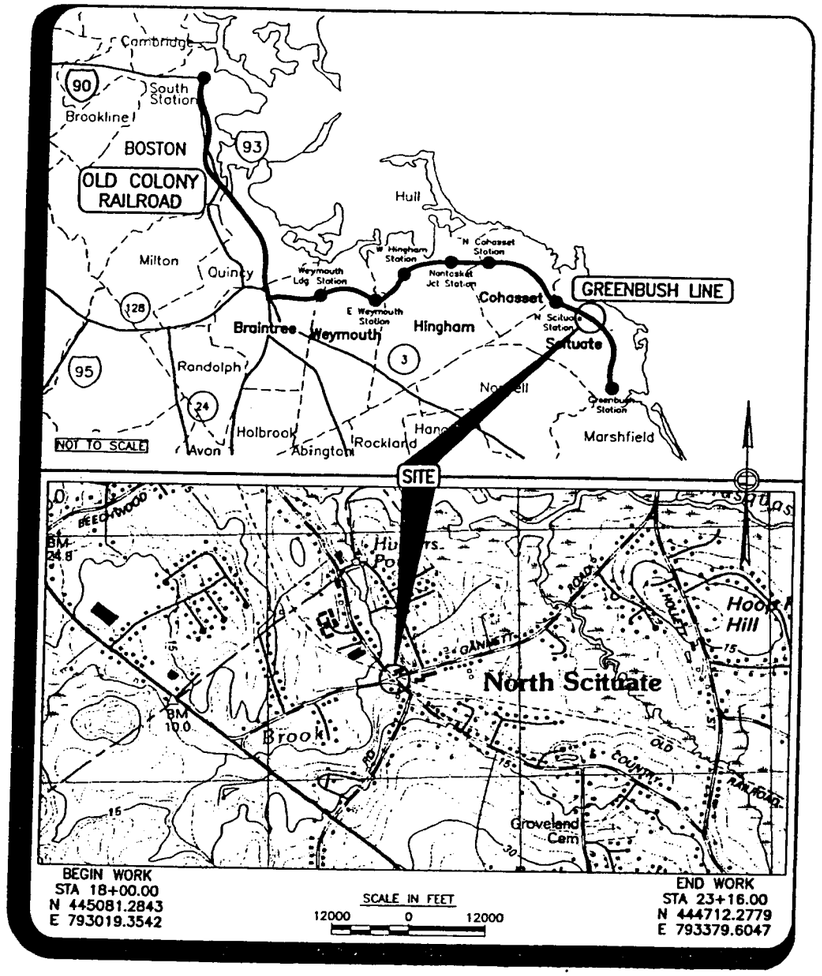


PREPARED BY:

GREENBUSH
JAY CASHMAN, INC./BALFOUR BEATTY CONST., INC., JV

STV Incorporated
321 Summer Street
Boston, Ma. 02210

3-10-04

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

OLD COLONY RAILROAD REHABILITATION PROJECT GREENBUSH LINE MBTA CONTRACT NO. K83CN01

SCITUATE COUNTRY WAY AT GANNETT ROAD GRADE CROSSING

DESIGN PACKAGE 53

FINAL DESIGN SUBMITTAL FEBRUARY 4, 2004

MBTA APPROVALS:

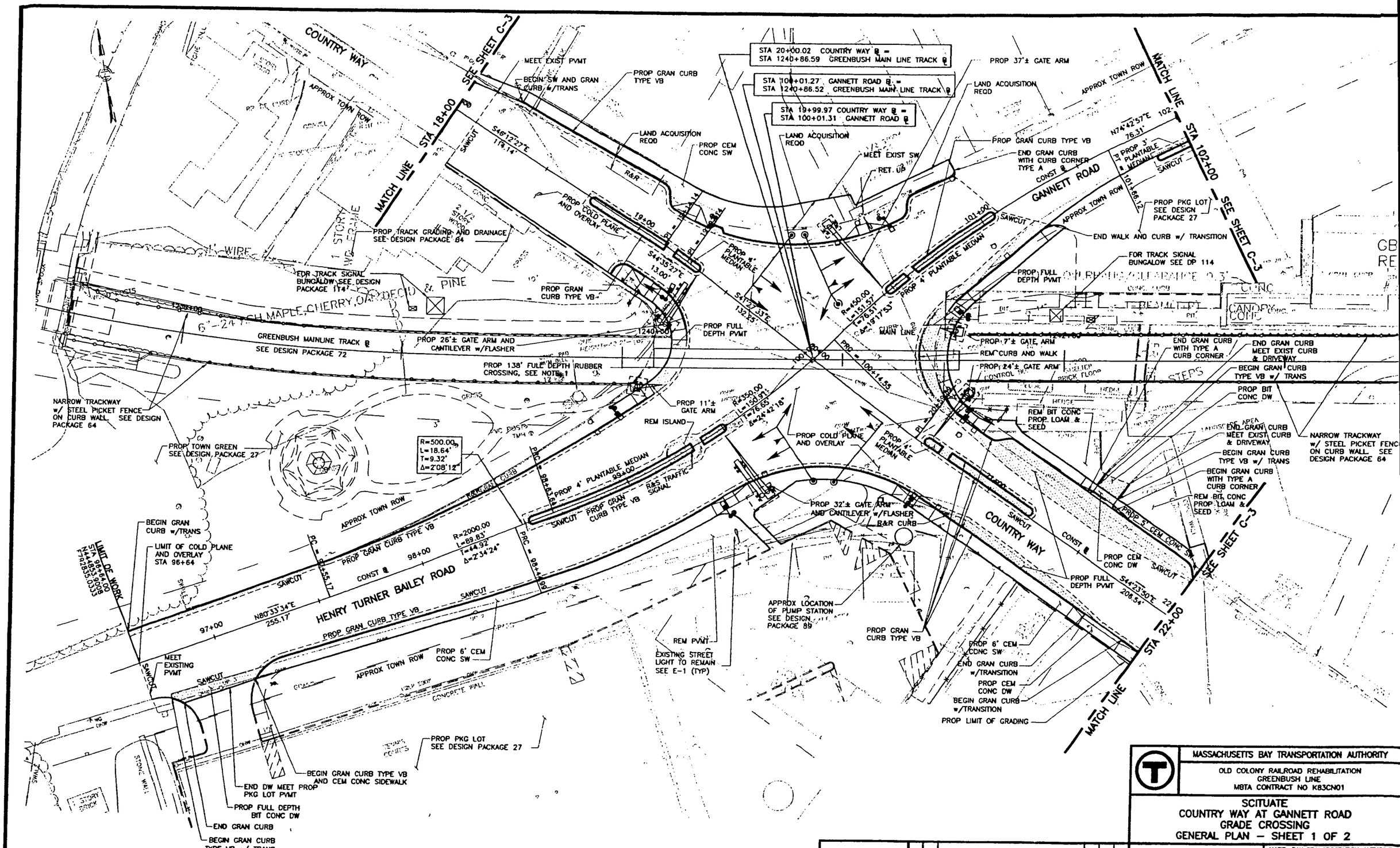
ASSISTANT GENERAL MANAGER FOR DESIGN AND CONSTRUCTION — DATE 3-4-04

CHIEF OF ENGINEERING AND CONSTRUCTION — DATE 3-3-04

DIRECTOR OF CONSTRUCTION – GREENBUSH — DATE 03-05-04

PLAN

ISSUE



NOTES:

1. HMA LIMITS EXTENDED A MINIMUM OF 55' FROM EDGE OF CROSSING. FOR LIMITS SEE MBTA SD 3100, MBTA 3106, MBTA 3108 AND DP67-73.

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

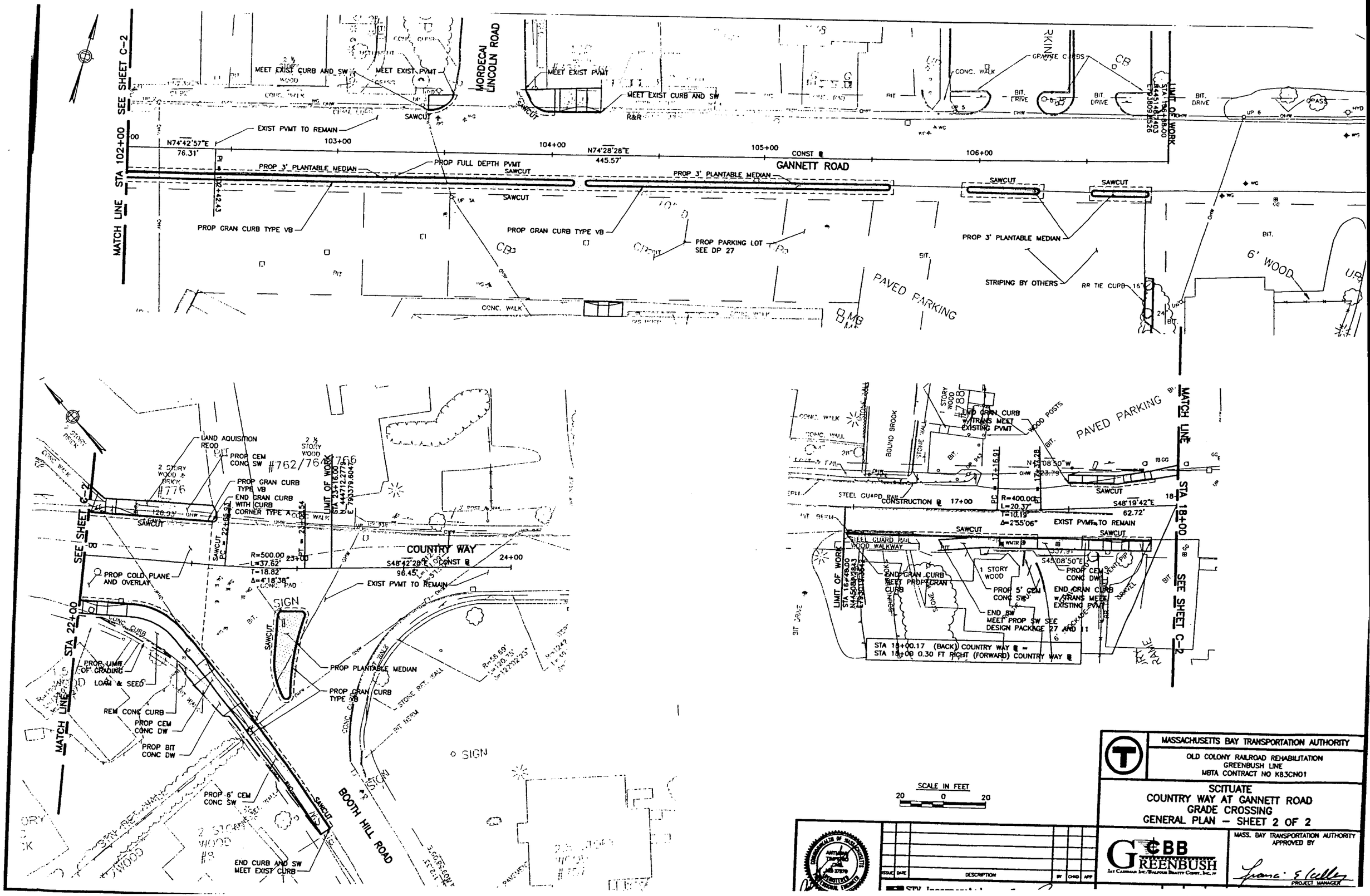
OLD COLONY RAILROAD REHABILITATION
GREENBUSH LINE
MBTA CONTRACT NO K83CN01

SCITUATE
COUNTRY WAY AT GANNETT ROAD
GRADE CROSSING
GENERAL PLAN – SHEET 1 OF 2

ISSUE	DATE	DESCRIPTION	BY	CHKD	APP

GRBB GREENBUSH
JAY CASHMAN INC./BALFOUR BEATTY CONST., INC., JV

MASS. BAY TRANSPORTATION AUTHORITY APPROVED BY



MASSACHUSETTS BAY TRANSPORTATION AUTHORITY

OLD COLONY RAILROAD REHABILITATION
GREENBUSH LINE
MBTA CONTRACT NO K83CN01

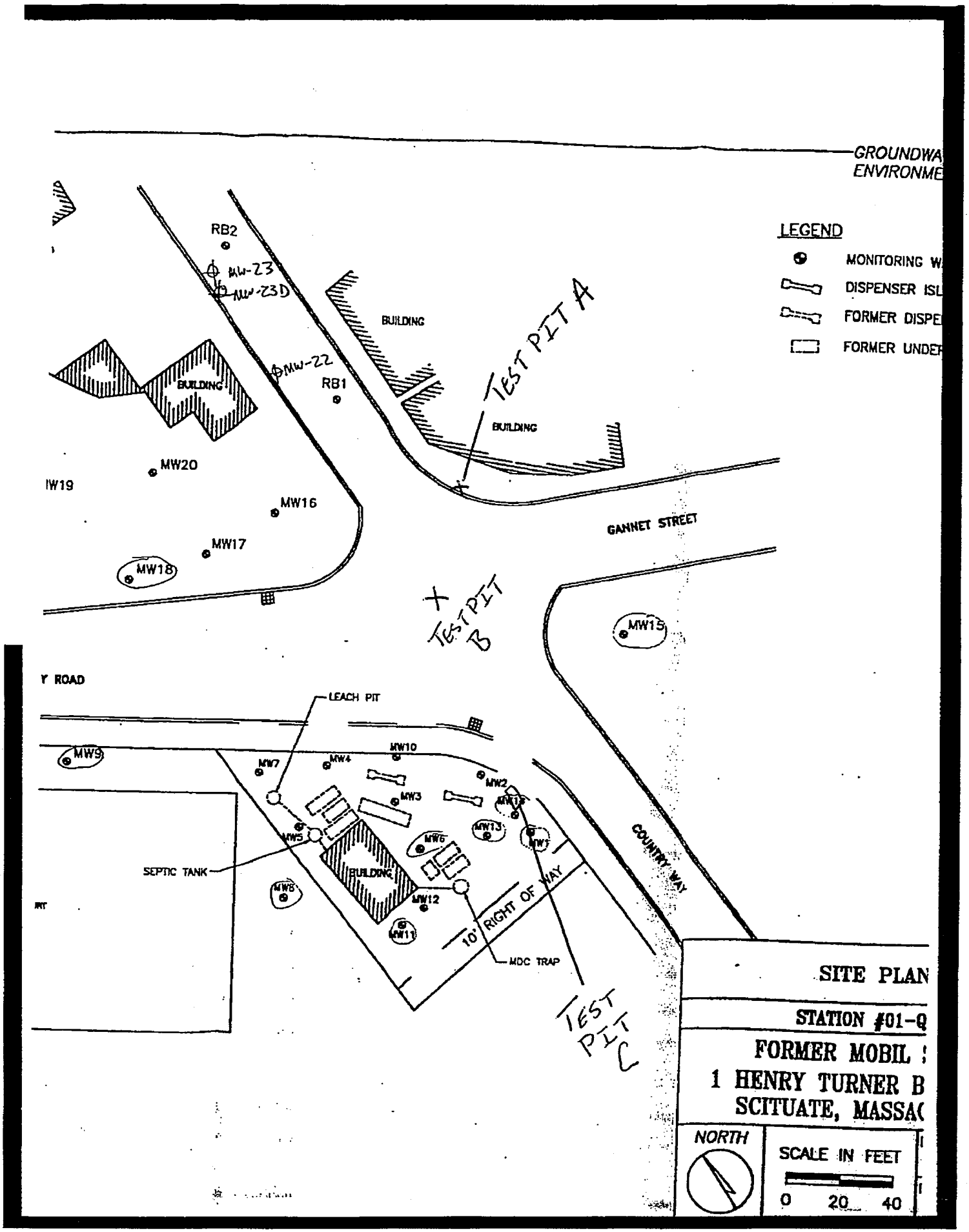
SCITUATE
COUNTRY WAY AT GANNETT ROAD
GRADE CROSSING
GENERAL PLAN – SHEET 2 OF 2

ISSUE	DATE	DESCRIPTION	BY	CHKD	APP

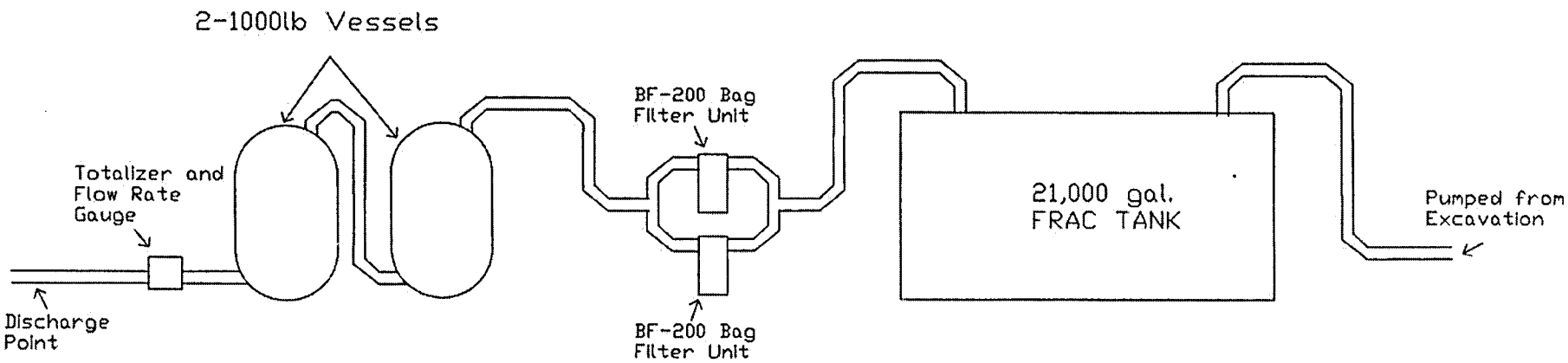
CBB GREENBUSH
Jay Cashman Inc./Balfour Beatty Const., Inc. JV

MASS. BAY TRANSPORTATION AUTHORITY APPROVED BY

PROJECT MANAGER


GROUNDWA
ENVIRONME
LEGEND
MONITORING W
DISPENSER ISL
FORMER DISPE
FORMER UNDER
RB2
MW-23
MW-23D
MW-22
RB1
BUILDING
BUILDING
BUILDING
TEST PIT A
MW20
IW19
MW16
MW17
MW18
GANNET STREET
TEST PIT B
MW15
Y ROAD
LEACH PIT
MW9
MW7
MW4
MW10
MW2
MW3
MW13
MW5
MW6
MW1
SEPTIC TANK
BUILDING
MW8
MW12
MW11
10' RIGHT OF WAY
MDC TRAP
COUNTRY WAY
TEST PIT C
SITE PLAN
STATION #01-0
FORMER MOBIL
1 HENRY TURNER B
SCITUATE, MASSA
NORTH
SCALE IN FEET
0
20
40

GREENBUSH LINE
COUNTRY WAY GROUNDWATER CONTAMINATION SYSTEM
50 GPM DISCHARGE WATER TREATMENT SYSTEM DESIGN



DISCHARGE LOCATIONS:

#1 & #2 ARE DROP INLETS TO STORM DRAIN

#3 & #4 ARE SURFACE WATER OUTFALLS

Table 1 Groundwater Analytical Data (µg/L) - Greenbush-North Scituate Station

Location:	North Scituate, MA	North Scituate, MA	North Scituate, MA				
	Greenbush Country Way	Greenbush Country Way	Greenbush Country Way				
Sample Name:	Location A	Location B	Location C	Current RCGW-1 Standard µg/L	Current RCGW-2 Standard µg/L	Wave 2 RCGW-1 Standard µg/L	Wave 2 RCGW-2 Standard µg/L
Laboratory:	Phoenix	Phoenix	Phoenix				
Laboratory I.D.:	AH05259	AH05255	AH05255				
Sample Date:	2-Mar-06	3-Mar-06	3-Mar-06				
Consultant:	Rizzo	Rizzo	Rizzo				
Butylbenzene, n-	880	<1,300	11,000	NA	NA	NA	NA
Ethylbenzene	**2,900**	**2,100**	**<5,000**	700	4,000	700	4000
Naphthalene	**1,400**	**<1,300**	**6,200**	20	6,000	140	1000
Propylbenzene, n-	**1,200**	**<1,300**	**6,600**	1,000	10,000		
Trimethylbenzene, 1,2,4-	8,800	3,400	**43,000**	10,000	100,000		
Trimethylbenzene, 1,3,5-	**2,000**	**<1,300**	**14,000**	100	1,000		
Xylene (total)	**10,030**	5,800	**23,300**	6,000	6,000	500	500
Methylnaphthalene, 2-	**1,900**	**440**	**500**	10	3,000	10	3000
Naphthalene	**3,700**	**1,100**	**610**	20	6,000	140	1000
Arochlor 1016	<5	<0.5	<2	0.3	0.3	0.3	0.3
Arochlor 1221	<5	<0.5	<2	0.3	0.3	0.3	0.3
Arochlor 1232	<5	<0.5	<2	0.3	0.3	0.3	0.3
Arochlor 1242	<5	<0.5	<2	0.3	0.3	0.3	0.3
Arochlor 1248	<5	<0.5	<2	0.3	0.3	0.3	0.3
Arochlor 1254	<5	<0.5	<2	0.3	0.3	0.3	0.3
Arochlor 1260	<5	<0.5	<2	0.3	0.3	0.3	0.3
Arochlor 1262	<5	<0.5	<2	0.3	0.3	0.3	0.3
Arochlor 1268	<5	<0.5	<2	0.3	0.3	0.3	0.3
Antimony, Dissolved	**<20**	<5	**23**	6	300	6	8000
Arsenic, Dissolved	<16	14	<16	50	400	10	900
Cadmium, Dissolved	<4	<1	<4	5	10	4	4
Chromium, Dissolved	4	<1	<4	100	2,000	100	300
Chromium, Hexavalent	<10	<10	<10	50	100	100	300
Copper, Dissolved	<4	5	<4	10,000	100,000		
Iron, Dissolved	68	49,200	9,590	NA	NA		
Lead, Dissolved	14	8	**52**	20	30	10	10
Mercury, Dissolved	<0.2	<0.2	<0.2	1	1	2	20
Nickel, Dissolved	<8	2	<8	80	80	100	200
Selenium, Dissolved	<40	<10	<40	50	80	50	100
Silver, Dissolved	<4	<1	<4	7	7	7	7
Zinc, Dissolved	<8	19	<8	900	900	900	900
Cyanide, Total	<10	<10	<10	10	10	30	30
Chlorine Residual	<20	<20	<20	NA	NA		
Unknown Oil	**160,000**	**23,000**	**160,000**	200	1,000	200	1000
Total Suspended Solids	3.6E+08	2.0E+06	5.8E+06				

Notes: **Bold** print indicates exceedence of current RC GW-1 standards.
Shading indicates exceedence of current RC GW-2 standards.

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report
March 07, 2006

FOR: Attn: Mr Adam Swederskas
GZA GeoEnvironmental Inc
One Edgewater Drive
Norwood, MA 02062

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:	AS	03/02/06	11:30
Location Code:	GZA-MA	Received by:	SW	03/03/06	16:00
Rush Request:	RUSH#	Analyzed by:	see "By" below		
P.O.#:					

SDG.I.D.: GAH05259
Phoenix I.D.: AH05259

Laboratory Data

Client ID: GREENBUSH COUNTRY WAY LOCATION A

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver (Dissolved)	< 0.004	0.004	mg/L	03/06/06		EK	200.7/6010
Arsenic (Dissolved)	< 0.016	0.016	mg/L	03/06/06		EK	200.7/6010
Cadmium (Dissolved)	< 0.004	0.004	mg/L	03/06/06		EK	200.7/6010
Chromium (Dissolved)	0.004	0.004	mg/L	03/06/06		EK	200.7/6010
Copper (Dissolved)	< 0.004	0.004	mg/L	03/06/06		EK	6010/E200.7
Iron (Dissolved)	0.068	0.008	mg/L	03/06/06		EK	6010/E200.7
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	03/06/06		TH	SW-7470
Nickel (Dissolved)	< 0.008	0.008	mg/L	03/06/06		EK	200.7/6010
Lead (Dissolved)	0.014	0.004	mg/L	03/06/06		TH	7421/E239.2
Antimony (Dissolved)	< 0.020	0.020	mg/L	03/06/06		EK	200.7/6010
Selenium (Dissolved)	< 0.040	0.040	mg/L	03/06/06		EK	200.7/6010
Zinc (Dissolved)	< 0.008	0.008	mg/L	03/06/06		EK	200.7/6010
Chlorine Residual	< 0.02	0.02	mg/L	03/03/06	23:00	CD	4500Cl-G
Chromium, Hexavalent	< 0.01	0.01	mg/L	03/03/06	23:00	CD	S3500CRD
Total Cyanide	< 0.01	0.01	mg/L	03/06/06		M/G	9010/335.3
Total Suspended Solids	360000	100	mg/L	03/03/06		KL	SM2540D
MADEP MCP 8260 Certification	Completed			03/07/06		JH	MCP
MADEP MCP 7000 Certification	Completed			03/07/06		TH	MCP
MADEP MCP 7470/7471 Certification	Completed			03/06/06		TH	MCP
MADEP MCP 6010 Certification	Completed			03/06/06		EK	MCP
Filtration Dissolved Metals	Completed			03/03/06		AG	.45um Filter
Dissolved Mercury Digestion	Completed		NA	03/06/06		E	SW7470
PCB Extraction	Completed			03/03/06		R/L	SW3510/3520
Semi-Volatile Extraction	Completed			03/03/06		O	SW3510/3520

Client ID: GREENBUSH COUNTRY WAY LOCATION A Phoenix I.D.: AH05259

Parameter	Result		RL	Units	Date	Time	By	Reference
Dissolved Metals Preparation	Completed				03/03/06		AG	SW846-3005
Extraction of TPH MOD 8100	Completed				03/03/06		O	3550/5030
Polychlorinated Biphenyls								
PCB-1016	ND	***	5	ug/L	03/07/06		MH	608/ 8082
PCB-1221	ND	***	5	ug/L	03/07/06		MH	608/ 8082
PCB-1232	ND	***	5	ug/L	03/07/06		MH	608/ 8082
PCB-1242	ND	***	5	ug/L	03/07/06		MH	608/ 8082
PCB-1248	ND	***	5	ug/L	03/07/06		MH	608/ 8082
PCB-1254	ND	***	5	ug/L	03/07/06		MH	608/ 8082
PCB-1260	ND	***	5	ug/L	03/07/06		MH	608/ 8082
PCB-1262	ND	***	5	ug/L	03/07/06		MH	608/ 8082
PCB-1268	ND	***	5	ug/L	03/07/06		MH	608/ 8082
QA/QC Surrogates								
% DCBP (Surrogate Rec)	Diluted Out ***			%	03/07/06		MH	608/ 8082
% TCMX (Surrogate Rec)	Diluted Out ***			%	03/07/06		MH	608/ 8082
TPH by GC (Extractable Products)								
Aviation Fuel/Kerosene	ND		0.5	mg/L	03/07/06		JRB	8100Modified
Fuel Oil #2/ Diesel Fuel	ND		0.5	mg/L	03/07/06		JRB	8100Modified
Fuel Oil #4	ND		0.5	mg/L	03/07/06		JRB	8100Modified
Fuel Oil #6	ND		0.5	mg/L	03/07/06		JRB	8100Modified
Motor Oil	ND		0.5	mg/L	03/07/06		JRB	8100Modified
Other Oil (Cutting & Lubricating)	**		0.5	mg/L	03/07/06		JRB	8100Modified
Unidentified	160		0.5	mg/L	03/07/06		JRB	8100Modified
QA/QC Surrogates								
% n-Pentacosane	Interference			%	03/07/06		JRB	8100Modified
Tert-amyl-methyl-ether	< 500		500	ug/L	03/05/06		R/J	SW8260
Tert-butyl alcohol	< 200		200	ug/L	03/05/06		R/J	SW8260
Volatiles								
1,1,1,2-Tetrachloroethane	ND		500	ug/L	03/05/06		R/J	SW8260
1,1,1-Trichloroethane	ND		500	ug/L	03/05/06		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND		500	ug/L	03/05/06		R/J	SW8260
1,1,2-Trichloroethane	ND		500	ug/L	03/05/06		R/J	SW8260
1,1-Dichloroethane	ND		500	ug/L	03/05/06		R/J	SW8260
1,1-Dichloroethene	ND		500	ug/L	03/05/06		R/J	SW8260
1,1-Dichloropropene	ND		500	ug/L	03/05/06		R/J	SW8260
1,2,3-Trichlorobenzene	ND		500	ug/L	03/05/06		R/J	SW8260
1,2,3-Trichloropropane	ND		500	ug/L	03/05/06		R/J	SW8260
1,2,4-Trichlorobenzene	ND		500	ug/L	03/05/06		R/J	SW8260
1,2,4-Trimethylbenzene	8800		2500	ug/L	03/05/06		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND		500	ug/L	03/05/06		R/J	SW8260
1,2-Dichlorobenzene	ND		500	ug/L	03/05/06		R/J	SW8260
1,2-Dichloroethane	ND		500	ug/L	03/05/06		R/J	SW8260

Client ID: GREENBUSH COUNTRY WAY LOCATION A Phoenix I.D.: AH05259

Parameter	Result	RL	Units	Date	Time	By	Reference
1,2-Dichloropropane	ND	500	ug/L	03/05/06		R/J	SW8260
1,3,5-Trimethylbenzene	2000	500	ug/L	03/05/06		R/J	SW8260
1,3-Dichlorobenzene	ND	500	ug/L	03/05/06		R/J	SW8260
1,3-Dichloropropane	ND	500	ug/L	03/05/06		R/J	SW8260
1,4-Dichlorobenzene	ND	500	ug/L	03/05/06		R/J	SW8260
2,2-Dichloropropane	ND	500	ug/L	03/05/06		R/J	SW8260
2-Chlorotoluene	ND	500	ug/L	03/05/06		R/J	SW8260
4-Chlorotoluene	ND	500	ug/L	03/05/06		R/J	SW8260
Benzene	ND	500	ug/L	03/05/06		R/J	SW8260
Bromobenzene	ND	500	ug/L	03/05/06		R/J	SW8260
Bromochloromethane	ND	500	ug/L	03/05/06		R/J	SW8260
Bromodichloromethane	ND	500	ug/L	03/05/06		R/J	SW8260
Bromoform	ND	500	ug/L	03/05/06		R/J	SW8260
Bromomethane	ND	500	ug/L	03/05/06		R/J	SW8260
Carbon tetrachloride	ND	500	ug/L	03/05/06		R/J	SW8260
Chlorobenzene	ND	500	ug/L	03/05/06		R/J	SW8260
Chloroethane	ND	500	ug/L	03/05/06		R/J	SW8260
Chloroform	ND	500	ug/L	03/05/06		R/J	SW8260
Chloromethane	ND	500	ug/L	03/05/06		R/J	SW8260
cis-1,2-Dichloroethene	ND	500	ug/L	03/05/06		R/J	SW8260
cis-1,3-Dichloropropene	ND	500	ug/L	03/05/06		R/J	SW8260
Dibromochloromethane	ND	500	ug/L	03/05/06		R/J	SW8260
Dibromoethane	ND	500	ug/L	03/05/06		R/J	SW8260
Dibromomethane	ND	500	ug/L	03/05/06		R/J	SW8260
Dichlorodifluoromethane	ND	500	ug/L	03/05/06		R/J	SW8260
Ethylbenzene	2900	500	ug/L	03/05/06		R/J	SW8260
Hexachlorobutadiene	ND	500	ug/L	03/05/06		R/J	SW8260
Isopropylbenzene	ND	500	ug/L	03/05/06		R/J	SW8260
m&p-Xylene	9300	500	ug/L	03/05/06		R/J	SW8260
Methyl Ethyl Ketone	ND	6000	ug/L	03/05/06		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	1000	ug/L	03/05/06		R/J	SW8260
Methylene chloride	ND	500	ug/L	03/05/06		R/J	SW8260
n-Butylbenzene	880	500	ug/L	03/05/06		R/J	SW8260
n-Propylbenzene	1200	500	ug/L	03/05/06		R/J	SW8260
Naphthalene	1400	500	ug/L	03/05/06		R/J	SW8260
o-Xylene	730	500	ug/L	03/05/06		R/J	SW8260
p-Isopropyltoluene	ND	500	ug/L	03/05/06		R/J	SW8260
sec-Butylbenzene	ND	500	ug/L	03/05/06		R/J	SW8260
Styrene	ND	500	ug/L	03/05/06		R/J	SW8260
tert-Butylbenzene	ND	500	ug/L	03/05/06		R/J	SW8260
Tetrachloroethene	ND	500	ug/L	03/05/06		R/J	SW8260
Toluene	ND	500	ug/L	03/05/06		R/J	SW8260
Total Xylenes	10000	500	ug/L	03/05/06		R/J	SW8260
trans-1,2-Dichloroethene	ND	500	ug/L	03/05/06		R/J	SW8260

Client ID: GREENBUSH COUNTRY WAY LOCATION A Phoenix I.D.: AH05259

Parameter	Result	RL	Units	Date	Time	By	Reference
trans-1,3-Dichloropropene	ND	500	ug/L	03/05/06		R/J	SW8260
Trichloroethene	ND	500	ug/L	03/05/06		R/J	SW8260
Trichlorofluoromethane	ND	500	ug/L	03/05/06		R/J	SW8260
Vinyl chloride	ND	500	ug/L	03/05/06		R/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	98		%	03/05/06		R/J	SW8260
% Bromofluorobenzene	122		%	03/05/06		R/J	SW8260
% Dibromofluoromethane	94		%	03/05/06		R/J	SW8260
% Toluene-d8	98		%	03/05/06		R/J	SW8260
Semivolatiles							
1,2,4-Trichlorobenzene	ND	400	ug/L	03/06/06		KCA	SW 8270
1,2-Dichlorobenzene	ND	400	ug/L	03/06/06		KCA	SW 8270
1,2-Diphenylhydrazine	ND	400	ug/L	03/06/06		KCA	SW 8270
1,3-Dichlorobenzene	ND	400	ug/L	03/06/06		KCA	SW 8270
1,4-Dichlorobenzene	ND	400	ug/L	03/06/06		KCA	SW 8270
2,4,5-Trichlorophenol	ND	400	ug/L	03/06/06		KCA	SW 8270
2,4,6-Trichlorophenol	ND	400	ug/L	03/06/06		KCA	SW 8270
2,4-Dichlorophenol	ND	400	ug/L	03/06/06		KCA	SW 8270
2,4-Dimethylphenol	ND	400	ug/L	03/06/06		KCA	SW 8270
2,4-Dinitrophenol	ND	2000	ug/L	03/06/06		KCA	SW 8270
2,4-Dinitrotoluene	ND	400	ug/L	03/06/06		KCA	SW 8270
2,6-Dichlorophenol	ND	400	ug/L	03/06/06		KCA	SW 8270
2,6-Dinitrotoluene	ND	400	ug/L	03/06/06		KCA	SW 8270
2-Chloronaphthalene	ND	400	ug/L	03/06/06		KCA	SW 8270
2-Chlorophenol	ND	400	ug/L	03/06/06		KCA	SW 8270
2-Methylnaphthalene	1900	400	ug/L	03/06/06		KCA	SW 8270
2-Methylphenol (o-cresol)	ND	400	ug/L	03/06/06		KCA	SW 8270
2-Nitroaniline	ND	2000	ug/L	03/06/06		KCA	SW 8270
2-Nitrophenol	ND	400	ug/L	03/06/06		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	400	ug/L	03/06/06		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	800	ug/L	03/06/06		KCA	SW 8270
3-Nitroaniline	ND	2000	ug/L	03/06/06		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	2000	ug/L	03/06/06		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	400	ug/L	03/06/06		KCA	SW 8270
4-Chloro-3-methylphenol	ND	800	ug/L	03/06/06		KCA	SW 8270
4-Chloroaniline	ND	800	ug/L	03/06/06		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	400	ug/L	03/06/06		KCA	SW 8270
4-Nitroaniline	ND	2000	ug/L	03/06/06		KCA	SW 8270
4-Nitrophenol	ND	2000	ug/L	03/06/06		KCA	SW 8270
Acenaphthene	ND	400	ug/L	03/06/06		KCA	SW 8270
Acenaphthylene	ND	400	ug/L	03/06/06		KCA	SW 8270
Anthracene	ND	400	ug/L	03/06/06		KCA	SW 8270
Benz(a)anthracene	ND	400	ug/L	03/06/06		KCA	SW 8270

Client ID: GREENBUSH COUNTRY WAY LOCATION A Phoenix I.D.: AH05259

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzidine	ND	400	ug/L	03/06/06		KCA	SW 8270
Benzo(a)pyrene	ND	400	ug/L	03/06/06		KCA	SW 8270
Benzo(b)fluoranthene	ND	400	ug/L	03/06/06		KCA	SW 8270
Benzo(ghi)perylene	ND	400	ug/L	03/06/06		KCA	SW 8270
Benzo(k)fluoranthene	ND	400	ug/L	03/06/06		KCA	SW 8270
Benzoic acid	ND	2000	ug/L	03/06/06		KCA	SW 8270
Benzyl alcohol	ND	800	ug/L	03/06/06		KCA	SW 8270
Benzyl butyl phthalate	ND	400	ug/L	03/06/06		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	400	ug/L	03/06/06		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	400	ug/L	03/06/06		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	400	ug/L	03/06/06		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	400	ug/L	03/06/06		KCA	SW 8270
Chrysene	ND	400	ug/L	03/06/06		KCA	SW 8270
Di-n-butylphthalate	ND	400	ug/L	03/06/06		KCA	SW 8270
Di-n-octylphthalate	ND	400	ug/L	03/06/06		KCA	SW 8270
Dibenz(a,h)anthracene	ND	400	ug/L	03/06/06		KCA	SW 8270
Dibenzofuran	ND	400	ug/L	03/06/06		KCA	SW 8270
Diethyl phthalate	ND	400	ug/L	03/06/06		KCA	SW 8270
Dimethylphthalate	ND	400	ug/L	03/06/06		KCA	SW 8270
Fluoranthene	ND	400	ug/L	03/06/06		KCA	SW 8270
Fluorene	ND	400	ug/L	03/06/06		KCA	SW 8270
Hexachlorobenzene	ND	400	ug/L	03/06/06		KCA	SW 8270
Hexachlorobutadiene	ND	400	ug/L	03/06/06		KCA	SW 8270
Hexachlorocyclopentadiene	ND	400	ug/L	03/06/06		KCA	SW 8270
Hexachloroethane	ND	400	ug/L	03/06/06		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	ND	400	ug/L	03/06/06		KCA	SW 8270
Isophorone	ND	400	ug/L	03/06/06		KCA	SW 8270
N-Nitrosodi-n-propylamine	ND	400	ug/L	03/06/06		KCA	SW 8270
N-Nitrosodimethylamine	ND	400	ug/L	03/06/06		KCA	SW 8270
N-Nitrosodiphenylamine	ND	400	ug/L	03/06/06		KCA	SW 8270
Naphthalene	3700	400	ug/L	03/06/06		KCA	SW 8270
Nitrobenzene	ND	400	ug/L	03/06/06		KCA	SW 8270
Pentachlorophenol	ND	400	ug/L	03/06/06		KCA	SW 8270
Phenanthrene	ND	400	ug/L	03/06/06		KCA	SW 8270
Phenol	ND	400	ug/L	03/06/06		KCA	SW 8270
Pyrene	ND	400	ug/L	03/06/06		KCA	SW 8270
Pyridine	ND	400	ug/L	03/06/06		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	Diluted Out		%	03/06/06		KCA	SW 8270
% 2-Fluorobiphenyl	Diluted Out		%	03/06/06		KCA	SW 8270
% 2-Fluorophenol	Diluted Out		%	03/06/06		KCA	SW 8270
% Nitrobenzene-d5	Diluted Out		%	03/06/06		KCA	SW 8270
% Phenol-d5	Diluted Out		%	03/06/06		KCA	SW 8270
% Terphenyl-d14	Diluted Out		%	03/06/06		KCA	SW 8270

Client ID: GREENBUSH COUNTRY WAY LOCATION A Phoenix I.D.: AH05259

Parameter	Result	RL	Units	Date	Time	By	Reference

Comments: ND=Not detected BDL = Below Detection Limit RL=Reporting Limit

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but contains a distribution in the C9 to C14 range. The sample was quantitated against a C9-C36 standard.

*EDB could not be run via 504 due to matrix interference.

*** Due to matrix interference cuased by non target compounds in the sample an elevated MDL was reported.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

Phyllis Shiller, Laboratory Director
March 07, 2006

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac

Analysis Report
March 07, 2006

FOR: Attn: Mr Adam Swederskas
GZA GeoEnvironmental Inc
One Edgewater Drive
Norwood, MA 02062

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		03/03/06	10:35
Location Code:	GZA-MA	Received by:	SW	03/03/06	16:00
Rush Request:	RUSH#	Analyzed by:	see "By" below		
P.O.#:					

SDG I.D.: GAH05255
Phoenix I.D.: AH05255

Laboratory Data

Client ID: GREENBUSH COUNTRY WAY LOCATION B

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver (Dissolved)	< 0.001	0.001	mg/L	03/06/06		EK	200.7/6010
Arsenic (Dissolved)	0.014	0.004	mg/L	03/06/06		EK	200.7/6010
Cadmium (Dissolved)	< 0.001	0.001	mg/L	03/06/06		EK	200.7/6010
Chromium (Dissolved)	< 0.001	0.001	mg/L	03/06/06		EK	200.7/6010
Copper (Dissolved)	0.005	0.001	mg/L	03/06/06		EK	6010/E200.7
Iron (Dissolved)	49.2	0.002	mg/L	03/06/06		EK	6010/E200.7
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	03/06/06		TH	SW-7470
Nickel (Dissolved)	0.002	0.002	mg/L	03/06/06		EK	200.7/6010
Lead (Dissolved)	0.008	0.001	mg/L	03/06/06		TH	7421/E239.2
Antimony (Dissolved)	< 0.005	0.005	mg/L	03/06/06		EK	200.7/6010
Selenium (Dissolved)	< 0.010	0.010	mg/L	03/06/06		EK	200.7/6010
Zinc (Dissolved)	0.019	0.002	mg/L	03/06/06		EK	200.7/6010
Chlorine Residual	< 0.02	0.02	mg/L	03/03/06	23:00	CD	4500Cl-G
Chromium, Hexavalent	< 0.01	0.01	mg/L	03/03/06	23:00	CD	S3500CRD
Total Cyanide	< 0.01	0.01	mg/L	03/06/06		M/G	9010/335.3
Total Suspended Solids	2000	20	mg/L	03/03/06		KL	SM2540D
MADEP MCP 8260 Certification	Completed			03/07/06		JH	MCP
MADEP MCP 7000 Certification	Completed			03/07/06		TH	MCP
MADEP MCP 7470/7471 Certification	Completed			03/06/06		TH	MCP
MADEP MCP 6010 Certification	Completed			03/06/06		EK	MCP
Filtration Dissolved Metals	Completed			03/03/06		AG	.45um Filter
Dissolved Mercury Digestion	Completed		NA	03/06/06		E	SW7470
PCB Extraction	Completed			03/03/06		R/L	SW3510/3520
Semi-Volatile Extraction	Completed			03/03/06		O	SW3510/3520

Client ID: GREENBUSH COUNTRY WAY LOCATION B Phoenix I.D.: AH05255

Parameter	Result	RL	Units	Date	Time	By	Reference
Dissolved Metals Preparation	Completed			03/03/06		AG	SW846-3005
Extraction of TPH MOD 8100	Completed			03/03/06		O	3550/5030
Polychlorinated Biphenyls							
PCB-1016	ND	0.5	ug/L	03/06/06		MH	608/ 8082
PCB-1221	ND	0.5	ug/L	03/06/06		MH	608/ 8082
PCB-1232	ND	0.5	ug/L	03/06/06		MH	608/ 8082
PCB-1242	ND	0.5	ug/L	03/06/06		MH	608/ 8082
PCB-1248	ND	0.5	ug/L	03/06/06		MH	608/ 8082
PCB-1254	ND	0.5	ug/L	03/06/06		MH	608/ 8082
PCB-1260	ND	0.5	ug/L	03/06/06		MH	608/ 8082
PCB-1262	ND	0.5	ug/L	03/06/06		MH	608/ 8082
PCB-1268	ND	0.5	ug/L	03/06/06		MH	608/ 8082
QA/QC Surrogates							
% DCBP (Surrogate Rec)	88		%	03/06/06		MH	608/ 8082
% TCMX (Surrogate Rec)	Interference		%	03/06/06		MH	608/ 8082
TPH by GC (Extractable Products)							
Aviation Fuel/Kerosene	ND	0.5	mg/L	03/06/06		JRB	8100Modified
Fuel Oil #2/ Diesel Fuel	ND	0.5	mg/L	03/06/06		JRB	8100Modified
Fuel Oil #4	ND	0.5	mg/L	03/06/06		JRB	8100Modified
Fuel Oil #6	ND	0.5	mg/L	03/06/06		JRB	8100Modified
Motor Oil	ND	0.5	mg/L	03/06/06		JRB	8100Modified
Other Oil (Cutting & Lubricating)	**	0.5	mg/L	03/06/06		JRB	8100Modified
Unidentified	23	0.5	mg/L	03/06/06		JRB	8100Modified
QA/QC Surrogates							
% n-Pentacosane	Interference		%	03/06/06		JRB	8100Modified
Tert-amyl-methyl-ether	< 100	100	ug/L	03/05/06		R/J	SW8260
Tert-butyl alcohol	< 200	200	ug/L	03/07/06		JH	SW8260
Volatiles							
1,1,1,2-Tetrachloroethane	ND	1300	ug/L	03/07/06		R/J	SW8260
1,1,1-Trichloroethane	ND	1300	ug/L	03/07/06		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND	1300	ug/L	03/07/06		R/J	SW8260
1,1,2-Trichloroethane	ND	1300	ug/L	03/07/06		R/J	SW8260
1,1-Dichloroethane	ND	1300	ug/L	03/07/06		R/J	SW8260
1,1-Dichloroethene	ND	1300	ug/L	03/07/06		R/J	SW8260
1,1-Dichloropropene	ND	1300	ug/L	03/07/06		R/J	SW8260
1,2,3-Trichlorobenzene	ND	1300	ug/L	03/07/06		R/J	SW8260
1,2,3-Trichloropropane	ND	1300	ug/L	03/07/06		R/J	SW8260
1,2,4-Trichlorobenzene	ND	1300	ug/L	03/07/06		R/J	SW8260
1,2,4-Trimethylbenzene	3400	1300	ug/L	03/07/06		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND	1300	ug/L	03/07/06		R/J	SW8260
1,2-Dichlorobenzene	ND	1300	ug/L	03/07/06		R/J	SW8260
1,2-Dichloroethane	ND	1300	ug/L	03/07/06		R/J	SW8260

Client ID: GREENBUSH COUNTRY WAY LOCATION B Phoenix I.D.: AH05255

Parameter	Result	RL	Units	Date	Time	By	Reference
1,2-Dichloropropane	ND	1300	ug/L	03/07/06		R/J	SW8260
1,3,5-Trimethylbenzene	ND	1300	ug/L	03/07/06		R/J	SW8260
1,3-Dichlorobenzene	ND	1300	ug/L	03/07/06		R/J	SW8260
1,3-Dichloropropane	ND	1300	ug/L	03/07/06		R/J	SW8260
1,4-Dichlorobenzene	ND	1300	ug/L	03/07/06		R/J	SW8260
2,2-Dichloropropane	ND	1300	ug/L	03/07/06		R/J	SW8260
2-Chlorotoluene	ND	1300	ug/L	03/07/06		R/J	SW8260
4-Chlorotoluene	ND	1300	ug/L	03/07/06		R/J	SW8260
Benzene	ND	1300	ug/L	03/07/06		R/J	SW8260
Bromobenzene	ND	1300	ug/L	03/07/06		R/J	SW8260
Bromochloromethane	ND	1300	ug/L	03/07/06		R/J	SW8260
Bromodichloromethane	ND	1300	ug/L	03/07/06		R/J	SW8260
Bromoform	ND	1300	ug/L	03/07/06		R/J	SW8260
Bromomethane	ND	1300	ug/L	03/07/06		R/J	SW8260
Carbon tetrachloride	ND	1300	ug/L	03/07/06		R/J	SW8260
Chlorobenzene	ND	1300	ug/L	03/07/06		R/J	SW8260
Chloroethane	ND	1300	ug/L	03/07/06		R/J	SW8260
Chloroform	ND	1300	ug/L	03/07/06		R/J	SW8260
Chloromethane	ND	1300	ug/L	03/07/06		R/J	SW8260
cis-1,2-Dichloroethene	ND	1300	ug/L	03/07/06		R/J	SW8260
cis-1,3-Dichloropropene	ND	1300	ug/L	03/07/06		R/J	SW8260
Dibromochloromethane	ND	1300	ug/L	03/07/06		R/J	SW8260
Dibromoethane	ND	1300	ug/L	03/07/06		R/J	SW8260
Dibromomethane	ND	1300	ug/L	03/07/06		R/J	SW8260
Dichlorodifluoromethane	ND	1300	ug/L	03/07/06		R/J	SW8260
Ethylbenzene	2100	1300	ug/L	03/07/06		R/J	SW8260
Hexachlorobutadiene	ND	1300	ug/L	03/07/06		R/J	SW8260
Isopropylbenzene	ND	1300	ug/L	03/07/06		R/J	SW8260
m&p-Xylene	5800	1300	ug/L	03/07/06		R/J	SW8260
Methyl Ethyl Ketone	ND	15000	ug/L	03/07/06		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	2500	ug/L	03/07/06		R/J	SW8260
Methylene chloride	ND	1300	ug/L	03/07/06		R/J	SW8260
n-Butylbenzene	ND	1300	ug/L	03/07/06		R/J	SW8260
n-Propylbenzene	ND	1300	ug/L	03/07/06		R/J	SW8260
Naphthalene	ND	1300	ug/L	03/07/06		R/J	SW8260
o-Xylene	ND	1300	ug/L	03/07/06		R/J	SW8260
p-Isopropyltoluene	ND	1300	ug/L	03/07/06		R/J	SW8260
sec-Butylbenzene	ND	1300	ug/L	03/07/06		R/J	SW8260
Styrene	ND	1300	ug/L	03/07/06		R/J	SW8260
tert-Butylbenzene	ND	1300	ug/L	03/07/06		R/J	SW8260
Tetrachloroethene	ND	1300	ug/L	03/07/06		R/J	SW8260
Toluene	ND	1300	ug/L	03/07/06		R/J	SW8260
Total Xylenes	5800	1300	ug/L	03/07/06		R/J	SW8260
trans-1,2-Dichloroethene	ND	1300	ug/L	03/07/06		R/J	SW8260

Client ID: GREENBUSH COUNTRY WAY LOCATION B Phoenix I.D.: AH05255

Parameter	Result	RL	Units	Date	Time	By	Reference
trans-1,3-Dichloropropene	ND	1300	ug/L	03/07/06		R/J	SW8260
Trichloroethene	ND	1300	ug/L	03/07/06		R/J	SW8260
Trichlorofluoromethane	ND	1300	ug/L	03/07/06		R/J	SW8260
Vinyl chloride	ND	1300	ug/L	03/07/06		R/J	SW8260
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	03/07/06		R/J	SW8260
% Bromofluorobenzene	109		%	03/07/06		R/J	SW8260
% Dibromofluoromethane	96		%	03/07/06		R/J	SW8260
% Toluene-d8	101		%	03/07/06		R/J	SW8260
Semivolatiles							
1,2,4-Trichlorobenzene	ND	200	ug/L	03/06/06		KCA	SW 8270
1,2-Dichlorobenzene	ND	200	ug/L	03/06/06		KCA	SW 8270
1,2-Diphenylhydrazine	ND	200	ug/L	03/06/06		KCA	SW 8270
1,3-Dichlorobenzene	ND	200	ug/L	03/06/06		KCA	SW 8270
1,4-Dichlorobenzene	ND	200	ug/L	03/06/06		KCA	SW 8270
2,4,5-Trichlorophenol	ND	200	ug/L	03/06/06		KCA	SW 8270
2,4,6-Trichlorophenol	ND	200	ug/L	03/06/06		KCA	SW 8270
2,4-Dichlorophenol	ND	200	ug/L	03/06/06		KCA	SW 8270
2,4-Dimethylphenol	ND	200	ug/L	03/06/06		KCA	SW 8270
2,4-Dinitrophenol	ND	1000	ug/L	03/06/06		KCA	SW 8270
2,4-Dinitrotoluene	ND	200	ug/L	03/06/06		KCA	SW 8270
2,6-Dichlorophenol	ND	200	ug/L	03/06/06		KCA	SW 8270
2,6-Dinitrotoluene	ND	200	ug/L	03/06/06		KCA	SW 8270
2-Chloronaphthalene	ND	200	ug/L	03/06/06		KCA	SW 8270
2-Chlorophenol	ND	200	ug/L	03/06/06		KCA	SW 8270
2-Methylnaphthalene	440	200	ug/L	03/06/06		KCA	SW 8270
2-Methylphenol (o-cresol)	ND	200	ug/L	03/06/06		KCA	SW 8270
2-Nitroaniline	ND	1000	ug/L	03/06/06		KCA	SW 8270
2-Nitrophenol	ND	200	ug/L	03/06/06		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	200	ug/L	03/06/06		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	400	ug/L	03/06/06		KCA	SW 8270
3-Nitroaniline	ND	1000	ug/L	03/06/06		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1000	ug/L	03/06/06		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	200	ug/L	03/06/06		KCA	SW 8270
4-Chloro-3-methylphenol	ND	400	ug/L	03/06/06		KCA	SW 8270
4-Chloroaniline	ND	400	ug/L	03/06/06		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	200	ug/L	03/06/06		KCA	SW 8270
4-Nitroaniline	ND	1000	ug/L	03/06/06		KCA	SW 8270
4-Nitrophenol	ND	1000	ug/L	03/06/06		KCA	SW 8270
Acenaphthene	ND	200	ug/L	03/06/06		KCA	SW 8270
Acenaphthylene	ND	200	ug/L	03/06/06		KCA	SW 8270
Anthracene	ND	200	ug/L	03/06/06		KCA	SW 8270
Benz(a)anthracene	ND	200	ug/L	03/06/06		KCA	SW 8270

Client ID: GREENBUSH COUNTRY WAY LOCATION B Phoenix I.D.: AH05255

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzidine	ND	200	ug/L	03/06/06		KCA	SW 8270
Benzo(a)pyrene	ND	200	ug/L	03/06/06		KCA	SW 8270
Benzo(b)fluoranthene	ND	200	ug/L	03/06/06		KCA	SW 8270
Benzo(ghi)perylene	ND	200	ug/L	03/06/06		KCA	SW 8270
Benzo(k)fluoranthene	ND	200	ug/L	03/06/06		KCA	SW 8270
Benzoic acid	ND	1000	ug/L	03/06/06		KCA	SW 8270
Benzyl alcohol	ND	400	ug/L	03/06/06		KCA	SW 8270
Benzyl butyl phthalate	ND	200	ug/L	03/06/06		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	200	ug/L	03/06/06		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	200	ug/L	03/06/06		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	200	ug/L	03/06/06		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	200	ug/L	03/06/06		KCA	SW 8270
Chrysene	ND	200	ug/L	03/06/06		KCA	SW 8270
Di-n-butylphthalate	ND	200	ug/L	03/06/06		KCA	SW 8270
Di-n-octylphthalate	ND	200	ug/L	03/06/06		KCA	SW 8270
Dibenz(a,h)anthracene	ND	200	ug/L	03/06/06		KCA	SW 8270
Dibenzofuran	ND	200	ug/L	03/06/06		KCA	SW 8270
Diethyl phthalate	ND	200	ug/L	03/06/06		KCA	SW 8270
Dimethylphthalate	ND	200	ug/L	03/06/06		KCA	SW 8270
Fluoranthene	ND	200	ug/L	03/06/06		KCA	SW 8270
Fluorene	ND	200	ug/L	03/06/06		KCA	SW 8270
Hexachlorobenzene	ND	200	ug/L	03/06/06		KCA	SW 8270
Hexachlorobutadiene	ND	200	ug/L	03/06/06		KCA	SW 8270
Hexachlorocyclopentadiene	ND	200	ug/L	03/06/06		KCA	SW 8270
Hexachloroethane	ND	200	ug/L	03/06/06		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	ND	200	ug/L	03/06/06		KCA	SW 8270
Isophorone	ND	200	ug/L	03/06/06		KCA	SW 8270
N-Nitrosodi-n-propylamine	ND	200	ug/L	03/06/06		KCA	SW 8270
N-Nitrosodimethylamine	ND	200	ug/L	03/06/06		KCA	SW 8270
N-Nitrosodiphenylamine	ND	200	ug/L	03/06/06		KCA	SW 8270
Naphthalene	1100	200	ug/L	03/06/06		KCA	SW 8270
Nitrobenzene	ND	200	ug/L	03/06/06		KCA	SW 8270
Pentachlorophenol	ND	200	ug/L	03/06/06		KCA	SW 8270
Phenanthrene	ND	200	ug/L	03/06/06		KCA	SW 8270
Phenol	ND	200	ug/L	03/06/06		KCA	SW 8270
Pyrene	ND	200	ug/L	03/06/06		KCA	SW 8270
Pyridine	ND	200	ug/L	03/06/06		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	Diluted Out		%	03/06/06		KCA	SW 8270
% 2-Fluorobiphenyl	Diluted Out		%	03/06/06		KCA	SW 8270
% 2-Fluorophenol	Diluted Out		%	03/06/06		KCA	SW 8270
% Nitrobenzene-d5	Diluted Out		%	03/06/06		KCA	SW 8270
% Phenol-d5	Diluted Out		%	03/06/06		KCA	SW 8270
% Terphenyl-d14	Diluted Out		%	03/06/06		KCA	SW 8270

Client ID: GREENBUSH COUNTRY WAY LOCATION B Phoenix I.D.: AH05255

Parameter	Result	RL	Units	Date	Time	By	Reference

Comments: ND=Not detected BDL = Below Detection Limit RL=Reporting Limit

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but most closely resembles gasoline.

EDB could not be run via 504 due to matrix interference.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

Phyllis Shiller, Laboratory Director
March 07, 2006

PHOENIX
Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report
March 07, 2006

FOR: Attn: Mr Adam Swederskas
GZA GeoEnvironmental Inc
One Edgewater Drive
Norwood, MA 02062

Sample Information		Custody Information		Date	Time
Matrix:	WATER	Collected by:		03/03/06	11:10
Location Code:	GZA-MA	Received by:	SW	03/03/06	16:00
Rush Request:	RUSH#	Analyzed by:	see "By" below		
P.O.#:					

SDG I.D.: GAH05255
Phoenix I.D.: AH05256

Laboratory Data

Client ID: GREENBUSH COUNTRY WAY LOCATION C

Parameter	Result	RL	Units	Date	Time	By	Reference
Silver (Dissolved)	< 0.004	0.004	mg/L	03/06/06		EK	200.7/6010
Arsenic (Dissolved)	< 0.016	0.016	mg/L	03/06/06		EK	200.7/6010
Cadmium (Dissolved)	< 0.004	0.004	mg/L	03/06/06		EK	200.7/6010
Chromium (Dissolved)	< 0.004	0.004	mg/L	03/06/06		EK	200.7/6010
Copper (Dissolved)	< 0.004	0.004	mg/L	03/06/06		EK	6010/E200.7
Iron (Dissolved)	9.59	0.008	mg/L	03/06/06		EK	6010/E200.7
Mercury (Dissolved)	< 0.0002	0.0002	mg/L	03/06/06		TH	SW-7470
Nickel (Dissolved)	< 0.008	0.008	mg/L	03/06/06		EK	200.7/6010
Lead (Dissolved)	0.052	0.004	mg/L	03/06/06		TH	7421/E239.2
Antimony (Dissolved)	0.023	0.020	mg/L	03/06/06		EK	200.7/6010
Selenium (Dissolved)	< 0.040	0.040	mg/L	03/06/06		EK	200.7/6010
Zinc (Dissolved)	< 0.008	0.008	mg/L	03/06/06		EK	200.7/6010
Chlorine Residual	< 0.02	0.02	mg/L	03/03/06	23:00	CD	4500Cl-G
Chromium, Hexavalent	< 0.01	0.01	mg/L	03/03/06	23:00	CD	S3500CRD
Total Cyanide	< 0.01	0.01	mg/L	03/06/06		M/G	9010/335.3
Total Suspended Solids	5800	50	mg/L	03/03/06		KL	SM2540D
Filtration Dissolved Metals	Completed			03/03/06		AG	.45um Filter
Dissolved Mercury Digestion	Completed		NA	03/06/06		E	SW7470
PCB Extraction	Completed			03/03/06		R/L	SW3510/3520
Semi-Volatile Extraction	Completed			03/03/06		O	SW3510/3520
Dissolved Metals Preparation	Completed			03/03/06		AG	SW846-3005
Extraction of TPH MOD 8100	Completed			03/03/06		O	3550/5030
Polychlorinated Biphenyls							
PCB-1016	ND *	2	ug/L	03/07/06		MH	608/ 8082

Client ID: GREENBUSH COUNTRY WAY LOCATION C Phoenix I.D.: AH05256

Parameter	Result		RL	Units	Date	Time	By	Reference
PCB-1221	ND	*	2	ug/L	03/07/06		MH	608/ 8082
PCB-1232	ND	*	2	ug/L	03/07/06		MH	608/ 8082
PCB-1242	ND	*	2	ug/L	03/07/06		MH	608/ 8082
PCB-1248	ND	*	2	ug/L	03/07/06		MH	608/ 8082
PCB-1254	ND	*	2	ug/L	03/07/06		MH	608/ 8082
PCB-1260	ND	*	2	ug/L	03/07/06		MH	608/ 8082
PCB-1262	ND	*	2	ug/L	03/07/06		MH	608/ 8082
PCB-1268	ND	*	2	ug/L	03/07/06		MH	608/ 8082
QA/QC Surrogates								
% DCBP (Surrogate Rec)	Diluted Out *			%	03/07/06		MH	608/ 8082
% TCMX (Surrogate Rec)	Diluted Out *			%	03/07/06		MH	608/ 8082
TPH by GC (Extractable Products)								
Aviation Fuel/Kerosene	ND		0.5	mg/L	03/07/06		JRB	8100Modified
Fuel Oil #2/ Diesel Fuel	ND		0.5	mg/L	03/07/06		JRB	8100Modified
Fuel Oil #4	ND		0.5	mg/L	03/07/06		JRB	8100Modified
Fuel Oil #6	ND		0.5	mg/L	03/07/06		JRB	8100Modified
Motor Oil	ND		0.5	mg/L	03/07/06		JRB	8100Modified
Other Oil (Cutting & Lubricating)	**		0.5	mg/L	03/07/06		JRB	8100Modified
Unidentified	160		0.5	mg/L	03/07/06		JRB	8100Modified
QA/QC Surrogates								
% n-Pentacosane	Interference			%	03/07/06		JRB	8100Modified
Tert-amyl-methyl-ether	< 500		500	ug/L	03/05/06		R/J	SW8260
Tert-butyl alcohol	< 200		200	ug/L	03/05/06		R/J	SW8260
Volatiles								
1,1,1,2-Tetrachloroethane	ND		5000	ug/L	03/07/06		R/J	SW8260
1,1,1-Trichloroethane	ND		5000	ug/L	03/07/06		R/J	SW8260
1,1,2,2-Tetrachloroethane	ND		5000	ug/L	03/07/06		R/J	SW8260
1,1,2-Trichloroethane	ND		5000	ug/L	03/07/06		R/J	SW8260
1,1-Dichloroethane	ND		5000	ug/L	03/07/06		R/J	SW8260
1,1-Dichloroethene	ND		5000	ug/L	03/07/06		R/J	SW8260
1,1-Dichloropropene	ND		5000	ug/L	03/07/06		R/J	SW8260
1,2,3-Trichlorobenzene	ND		5000	ug/L	03/07/06		R/J	SW8260
1,2,3-Trichloropropane	ND		5000	ug/L	03/07/06		R/J	SW8260
1,2,4-Trichlorobenzene	ND		5000	ug/L	03/07/06		R/J	SW8260
1,2,4-Trimethylbenzene	43000		5000	ug/L	03/07/06		R/J	SW8260
1,2-Dibromo-3-chloropropane	ND		5000	ug/L	03/07/06		R/J	SW8260
1,2-Dichlorobenzene	ND		5000	ug/L	03/07/06		R/J	SW8260
1,2-Dichloroethane	ND		5000	ug/L	03/07/06		R/J	SW8260
1,2-Dichloropropane	ND		5000	ug/L	03/07/06		R/J	SW8260
1,3,5-Trimethylbenzene	14000		5000	ug/L	03/07/06		R/J	SW8260
1,3-Dichlorobenzene	ND		5000	ug/L	03/07/06		R/J	SW8260
1,3-Dichloropropane	ND		5000	ug/L	03/07/06		R/J	SW8260

Client ID: GREENBUSH COUNTRY WAY LOCATION C Phoenix I.D.: AH05256

Parameter	Result	RL	Units	Date	Time	By	Reference
1,4-Dichlorobenzene	ND	5000	ug/L	03/07/06		R/J	SW8260
2,2-Dichloropropane	ND	5000	ug/L	03/07/06		R/J	SW8260
2-Chlorotoluene	ND	5000	ug/L	03/07/06		R/J	SW8260
4-Chlorotoluene	ND	5000	ug/L	03/07/06		R/J	SW8260
Benzene	ND	5000	ug/L	03/07/06		R/J	SW8260
Bromobenzene	ND	5000	ug/L	03/07/06		R/J	SW8260
Bromochloromethane	ND	5000	ug/L	03/07/06		R/J	SW8260
Bromodichloromethane	ND	5000	ug/L	03/07/06		R/J	SW8260
Bromoform	ND	5000	ug/L	03/07/06		R/J	SW8260
Bromomethane	ND	5000	ug/L	03/07/06		R/J	SW8260
Carbon tetrachloride	ND	5000	ug/L	03/07/06		R/J	SW8260
Chlorobenzene	ND	5000	ug/L	03/07/06		R/J	SW8260
Chloroethane	ND	5000	ug/L	03/07/06		R/J	SW8260
Chloroform	ND	5000	ug/L	03/07/06		R/J	SW8260
Chloromethane	ND	5000	ug/L	03/07/06		R/J	SW8260
cis-1,2-Dichloroethene	ND	5000	ug/L	03/07/06		R/J	SW8260
cis-1,3-Dichloropropene	ND	5000	ug/L	03/07/06		R/J	SW8260
Dibromochloromethane	ND	5000	ug/L	03/07/06		R/J	SW8260
Dibromoethane	ND	5000	ug/L	03/07/06		R/J	SW8260
Dibromomethane	ND	5000	ug/L	03/07/06		R/J	SW8260
Dichlorodifluoromethane	ND	5000	ug/L	03/07/06		R/J	SW8260
Ethylbenzene	ND	5000	ug/L	03/07/06		R/J	SW8260
Hexachlorobutadiene	ND	5000	ug/L	03/07/06		R/J	SW8260
Isopropylbenzene	ND	5000	ug/L	03/07/06		R/J	SW8260
m&p-Xylene	17000	5000	ug/L	03/07/06		R/J	SW8260
Methyl Ethyl Ketone	ND	60000	ug/L	03/07/06		R/J	SW8260
Methyl t-butyl ether (MTBE)	ND	10000	ug/L	03/07/06		R/J	SW8260
Methylene chloride	ND	5000	ug/L	03/07/06		R/J	SW8260
n-Butylbenzene	11000	5000	ug/L	03/07/06		R/J	SW8260
n-Propylbenzene	6600	5000	ug/L	03/07/06		R/J	SW8260
Naphthalene	6200	5000	ug/L	03/07/06		R/J	SW8260
o-Xylene	6300	5000	ug/L	03/07/06		R/J	SW8260
p-Isopropyltoluene	ND	5000	ug/L	03/07/06		R/J	SW8260
sec-Butylbenzene	ND	5000	ug/L	03/07/06		R/J	SW8260
Styrene	ND	5000	ug/L	03/07/06		R/J	SW8260
tert-Butylbenzene	ND	5000	ug/L	03/07/06		R/J	SW8260
Tetrachloroethene	ND	5000	ug/L	03/07/06		R/J	SW8260
Toluene	ND	5000	ug/L	03/07/06		R/J	SW8260
Total Xylenes	23000	5000	ug/L	03/07/06		R/J	SW8260
trans-1,2-Dichloroethene	ND	5000	ug/L	03/07/06		R/J	SW8260
trans-1,3-Dichloropropene	ND	5000	ug/L	03/07/06		R/J	SW8260
Trichloroethene	ND	5000	ug/L	03/07/06		R/J	SW8260
Trichlorofluoromethane	ND	5000	ug/L	03/07/06		R/J	SW8260
Vinyl chloride	ND	5000	ug/L	03/07/06		R/J	SW8260

Client ID: GREENBUSH COUNTRY WAY LOCATION C Phoenix I.D.: AH05256

Parameter	Result	RL	Units	Date	Time	By	Reference
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	101		%	03/07/06		R/J	SW8260
% Bromofluorobenzene	119		%	03/07/06		R/J	SW8260
% Dibromofluoromethane	91		%	03/07/06		R/J	SW8260
% Toluene-d8	99		%	03/07/06		R/J	SW8260
Semivolatiles							
1,2,4-Trichlorobenzene	ND	200	ug/L	03/06/06		KCA	SW 8270
1,2-Dichlorobenzene	ND	200	ug/L	03/06/06		KCA	SW 8270
1,2-Diphenylhydrazine	ND	200	ug/L	03/06/06		KCA	SW 8270
1,3-Dichlorobenzene	ND	200	ug/L	03/06/06		KCA	SW 8270
1,4-Dichlorobenzene	ND	200	ug/L	03/06/06		KCA	SW 8270
2,4,5-Trichlorophenol	ND	200	ug/L	03/06/06		KCA	SW 8270
2,4,6-Trichlorophenol	ND	200	ug/L	03/06/06		KCA	SW 8270
2,4-Dichlorophenol	ND	200	ug/L	03/06/06		KCA	SW 8270
2,4-Dimethylphenol	ND	200	ug/L	03/06/06		KCA	SW 8270
2,4-Dinitrophenol	ND	1000	ug/L	03/06/06		KCA	SW 8270
2,4-Dinitrotoluene	ND	200	ug/L	03/06/06		KCA	SW 8270
2,6-Dichlorophenol	ND	200	ug/L	03/06/06		KCA	SW 8270
2,6-Dinitrotoluene	ND	200	ug/L	03/06/06		KCA	SW 8270
2-Chloronaphthalene	ND	200	ug/L	03/06/06		KCA	SW 8270
2-Chlorophenol	ND	200	ug/L	03/06/06		KCA	SW 8270
2-Methylnaphthalene	500	200	ug/L	03/06/06		KCA	SW 8270
2-Methylphenol (o-cresol)	ND	200	ug/L	03/06/06		KCA	SW 8270
2-Nitroaniline	ND	1000	ug/L	03/06/06		KCA	SW 8270
2-Nitrophenol	ND	200	ug/L	03/06/06		KCA	SW 8270
3&4-Methylphenol (m&p-cresol)	ND	200	ug/L	03/06/06		KCA	SW 8270
3,3'-Dichlorobenzidine	ND	400	ug/L	03/06/06		KCA	SW 8270
3-Nitroaniline	ND	1000	ug/L	03/06/06		KCA	SW 8270
4,6-Dinitro-2-methylphenol	ND	1000	ug/L	03/06/06		KCA	SW 8270
4-Bromophenyl phenyl ether	ND	200	ug/L	03/06/06		KCA	SW 8270
4-Chloro-3-methylphenol	ND	400	ug/L	03/06/06		KCA	SW 8270
4-Chloroaniline	ND	400	ug/L	03/06/06		KCA	SW 8270
4-Chlorophenyl phenyl ether	ND	200	ug/L	03/06/06		KCA	SW 8270
4-Nitroaniline	ND	1000	ug/L	03/06/06		KCA	SW 8270
4-Nitrophenol	ND	1000	ug/L	03/06/06		KCA	SW 8270
Acenaphthene	ND	200	ug/L	03/06/06		KCA	SW 8270
Acenaphthylene	ND	200	ug/L	03/06/06		KCA	SW 8270
Anthracene	ND	200	ug/L	03/06/06		KCA	SW 8270
Benz(a)anthracene	ND	200	ug/L	03/06/06		KCA	SW 8270
Benzidine	ND	200	ug/L	03/06/06		KCA	SW 8270
Benzo(a)pyrene	ND	200	ug/L	03/06/06		KCA	SW 8270
Benzo(b)fluoranthene	ND	200	ug/L	03/06/06		KCA	SW 8270
Benzo(ghi)perylene	ND	200	ug/L	03/06/06		KCA	SW 8270

Client ID: GREENBUSH COUNTRY WAY LOCATION C Phoenix I.D.: AH05256

Parameter	Result	RL	Units	Date	Time	By	Reference
Benzo(k)fluoranthene	ND	200	ug/L	03/06/06		KCA	SW 8270
Benzoic acid	ND	1000	ug/L	03/06/06		KCA	SW 8270
Benzyl alcohol	ND	400	ug/L	03/06/06		KCA	SW 8270
Benzyl butyl phthalate	ND	200	ug/L	03/06/06		KCA	SW 8270
Bis(2-chloroethoxy)methane	ND	200	ug/L	03/06/06		KCA	SW 8270
Bis(2-chloroethyl)ether	ND	200	ug/L	03/06/06		KCA	SW 8270
Bis(2-chloroisopropyl)ether	ND	200	ug/L	03/06/06		KCA	SW 8270
Bis(2-ethylhexyl)phthalate	ND	200	ug/L	03/06/06		KCA	SW 8270
Chrysene	ND	200	ug/L	03/06/06		KCA	SW 8270
Di-n-butylphthalate	ND	200	ug/L	03/06/06		KCA	SW 8270
Di-n-octylphthalate	ND	200	ug/L	03/06/06		KCA	SW 8270
Dibenz(a,h)anthracene	ND	200	ug/L	03/06/06		KCA	SW 8270
Dibenzofuran	ND	200	ug/L	03/06/06		KCA	SW 8270
Diethyl phthalate	ND	200	ug/L	03/06/06		KCA	SW 8270
Dimethylphthalate	ND	200	ug/L	03/06/06		KCA	SW 8270
Fluoranthene	ND	200	ug/L	03/06/06		KCA	SW 8270
Fluorene	ND	200	ug/L	03/06/06		KCA	SW 8270
Hexachlorobenzene	ND	200	ug/L	03/06/06		KCA	SW 8270
Hexachlorobutadiene	ND	200	ug/L	03/06/06		KCA	SW 8270
Hexachlorocyclopentadiene	ND	200	ug/L	03/06/06		KCA	SW 8270
Hexachloroethane	ND	200	ug/L	03/06/06		KCA	SW 8270
Indeno(1,2,3-cd)pyrene	ND	200	ug/L	03/06/06		KCA	SW 8270
Isophorone	ND	200	ug/L	03/06/06		KCA	SW 8270
N-Nitrosodi-n-propylamine	ND	200	ug/L	03/06/06		KCA	SW 8270
N-Nitrosodimethylamine	ND	200	ug/L	03/06/06		KCA	SW 8270
N-Nitrosodiphenylamine	ND	200	ug/L	03/06/06		KCA	SW 8270
Naphthalene	610	200	ug/L	03/06/06		KCA	SW 8270
Nitrobenzene	ND	200	ug/L	03/06/06		KCA	SW 8270
Pentachlorophenol	ND	200	ug/L	03/06/06		KCA	SW 8270
Phenanthrene	ND	200	ug/L	03/06/06		KCA	SW 8270
Phenol	ND	200	ug/L	03/06/06		KCA	SW 8270
Pyrene	ND	200	ug/L	03/06/06		KCA	SW 8270
Pyridine	ND	200	ug/L	03/06/06		KCA	SW 8270
QA/QC Surrogates							
% 2,4,6-Tribromophenol	Diluted Out		%	03/06/06		KCA	SW 8270
% 2-Fluorobiphenyl	Diluted Out		%	03/06/06		KCA	SW 8270
% 2-Fluorophenol	Diluted Out		%	03/06/06		KCA	SW 8270
% Nitrobenzene-d5	Diluted Out		%	03/06/06		KCA	SW 8270
% Phenol-d5	Diluted Out		%	03/06/06		KCA	SW 8270
% Terphenyl-d14	Diluted Out		%	03/06/06		KCA	SW 8270

Comments: ND=Not detected BDL = Below Detection Limit RL=Reporting Limit

* Due to matrix interference cuased by non target compounds in the sample an elevated MDL was reported.

**Petroleum hydrocarbon chromatogram was not a perfect match with any of the standards, but contains a distribution in the C9 to C14 range. The sample was quantitated against a C9-C36 standard.

EDB could not be run via 504 due to matrix interference.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

Phyllis Shiller, Laboratory Director
March 07, 2006

PHOENIX

Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06040
Tel. (860) 645-1102 Fax (860) 645-0823

QA/QC Report

March 07, 2006

QA/QC Data

SDG I.D.: GAH05255

Parameter	Blank	Dup RPD	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
QA/QC Batch Sample No: AH03397 (AH05255, AH05256)								
ICP Metals - Dissolved								
Aluminum	BDL	8.0	88.2			87.5	90.1	2.9
Antimony	BDL	NC	84.9			87.9	90.5	2.9
Arsenic	BDL	NC	88.2			90.7	93.1	2.6
Barium	BDL	NC	89.5			91.6	94.4	3.0
Beryllium	BDL	NC	88.8			91.2	95.2	4.3
Boron	BDL	BDL						
Cadmium	BDL	NC	90.0			93.0	95.2	2.3
Calcium	BDL	BDL						
Chromium	BDL	NC	91.7			93.7	96.9	3.4
Cobalt	BDL	NC	90.1			93.8	95.4	1.7
Copper	BDL	NC	90.9			92.4	95.2	3.0
Iron	BDL	7.5	90.2			91.2	93.9	2.9
Lead	BDL	NC	88.7			92.6	92.9	0.3
Magnesium	BDL	BDL						
Manganese	BDL	NC	90.9			91.9	94.5	2.8
Molybdenum	BDL	BDL						
Nickel	BDL	NC	90.7			93.6	95.9	2.4
Phosphorus	BDL	BDL						
Potassium	BDL	BDL						
Selenium	BDL	NC	88.4			89.2	92.4	3.5
Silver	BDL	NC	88.4			37.0	61.8	50.2
Sodium	BDL	BDL						
Thallium	BDL	NC	90.8			92.8	94.6	1.9
Tin	BDL	BDL						
Vanadium	BDL	NC	88.4			92.3	92.8	0.5
Zinc	BDL	NC	88.9			93.6	95.0	1.5
QA/QC Batch Sample No: AH05234 (AH05255, AH05256)								
Mercury	BDL		96			98	96	2.1

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate

Phyllis Shiller, Laboratory Director
March 07, 2006

PHOENIX

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QA/QC Report

March 07, 2006

QA/QC Data

SDG I.D.: GAH05255

Parameter	Blank	Dup RPD	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
QA/QC Batch Sample No: AH05134 (AH05255, AH05256)								
Total Cyanide	BDL		104			90		
QA/QC Batch Sample No: AH05255 (AH05255, AH05256)								
Chromium, Hexavalent	BDL	NR	100.0			100.0		
QA/QC Batch Sample No: AH05259 (AH05255, AH05256)								
Chlorine Residual	BDL		101.6					

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate

Phyllis Shiller, Laboratory Director
March 07, 2006

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QA/QC Report

March 07, 2006

QA/QC Data

SDG I.D.: GAH05255

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
QA/QC Batch Sample No: AH01394 (AH05255, AH05256)							
Polychlorinated Biphenyls							
PCB-1016	ND				76	109	35.7
PCB-1221	ND						
PCB-1232	ND						
PCB-1242	ND						
PCB-1248	ND						
PCB-1254	ND						
PCB-1260	ND				66	72	8.7
PCB-1262	ND						
PCB-1268	ND						
% DCBP (Surrogate Rec)	106				60	66	9.5
% TCMX (Surrogate Rec)	130				71	54	27.2
Comment: A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.							
QA/QC Batch Sample No: AH02263 (AH05255, AH05256)							
Semivolatiles							
1,2,4-Trichlorobenzene	ND				91	85	6.8
1,2-Dichlorobenzene	ND				90	83	8.1
1,2-Diphenylhydrazine	ND						
1,3-Dichlorobenzene	ND				87	81	7.1
1,4-Dichlorobenzene	ND				87	81	7.1
2,4,5-Trichlorophenol	ND				98	97	1.0
2,4,6-Trichlorophenol	ND				97	94	3.1
2,4-Dichlorophenol	ND				93	88	5.5
2,4-Dimethylphenol	ND				86	78	9.8
2,4-Dinitrophenol	ND						
2,4-Dinitrotoluene	ND				111	111	0.0
2,6-Dichlorophenol	ND						
2,6-Dinitrotoluene	ND				105	106	0.9
2-Chloronaphthalene	ND				91	88	3.4
2-Chlorophenol	ND				90	82	9.3
2-Methylnaphthalene	ND				93	87	6.7
2-Methylphenol (o-cresol)	ND				95	87	8.8
2-Nitroaniline	ND						

QA/QC Data

SDG I.D.: GAH05255

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
2-Nitrophenol	ND				96	92	4.3
3&4-Methylphenol (m&p-cresol)	ND				95	87	8.8
3,3'-Dichlorobenzidine	ND						
3-Nitroaniline	ND				109	111	1.8
4,6-Dinitro-2-methylphenol	ND						
4-Bromophenyl phenyl ether	ND				97	99	2.0
4-Chloro-3-methylphenol	ND				99	96	3.1
4-Chloroaniline	ND				75	76	1.3
4-Chlorophenyl phenyl ether	ND				96	95	1.0
4-Nitroaniline	ND				109	111	1.8
4-Nitrophenol	ND				106	110	3.7
Acenaphthene	ND				95	93	2.1
Acenaphthylene	ND				81	77	5.1
Anthracene	ND				93	96	3.2
Benz(a)anthracene	ND				99	104	4.9
Benzidine	ND						
Benzo(a)pyrene	ND				93	101	8.2
Benzo(b)fluoranthene	ND				101	110	8.5
Benzo(ghi)perylene	ND				96	99	3.1
Benzo(k)fluoranthene	ND				95	109	13.7
Benzoic acid	ND						
Benzyl alcohol	ND					123	
Benzyl butyl phthalate	ND				89	93	4.4
Bis(2-chloroethoxy)methane	ND				93	87	6.7
Bis(2-chloroethyl)ether	ND				96	87	9.8
Bis(2-chloroisopropyl)ether	ND				88	80	9.5
Bis(2-ethylhexyl)phthalate	ND				94	101	7.2
Chrysene	ND				100	107	6.8
Di-n-butylphthalate	ND				94	98	4.2
Di-n-octylphthalate	ND				104	109	4.7
Dibenz(a,h)anthracene	ND				100	104	3.9
Dibenzofuran	ND				92	91	1.1
Diethyl phthalate	ND				94	94	0.0
Dimethylphthalate	ND				94	94	0.0
Fluoranthene	ND				103	107	3.8
Fluorene	ND				97	96	1.0
Hexachlorobenzene	ND				97	98	1.0
Hexachlorobutadiene	ND				90	84	6.9
Hexachlorocyclopentadiene	ND						
Hexachloroethane	ND				87	81	7.1
Indeno(1,2,3-cd)pyrene	ND				101	104	2.9
Isophorone	ND				77	72	6.7

QA/QC Data

SDG I.D.: GAH05255

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
N-Nitrosodi-n-propylamine	ND				84	79	6.1
N-Nitrosodimethylamine	ND				83	75	10.1
N-Nitrosodiphenylamine	ND						
Naphthalene	ND				93	88	5.5
Nitrobenzene	ND				95	88	7.7
Pentachlorophenol	ND				118	119	0.8
Phenanthrene	ND				96	100	4.1
Phenol	ND				90	82	9.3
Pyrene	ND				99	104	4.9
Pyridine	ND						
% 2,4,6-Tribromophenol	79				98	100	2.0
% 2-Fluorobiphenyl	73				87	83	4.7
% 2-Fluorophenol	63				76	68	11.1
% Nitrobenzene-d5	70				85	78	8.6
% Phenol-d5	63				85	74	13.8
% Terphenyl-d14	50				99	100	1.0

Comment: Due to an error in the extraction, the LCS was removed from the QC batch. The MS and MSD are reported.

QA/QC Batch Sample No: AH03682 (AH05255, AH05256)

TPH by GC (Extractable Products)

Aviation Fuel/Kerosene	ND						
Fuel Oil #2/ Diesel Fuel	ND				99	102	3.0
Fuel Oil #4	ND						
Fuel Oil #6	ND						
Motor Oil	ND						
Other Oil (Cutting & Lubricating)	ND						
Unidentified	ND						

Comment: A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QA/QC Batch Sample No: AH05254 (AH05255, AH05256)

Volatiles Organics

1,1,1,2-Tetrachloroethane	ND	101			48	50	4.1
1,1,1-Trichloroethane	ND	100			104	106	1.9
1,1,2,2-Tetrachloroethane	ND	90			89	90	1.1
1,1,2-Trichloroethane	ND	97			93	102	9.2
1,1-Dichloroethane	ND	97			100	101	1.0
1,1-Dichloroethene	ND	101			100	100	0.0
1,1-Dichloropropene	ND	107			100	102	2.0
1,2,3-Trichlorobenzene	ND	109			103	106	2.9
1,2,3-Trichloropropane	ND	104			91	96	5.3
1,2,4-Trichlorobenzene	ND	118			115	113	1.8
1,2,4-Trimethylbenzene	ND	97			102	100	2.0
1,2-Dibromo-3-chloropropane	ND	108			103	92	11.3

QA/QC Data

SDG I.D.: GAH05255

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
1,2-Dichlorobenzene	ND	95			92	89	3.3
1,2-Dichloroethane	ND	99			102	102	0.0
1,2-Dichloropropane	ND	89			87	91	4.5
1,3,5-Trimethylbenzene	ND	99			98	99	1.0
1,3-Dichlorobenzene	ND	96			93	94	1.1
1,3-Dichloropropane	ND	101			98	99	1.0
1,4-Dichlorobenzene	ND	95			94	96	2.1
2,2-Dichloropropane	ND	115			102	100	2.0
2-Chlorotoluene	ND	96			96	99	3.1
4-Chlorotoluene	ND	98			94	97	3.1
Benzene	ND	100			95	99	4.1
Bromobenzene	ND	96			93	96	3.2
Bromochloromethane	ND	95			97	101	4.0
Bromodichloromethane	ND	115			112	115	2.6
Bromoform	ND	104			98	100	2.0
Bromomethane	ND	88			86	91	5.6
Carbon tetrachloride	ND	106			102	102	0.0
Chlorobenzene	ND	98			96	100	4.1
Chloroethane	ND	95			107	111	3.7
Chloroform	ND	98			102	104	1.9
Chloromethane	ND	113			97	95	2.1
cis-1,2-Dichloroethene	ND	99			104	102	1.9
cis-1,3-Dichloropropene	ND	106			107	109	1.9
Dibromochloromethane	ND	97			95	98	3.1
Dibromoethane	ND	100			100	103	3.0
Dibromomethane	ND	104			107	104	2.8
Dichlorodifluoromethane	ND	128			98	94	4.2
Ethylbenzene	ND	101			98	100	2.0
Hexachlorobutadiene	ND	99			92	92	0.0
Isopropylbenzene	ND	107			93	96	3.2
m&p-Xylene	ND	101			97	100	3.0
Methyl t-butyl ether (MTBE)	ND	104			56	54	3.6
Methylene chloride	ND	91			96	96	0.0
n-Butylbenzene	ND	101			101	98	3.0
n-Propylbenzene	ND	101			96	99	3.1
Naphthalene	ND	123			126	108	15.4
o-Xylene	ND	100			100	105	4.9
p-Isopropyltoluene	ND	104			97	98	1.0
sec-Butylbenzene	ND	94			96	97	1.0
Styrene	ND	100			203	212	4.3
tert-Butylbenzene	ND	99			98	98	0.0
Tetrachloroethene	ND	102			95	98	3.1

QA/QC Data

SDG I.D.: GAH05255

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS Rec %	MS Dup Rec %	RPD
Toluene	ND	102			98	103	5.0
trans-1,2-Dichloroethene	ND	100			103	104	1.0
trans-1,3-Dichloropropene	ND	101			107	106	0.9
Trichloroethene	ND	100			98	103	5.0
Trichlorofluoromethane	ND	118			102	101	1.0
Vinyl chloride	ND	119			101	100	1.0
% 1,2-dichlorobenzene-d4	99	97			97	91	6.4
% Bromofluorobenzene	108	112			115	114	0.9
% Dibromofluoromethane	99	95			100	96	4.1
% Toluene-d8	102	102			102	104	1.9

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MS Dup - Matrix Spike Duplicate

Phyllis Shiller, Laboratory Director
March 07, 2006

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JOB Greenbush/KBB
SHEET NO. 1 OF 6
CALCULATED BY ISC DATE 3/15/2006
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7 Day 10 year low flow (7Q10) Bound Brook or Musquashcut Brook

Estimation based of field observations & review of topo maps

$7Q10 = 5\ cfs \Rightarrow Q_s$ or as low as $1\ cfs$

Dilution Factor (DF)

$$DF = (Q_d + Q_s)/Q_d$$

$Q_d = 0.11\ ft^3/sec$: design maximum flow $= 50\ gal/min \cdot \frac{0.134\ ft^3}{1\ gal} \cdot \frac{1\ min}{60\ sec} = 0.11\ ft^3/sec$

$Q_s = 5\ ft^3/sec$ to $1\ ft^3/sec$

$$DF = \frac{(0.11 + 5)}{0.11} = 46.45 \quad \text{say } 46$$

Dilution Factor is 10-50 (Appendix IV)

<u>Note</u>: even if 7Q10 for recieving water was $1\ ft^3/sec$ same DF range (10-50) would apply.

ie) $DF = \frac{(0.11 + 1.0)}{0.11} = 10.09$ say 10

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SHEET NO. 2 OF 6
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Mass Calculations:

TSS: $\frac{3.6\times10^{8}\,mg}{L} \times \frac{0.11\,ft^3}{Sec.}$ (Max) $\times \frac{86.4\times10^{3}\,Sec}{Day} \times \frac{28.317\,L}{1\,ft^3} = 96.9\times10^{12}\,mg \Rightarrow 96.9\times10^{6}\,Kg$

Say $97\times10^{6}\,Kg/Day$ Max.

$\frac{1.2\times10^{8}\,mg}{L} \times \frac{0.09\,ft^3}{Sec} \times \frac{86.4\times10^{3}\,Sec}{Day} \times \frac{28.317\,L}{1\,ft^3} = 26.4\times10^{12}\,mg \Rightarrow 26.4\times10^{6}\,Kg$

Say $26\times10^{6}\,Kg/Day$ Ave.

TPH: $\frac{1.6\times10^{5}\,mg}{L} \times \frac{0.11\,ft^3}{Sec.} \times \frac{86.4\times10^{3}\,Sec}{Day} \times \frac{28.317\,L}{1\,ft^3} = 43.1\times10^{9}\,mg \Rightarrow 43.1\times10^{3}\,Kg$

Say $43\times10^{3}\,Kg/Day$ Max.

$\frac{1.1\times10^{5}\,mg}{L} \times \frac{0.09\,ft^3}{Sec.} \times \frac{86.4\times10^{3}\,Sec}{Day} \times \frac{28.317\,L}{1\,ft^3} = 24.2\times10^{9}\,mg \Rightarrow 24.2\times10^{3}\,Kg$

Say $24\times10^{3}\,Kg/Day$ Ave

Ethylbenzene: $\frac{2{,}900\,mg}{L} \times \frac{0.11\,ft^3}{Sec} \times \frac{86.4\times10^{3}\,Sec}{Day} \times \frac{28.317\,L}{1\,ft^3} = 780.5\times10^{6}\,mg \Rightarrow 0.78\,Kg$

Say $0.8\,Kg/Day$ Max.

$\frac{2{,}500\,mg}{L} \times \frac{0.09\,ft^3}{Sec.} \times \frac{86.4\times10^{3}\,Sec}{Day} \times \frac{28.317\,L}{1\,ft^3} = 550\times10^{6}\,mg \Rightarrow 0.55\,Kg$

Say $0.6\,Kg/Day$ Ave.

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Total Xylene: (all isomers)

$2.33 \times 10^4 \frac{mg}{L} \quad 0.11 \frac{ft^3}{Sec} \quad 86.4 \times 10^3 \frac{Sec}{Day} \times 28.317 \frac{L}{1\ ft^3} = 6.27 \times 10^9 mg \Rightarrow 6.27\ Kg$

Say 6.3 Kg/Day Max.

$1.3043 \times 10^4 \frac{mg}{L} \quad 0.09 \frac{ft^3}{Sec} \quad 86.4 \times 10^3 \frac{Sec}{Day} \quad 28.317 \frac{L}{ft^3} = 2.87 \times 10^9 mg \Rightarrow 2.87\ Kg$

Say 2.9 Kg/Day Ave.

Total BTEX

$2.62 \times 10^4 \frac{mg}{L} \quad 0.11 \frac{ft^3}{Sec} \quad 86.4 \times 10^3 \frac{Sec}{Day} \quad 28.317 \frac{L}{ft^3} = 7.05 \times 10^9 mg \Rightarrow 7.05\ Kg$

Say 7.1 Kg/Day Max.

$15543 \frac{mg}{L} \quad 0.09 \frac{ft^3}{Sec} \quad 86.4 \times 10^3 \frac{Sec}{Day} \quad 28.317 \frac{L}{ft^3} = 3.42 \times 10^9 mg \Rightarrow 3.42\ Kg$

Say 3.4 Kg/Day Ave.

Naphthalene (VOC)

$6,200 \frac{mg}{L} \quad 0.11 \frac{ft^3}{Sec} \quad 86.4 \times 10^3 \frac{Sec}{Day} \quad 28.317 \frac{L}{ft^3} = 1.67 \times 10^9 mg \Rightarrow 1.67 \times 10^6$

Say 1.7 Kg/Day Max

$3,800 \frac{mg}{L} \quad 0.09 \frac{ft^3}{Sec} \quad 86.4 \times 10^3 \frac{Sec}{Day} \quad 28.317 \frac{L}{ft^3} = 836.7 \times 10^6 mg \Rightarrow 0.836\ Kg$

Say 0.8 Kg/Day Ave.

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Naphthalene (8270M):

$$\frac{3{,}700\ ug}{L} \cdot \frac{0.11\ ft^3}{Sec} \cdot \frac{86.4 \times 10^3\ Sec}{Day} \cdot \frac{28.317\ L}{ft^3} = 996 \times 10^6\ ug \Rightarrow 0.996\ Kg$$

Say 1.0 Kg/Day Max.

$$\frac{1{,}803\ ug}{L} \cdot \frac{0.09\ ft^3}{Sec} \cdot \frac{86.4 \times 10^3\ Sec}{Day} \cdot \frac{28.317\ L}{ft^3} = 397 \times 10^6\ ug \Rightarrow 0.397\ Kg$$

Say 0.4 Kg/Day Ave.

Antimony:

$$\frac{23\ ug}{L} \cdot \frac{0.11\ ft^3}{Sec} \cdot \frac{86.4 \times 10^3}{Day} \cdot \frac{28.317\ L}{ft^3} = 6.19 \times 10^6\ ug \Rightarrow 0.006\ Kg$$

Say 0.01 Kg/Day Max

$$\frac{11.8\ ug}{L} \cdot \frac{0.09\ ft^3}{Sec} \cdot \frac{86.4 \times 10^3\ Sec}{Day} \cdot \frac{28.317\ L}{ft^3} = 2.60 \times 10^6\ ug \Rightarrow 0.003\ Kg$$

Say 0.003 Kg/Day Ave.

Arsenic:

$$\frac{14\ ug}{L} \cdot \frac{0.11\ ft^3}{Sec} \cdot \frac{86.4 \times 10^3\ Sec}{Day} \cdot \frac{28.317\ L}{ft^3} = 3.77 \times 10^6\ ug \Rightarrow 0.004\ Kg$$

Say 0.004 Kg/Day Max

$$\frac{10\ ug}{L} \cdot \frac{0.09\ ft^3}{Sec} \cdot \frac{86.4 \times 10^3\ Sec}{Day} \cdot \frac{28.317\ L}{ft^3} = 2.2 \times 10^6\ ug \Rightarrow 0.002\ Kg$$

Say 0.002 Kg/Day Ave.

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Copper: $\frac{5\,mg}{L} \cdot \frac{0.11\,ft^3}{Sec} \cdot \frac{86.4\times10^3\,Sec}{Day} \cdot \frac{28.317\,L}{ft^3} = 1.34\times10^6\,mg \Rightarrow 0.001\,Kg$

Say 0.001 Kg/Day Max

$\frac{3\,mg}{L} \cdot \frac{0.09\,ft^3}{Sec} \cdot \frac{86.4\times10^3\,Sec}{Day} \cdot \frac{28.317\,L}{ft^3} = 660\times10^3\,mg \Rightarrow 0.0007\,Kg$

Say 0.0007 Kg/Day Ave.

Lead: $\frac{52\,mg}{L} \cdot \frac{0.11\,ft^3}{Sec} \cdot \frac{86.4\times10^3\,Sec}{Day} \cdot \frac{28.317\,L}{ft^3} = 13.99\times10^6\,mg \Rightarrow 0.01399\,Kg$

Say 0.014 Kg/Day Max.

$\frac{24.7\,mg}{L} \cdot \frac{0.09\,ft^3}{Sec} \cdot \frac{86.4\times10^3\,Sec}{Day} \cdot \frac{28.317\,L}{ft^3} = 5.44\times10^6\,mg \Rightarrow 0.005\,Kg$

Say 0.005 Kg/Day Ave.

Nickel: $\frac{2\,mg}{L} \cdot \frac{0.11\,ft^3}{Sec} \cdot \frac{86.4\times10^3\,Sec}{Day} \cdot \frac{28.317\,L}{ft^3} = 538\times10^3\,mg \Rightarrow 0.00054\,Kg$

Say 0.0005 Kg/Day Max.

$\frac{2\,mg}{L} \cdot \frac{0.09\,ft^3}{Sec} \cdot \frac{86.4\times10^3\,Sec}{Day} \cdot \frac{28.317\,L}{ft^3} = 440\times10^3\,mg \Rightarrow 0.00044\,Kg$

Say 0.0004 Kg/Day Ave.

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Zinc:

$$\frac{19\,mg}{L} \cdot \frac{0.11\,ft^3}{Sec} \cdot \frac{86.4\times10^3\,Sec}{Day} \cdot \frac{28.317\,L}{ft^3} = 5.11\times10^6\,mg \Rightarrow 0.0051\,Kg$$

Say 0.005 Kg/Day Max.

$$\frac{9\,mg}{L} \cdot \frac{0.09\,ft^3}{Sec} \cdot \frac{86.4\times10^3\,Sec}{Day} \cdot \frac{28.317\,L}{ft^3} = 1.98\times10^6\,mg \Rightarrow 0.00198\,Kg$$

Say 0.002 Kg/Day Ave.

Iron

$$\frac{49{,}200\,mg}{L} \cdot \frac{0.11\,ft^3}{Sec} \cdot \frac{86.4\times10^3\,Sec}{Day} \cdot \frac{28.317\,L}{ft^3} = 13.2\times10^7\,mg \Rightarrow 13.2\,Kg$$

Say 13.2 Kg/Day Max.

$$\frac{19{,}619\,mg}{L} \cdot \frac{0.09\,ft^3}{Sec.} \cdot \frac{86.4\times10^3\,Sec}{Day} \cdot \frac{28.317\,L}{ft^3} = 4.32\times10^9\,mg \Rightarrow 4.32\,Kg$$

Say 4.3 Kg/Day Ave.