



SIGNIFICANT *MTBE* REDUCTIONS OBSERVED AT MASSACHUSETTS SITE

Petroleum Site in Boston, MA

Time Period	Start-up	+ 9 Months
Parameters		
VPH (ug/L)	GBI-6	GBI-6
Methyl tert-butyl ether (MBTE)	544,000	14,200
Benzene	7,100	761
Toluene	5,240	372
Ethylbenzene	490	326
Xylenes	7,770	1,409
Naphthalene	<200	53
C ₅ -C ₈ Aliphatic Hydrocarbons	<40,000	24,700
C ₉ -C ₁₂ Aliphatic Hydrocarbons	<15,000	125
C ₉ -C ₁₀ Aromatic Hydrocarbons	3,150	1,230

System start-up date 4/21/2004

EXAMPLE OF CONTAMINANT DECREASES OBSERVED AT SITE

The Site is a Sunoco gas station located at 634 Huntington Avenue in Boston, Massachusetts. The Site is set on the southeasterly side of Huntington Avenue, immediately south of Ward Street. The Site consists of an irregular shaped parcel of land improved by a one-story garage with two bays constructed on slab. Three 6,000-gallon gasoline underground storage tanks (USTs) are located at the Site along with two pump islands. The area surrounding the building and the pump islands is completely paved.

Seven butane/air injection wells and nine vertical bioventing wells were installed at the Site in March 2003. The *Butane Biosparging*[™] and *Butane Bioventing*[™] systems were installed at the Site by GBI personnel in August 2003. System startup occurred in April 2004. The subsurface in the area of the injection wells consists of sand and gravel fill materials to a depth approximately eight feet below grade. A clay layer underlies the fill material.

The above slide highlights the contaminant reductions observed in a key monitoring well located within the hot zone. Similar results were observed in several monitoring wells located across the Site.