed headspace screening using the same instrument.

PROJECT: STATE ST. - MT. HOPE TUNNEL
Rochester, New York
CLIENT: STV/Seelye Stevenson Value &
Knecht

DATE: 2 May 1990
PAGE: 2 of 2
FILE: 7433-82

TEST DATA SUMMARY:

None of the action threshold levels for the targeted compounds referenced in the 1 March 1990 workplan (benzene, toluene, 1,2-DCE, methylene chloride, and vinyl chloride) were exceeded during the monitoring periods.

FIELD REPRESENTATIVE

S. Parker

P. Micciche

W. Lanik

TIME ON SITE

0700-1530

(8.5 hrs.)

1500-2300

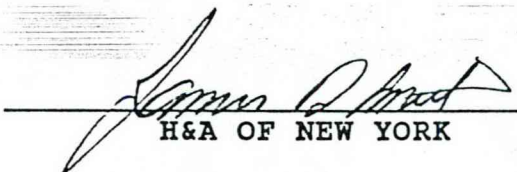
(8.0 hrs.)

2300-0700

(8.0 hrs.)

DISTRIBUTION

STV/Seelye Stevenson: Mr. Richard Richter
Mr. Suki Suresh
Mr. Phil Steinfeldt


H&A OF NEW YORK

SHIFT DATA TABLE

PROJECT: STATE ST. MT. HOPE AVE TUNNEL
 CLIENT: STV/ SEELYE STEVENSON VALUE & KNECHT
 H&A REPRESENTATIVE: S. Parker
 CHECKED BY: P. Micciche

TUNNEL HEADINGS AT
 START: 64 + 35
 END: 64 + 90
 ADVANCE: 55

FILE: 7433-82
 PAGE: 1 OF 2
 DATE: 2 May 1990
 SHIFT: Day
 DFR NO.: 51

TUNNEL AIR SAMPLES

APPARENT VOLATILE ORGANIC COMPOUNDS DETECTED IN PPM

TIME	TARGET COMPOUNDS					OTHERS						
	VINYL CHLORIDE	METHYLENE CHLORIDE	1,2-DCE	BENZENE	TOLUENE	METHANE (PERCENT)	HYDROGEN SULFIDE	ETHYL BENZENE	M-XYLENE	STYRENE	UNKNOWN*	TOTAL DETECTED
0703	—	—	—	0.03	0.07	0.02	—	—	0.05	0.19	0.73	1.07
0742	—	—	—	—	0.04	0.01	—	0.04	0.05	0.16	—	0.29
0813	—	—	—	0.02	0.07	0.02	—	—	0.07	0.15	0.56	0.87
0856	—	—	—	0.02	0.07	0.01	—	0.04	0.08	0.34	0.54	1.09
0943	—	—	—	0.01	0.05	0.01	—	—	0.06	0.23	0.21	0.56
1020	—	—	—	—	0.07	0.02	—	—	0.03	0.17	0.22	0.49
1108	—	—	—	0.02	0.05	0.01	—	—	0.03	0.18	0.19	0.47
1140	—	—	—	—	0.02	0.02	—	—	—	0.22	0.01	0.25
1222	—	—	—	0.01	0.05	0.02	—	—	0.03	0.32	0.54	0.95
1258	—	—	—	—	—	0.01	—	—	—	0.16	—	0.16
1340	—	—	—	—	0.04	0.01	—	—	—	—	0.23	0.27
1416	—	—	—	—	—	0.01	—	—	—	0.13	0.04	0.17
1434	—	—	—	—	—	0.01	—	—	—	0.18	0.20	0.38
1359aa	—	—	—	—	0.02	—	—	—	—	—	—	0.02
1435cg	—	—	—	—	—	—	—	—	—	—	0.64	0.64

TUNNEL MUCK/ SHAFT/ GROUNDWATER SAMPLES

APPARENT VOLATILE ORGANIC COMPOUNDS DETECTED IN PPM

SAMPLE TYPE	TARGET COMPOUNDS					OTHERS						
	VINYL CHLORIDE	METHYLENE CHLORIDE	1,2-DCE	BENZENE	TOLUENE	METHANE (PERCENT)	HYDROGEN SULFIDE	ETHYL BENZENE	M-XYLENE	STYRENE	UNKNOWN*	TOTAL DETECTED
TM/0830	—	—	—	0.14	0.14	—	—	—	0.06	0.14	4.18	4.66
SM15/1050	—	—	—	—	—	—	—	—	—	—	0.02	0.02
TM/1135	—	—	—	0.12	0.12	—	—	—	0.05	0.07	3.04	3.40

REMARKS/ VISITORS:

Tunnel muck dumped intermittently during day shift.

Tunnel muck hauled from site intermittently during day shift.

Collected sample of soil from the excavation for the 24-in. diameter reinforced concrete pipe (east of the railroad tracks)

at Site 15 at 1050 hrs. Sample obtained from pile of excavated materials located adjacent to the 8-ft. diameter access manhole.

Excavation in trench advanced to approximately 29.4 ft. below ground surface at the time of sampling. Sample consisted of brown fill, visually classified as silty CLAY, with little gravel, little coarse to fine sand, and trace cinders.

ABBREVIATIONS:

SAMPLE TYPE:

TM	TUNNEL MUCK
TS	TUNNEL SEEP
SM#	SHAFT SOIL OR MUCK FROM SITE 15, 27, OR 28

- NOTES:
1. (*) UNIDENTIFIED CHROMATOGRAM PEAKS EXPRESSED IN TOLUENE EQUIVALENTS.
 2. COMPOUNDS LESS THAN 10 PPB NOT REPORTED.
 3. (cg) INDICATES CARRIER GAS BLANK ANALYSIS.
 4. (aa) INDICATES AMBIENT AIR BLANK ANALYSIS.
 5. METHANE CONCENTRATIONS EXPRESSED IN PERCENT BY VOLUME. METHANE CONCENTRATION VALUES NOT INCLUDED IN TOTAL DETECTED COLUMN.

SHIFT DATA TABLE

PROJECT: STATE ST. MT. HOPE AVE TUNNEL
 CLIENT: STV/ SEELYE STEVENSON VALUE & KNECHT
 H&A REPRESENTATIVE: P. Micciche
 CHECKED BY: P. Micciche

TUNNEL HEADINGS AT
 START: 64 + 90
 END: 65 + 35
 ADVANCE: 45

FILE: 7433-82
 PAGE: 1 OF 2
 DATE: 2 May 1990
 SHIFT: Swing
 DFR NO.: 51

TUNNEL AIR SAMPLES

APPARENT VOLATILE ORGANIC COMPOUNDS DETECTED IN PPM

TIME	TARGET COMPOUNDS					OTHERS						
	VINYL CHLORIDE	METHYLENE CHLORIDE	1,2-DCE	BENZENE	TOLUENE	METHANE (PERCENT)	HYDROGEN SULFIDE	ETHYL BENZENE	M-XYLENE	STYRENE	UNKNOWN ^S *	TOTAL DETECTED
1519	—	—	—	—	—	0.02	—	—	—	—	—	—
1602	—	—	—	—	0.03	0.02	—	—	—	0.22	0.32	0.57
1637	—	—	—	—	—	0.03	—	—	—	0.23	0.04	0.27
1714	—	—	—	0.03	0.09	0.02	—	—	0.10	0.26	0.46	0.94
1756	—	—	—	—	0.05	0.03	—	—	0.06	0.32	0.16	0.59
1826	—	—	—	—	—	0.02	—	—	0.04	0.21	—	0.25
1904	—	—	—	—	—	0.01	—	—	—	0.15	0.04	0.19
1938	—	—	—	—	—	0.02	—	—	—	0.14	—	0.14
2018	—	—	—	—	—	0.02	—	—	—	0.16	0.03	0.19
2045	—	—	—	—	—	0.01	—	—	—	0.14	—	0.14
2113	—	—	—	—	—	0.01	—	—	—	0.13	—	0.13
2151	—	—	—	—	0.12	0.01	—	—	—	0.14	0.50	0.76
2211	—	—	—	—	0.06	0.02	—	—	0.06	0.12	0.59	0.83
2236	—	—	—	—	0.06	0.02	—	—	—	—	0.51	0.57
1540aa	—	—	—	—	—	—	—	—	—	—	—	—
1620cg	—	—	—	—	—	—	—	—	—	—	0.08	0.08

TUNNEL MUCK/ SHAFT/ GROUNDWATER SAMPLES

APPARENT VOLATILE ORGANIC COMPOUNDS DETECTED IN PPM

SAMPLE TYPE TIME	TARGET COMPOUNDS					OTHERS						
	VINYL CHLORIDE	METHYLENE CHLORIDE	1,2-DCE	BENZENE	TOLUENE	METHANE (PERCENT)	HYDROGEN SULFIDE	PCE	M-XYLENE	STYRENE	UNKNOWN ^S *	TOTAL DETECTED
SM27/1510	—	—	—	—	—	—	—	—	—	—	—	—
SM27/1510D	—	—	—	—	—	—	—	—	—	—	—	—**
TM/1645	—	—	—	0.16	0.17	—	—	—	0.07	0.08	4.92	5.40
TM/2200	—	—	—	0.34	0.34	—	—	—	0.16	0.54	15.29***	16.67
TM/2200D	—	—	—	0.33	0.35	—	—	—	0.14	0.24	16.12***	17.18
TM/2200T	—	—	—	0.33	0.33	—	—	—	0.13	0.51	14.32	15.62

REMARKS/ VISITORS:

Tunnel muck dumped intermittently during swing shift.

Tunnel muck hauled from site intermittently until approximately 1610 hrs. during swing shift.

No visitors to trailer during swing shift.

Collected sample of soil excavated from the 12-ft. diameter drop structure at Site 27 at 1510 hrs. Sample obtained from stockpile adjacent to the structure. Excavation advanced to approximately 6.0 ft. below ground surface at the time of sampling. Sample consisted of brown fill, visually classified as coarse to fine sandy GRAVEL, with little silt, trace concrete, and trace brick fragments.

ABBREVIATIONS:

SAMPLE TYPE:

TM	TUNNEL MUCK
TS	TUNNEL SEEP
SM#	SHAFT SOIL OR MUCK FROM SITE 15, 27, OR 28

NOTES:

1. (*) UNIDENTIFIED CHROMATOGRAM PEAKS EXPRESSED IN TOLUENE EQUIVALENTS.
2. COMPOUNDS LESS THAN 10 PPB NOT REPORTED.
3. (cg) INDICATES CARRIER GAS BLANK ANALYSIS.
4. (aa) INDICATES AMBIENT AIR BLANK ANALYSIS.
5. METHANE CONCENTRATIONS EXPRESSED IN PERCENT BY VOLUME. METHANE CONCENTRATION VALUES NOT INCLUDED IN TOTAL DETECTED COLUMN.
6. (D) INDICATES DUPLICATE ANALYSIS.
7. (T) INDICATES TRIPLICATE ANALYSIS.
8. (**) DUPLICATE ANALYSIS WAS PERFORMED AS A RESULT OF CHROMATOGRAM BASELINE DRIFT DURING ORIGINAL ANALYSIS.
9. (***) INDICATES IMPRECISE RESULT DUE TO OFF-SCALE CHROMATOGRAM PEAKS FOR UNKNOWN COMPOUNDS. SEE TRIPLICATE ANALYSIS FOR MORE PRECISE CONCENTRATION OF UNKNOWN. ALL OTHER CONCENTRATIONS REPORTED IN THE ORIGINAL ANALYSIS ARE BASED ON ON-SCALE CHROMATOGRAM PEAKS, AND THEREFORE ARE MORE ACCURATE THAN THOSE IN THE DUPLICATE AND TRIPLICATE ANALYSES.

SHIFT DATA TABLE

PROJECT: STATE ST. MT. HOPE AVE TUNNEL
 CLIENT: STV/ SEELYE STEVENSON VALUE & KNECHT
 H&A REPRESENTATIVE: W. Lanik
 CHECKED BY: P. Micciche

TUNNEL HEADINGS AT
 START: 65 + 35
 END: 66 + 00
 ADVANCE: 65

FILE: 7433-82
 PAGE: 1 OF 2
 DATE: 2-3 May 1990
 SHIFT: Graveyard
 DFR NO.: 51

TUNNEL AIR SAMPLES

APPARENT VOLATILE ORGANIC COMPOUNDS DETECTED IN PPM

TIME	TARGET COMPOUNDS					OTHERS						
	VINYL CHLORIDE	METHYLENE CHLORIDE	1,2-DCE	BENZENE	TOLUENE	METHANE (PERCENT)	HYDROGEN SULFIDE	ETHYL BENZENE	M-XYLENE	STYRENE	UNKNOWN ^s	TOTAL DETECTED
2305	—	—	—	—	0.04	0.01	—	—	0.03	0.18	0.07	0.32
2335	—	—	—	—	—	0.01	—	—	—	0.14	—	0.14
0000	—	—	—	—	—	0.02	—	—	—	0.13	0.03	0.16
0030	—	—	—	—	—	0.02	—	—	—	0.12	0.01	0.13
0100	—	—	—	—	0.01	0.01	—	—	—	0.17	—	0.18
0131	—	—	—	—	0.03	0.02	—	—	—	0.12	0.03	0.18
0201	—	—	—	—	0.10	0.03	—	—	0.05	0.17	0.34	0.66
0230	—	—	—	—	0.06	0.02	—	—	0.04	0.17	0.23	0.50
0300	—	—	—	—	0.02	0.02	—	—	—	0.23	0.02	0.27
0330	—	—	—	0.02	0.06	0.01	—	—	0.05	0.24	0.63	1.00
0400	—	—	—	0.02	0.07	0.01	—	—	0.04	0.13	0.70	0.96
0430	—	—	—	—	0.05	0.02	—	—	—	—	—	0.05
0500	—	—	—	0.02	0.06	0.01	—	—	0.05	—	0.81	0.94
0530	—	—	—	0.02	0.05	0.01	—	—	0.03	0.22	0.51	0.83
0600	—	—	—	0.01	0.03	0.01	—	—	0.02	0.18	0.27	0.51
0630	—	—	—	—	0.02	0.02	—	—	—	0.18	0.03	0.23

TUNNEL MUCK/ SHAFT/ GROUNDWATER SAMPLES

APPARENT VOLATILE ORGANIC COMPOUNDS DETECTED IN PPM

SAMPLE TYPE TIME	TARGET COMPOUNDS					OTHERS						
	VINYL CHLORIDE	METHYLENE CHLORIDE	1,2-DCE	BENZENE	TOLUENE	METHANE (PERCENT)	HYDROGEN SULFIDE	ETHYL BENZENE	M-XYLENE	STYRENE	UNKNOWN ^s	TOTAL DETECTED
TM/0015	—	—	—	0.10	0.11	—	—	—	0.05	—	2.57	2.83
TM/0430	—	—	—	0.09	0.10	—	—	—	0.06	0.05	1.53	1.83
2320aa	—	—	—	—	0.05	—	—	—	—	—	0.45	0.50

REMARKS/ VISITORS:

Tunnel muck dumped intermittently during graveyard shift.

No tunnel muck hauled from site during graveyard shift.

No visitors to trailer during graveyard shift.

ABBREVIATIONS:

SAMPLE TYPE:

TM	TUNNEL MUCK
TS	TUNNEL SEEP
SM#	SHAFT SOIL OR MUCK FROM SITE 15, 27, OR 28

- NOTES:
1. (*) UNIDENTIFIED CHROMATOGRAM PEAKS EXPRESSED IN TOLUENE EQUIVALENTS.
 2. COMPOUNDS LESS THAN 10 PPB NOT REPORTED.
 3. (aa) INDICATES AMBIENT AIR BLANK ANALYSIS.
 4. METHANE CONCENTRATIONS EXPRESSED IN PERCENT BY VOLUME. METHANE CONCENTRATION VALUES NOT INCLUDED IN TOTAL DETECTED COLUMN.

DAILY FIELD REPORT

PROJECT:	STATE ST. - MT. HOPE TUNNEL Rochester, New York	DATE:	3 May 1990
CLIENT:	STV/Seelye Stevenson Value & Knecht	PAGE:	1 of 2
CONTRACTOR:	GCF Constructors	FILE:	7433-82
WEATHER:	Sunny 50°		

CONTRACTOR ACTIVITIES:

Mined TBM tunnel from Station 66+00 to Station 66+34 (day shift), from 66+34 to 67+02 (swing shift), and from 67+02 to 67+67 (graveyard shift).

Hauled tunnel muck intermittently during the day shift. Dumped tunnel muck on the spoil pile adjacent to Control Structure 41 intermittently during all three shifts.

FIELD REPRESENTATIVE ACTIVITIES:

S. Parker (H&A) performed routine air monitoring of the tunnel ventilation exhaust from 0703 to 1440 hrs. Conducted 14 tunnel exhaust air screenings using the Photovac 10s70 gas chromatograph.

Obtained two tunnel muck samples from the spoil pile and one sample of soil excavated from the 12-ft. diameter drop structure at Site 27, and performed headspace screening using the same instrument.

No soil samples were obtained from Site 15 as no excavation was performed during the day shift.

Obtained routine weekly tunnel muck sample TM0800(0503) in accordance with the 1 March 1990 workplan.

P. Micciche (H&A) performed routine air monitoring of the tunnel ventilation exhaust from 1507 to 2235 hrs. Conducted 15 tunnel exhaust air screenings using the Photovac 10s70 gas chromatograph.

Delivered routine weekly tunnel muck sample TM0800(0503) to General Testing Company for analysis.

Obtained two tunnel muck samples from the spoil pile and performed headspace screening using the same instrument.

W. Lanik (H&A) performed air monitoring of the tunnel ventilation exhaust from 2303 to 0630 hrs. Conducted 16 tunnel exhaust air screenings using the Photovac 10s70 gas chromatograph.

PROJECT: STATE ST. - MT. HOPE TUNNEL
Rochester, New York
CLIENT: STV/Seelye Stevenson Value &
Knecht

DATE: 3 May 1990
PAGE: 2 of 2
FILE: 7433-82

Obtained two tunnel muck samples from the spoil pile and performed headspace screening using the same instrument.

DATA SUMMARY:

None of the action threshold levels for the targeted compounds referenced in the 1 March 1990 workplan (benzene, toluene, 1,2-DCE, methylene chloride, and vinyl chloride) were exceeded during the monitoring periods.

FIELD REPRESENTATIVE

S. Parker

P. Micciche

W. Lanik

TIME ON SITE

0700-1515

(8.25 hrs.)

1500-2300

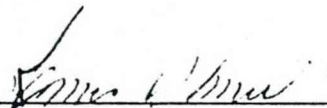
(8.0 hrs.)

2300-0700

(8.0 hrs.)

DISTRIBUTION

STV/Seelye Stevenson: Mr. Richard Richter
Mr. Suki Suresh
Mr. Phil Steinfeldt


H&A OF NEW YORK

SHIFT DATA TABLE

PROJECT: STATE ST. MT. HOPE AVE TUNNEL
 CLIENT: STV/ SEELYE STEVENSON VALUE & KNECHT
 H&A REPRESENTATIVE: S. Parker
 CHECKED BY: S. Parker

TUNNEL HEADINGS AT
 START: 66 + 00
 END: 66 + 34
 ADVANCE: 34

FILE: 7433-82
 PAGE: 1 OF 2
 DATE: 3 May 1990
 SHIFT: Day
 DFR NO.: 52

TUNNEL AIR SAMPLES

APPARENT VOLATILE ORGANIC COMPOUNDS DETECTED IN PPM

TIME	TARGET COMPOUNDS					OTHERS						
	VINYL CHLORIDE	METHYLENE CHLORIDE	1,2-DCE	BENZENE	TOLUENE	METHANE (PERCENT)	HYDROGEN SULFIDE	ETHYL BENZENE	M-XYLENE	STYRENE	UNKNOWN ^s	TOTAL DETECTED
0703	—	—	—	—	0.03	0.03	—	—	—	0.18	0.08	0.29
0753	—	—	—	0.01	0.04	0.01	—	0.04	0.06	0.27	—	0.42
0838	—	—	—	—	0.02	0.01	—	—	0.03	0.20	—	0.25
0923	—	—	—	—	—	0.01	—	—	0.02	0.13	—	0.15
0958	—	—	—	—	—	0.01	—	—	—	0.12	—	0.12
1034	—	—	—	—	—	0.02	—	—	—	—	—	—
1107	—	—	—	—	—	0.01	—	—	—	0.14	0.03	0.17
1145	—	—	—	0.02	0.06	0.01	—	—	0.05	0.28	0.72	1.13
1221	—	—	—	—	0.03	0.01	—	—	—	0.29	0.16	0.48
1242	—	—	—	0.02	0.05	0.01	—	—	0.04	0.29	0.79	1.19
1309	—	—	—	0.01	0.04	0.01	—	—	—	—	0.49	0.54
1344	—	—	—	0.02	0.07	0.02	—	—	0.06	0.31	0.68	1.14
1418	—	—	—	0.02	0.07	0.02	—	—	0.05	0.17	0.73	1.04
1440	—	—	—	—	0.02	0.03	—	—	—	0.10	0.04	0.16

TUNNEL MUCK/ SHAFT/ GROUNDWATER SAMPLES

APPARENT VOLATILE ORGANIC COMPOUNDS DETECTED IN PPM

SAMPLE TYPE TIME	TARGET COMPOUNDS					OTHERS						
	VINYL CHLORIDE	METHYLENE CHLORIDE	1,2-DCE	BENZENE	TOLUENE	METHANE (PERCENT)	HYDROGEN SULFIDE	ETHYL BENZENE	M-XYLENE	STYRENE	UNKNOWN ^s	TOTAL DETECTED
TM/0800	—	—	—	0.14	0.17	—	—	—	0.07	0.19	0.61	1.18
SM27/1205	—	—	—	—	—	—	—	—	—	—	—	—
TM/1240	—	—	—	0.10	0.14	—	—	—	0.08	0.07	1.86	2.25

REMARKS/ VISITORS:

Tunnel muck dumped intermittently during day shift.

Tunnel muck hauled from site intermittently during day shift.

No visitors to trailer during day shift.

Collected sample of soil excavated from the 12-ft. diameter drop structure at Site 27 at 1135 hrs. Sample obtained from stockpile adjacent to structure. Excavation advanced to bedrock at approximately 8.5 ft. below ground surface at time of sampling. Sample consisted of brown fill, visually classified as coarse to fine sandy GRAVEL, with little silt and clay, trace brick, trace cinders, and trace asphalt.

Obtained routine weekly tunnel muck sample TM 0800(0503).

ABBREVIATIONS:

SAMPLE TYPE:

TM	TUNNEL MUCK
TS	TUNNEL SEEP
SM#	SHAFT SOIL OR MUCK FROM SITE 15, 27, OR 28

- NOTES:
1. (*) UNIDENTIFIED CHROMATOGRAM PEAKS EXPRESSED IN TOLUENE EQUIVALENTS.
 2. COMPOUNDS LESS THAN 10 PPB NOT REPORTED.
 3. METHANE CONCENTRATIONS EXPRESSED IN PERCENT BY VOLUME. METHANE CONCENTRATION VALUES NOT INCLUDED IN TOTAL DETECTED COLUMN.

PROJECT: STATE ST. MT. HOPE AVE TUNNEL
 CLIENT: STV/ SEELYE STEVENSON VALUE & KNECHT
 H&A REPRESENTATIVE: P. Micciche
 CHECKED BY: S. Parker

TUNNEL HEADINGS AT
 START: 66 + 34
 END: 67 + 02
 ADVANCE: 68

FILE: 7433-82
 PAGE: 1 OF 2
 DATE: 3 May 1990
 SHIFT: Swing
 DFR NO.: 52

TUNNEL AIR SAMPLES

APPARENT VOLATILE ORGANIC COMPOUNDS DETECTED IN PPM

TIME	TARGET COMPOUNDS					OTHERS						
	VINYL CHLORIDE	METHYLENE CHLORIDE	1,2-DCE	BENZENE	TOLUENE	METHANE (PERCENT)	HYDROGEN SULFIDE	ETHYL BENZENE	M-XYLENE	STYRENE	UNKNOWN*	TOTAL DETECTED
1507	—	—	—	—	—	0.02	—	—	—	—	—	—
1538	—	—	—	—	—	0.02	—	—	—	—	0.38	0.38
1808	—	—	—	—	—	0.02	—	—	—	—	0.03	0.03
1838	—	—	—	—	—	0.02	—	—	—	1.38	0.06	1.44
1708	—	—	—	—	—	0.04	—	—	—	0.13	0.02	0.15
1749	—	—	—	0.02	0.08	0.02	—	—	0.08	0.20	0.76	1.10
1824	—	—	—	0.02	0.05	0.02	—	—	—	0.28	0.51	0.84
1902	—	—	—	—	—	0.03	—	—	—	0.43	0.06	0.49
1948	—	—	—	0.03	0.09	0.02	—	0.03	0.11	0.41	0.81	1.48
2027	—	—	—	—	0.03	0.04	—	—	0.03	0.22	0.05	0.33
2101	—	—	—	0.02	0.07	0.01	—	—	0.08	0.34	0.81	1.32
2131	—	—	—	0.02	0.07	0.02	—	—	0.08	0.32	0.75	1.22
2152	—	—	—	0.02	0.10	0.02	—	—	0.05	0.38	0.84	1.39
2214	—	—	—	—	0.02	0.03	—	—	0.03	0.22	0.03	0.30
2235	—	—	—	0.02	0.08	0.01	—	—	0.08	0.42	0.80	1.38

TUNNEL MUCK/ SHAFT/ GROUNDWATER SAMPLES

APPARENT VOLATILE ORGANIC COMPOUNDS DETECTED IN PPM

SAMPLE TYPE TIME	TARGET COMPOUNDS					OTHERS						
	VINYL CHLORIDE	METHYLENE CHLORIDE	1,2-DCE	BENZENE	TOLUENE	METHANE (PERCENT)	HYDROGEN SULFIDE	ETHYL BENZENE	M-XYLENE	STYRENE	UNKNOWN*	TOTAL DETECTED
TM/1640	—	—	—	0.11	0.15	—	—	—	0.08	—	2.02	2.38
TM/1920	—	—	—	0.18	0.18	—	—	—	0.09	—	3.37	3.80

REMARKS/ VISITORS:

Tunnel muck dumped intermittently during swing shift.

No tunnel muck hauled from site during swing shift.

No visitors to trailer during swing shift.

Delivered routine weekly tunnel muck sample TM 0800(0503) to General Testing Co. for analysis.

ABBREVIATIONS:

SAMPLE TYPE:

TM	TUNNEL MUCK
TS	TUNNEL SEEP
SM#	SHAFT SOIL OR MUCK FROM SITE 15, 27, OR 28

- NOTES:
1. (*) UNIDENTIFIED CHROMATOGRAM PEAKS EXPRESSED IN TOLUENE EQUIVALENTS.
 2. COMPOUNDS LESS THAN 10 PPB NOT REPORTED.
 3. METHANE CONCENTRATIONS EXPRESSED IN PERCENT BY VOLUME. METHANE CONCENTRATION VALUES NOT INCLUDED IN TOTAL DETECTED COLUMN.

SHIFT DATA TABLE

PROJECT: STATE ST. MT. HOPE AVE TUNNEL
 CLIENT: STV/ SEELYE STEVENSON VALUE & KNECHT
 H&A REPRESENTATIVE: S. Parker
 CHECKED BY: S. Parker

TUNNEL HEADINGS AT
 START: 67 + 02
 END: 67 + 67
 ADVANCE: 65

FILE: 7433-82
 PAGE: 1 OF 2
 DATE: 3-4 May 1990
 SHIFT: Graveyard
 DFR NO.: 52

TUNNEL AIR SAMPLES

APPARENT VOLATILE ORGANIC COMPOUNDS DETECTED IN PPM

TIME	TARGET COMPOUNDS					OTHERS						
	VINYL CHLORIDE	METHYLENE CHLORIDE	1,2-DCE	BENZENE	TOLUENE	METHANE (PERCENT)	HYDROGEN SULFIDE	ETHYL BENZENE	M-XYLENE	STYRENE	UNKNOWN ^s	TOTAL DETECTED
2303	—	—	—	0.02	0.07	0.02	—	—	—	0.19	0.75	1.03
2330	—	—	—	0.02	0.06	0.02	—	—	0.05	0.22	0.59	0.94
0000	—	—	—	—	0.02	0.03	—	—	—	—	0.03	0.05
0030	—	—	—	—	0.02	—	—	—	—	—	—	0.02
0105	—	—	—	0.02	0.06	0.01	—	—	—	0.25	0.74	1.07
0135	—	—	—	—	0.06	0.01	—	—	0.03	0.16	0.58	0.83
0204	—	—	—	0.02	0.07	0.02	—	—	0.07	0.16	0.80	1.12
0230	—	—	—	0.02	0.07	0.01	—	—	0.07	0.23	0.61	1.00
0300	—	—	—	0.02	0.06	0.02	—	—	0.04	0.20	0.59	0.91
0330	—	—	—	0.02	0.16	0.02	—	—	0.05	0.14	0.95	1.32
0400	—	—	—	0.02	0.07	0.01	—	—	0.05	0.25	0.72	1.11
0430	—	—	—	0.02	0.06	0.01	—	—	0.05	0.15	0.62	0.90
0500	—	—	—	0.02	0.05	0.02	—	—	0.04	—	0.50	0.61
0530	—	—	—	0.02	0.12	0.01	—	—	0.06	—	0.81	1.01
0600	—	—	—	0.02	0.06	0.02	—	—	0.06	0.31	0.59	1.04
0630	—	—	—	0.02	0.07	0.02	—	—	—	0.29	0.78	1.16

TUNNEL MUCK/ SHAFT/ GROUNDWATER SAMPLES

APPARENT VOLATILE ORGANIC COMPOUNDS DETECTED IN PPM

SAMPLE TYPE TIME	TARGET COMPOUNDS					OTHERS						
	VINYL CHLORIDE	METHYLENE CHLORIDE	1,2-DCE	BENZENE	TOLUENE	METHANE (PERCENT)	HYDROGEN SULFIDE	ETHYL BENZENE	M-XYLENE	STYRENE	UNKNOWN ^s	TOTAL DETECTED
TM/0030	—	—	—	0.13	0.13	—	—	—	0.07	—	1.61	1.94
TM/0430	—	—	—	0.09	0.10	—	—	—	0.05	0.06	1.68	1.93
0013aa	—	—	—	—	0.07	—	—	—	—	—	0.10	0.17

REMARKS/ VISITORS:

Tunnel muck dumped intermittently during graveyard shift.

No tunnel muck hauled from site during graveyard shift.

No visitors to trailer during graveyard shift.

ABBREVIATIONS:

SAMPLE TYPE:

TM	TUNNEL MUCK
TS	TUNNEL SEEP
SM#	SHAFT SOIL OR MUCK FROM SITE 15, 27, OR 28

- NOTES:
1. (*) UNIDENTIFIED CHROMATOGRAM PEAKS EXPRESSED IN TOLUENE EQUIVALENTS.
 2. COMPOUNDS LESS THAN 10 PPB NOT REPORTED.
 3. (aa) INDICATES AMBIENT AIR BLANK ANALYSIS.
 4. METHANE CONCENTRATIONS EXPRESSED IN PERCENT BY VOLUME. METHANE CONCENTRATION VALUES NOT INCLUDED IN TOTAL DETECTED COLUMN.

DAILY FIELD REPORT

PROJECT:	STATE ST. - MT. HOPE TUNNEL Rochester, New York	DATE: 4 May 1990
CLIENT:	STV/Seelye Stevenson Value & Knecht	PAGE: 1 of 2
CONTRACTOR:	GCF Constructors	FILE: 7433-82
WEATHER:	Partly cloudy 60°	

CONTRACTOR ACTIVITIES:

Mined TBM tunnel from Station 67+67 to Station 67+80 (day shift), from 67+80 to 68+51 (swing shift), and from 68+51 to 69+15 (graveyard shift).

Hauled tunnel muck intermittently during the day shift and until approximately 1630 hrs. during the swing shift. Dumped tunnel muck on the spoil pile adjacent to Control Structure 41 intermittently during all three shifts.

FIELD REPRESENTATIVE ACTIVITIES:

S. Parker (H&A) performed routine air monitoring of the tunnel ventilation exhaust from 0705 to 1900 hrs. Conducted 19 tunnel exhaust air screenings using the Photovac 10s70 gas chromatograph.

Obtained 3 tunnel muck samples from the spoil pile and performed headspace screening using the same instrument.

Coordinated delivery of tunnel muck sample TM/2200, obtained on 2 May 1990, to General Testing Co. for volatiles analyses (EPA 8240). This sample was selected to replace previously submitted routine weekly sample TM0800(0503) due to relatively high concentrations of unknowns detected during headspace screening. The remaining routine analyses will be performed on TM0800(0503).

No samples were obtained from Sites 15, 27 or 28 as no excavation was performed during the day shift.

W. Lanik (H&A) performed routine air monitoring of the tunnel ventilation exhaust from 1900 to 0700 hrs. Conducted 24 tunnel exhaust air screenings using the Photovac 10s70 gas chromatograph.

Obtained 3 tunnel muck samples from the spoil pile and performed headspace screening using the same instrument.

PROJECT: STATE ST. - MT. HOPE TUNNEL
Rochester, New York
CLIENT: STV/Seelye Stevenson Value &
Knecht

DATE: 4 May 1990
PAGE: 2 of 2
FILE: 7433-82

TEST DATA SUMMARY:

None of the action threshold levels for the targeted compounds referenced in the 1 March 1990 workplan (benzene, toluene, 1,2-DCE, methylene chloride, and vinyl chloride) were exceeded during the monitoring periods.

FIELD REPRESENTATIVE

S. Parker

W. Lanik

TIME ON SITE

0700-1915
(12.25 hrs.)
1900-0700
(12.0 hrs.)

DISTRIBUTION

STV/Seelye Stevenson: Mr. Richard Richter
Mr. Suki Suresh
Mr. Phil Steinfeldt


H&A OF NEW YORK

SHIFT DATA TABLE

PROJECT: STATE ST. MT. HOPE AVE TUNNEL
 CLIENT: STV/ SEELYE STEVENSON VALUE & KNECHT
 H&A REPRESENTATIVE: S. Parker
 CHECKED BY: P. Micciche

TUNNEL HEADINGS AT
 START: 67 + 67
 END: 67 + 80
 ADVANCE: 13

FILE: 7433-82
 PAGE: 1 OF 2
 DATE: 4 May 1990
 SHIFT: Day
 DFR NO.: 53

TUNNEL AIR SAMPLES

APPARENT VOLATILE ORGANIC COMPOUNDS DETECTED IN PPM

TIME	TARGET COMPOUNDS					OTHERS						
	VINYL CHLORIDE	METHYLENE CHLORIDE	1,2-DCE	BENZENE	TOLUENE	METHANE (PERCENT)	HYDROGEN SULFIDE	ETHYL BENZENE	M-XYLENE	STYRENE	UNKNOWN ^s	TOTAL DETECTED
0705	—	—	—	0.02	0.05	0.02	—	—	0.03	0.14	0.60	0.84
0754	—	—	—	0.03	0.08	0.02	—	—	0.11	0.43	0.67	1.32
0829	—	—	—	—	0.02	0.03	—	—	—	0.22	0.03	0.27
0909	—	—	—	0.02	0.07	0.02	—	—	0.07	0.36	0.74	1.26
0949	—	—	—	—	0.02	0.02	—	—	—	0.19	0.40	0.61
1031	—	—	—	—	—	tr	—	—	—	0.17	—	0.17
1115	—	—	—	—	—	0.01	—	—	—	0.13	0.04	0.17
1145	—	—	—	—	—	0.01	—	—	—	0.10	—	0.10
1215	—	—	—	—	—	0.01	—	—	—	—	—	—
1240	—	—	—	—	—	0.01	—	—	—	0.12	0.20	0.32
1315	—	—	—	—	0.03	0.02	—	—	0.04	—	0.06	0.13
1341	—	—	—	—	—	0.01	—	—	—	0.29	—	0.29
1416	—	—	—	—	—	tr	—	—	—	—	—	—
1451	—	—	—	—	—	0.01	—	—	—	—	—	—

TUNNEL MUCK/ SHAFT/ GROUNDWATER SAMPLES

APPARENT VOLATILE ORGANIC COMPOUNDS DETECTED IN PPM

SAMPLE TYPE TIME	TARGET COMPOUNDS					OTHERS						
	VINYL CHLORIDE	METHYLENE CHLORIDE	1,2-DCE	BENZENE	TOLUENE	METHANE (PERCENT)	TCE	ETHYL BENZENE	M-XYLENE	STYRENE	UNKNOWN ^s	TOTAL DETECTED
TM/0755	—	—	—	0.16	0.21	—	—	—	0.10	0.06	3.95	4.48
TM/1415	—	—	—	0.20	0.30	—	—	—	0.15	—	6.75	7.40
TM/1415D	—	—	—	0.23	0.31	—	—	—	0.15	—	6.55	7.24

REMARKS/ VISITORS:

Tunnel muck dumped intermittently during day shift.

Tunnel muck hauled from site intermittently during day shift.

T. Crowl (H&A) visited trailer at 1500 hrs. to pick up tunnel muck sample TM/2200, collected on 2 May 1990,

and delivered to General Testing Company for EPA 8240 volatiles analyses.

No apparent excavation was performed at Sites 15,27, or 28 during day shift and no samples were obtained.

ABBREVIATIONS:

SAMPLE TYPE:

TM	TUNNEL MUCK
TS	TUNNEL SEEP
SM#	SHAFT SOIL OR MUCK FROM SITE 15, 27, OR 28

NOTES:

1. (*) UNIDENTIFIED CHROMATOGRAM PEAKS EXPRESSED IN TOLUENE EQUIVALENTS.
2. COMPOUNDS LESS THAN 10 PPB NOT REPORTED.
3. (tr) INDICATES METHANE DETECTED AT CONCENTRATIONS LESS THAN 0.01 PERCENT.
4. METHANE CONCENTRATIONS EXPRESSED IN PERCENT BY VOLUME. METHANE CONCENTRATION VALUES NOT INCLUDED IN TOTAL DETECTED COLUMN.
5. (D) INDICATES DUPLICATE ANALYSIS PERFORMED FOR QUALITY ASSURANCE/QUALITY CONTROL.

SHIFT DATA TABLE

PROJECT: STATE ST. MT. HOPE AVE TUNNEL
 CLIENT: STV/ SEELYE STEVENSON VALUE & KNECHT
 H&A REPRESENTATIVE: S. Parker/W. Lanik
 CHECKED BY: P. Micciche

TUNNEL HEADINGS AT
 START: 67 + 80
 END: 68 + 51
 ADVANCE: 71

FILE: 7433-82
 PAGE: 1 OF 2
 DATE: 4 May 1990
 SHIFT: Swing
 DFR NO.: 53

TUNNEL AIR SAMPLES

APPARENT VOLATILE ORGANIC COMPOUNDS DETECTED IN PPM

TIME	TARGET COMPOUNDS					OTHERS						
	VINYL CHLORIDE	METHYLENE CHLORIDE	1,2-DCE	BENZENE	TOLUENE	METHANE (PERCENT)	HYDROGEN SULFIDE	ETHYL BENZENE	M-XYLENE	STYRENE	UNKNOWN*	TOTAL DETECTED
1529	—	—	—	—	—	0.01	—	—	—	—	—	—
1624	—	—	—	—	0.03	0.02	—	—	—	—	0.04	0.07
1706	—	—	—	0.02	0.06	0.02	—	—	0.04	0.16	0.48	0.76
1744	—	—	—	0.02	0.08	0.02	—	—	0.05	0.42	0.73	1.30
1847	—	—	—	0.02	0.07	0.02	—	—	0.04	0.20	0.72	1.05
1908	—	—	—	0.02	0.12	0.02	—	—	0.08	—	1.09	1.31
1931	—	—	—	0.02	0.07	0.02	—	—	—	—	0.82	0.91
2001	—	—	—	0.02	0.08	0.01	—	—	0.04	—	0.73	0.87
2030	—	—	—	0.02	0.08	0.02	—	—	0.06	0.20	1.14	1.50
2100	—	—	—	0.02	0.11	0.01	—	—	0.05	0.35	1.25	1.78
2130	—	—	—	—	0.02	0.01	—	—	—	0.12	0.36	0.50
2200	—	—	—	0.02	0.07	0.02	—	—	—	—	1.08	1.17
2230	—	—	—	0.02	0.10	0.02	—	—	—	0.29	0.91	1.32
1514aa	—	—	—	—	—	—	—	—	—	—	—	—

TUNNEL MUCK/ SHAFT/ GROUNDWATER SAMPLES

APPARENT VOLATILE ORGANIC COMPOUNDS DETECTED IN PPM

SAMPLE TYPE TIME	TARGET COMPOUNDS					OTHERS						
	VINYL CHLORIDE	METHYLENE CHLORIDE	1,2-DCE	BENZENE	TOLUENE	METHANE (PERCENT)	HYDROGEN SULFIDE	ETHYL BENZENE	M-XYLENE	STYRENE	UNKNOWN*	TOTAL DETECTED
TM/1740	—	—	—	0.16	0.26	—	—	—	0.13	—	2.57	3.12
TM/2100	—	—	—	0.05	0.14	—	—	—	0.09	—	0.41	0.69

REMARKS/ VISITORS:

Tunnel muck dumped intermittently after approximately 1720 hrs. during swing shift.

Tunnel muck hauled from site intermittently until approximately 1630 hrs. during swing shift.

No visitors to trailer during swing shift.

ABBREVIATIONS:

SAMPLE TYPE:

TM	TUNNEL MUCK
TS	TUNNEL SEEP
SM#	SHAFT SOIL OR MUCK FROM SITE 15, 27, OR 28

NOTES:

1. (*) UNIDENTIFIED CHROMATOGRAM PEAKS EXPRESSED IN TOLUENE EQUIVALENTS.
2. COMPOUNDS LESS THAN 10 PPB NOT REPORTED.
3. (aa) INDICATES AMBIENT AIR BLANK ANALYSIS.
4. METHANE CONCENTRATIONS EXPRESSED IN PERCENT BY VOLUME. METHANE CONCENTRATION VALUES NOT INCLUDED IN TOTAL DETECTED COLUMN.

SHIFT DATA TABLE

PROJECT: STATE ST. MT. HOPE AVE TUNNEL
 CLIENT: STV/ SEELYE STEVENSON VALUE & KNECHT
 H&A REPRESENTATIVE: W. Lanik
 CHECKED BY: P. Micciche

TUNNEL HEADINGS AT
 START: 68 + 51
 END: 69 + 15
 ADVANCE: 64

FILE: 7433-82
 PAGE: 1 OF 2
 DATE: 4-5 May 1990
 SHIFT: Graveyard
 DFR NO.: 53

TUNNEL AIR SAMPLES

APPARENT VOLATILE ORGANIC COMPOUNDS DETECTED IN PPM

TIME	TARGET COMPOUNDS					OTHERS						
	VINYL CHLORIDE	METHYLENE CHLORIDE	1,2-DCE	BENZENE	TOLUENE	METHANE (PERCENT)	HYDROGEN SULFIDE	ETHYL BENZENE	M-XYLENE	STYRENE	UNKNOWN*	TOTAL DETECTED
2300	—	—	—	0.02	0.10	0.01	—	—	0.05	0.26	0.74	1.17
2330	—	—	—	0.02	0.08	0.02	—	—	0.06	—	1.16	1.32
0000	—	—	—	—	0.02	0.01	—	—	—	0.12	0.11	0.25
0030	—	—	—	0.02	0.07	0.02	—	—	—	—	0.68	0.77
0100	—	—	—	0.02	0.08	0.01	—	—	0.06	0.12	0.94	1.22
0130	—	—	—	0.02	0.07	0.01	—	—	0.07	0.15	0.73	1.04
0200	—	—	—	0.02	0.07	0.02	—	—	—	0.16	0.62	0.87
0230	—	—	—	—	0.02	0.02	—	—	—	0.12	0.03	0.17
0300	—	—	—	—	0.02	0.02	—	—	—	0.12	0.05	0.19
0330	—	—	—	—	0.05	—	—	—	—	0.11	0.09	0.25
0400	—	—	—	0.02	0.06	0.01	—	—	—	—	0.72	0.80
0430	—	—	—	0.02	0.08	0.01	—	—	0.02	0.15	0.61	0.88
0500	—	—	—	0.02	0.07	0.01	—	—	0.05	—	0.99	1.13
0530	—	—	—	0.02	0.07	0.02	—	—	0.05	0.26	0.96	1.36
0600	—	—	—	0.02	0.06	0.01	—	—	0.05	0.24	0.88	1.25
0630	—	—	—	0.02	0.08	0.01	—	—	0.05	0.10	0.96	1.21

TUNNEL MUCK/ SHAFT/ GROUNDWATER SAMPLES

APPARENT VOLATILE ORGANIC COMPOUNDS DETECTED IN PPM

SAMPLE TYPE TIME	TARGET COMPOUNDS					OTHERS						
	VINYL CHLORIDE	METHYLENE CHLORIDE	1,2-DCE	BENZENE	TOLUENE	METHANE (PERCENT)	HYDROGEN SULFIDE	ETHYL BENZENE	M-XYLENE	STYRENE	UNKNOWN*	TOTAL DETECTED
TM/0000	—	—	—	0.12	0.21	—	—	—	0.14	0.07	1.70	2.24
TM/0430	—	—	—	0.07	0.17	—	—	—	0.09	—	0.67	1.00
0143aa	—	—	—	—	0.04	—	—	—	—	—	—	0.04

REMARKS/ VISITORS:

Tunnel muck dumped intermittently during graveyard shift.

No tunnel muck hauled from site during graveyard shift.

ABBREVIATIONS:

SAMPLE TYPE:

TM	TUNNEL MUCK
TS	TUNNEL SEEP
SM#	SHAFT SOIL OR MUCK FROM SITE 15, 27, OR 28

- NOTES:
1. (*) UNIDENTIFIED CHROMATOGRAM PEAKS EXPRESSED IN TOLUENE EQUIVALENTS.
 2. COMPOUNDS LESS THAN 10 PPB NOT REPORTED.
 3. (aa) INDICATES AMBIENT AIR BLANK ANALYSIS.
 4. METHANE CONCENTRATIONS EXPRESSED IN PERCENT BY VOLUME. METHANE CONCENTRATION VALUES NOT INCLUDED IN TOTAL DETECTED COLUMN.