

## WASTE CHARACTERIZATION: IN-SITU SOIL LOCATED AT ISRA OUTFALL 009 PLANNED EXCAVATION B1-2

### Introduction

This report presents supporting detailed information for the April 30, 2010 in-situ characterization of prospective soil wastes from planned ISRA excavations in SSFL Area I, near the former B-1 engine test facility.

### Background

In-situ characterization of soil destined to be excavated from designated locations in SSFL Area I in accordance with the ISRA Workplan was performed. A step-by-step approach was followed to accomplish characterization of the soil prior to excavation. The first step was to review available information regarding historical area usage and existing analytical data from past soil sampling in the applicable SSFL Area I locations. The objective was to identify all substances that could have an impact on the determination of whether soil in each planned excavation footprint was hazardous or not.

The next step was to develop a random sampling plan for each of the planned excavation footprints to determine whether any of the identified substances are present at concentrations that require further investigation. An evaluation of the results of the initial random sampling was performed to determine whether the data was adequate for waste characterization based on the exhibited variance of any detected analytes and the relative difference between detected concentrations and regulatory thresholds. The guidelines presented in U.S. EPA SW-846 are followed in evaluating the adequacy of sampling and the application of analytical results to regulatory thresholds. Soil was characterized non-hazardous when analyte concentrations among the samples exhibited a reasonably small variance and there was satisfactory margin between the mean of the samples and applicable regulatory thresholds. Otherwise, additional samples were collected and subjected to analysis or the soil was characterized as hazardous. Statistical analyses described in SW-846 are performed as necessary to determine minimum sample point requirements and the upper confidence levels of analytical results.

The review of historical information and existing analytical data relevant to planned excavation at B1-2 was based partly on the Group 1A RFI results. Evaluation of these data and other sources of relevant information, including recent sampling conducted specifically for ISRA, suggested that Regulated Metals, Petroleum Hydrocarbons (TPH), Volatile Organic Compounds (VOC), and Semi-Volatile Organic Compounds (SVOC) should be addressed in the B1-2 excavation footprint.

Initially, twelve (12) sample collection points were randomly identified within the planned excavation footprint. The samples were analyzed for CAM 17 Regulated Metals, TPH, VOCs, and SVOCs. Only two samples were analyzed for VOC presence because the probability of volatiles remaining in shallow soils over extended periods of time was considered to be low. Following excavation of soil from the planned B1-2 footprint, analysis of confirmation samples indicated that soil remediation goals were not attained in some areas within the footprint. Additional follow-up excavation was carried out. Some soil from outside the original excavation footprint was removed at this time, requiring further waste characterization. This soil was segregated in an isolated stockpile and four samples were collected from randomly identified locations within it. The same analytical suite was employed as during the first round of waste characterization sampling, with the addition of Polychlorinated Biphenyls (PCB).

During all phases of waste characterization sampling, samples were collected, contained, and handled according to field practice requirements in SW-846.

## **Results**

Analytical results for the B1-2 planned excavation area are presented in GEL Laboratories reports 252089 issued on 5/12/10, 252784 issued on 5/19/10, and 254951 issued on 6/29/10. The follow-up excavation stockpile sampling results are presented in Test America report ITI0270 issued on 10/1/10.

Results from the first round of sampling demonstrated that Regulated Metals were far below 10-Times their respective California Soluble Threshold Limits (STLC) in all cases, with the exception of one sample that exhibited Lead at 65.8 parts per million (ppm). This is slightly above the 50 ppm 10X STLC threshold. The Lead concentrations in the other 11 samples ranged between 4.31 ppm and 28.3 ppm. Subsequent analysis of the elevated sample, by the California Waste Extraction Test (WET) for leaching properties as required, resulted in a concentration of 2.49 milligrams per liter (mg/L), well below the 5 mg/L STLC hazardous waste limit.

Low concentrations of TPH were detected. These TPH detections ranged between 20 ppm and 410 ppm. All of the detections that exceeded 100 ppm were related to heavier, oil type petroleum hydrocarbon fractions in the C25 through C40 carbon range. Consequently, the TPH concentrations detected in the planned B1-2 excavation area are below permit limits generally set for Municipal Solid Waste landfills in California. Gasoline range Petroleum Hydrocarbons were not detected.

No VOCs were detected. Very low concentrations of some SVOCs were detected in the soil samples from B1-2, none of which were above the parts per billion level. Specific hazardous waste thresholds have been established in the regulations for only a small number of SVOCs. There were no exceedances of established limits. Furthermore, none of the detected SVOCs exceeded U.S. EPA Region IX "Preliminary Remediation Goals" values for residential soils.

The follow-up sampling again resulted in the detection of low concentrations of Regulated Metals for all but one sample. In this case, Mercury was detected at 2.0 ppm, at the 10X STLC threshold. However, the WET performed on this sample did not detect Mercury in the leachate. All other Regulated Metals were well below their respective 10X STLC thresholds. TPH concentrations did not exceed 53 ppm and Gasoline range Petroleum Hydrocarbons were not detected. Trace concentrations of Acetone were detected in two samples but did not exceed 0.21 ppm. Methyl Ethyl Ketone was another VOC detected at 0.024 ppm in one of the samples that also contained Acetone. In this same sample, p-Isopropyltoluene was detected at 0.00086 ppm. Trace concentrations of SVOCs (Polycyclic Aromatic Hydrocarbons) were detected in one sample only, but as with the first round of sampling, all concentrations were well below 1 ppm. No PCBs were detected.

## **Determination**

According to analytical results and generator knowledge, the soil in the planned excavation footprint of SSFL Area I B1-2, and additional follow-up excavation soil associated with it:

Is Not a Listed Waste (generator knowledge)

- Is Not ignitable (generator knowledge)
- Is Not corrosive (generator knowledge)
- Is Not reactive (generator knowledge)
- Is Not toxic (analytical results and generator knowledge)
  - Is Not Extremely or Acutely Hazardous Waste
  - Does not exceed any RCRA or Title 22 thresholds
  - Is Not subject to the Prop. 65 listing if it is applied to 22 CCR 66261.24(a)(7)
  - Is Not subject to Title 22 Appendix X list
  - Is Not known by experience or testing to pose a hazard to human health or environment because of its carcinogenicity, acute toxicity, chronic toxicity, bio-accumulative properties, or persistence in the environment.

**The soil in B1-2 is NON-HAZARDOUS.**

# Outfall 009 Waste Characterization Sample Locations for B1-2

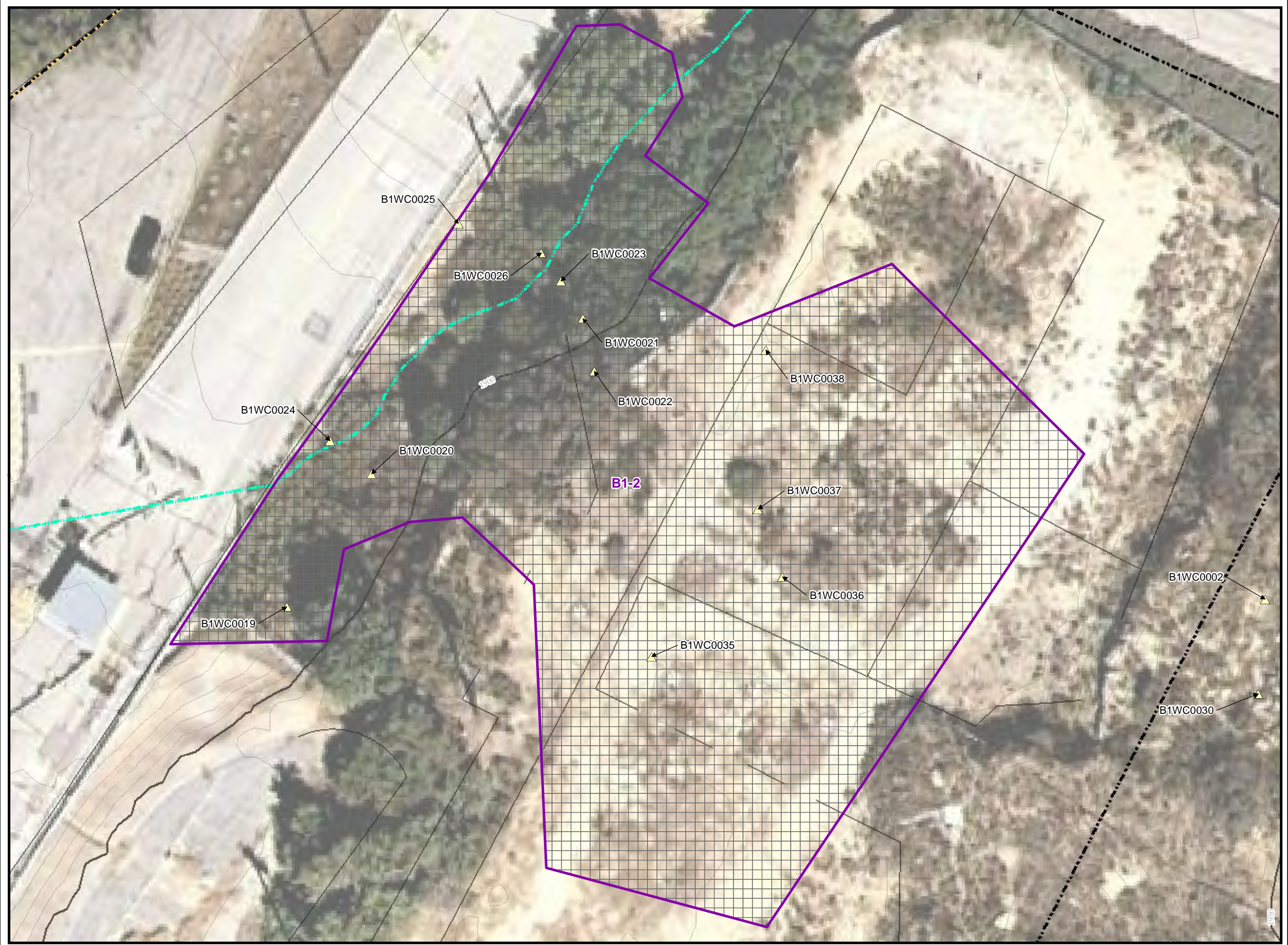
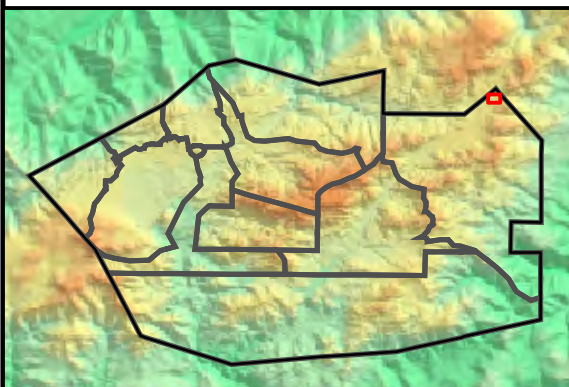
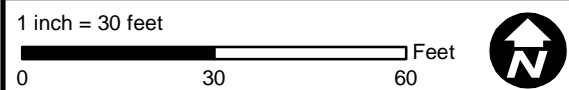
- Base Map Legend**
- Administrative Area Boundary
  - RFI Site Boundary
  - Report Group Boundary
  - NPDES Outfall
  - A/C Paving
  - Drainage
  - Non Jurisdictional Surface Water Pathway
  - Surface Water Divide
  - Elevation Contour

- Base Map Legend**
- ISRA Excavation Boundary
  - Waste Characterization Sample Location

**Note:**

1. Sample locations and depths were randomly selected. The 3ft x 3ft grid used in the sample location selection process is shown.
2. Aerial imagery from Google Earth, 2010.
3. Topographic contours from Lidar data, 2008.

Document: ISRA\_Plots\_SP\_B1-2\_SampleLocations\_062110\_WC.mxd Date: Jun 21, 2010



SANTA SUSANA FIELD LABORATORY

FIGURE 1

**INTERIM SOURCE REMOVAL ACTION (ISRA) - OUTFALL 009**

**WASTE CHARACTERIZATION SAMPLE RESULTS – B1-2  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY**

				Object Name:	B1WC0019	B1WC0020	B1WC0021	B1WC0022	B1WC0023	B1WC0024	B1WC0025	
				Sample Name:	B1WC0019S001	B1WC0020S001	B1WC0021S001	B1WC0022S001	B1WC0023S001	B1WC0024S001	B1WC0025S001	
				Collection Date:	4/30/2010	4/30/2010	4/30/2010	4/30/2010	4/30/2010	4/30/2010	4/30/2010	
				Sample Depth (feet):	1.0 - 1.5	1.5 - 2.0	0.0 - 0.5	0.5 - 1.0	0.0 - 0.5	0.0 - 0.5	0.0 - 0.5	
ANALYTE	UNITS	TTLIC	WET Leachate Testing Trigger <sup>a</sup>	TCLP Leachate Testing Trigger <sup>b</sup>	STLC	RESULT <sup>c</sup>	RESULT <sup>c</sup>	RESULT <sup>c</sup>	RESULT <sup>c</sup>	RESULT <sup>c</sup>	RESULT <sup>c</sup>	
<b>METALS</b>												
Antimony	mg/kg	500	150	--	--	0.16 J	0.121 J	0.197	0.0998 J	0.112 J	0.114 J	0.104 J
Arsenic	mg/kg	500	50	100	--	6.75	5.42	7.39	6.5	5.72	7.94	17.3
Barium	mg/kg	10,000	1,000	2,000	--	77.5	75.2	106	78.2	65.2	59.2	79.9
Beryllium	mg/kg	75	7.5	--	--	0.525	0.465	0.74	0.626	0.491	0.433	0.706
Cadmium	mg/kg	100	10	20	--	0.0482 J	0.0913 J	0.312	0.0688 J	0.635	0.477	0.0818 J
Chromium	mg/kg	500	50	100	--	21.5	22.1	29.5	19.3	18.6	19.3	22.1
Cobalt	mg/kg	8,000	800	--	--	6.69	5.75	8.4	5.72	5.56	5.09	7
Copper	mg/kg	2,500	250	--	--	9.57	9.99	19.5	9.66	11	10.4	10.3
Lead	mg/kg	1,000	50	100	--	6.54	8.34	20	5.9	28.3	65.8	15.2
Lead, WET	mg/L	--	--	--	5	--	--	--	--	--	2.49	--
Mercury	mg/kg	20	2	4	--	0.0235 J	0.0282 J	0.0393 J	0.0251 J	0.0563 J	0.049 J	0.0259 J
Molybdenum	mg/kg	3,500	3,500	--	--	0.552	0.426	1.03	0.643	0.557	0.566	0.49
Nickel	mg/kg	2,000	200	--	--	14.1	11.1	26.7	11.6	12.2	10.6	15.4
Selenium	mg/kg	100	10	20	--	0.324 J	0.185 J	0.186 J	0.153 J	0.138 J	0.108 J	0.096 J
Silver	mg/kg	500	50	100	--	0.049 J	0.0277 J	0.0864 J	0.0276 J	0.0445 J	0.0446 J	0.0574 J
Thallium	mg/kg	700	70	--	--	0.247	0.226	0.285	0.255	0.218	0.186	0.234
Vanadium	mg/kg	2,400	240	--	--	34.4	31.4	32.9	27	27.4	26.3	29.6
Zinc	mg/kg	5,000	2,500	--	--	54	62.4	126	55.8	73.9	131	57.2
<b>TPH</b>												
Gasoline Range Organics (C6-C12)	mg/kg	--	--	--	--	<10 {<10}	<1 {<1}	<1 {<1}	<1 {<1}	<9.3 {<9.3}	<9.9 {<9.9}	<9.1 {<9.1}
EFH (C10 - C24)	mg/kg	--	--	--	--	31	<12 {<4}	5.5 J	<12 {<4}	18 J	18 J	<12 {<4}
EFH (C10 - C40)	mg/kg	--	--	--	--	410	21	93	20	350	340	28
EFH (C25 - C40)	mg/kg	--	--	--	--	380	20	88	19	330	320	26
<b>VOCs</b>												
1,1,1-Trichloroethane	ug/kg	--	--	--	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--	--
1,1,2,2-Tetrachloroethane	ug/kg	--	--	--	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--	--
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	--	--	--	--	--	<5 {<1.6}	--	<5 {<1.6}	--	--	--
1,1,2-Trichloroethane	ug/kg	--	--	--	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--	--
1,1-Dichloroethane	ug/kg	--	--	--	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--	--
1,1-Dichloroethene	ug/kg	--	--	14,000	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--	--
1,2,4-Trichlorobenzene	ug/kg	--	--	--	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--	--
1,2-Dibromo-3-chloropropane	ug/kg	--	--	--	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--	--
1,2-Dichlorobenzene	ug/kg	--	--	--	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--	--
1,2-Dichloroethane	ug/kg	--	--	10,000	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--	--
1,2-Dichloropropane	ug/kg	--	--	--	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--	--

**INTERIM SOURCE REMOVAL ACTION (ISRA) - OUTFALL 009**

**WASTE CHARACTERIZATION SAMPLE RESULTS – B1-2  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY**

				<b>Object Name:</b>	<b>B1WC0019</b>	<b>B1WC0020</b>	<b>B1WC0021</b>	<b>B1WC0022</b>	<b>B1WC0023</b>	<b>B1WC0024</b>	<b>B1WC0025</b>
				Sample Name:	B1WC0019S001	B1WC0020S001	B1WC0021S001	B1WC0022S001	B1WC0023S001	B1WC0024S001	B1WC0025S001
				Collection Date:	4/30/2010	4/30/2010	4/30/2010	4/30/2010	4/30/2010	4/30/2010	4/30/2010
				Sample Depth (feet):	1.0 - 1.5	1.5 - 2.0	0.0 - 0.5	0.5 - 1.0	0.0 - 0.5	0.0 - 0.5	0.0 - 0.5
<b>ANALYTE</b>	<b>UNITS</b>	<b>TTLIC</b>	<b>WET Leachate Testing Trigger<sup>a</sup></b>	<b>TCLP Leachate Testing Trigger<sup>b</sup></b>	<b>STLC</b>	<b>RESULT<sup>c</sup></b>	<b>RESULT<sup>c</sup></b>	<b>RESULT<sup>c</sup></b>	<b>RESULT<sup>c</sup></b>	<b>RESULT<sup>c</sup></b>	<b>RESULT<sup>c</sup></b>
1,3-Dichlorobenzene	ug/kg	--	--	--	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--
1,4-Dichlorobenzene	ug/kg	--	--	--	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--
2-Butanone (MEK)	ug/kg	--	--	4,000,000	--	--	<5 {<1.5}	--	<5 {<1.5}	--	--
2-Hexanone	ug/kg	--	--	--	--	--	<5 {<1.5}	--	<5 {<1.5}	--	--
Acetone	ug/kg	--	--	--	--	--	<5 {<1.66}	--	<5 {<1.66}	--	--
Benzene	ug/kg	--	--	10,000	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--
Bromodichloromethane	ug/kg	--	--	--	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--
Bromoform	ug/kg	--	--	--	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--
Carbon Disulfide	ug/kg	--	--	--	--	--	<5 {<1.25}	--	<5 {<1.25}	--	--
Carbon Tetrachloride	ug/kg	--	--	10,000	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--
Chlorobenzene	ug/kg	--	--	2,000,000	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--
Chloroethane	ug/kg	--	--	--	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--
Chloroform	ug/kg	--	--	120,000	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--
Chloromethane	ug/kg	--	--	--	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--
cis-1,2-Dichloroethene	ug/kg	--	--	--	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--
cis-1,3-Dichloropropene	ug/kg	--	--	--	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--
Cyclohexane	ug/kg	--	--	--	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--
Dibromochloromethane	ug/kg	--	--	--	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--
Dichlorodifluoromethane	ug/kg	--	--	--	--	--	<1 {<0.34}	--	<1 {<0.34}	--	--
Ethylbenzene	ug/kg	--	--	--	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--
Hexachlorobutadiene	ug/kg	--	--	--	--	--	<1 {<66.5}	--	<1 {<66.3}	--	--
Isopropylbenzene	ug/kg	--	--	--	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--
Methyl acetate	ug/kg	--	--	--	--	--	<5 {<1.66}	--	<5 {<1.66}	--	--
Methyl-tert-butyl Ether (MTBE)	ug/kg	--	--	--	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--
Methylcyclohexane	ug/kg	--	--	--	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--
Methylene chloride	ug/kg	--	--	--	--	--	<5 {<2}	--	<5 {<2}	--	--
m,p-Xylenes	ug/kg	--	--	--	--	--	<2 {<0.3}	--	<2 {<0.3}	--	--
o-Xylene	ug/kg	--	--	--	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--
Styrene	ug/kg	--	--	--	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--
Tetrachloroethene	ug/kg	--	--	14,000	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--
Tetrahydrofuran	ug/kg	--	--	--	--	--	<5 {<1.7}	--	<5 {<1.7}	--	--
Toluene	ug/kg	--	--	--	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--
trans-1,2-Dichloroethene	ug/kg	--	--	--	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--
trans-1,3-Dichloropropene	ug/kg	--	--	--	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--
Trichloroethene	ug/kg	2,040,000	2,040,000	10,000	--	--	<1 {<0.33}	--	<1 {<0.33}	--	--
Trichlorofluoromethane	ug/kg	--	--	--	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--

**INTERIM SOURCE REMOVAL ACTION (ISRA) - OUTFALL 009**

**WASTE CHARACTERIZATION SAMPLE RESULTS – B1-2  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY**

				Object Name:	B1WC0019	B1WC0020	B1WC0021	B1WC0022	B1WC0023	B1WC0024	B1WC0025	
				Sample Name:	B1WC0019S001	B1WC0020S001	B1WC0021S001	B1WC0022S001	B1WC0023S001	B1WC0024S001	B1WC0025S001	
				Collection Date:	4/30/2010	4/30/2010	4/30/2010	4/30/2010	4/30/2010	4/30/2010	4/30/2010	
				Sample Depth (feet):	1.0 - 1.5	1.5 - 2.0	0.0 - 0.5	0.5 - 1.0	0.0 - 0.5	0.0 - 0.5	0.0 - 0.5	
ANALYTE	UNITS	TTLIC	WET Leachate Testing Trigger <sup>a</sup>	TCLP Leachate Testing Trigger <sup>b</sup>	STLC	RESULT <sup>c</sup>	RESULT <sup>c</sup>	RESULT <sup>c</sup>	RESULT <sup>c</sup>	RESULT <sup>c</sup>	RESULT <sup>c</sup>	
Vinyl acetate	ug/kg	--	--	--	--	--	<5 {<1.25}	--	<5 {<1.25}	--	--	
Vinyl chloride	ug/kg	--	--	4,000	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--	
Xylenes, Total	ug/kg	--	--	--	--	--	<1 {<0.3}	--	<1 {<0.3}	--	--	
<b>SVOCs</b>												
1,1'-Biphenyl	ug/kg	--	--	--	--	<333 {<99.9}	<332 {<99.7}	<333 {<99.8}	<332 {<99.5}	<332 {<99.6}	<333 {<99.8}	<332 {<99.6}
1,2,4-Trichlorobenzene	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}
1,2-Dichlorobenzene	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}
1,3-Dichlorobenzene	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}
1,4-Dichlorobenzene	ug/kg	--	--	150,000	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}
1-Naphthylamine	ug/kg	--	--	--	--	<333 {<99.9}	<332 {<99.7}	<333 {<99.8}	<332 {<99.5}	<332 {<99.6}	<333 {<99.8}	<332 {<99.6}
2,4,5-Trichlorophenol	ug/kg	--	--	8,000,000	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}
2,4,6-Trichlorophenol	ug/kg	--	--	40,000	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}
2,4-Dichlorophenol	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}
2,4-Dimethylphenol	ug/kg	--	--	--	--	<333 {<117}	<332 {<116}	<333 {<116}	<332 {<116}	<332 {<116}	<333 {<116}	<332 {<116}
2,4-Dinitrophenol	ug/kg	--	--	--	--	<666 {<127}	<665 {<126}	<665 {<126}	<663 {<126}	<664 {<126}	<665 {<126}	<664 {<126}
2,4-Dinitrotoluene	ug/kg	--	--	2,600	--	<333 {<33.3}	<332 {<33.2}	<333 {<33.3}	<332 {<33.2}	<332 {<33.2}	<333 {<33.3}	<332 {<33.2}
2,6-Dinitrotoluene	ug/kg	--	--	--	--	<333 {<33.3}	<332 {<33.2}	<333 {<33.3}	<332 {<33.2}	<332 {<33.2}	<333 {<33.3}	<332 {<33.2}
2-Chloronaphthalene	ug/kg	--	--	--	--	<33.3 {<11}	<33.2 {<11}	<33.3 {<11}	<33.2 {<10.9}	<33.2 {<11}	<33.3 {<11}	<33.2 {<11}
2-Chlorophenol	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}
2-Methylnaphthalene	ug/kg	--	--	--	--	<33.3 {<6.66}	<33.2 {<6.65}	<33.3 {<6.65}	<33.2 {<6.63}	<33.2 {<6.64}	<33.3 {<6.65}	<33.2 {<6.64}
2-Methylphenol	ug/kg	--	--	200	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}
2-Naphthylamine	ug/kg	--	--	--	--	<333 {<110}	<332 {<110}	<333 {<110}	<332 {<109}	<332 {<110}	<333 {<110}	<332 {<110}
2-Nitroaniline	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}
2-Nitrophenol	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}
3,3-Dichlorobenzidine	ug/kg	--	--	--	--	<333 {<99.9}	<332 {<99.7}	<333 {<99.8}	<332 {<99.5}	<332 {<99.6}	<333 {<99.8}	<332 {<99.6}
3-Nitroaniline	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}
4,6-Dinitro-2-methylphenol	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}
4-Aminobiphenyl	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}
4-Bromophenyl phenyl ether	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}
4-Chloro-3-methylphenol	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}
4-Chloroaniline	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}
4-Chlorophenyl-phenylether	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}
4-Methylphenol	ug/kg	--	--	200	--	<333 {<99.9}	<332 {<99.7}	<333 {<99.8}	<332 {<99.5}	<332 {<99.6}	<333 {<99.8}	<332 {<99.6}
4-Nitroaniline	ug/kg	--	--	--	--	<333 {<99.9}	<332 {<99.7}	<333 {<99.8}	<332 {<99.5}	<332 {<99.6}	<333 {<99.8}	<332 {<99.6}
4-Nitrophenol	ug/kg	--	--	--	--	<333 {<110}	<332 {<110}	<333 {<110}	<332 {<109}	<332 {<110}	<333 {<110}	<332 {<110}
Acenaphthene	ug/kg	--	--	--	--	<33.3 {<11}	<33.2 {<11}	<33.3 {<11}	<33.2 {<10.9}	<33.2 {<11}	<33.3 {<11}	<33.2 {<11}

**INTERIM SOURCE REMOVAL ACTION (ISRA) - OUTFALL 009**

**WASTE CHARACTERIZATION SAMPLE RESULTS – B1-2  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY**

						<b>Object Name:</b>	<b>B1WC0019</b>	<b>B1WC0020</b>	<b>B1WC0021</b>	<b>B1WC0022</b>	<b>B1WC0023</b>	<b>B1WC0024</b>	<b>B1WC0025</b>
						Sample Name:	B1WC0019S001	B1WC0020S001	B1WC0021S001	B1WC0022S001	B1WC0023S001	B1WC0024S001	B1WC0025S001
						Collection Date:	4/30/2010	4/30/2010	4/30/2010	4/30/2010	4/30/2010	4/30/2010	4/30/2010
						Sample Depth (feet):	1.0 - 1.5	1.5 - 2.0	0.0 - 0.5	0.5 - 1.0	0.0 - 0.5	0.0 - 0.5	0.0 - 0.5
<b>ANALYTE</b>	<b>UNITS</b>	<b>TTLIC</b>	<b>WET Leachate Testing Trigger<sup>a</sup></b>	<b>TCLP Leachate Testing Trigger<sup>b</sup></b>	<b>STLC</b>	<b>RESULT<sup>c</sup></b>	<b>RESULT<sup>c</sup></b>	<b>RESULT<sup>c</sup></b>	<b>RESULT<sup>c</sup></b>	<b>RESULT<sup>c</sup></b>	<b>RESULT<sup>c</sup></b>	<b>RESULT<sup>c</sup></b>	
Acenaphthylene	ug/kg	--	--	--	--	<33.3 {<9.99}	<33.2 {<9.97}	<33.3 {<9.98}	<33.2 {<9.95}	<33.2 {<9.96}	<33.3 {<9.98}	<33.2 {<9.96}	
Acetophenone	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}	
Anthracene	ug/kg	--	--	--	--	<33.3 {<6.66}	<33.2 {<6.65}	<33.3 {<6.65}	<33.2 {<6.63}	<33.2 {<6.64}	<33.3 {<6.65}	<33.2 {<6.64}	
Atrazine	ug/kg	--	--	--	--	<333 {<99.9}	<332 {<99.7}	<333 {<99.8}	<332 {<99.5}	<332 {<99.6}	<333 {<99.8}	<332 {<99.6}	
Benzaldehyde	ug/kg	--	--	--	--	<333 {<99.9}	<332 {<99.7}	<333 {<99.8}	<332 {<99.5}	<332 {<99.6}	<333 {<99.8}	<332 {<99.6}	
Benzidine	ug/kg	--	--	--	--	<333 {<99.9}	<332 {<99.7}	<333 {<99.8}	<332 {<99.5}	<332 {<99.6}	<333 {<99.8}	<332 {<99.6}	
Benzo(a)anthracene	ug/kg	--	--	--	--	<33.3 {<9.99}	<33.2 {<9.97}	<33.3 {<9.98}	<33.2 {<9.95}	<33.2 {<9.96}	<33.3 {<9.98}	<33.2 {<9.96}	
Benzo(a)pyrene	ug/kg	--	--	--	--	<33.3 {<9.99}	<33.2 {<9.97}	30.6 J	<33.2 {<9.95}	<33.2 {<9.96}	26.4 J	25.8 J	
Benzo(b)fluoranthene	ug/kg	--	--	--	--	<33.3 {<9.99}	<33.2 {<9.97}	42	<33.2 {<9.95}	<33.2 {<9.96}	27.4 J	32.4 J	
Benzo(ghi)perylene	ug/kg	--	--	--	--	<33.3 {<9.99}	<33.2 {<9.97}	<33.3 {<9.98}	<33.2 {<9.95}	<33.2 {<9.96}	<33.3 {<9.98}	<33.2 {<9.96}	
Benzo(k)fluoranthene	ug/kg	--	--	--	--	<33.3 {<9.99}	<33.2 {<9.97}	<33.3 {<9.98}	<33.2 {<9.95}	<33.2 {<9.96}	<33.3 {<9.98}	<33.2 {<9.96}	
Bis(2-chloroethoxy)methane	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}	
Bis(2-chloroethyl)ether	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}	
Bis(2-chloroisopropyl)ether	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}	
bis(2-Ethylhexyl) phthalate	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}	
Butyl benzyl phthalate	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}	
Caprolactam	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}	
Carbazole	ug/kg	--	--	--	--	<33.3 {<9.99}	<33.2 {<9.97}	<33.3 {<9.98}	<33.2 {<9.95}	<33.2 {<9.96}	<33.3 {<9.98}	<33.2 {<9.96}	
Chrysene	ug/kg	--	--	--	--	<33.3 {<9.99}	<33.2 {<9.97}	25.7 J	<33.2 {<9.95}	<33.2 {<9.96}	16.4 J	23.7 J	
Dibenzo(a,h)anthracene	ug/kg	--	--	--	--	<33.3 {<9.99}	<33.2 {<9.97}	<33.3 {<9.98}	<33.2 {<9.95}	<33.2 {<9.96}	<33.3 {<9.98}	<33.2 {<9.96}	
Dibenzofuran	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}	
Diethyl phthalate	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}	
Dimethyl phthalate	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}	
Di-n-butyl phthalate	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}	
Di-n-octyl phthalate	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}	
Diphenylamine	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}	
Fluoranthene	ug/kg	--	--	--	--	<33.3 {<9.99}	<33.2 {<9.97}	37	<33.2 {<9.95}	<33.2 {<9.96}	21.3 J	40	
Fluorene	ug/kg	--	--	--	--	<33.3 {<9.99}	<33.2 {<9.97}	<33.3 {<9.98}	<33.2 {<9.95}	<33.2 {<9.96}	<33.3 {<9.98}	<33.2 {<9.96}	
Hexachlorobenzene	ug/kg	--	--	2,600	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}	
Hexachlorobutadiene	ug/kg	--	--	10,000	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}	
Hexachlorocyclopentadiene	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}	
Hexachloroethane	ug/kg	--	--	60,000	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}	
Indeno(1,2,3-cd)pyrene	ug/kg	--	--	--	--	<33.3 {<9.99}	<33.2 {<9.97}	57	<33.2 {<9.95}	<33.2 {<9.96}	<33.3 {<9.98}	<33.2 {<9.96}	
Isophorone	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}	
Naphthalene	ug/kg	--	--	--	--	<33.3 {<9.99}	<33.2 {<9.97}	<33.3 {<9.98}	<33.2 {<9.95}	<33.2 {<9.96}	<33.3 {<9.98}	<33.2 {<9.96}	
Nitrobenzene	ug/kg	--	--	40,000	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}	



**INTERIM SOURCE REMOVAL ACTION (ISRA) - OUTFALL 009**

**WASTE CHARACTERIZATION SAMPLE RESULTS – B1-2  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY**

<b>Object Name:</b>	<b>B1WC0019</b>	<b>B1WC0020</b>	<b>B1WC0021</b>	<b>B1WC0022</b>	<b>B1WC0023</b>	<b>B1WC0024</b>	<b>B1WC0025</b>
Sample Name:	B1WC0019S001	B1WC0020S001	B1WC0021S001	B1WC0022S001	B1WC0023S001	B1WC0024S001	B1WC0025S001
Collection Date:	4/30/2010	4/30/2010	4/30/2010	4/30/2010	4/30/2010	4/30/2010	4/30/2010
Sample Depth (feet):	1.0 - 1.5	1.5 - 2.0	0.0 - 0.5	0.5 - 1.0	0.0 - 0.5	0.0 - 0.5	0.0 - 0.5

<b>ANALYTE</b>	<b>UNITS</b>	<b>TTLIC</b>	<b>WET Leachate Testing Trigger<sup>a</sup></b>	<b>TCLP Leachate Testing Trigger<sup>b</sup></b>	<b>STLC</b>	<b>RESULT<sup>c</sup></b>	<b>RESULT<sup>c</sup></b>	<b>RESULT<sup>c</sup></b>	<b>RESULT<sup>c</sup></b>	<b>RESULT<sup>c</sup></b>	<b>RESULT<sup>c</sup></b>	<b>RESULT<sup>c</sup></b>
n-Nitrosodimethylamine	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}
n-Nitroso-di-n-propylamine	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}
p-(Dimethylamino)azobenzene	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}
Pentachlorophenol	ug/kg	17,000	17,000	2,000,000	--	<333 {<83.3}	<332 {<83.1}	<333 {<83.1}	<332 {<82.9}	<332 {<83}	<333 {<83.1}	<332 {<83}
Phenanthrene	ug/kg	--	--	--	--	<33.3 {<9.99}	<33.2 {<9.97}	16.4 J	<33.2 {<9.95}	<33.2 {<9.96}	<33.3 {<9.98}	<33.2 {<9.96}
Phenol	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}
Pyrene	ug/kg	--	--	--	--	<33.3 {<9.99}	<33.2 {<9.97}	31.5 J	<33.2 {<9.95}	<33.2 {<9.96}	22.8 J	35
Pyridine	ug/kg	--	--	--	--	<333 {<66.6}	<332 {<66.5}	<333 {<66.5}	<332 {<66.3}	<332 {<66.4}	<333 {<66.5}	<332 {<66.4}
<b>RADIONUCLIDES</b>	--	--	--	--	--	R	R	R	R	R	R	R

**INTERIM SOURCE REMOVAL ACTION (ISRA) - OUTFALL 009**

**WASTE CHARACTERIZATION SAMPLE RESULTS – B1-2  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY**

						Object Name:	B1WC0026	B1WC0035	B1WC0036	B1WC0037	B1WC0038
						Sample Name:	B1WC0026S001	B1WC0035S001	B1WC0036S001	B1WC0037S001	B1WC0038S001
						Collection Date:	4/30/2010	6/17/2010	6/17/2010	6/17/2010	6/17/2010
						Sample Depth (feet):	0.5 - 1.0	0.0 - 0.5	0.0 - 0.5	0.5 - 1.0	0.0 - 0.5
ANALYTE	UNITS	TTLIC	WET Leachate Testing Trigger <sup>a</sup>	TCLP Leachate Testing Trigger <sup>b</sup>	STLC	RESULT <sup>c</sup>	RESULT <sup>c</sup>	RESULT <sup>c</sup>	RESULT <sup>c</sup>	RESULT <sup>c</sup>	
<b>METALS</b>											
Antimony	mg/kg	500	150	--	--	0.159 J	<1.61	<1.57	<0.319	<1.53	
Arsenic	mg/kg	500	50	100	--	7.79	10.3	10.1	12.4	10.3	
Barium	mg/kg	10,000	1,000	2,000	--	79.9	83.6	62	75.5	73	
Beryllium	mg/kg	75	7.5	--	--	0.549	<0.0978	<0.0951	<0.0965	<0.0926	
Cadmium	mg/kg	100	10	20	--	0.147	<0.0978	<0.475	<0.0965	0.117 J	
Chromium	mg/kg	500	50	100	--	17.8	21.1	17.1	19.3	17.8	
Cobalt	mg/kg	8,000	800	--	--	5.5	6.26	4.54	6.4	5.95	
Copper	mg/kg	2,500	250	--	--	9.08	23.5	8.56	13.3	11.6	
Lead	mg/kg	1,000	50	100	--	9.68	14.2	4.31	8.29	8.3	
Lead, WET	mg/L	--	--	--	5	--	--	--	--	--	
Mercury	mg/kg	20	2	4	--	0.0331 J	0.223	0.029	0.536	0.0708	
Molybdenum	mg/kg	3,500	3,500	--	--	0.664	0.797 J	0.948 J	1.13	1.27	
Nickel	mg/kg	2,000	200	--	--	10.9	12.9	8.28	11.3	10.1	
Selenium	mg/kg	100	10	20	--	0.151 J	9.23	7.5	8.83	6.4	
Silver	mg/kg	500	50	100	--	0.0378 J	7.88	<0.0951	1.08 J	<0.463	
Thallium	mg/kg	700	70	--	--	0.217	<0.489	<0.475	<2.41	<0.463	
Vanadium	mg/kg	2,400	240	--	--	29.7	33.6	35.8	35.9	33.1	
Zinc	mg/kg	5,000	2,500	--	--	55.2	101	47	64.2	59	
<b>TPH</b>											
Gasoline Range Organics (C6-C12)	mg/kg	--	--	--	--	<0.9 {<0.9}	<1 {<1}	<1 {<1}	<1 {<1}	<10 {<10}	
EFH (C10 - C24)	mg/kg	--	--	--	--	4.4 J	4.7 J	<12 {<4}	<12 {<4}	9 J	
EFH (C10 - C40)	mg/kg	--	--	--	--	130	62	86	63	320	
EFH (C25 - C40)	mg/kg	--	--	--	--	130	57	83	62	310	
<b>VOCs</b>											
1,1,1-Trichloroethane	ug/kg	--	--	--	--	--	--	--	--	--	
1,1,2,2-Tetrachloroethane	ug/kg	--	--	--	--	--	--	--	--	--	
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/kg	--	--	--	--	--	--	--	--	--	
1,1,2-Trichloroethane	ug/kg	--	--	--	--	--	--	--	--	--	
1,1-Dichloroethane	ug/kg	--	--	--	--	--	--	--	--	--	
1,1-Dichloroethene	ug/kg	--	--	14,000	--	--	--	--	--	--	
1,2,4-Trichlorobenzene	ug/kg	--	--	--	--	--	--	--	--	--	
1,2-Dibromo-3-chloropropane	ug/kg	--	--	--	--	--	--	--	--	--	
1,2-Dichlorobenzene	ug/kg	--	--	--	--	--	--	--	--	--	
1,2-Dichloroethane	ug/kg	--	--	10,000	--	--	--	--	--	--	
1,2-Dichloropropane	ug/kg	--	--	--	--	--	--	--	--	--	

INTERIM SOURCE REMOVAL ACTION (ISRA) - OUTFALL 009

WASTE CHARACTERIZATION SAMPLE RESULTS – B1-2  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY

						Object Name:	B1WC0026	B1WC0035	B1WC0036	B1WC0037	B1WC0038
						Sample Name:	B1WC0026S001	B1WC0035S001	B1WC0036S001	B1WC0037S001	B1WC0038S001
						Collection Date:	4/30/2010	6/17/2010	6/17/2010	6/17/2010	6/17/2010
						Sample Depth (feet):	0.5 - 1.0	0.0 - 0.5	0.0 - 0.5	0.5 - 1.0	0.0 - 0.5
ANALYTE	UNITS	TTLIC	WET Leachate Testing Trigger <sup>a</sup>	TCLP Leachate Testing Trigger <sup>b</sup>	STLC	RESULT <sup>c</sup>	RESULT <sup>c</sup>	RESULT <sup>c</sup>	RESULT <sup>c</sup>	RESULT <sup>c</sup>	
1,3-Dichlorobenzene	ug/kg	--	--	--	--	--	--	--	--	--	
1,4-Dichlorobenzene	ug/kg	--	--	--	--	--	--	--	--	--	
2-Butanone (MEK)	ug/kg	--	--	4,000,000	--	--	--	--	--	--	
2-Hexanone	ug/kg	--	--	--	--	--	--	--	--	--	
Acetone	ug/kg	--	--	--	--	--	--	--	--	--	
Benzene	ug/kg	--	--	10,000	--	--	--	--	--	--	
Bromodichloromethane	ug/kg	--	--	--	--	--	--	--	--	--	
Bromoform	ug/kg	--	--	--	--	--	--	--	--	--	
Carbon Disulfide	ug/kg	--	--	--	--	--	--	--	--	--	
Carbon Tetrachloride	ug/kg	--	--	10,000	--	--	--	--	--	--	
Chlorobenzene	ug/kg	--	--	2,000,000	--	--	--	--	--	--	
Chloroethane	ug/kg	--	--	--	--	--	--	--	--	--	
Chloroform	ug/kg	--	--	120,000	--	--	--	--	--	--	
Chloromethane	ug/kg	--	--	--	--	--	--	--	--	--	
cis-1,2-Dichloroethene	ug/kg	--	--	--	--	--	--	--	--	--	
cis-1,3-Dichloropropene	ug/kg	--	--	--	--	--	--	--	--	--	
Cyclohexane	ug/kg	--	--	--	--	--	--	--	--	--	
Dibromochloromethane	ug/kg	--	--	--	--	--	--	--	--	--	
Dichlorodifluoromethane	ug/kg	--	--	--	--	--	--	--	--	--	
Ethylbenzene	ug/kg	--	--	--	--	--	--	--	--	--	
Hexachlorobutadiene	ug/kg	--	--	--	--	--	--	--	--	--	
Isopropylbenzene	ug/kg	--	--	--	--	--	--	--	--	--	
Methyl acetate	ug/kg	--	--	--	--	--	--	--	--	--	
Methyl-tert-butyl Ether (MTBE)	ug/kg	--	--	--	--	--	--	--	--	--	
Methylcyclohexane	ug/kg	--	--	--	--	--	--	--	--	--	
Methylene chloride	ug/kg	--	--	--	--	--	--	--	--	--	
m,p-Xylenes	ug/kg	--	--	--	--	--	--	--	--	--	
o-Xylene	ug/kg	--	--	--	--	--	--	--	--	--	
Styrene	ug/kg	--	--	--	--	--	--	--	--	--	
Tetrachloroethene	ug/kg	--	--	14,000	--	--	--	--	--	--	
Tetrahydrofuran	ug/kg	--	--	--	--	--	--	--	--	--	
Toluene	ug/kg	--	--	--	--	--	--	--	--	--	
trans-1,2-Dichloroethene	ug/kg	--	--	--	--	--	--	--	--	--	
trans-1,3-Dichloropropene	ug/kg	--	--	--	--	--	--	--	--	--	
Trichloroethene	ug/kg	2,040,000	2,040,000	10,000	--	--	--	--	--	--	
Trichlorofluoromethane	ug/kg	--	--	--	--	--	--	--	--	--	

**INTERIM SOURCE REMOVAL ACTION (ISRA) - OUTFALL 009**

**WASTE CHARACTERIZATION SAMPLE RESULTS – B1-2  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY**

				Object Name:		B1WC0026	B1WC0035	B1WC0036	B1WC0037	B1WC0038
				Sample Name:		B1WC0026S001	B1WC0035S001	B1WC0036S001	B1WC0037S001	B1WC0038S001
				Collection Date:		4/30/2010	6/17/2010	6/17/2010	6/17/2010	6/17/2010
				Sample Depth (feet):		0.5 - 1.0	0.0 - 0.5	0.0 - 0.5	0.5 - 1.0	0.0 - 0.5
ANALYTE	UNITS	TTLIC	WET Leachate Testing Trigger <sup>a</sup>	TCLP Leachate Testing Trigger <sup>b</sup>	STLC	RESULT <sup>c</sup>	RESULT <sup>c</sup>	RESULT <sup>c</sup>	RESULT <sup>c</sup>	RESULT <sup>c</sup>
Vinyl acetate	ug/kg	--	--	--	--	--	--	--	--	--
Vinyl chloride	ug/kg	--	--	4,000	--	--	--	--	--	--
Xylenes, Total	ug/kg	--	--	--	--	--	--	--	--	--
<b>SVOCs</b>										
1,1'-Biphenyl	ug/kg	--	--	--	--	<331 {<99.4}	<333 {<99.9}	<332 {<99.6}	<332 {<99.6}	<332 {<99.7}
1,2,4-Trichlorobenzene	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}
1,2-Dichlorobenzene	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}
1,3-Dichlorobenzene	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}
1,4-Dichlorobenzene	ug/kg	--	--	150,000	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}
1-Naphthylamine	ug/kg	--	--	--	--	<331 {<99.4}	<333 {<99.9}	<332 {<99.6}	<332 {<99.6}	<332 {<99.7}
2,4,5-Trichlorophenol	ug/kg	--	--	8,000,000	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}
2,4,6-Trichlorophenol	ug/kg	--	--	40,000	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}
2,4-Dichlorophenol	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}
2,4-Dimethylphenol	ug/kg	--	--	--	--	<331 {<116}	<333 {<117}	<332 {<116}	<332 {<116}	<332 {<116}
2,4-Dinitrophenol	ug/kg	--	--	--	--	<662 {<126}	<666 {<126}	<664 {<126}	<664 {<126}	<665 {<126}
2,4-Dinitrotoluene	ug/kg	--	--	2,600	--	<331 {<33.1}	<333 {<33.3}	<332 {<33.2}	<332 {<33.2}	<332 {<33.2}
2,6-Dinitrotoluene	ug/kg	--	--	--	--	<331 {<33.1}	<333 {<33.3}	<332 {<33.2}	<332 {<33.2}	<332 {<33.2}
2-Chloronaphthalene	ug/kg	--	--	--	--	<33.1 {<10.9}	<33.3 {<11}	<33.2 {<11}	<33.2 {<11}	<33.2 {<11}
2-Chlorophenol	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}
2-Methylnaphthalene	ug/kg	--	--	--	--	<33.1 {<6.62}	<33.3 {<6.66}	<33.2 {<6.64}	<33.2 {<6.64}	<33.2 {<6.65}
2-Methylphenol	ug/kg	--	--	200	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}
2-Naphthylamine	ug/kg	--	--	--	--	<331 {<109}	<333 {<110}	<332 {<110}	<332 {<110}	<332 {<110}
2-Nitroaniline	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}
2-Nitrophenol	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}
3,3-Dichlorobenzidine	ug/kg	--	--	--	--	<331 {<99.4}	<333 {<99.9}	<332 {<99.6}	<332 {<99.6}	<332 {<99.7}
3-Nitroaniline	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}
4,6-Dinitro-2-methylphenol	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}
4-Aminobiphenyl	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}
4-Bromophenyl phenyl ether	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}
4-Chloro-3-methylphenol	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}
4-Chloroaniline	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}
4-Chlorophenyl-phenylether	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}
4-Methylphenol	ug/kg	--	--	200	--	<331 {<99.4}	<333 {<99.9}	<332 {<99.6}	<332 {<99.6}	<332 {<99.7}
4-Nitroaniline	ug/kg	--	--	--	--	<331 {<99.4}	<333 {<99.9}	<332 {<99.6}	<332 {<99.6}	<332 {<99.7}
4-Nitrophenol	ug/kg	--	--	--	--	<331 {<109}	<333 {<110}	<332 {<110}	<332 {<110}	<332 {<110}
Acenaphthene	ug/kg	--	--	--	--	<33.1 {<10.9}	<33.3 {<11}	<33.2 {<11}	<33.2 {<11}	<33.2 {<11}

INTERIM SOURCE REMOVAL ACTION (ISRA) - OUTFALL 009

WASTE CHARACTERIZATION SAMPLE RESULTS – B1-2  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY

						Object Name:	B1WC0026	B1WC0035	B1WC0036	B1WC0037	B1WC0038
						Sample Name:	B1WC0026S001	B1WC0035S001	B1WC0036S001	B1WC0037S001	B1WC0038S001
						Collection Date:	4/30/2010	6/17/2010	6/17/2010	6/17/2010	6/17/2010
						Sample Depth (feet):	0.5 - 1.0	0.0 - 0.5	0.0 - 0.5	0.5 - 1.0	0.0 - 0.5
ANALYTE	UNITS	TCLC	WET Leachate Testing Trigger <sup>a</sup>	TCLP Leachate Testing Trigger <sup>b</sup>	STLC	RESULT <sup>c</sup>	RESULT <sup>c</sup>	RESULT <sup>c</sup>	RESULT <sup>c</sup>	RESULT <sup>c</sup>	
Acenaphthylene	ug/kg	--	--	--	--	<33.1 {<9.94}	<33.3 {<9.99}	<33.2 {<9.96}	<33.2 {<9.96}	<33.2 {<9.97}	
Acetophenone	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}	
Anthracene	ug/kg	--	--	--	--	<33.1 {<6.62}	<33.3 {<6.66}	<33.2 {<6.64}	<33.2 {<6.64}	<33.2 {<6.65}	
Atrazine	ug/kg	--	--	--	--	<331 {<99.4}	<333 {<99.9}	<332 {<99.6}	<332 {<99.6}	<332 {<99.7}	
Benzaldehyde	ug/kg	--	--	--	--	<331 {<99.4}	<333 {<99.9}	<332 {<99.6}	<332 {<99.6}	<332 {<99.7}	
Benzidine	ug/kg	--	--	--	--	<331 {<99.4}	<333 {<99.9}	<332 {<99.6}	<332 {<99.6}	<332 {<99.7}	
Benzo(a)anthracene	ug/kg	--	--	--	--	<33.1 {<9.94}	<33.3 {<9.99}	<33.2 {<9.96}	<33.2 {<9.96}	<33.2 {<9.97}	
Benzo(a)pyrene	ug/kg	--	--	--	--	<33.1 {<9.94}	<33.3 {<9.99}	<33.2 {<9.96}	10.5 J	<33.2 {<9.97}	
Benzo(b)fluoranthene	ug/kg	--	--	--	--	<33.1 {<9.94}	21.8 J	<33.2 {<9.96}	21.8 J	<33.2 {<9.97}	
Benzo(ghi)perylene	ug/kg	--	--	--	--	<33.1 {<9.94}	21.2 J	<33.2 {<9.96}	<33.2 {<9.96}	<33.2 {<9.97}	
Benzo(k)fluoranthene	ug/kg	--	--	--	--	<33.1 {<9.94}	<33.3 {<9.99}	<33.2 {<9.96}	<33.2 {<9.96}	<33.2 {<9.97}	
Bis(2-chloroethoxy)methane	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}	
Bis(2-chloroethyl)ether	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}	
Bis(2-chloroisopropyl)ether	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}	
bis(2-Ethylhexyl) phthalate	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}	
Butyl benzyl phthalate	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}	
Caprolactam	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}	
Carbazole	ug/kg	--	--	--	--	<33.1 {<9.94}	<33.3 {<9.99}	<33.2 {<9.96}	<33.2 {<9.96}	<33.2 {<9.97}	
Chrysene	ug/kg	--	--	--	--	<33.1 {<9.94}	<33.3 {<9.99}	<33.2 {<9.96}	14.2 J	<33.2 {<9.97}	
Dibenzo(a,h)anthracene	ug/kg	--	--	--	--	<33.1 {<9.94}	<33.3 {<9.99}	<33.2 {<9.96}	<33.2 {<9.96}	<33.2 {<9.97}	
Dibenzofuran	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}	
Diethyl phthalate	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	847	<332 {<66.5}	
Dimethyl phthalate	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}	
Di-n-butyl phthalate	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}	
Di-n-octyl phthalate	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}	
Diphenylamine	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}	
Fluoranthene	ug/kg	--	--	--	--	<33.1 {<9.94}	<33.3 {<9.99}	<33.2 {<9.96}	<33.2 {<9.96}	<33.2 {<9.97}	
Fluorene	ug/kg	--	--	--	--	<33.1 {<9.94}	<33.3 {<9.99}	<33.2 {<9.96}	<33.2 {<9.96}	<33.2 {<9.97}	
Hexachlorobenzene	ug/kg	--	--	2,600	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}	
Hexachlorobutadiene	ug/kg	--	--	10,000	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}	
Hexachlorocyclopentadiene	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}	
Hexachloroethane	ug/kg	--	--	60,000	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}	
Indeno(1,2,3-cd)pyrene	ug/kg	--	--	--	--	<33.1 {<9.94}	20.2 J	<33.2 {<9.96}	<33.2 {<9.96}	<33.2 {<9.97}	
Isophorone	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}	
Naphthalene	ug/kg	--	--	--	--	<33.1 {<9.94}	<33.3 {<9.99}	<33.2 {<9.96}	<33.2 {<9.96}	<33.2 {<9.97}	
Nitrobenzene	ug/kg	--	--	40,000	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}	

**INTERIM SOURCE REMOVAL ACTION (ISRA) - OUTFALL 009**

**WASTE CHARACTERIZATION SAMPLE RESULTS – B1-2  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY**

						<b>Object Name:</b>	<b>B1WC0026</b>	<b>B1WC0035</b>	<b>B1WC0036</b>	<b>B1WC0037</b>	<b>B1WC0038</b>
						Sample Name:	B1WC0026S001	B1WC0035S001	B1WC0036S001	B1WC0037S001	B1WC0038S001
						Collection Date:	4/30/2010	6/17/2010	6/17/2010	6/17/2010	6/17/2010
						Sample Depth (feet):	0.5 - 1.0	0.0 - 0.5	0.0 - 0.5	0.5 - 1.0	0.0 - 0.5
<b>ANALYTE</b>	<b>UNITS</b>	<b>TTLIC</b>	<b>WET Leachate Testing Trigger<sup>a</sup></b>	<b>TCLP Leachate Testing Trigger<sup>b</sup></b>	<b>STLC</b>	<b>RESULT<sup>c</sup></b>	<b>RESULT<sup>c</sup></b>	<b>RESULT<sup>c</sup></b>	<b>RESULT<sup>c</sup></b>	<b>RESULT<sup>c</sup></b>	
n-Nitrosodimethylamine	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}	
n-Nitroso-di-n-propylamine	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}	
p-(Dimethylamino)azobenzene	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}	
Pentachlorophenol	ug/kg	17,000	17,000	2,000,000	--	<331 {<82.8}	<333 {<83.2}	<332 {<83}	<332 {<83}	<332 {<83.1}	
Phenanthrene	ug/kg	--	--	--	--	<33.1 {<9.94}	<33.3 {<9.99}	<33.2 {<9.96}	<33.2 {<9.96}	<33.2 {<9.97}	
Phenol	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}	
Pyrene	ug/kg	--	--	--	--	<33.1 {<9.94}	<33.3 {<9.99}	<33.2 {<9.96}	<33.2 {<9.96}	<33.2 {<9.97}	
Pyridine	ug/kg	--	--	--	--	<331 {<66.2}	<333 {<66.6}	<332 {<66.4}	<332 {<66.4}	<332 {<66.5}	
<b>RADIONUCLIDES</b>	--	--	--	--	--	R	R	R	R	R	

**INTERIM SOURCE REMOVAL ACTION (ISRA) - OUTFALL 009**

**WASTE CHARACTERIZATION SAMPLE RESULTS – B1-1 AND B1-2  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY**

**Notes:**

"--" - not analyzed / not applicable

<5 - Analyte not detected at or above the stated method detection limit (metals) or analyte not detected at or above the stated reporting limit (organics)

{<1} - Analyte not detected at or above the stated method detection limit (organics)

<sup>a</sup> - WET Leachate Testing Trigger = STLC limit \* 10

<sup>b</sup> - TCLP Leachate Testing Trigger = TCLP limit \* 20

<sup>c</sup> Waste characterization sample results not validated

H - Analytical holding time was exceeded.

J - Estimated value. Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). The user of this data should be aware that this data is of limited reliability.

µg/kg - micrograms per kilogram

mg/kg - milligrams per kilogram

mg/L - milligrams per liter

R - Radiological analysis includes gamma spectroscopy (Na-22, K-40, Mn-54, Co-60, Cs-134, Cs-137, Eu-152, Eu-154, Th-228, Th-232, U-235, U-238 and Am-241), strontium-90, and tritium. Boeing will be preparing a document that provides the radiological results and statistical analysis of these waste characterization samples.

SU - Standard Units

**INTERIM SOURCE REMOVAL ACTION (ISRA) - OUTFALL 009**

**WASTE CHARACTERIZATION SAMPLE RESULTS – B1-2 STOCKPILE  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY**

			Object Name:			B1ST0001	B1ST0002	B1ST0003	B1ST0004
			Sample Name:			B1ST0001S001	B1ST0002S001	B1ST0003S001	B1ST0004S001
			Collection Date:			9/2/2010	9/2/2010	9/2/2010	9/2/2010
			Sample Depth (feet):			0 - 0.5	0 - 0.5	3.5 - 4	2 - 2.5
ANALYTE	UNITS	TTLIC	WET Leachate Testing Trigger <sup>a</sup>	TCLP Leachate Testing Trigger <sup>b</sup>	STLC	RESULT <sup>c</sup>	RESULT <sup>c</sup>	RESULT <sup>c</sup>	RESULT <sup>c</sup>
<b>Metals</b>									
Antimony	mg/kg	500	150	--	--	1.7 J	1.3 J	1.5 J	1.2 J
Arsenic	mg/kg	500	50	100	--	6.2	4.8	7.2	6.7
Barium	mg/kg	10,000	1,000	2,000	--	86	82	73	68
Beryllium	mg/kg	75	7.5	--	--	0.44 J	0.48 J	0.45 J	0.41 J
Cadmium	mg/kg	100	10	20	--	<0.2	<0.2	<0.2	<0.2
Chromium	mg/kg	500	50	100	--	21	18	21	18
Cobalt	mg/kg	8,000	800	--	--	5.4	4.7	5.2	4.8
Copper	mg/kg	2,500	250	--	--	12	11	12	11
Lead	mg/kg	1,000	50	100	--	8.1	5	8.2	11
Mercury	mg/kg	20	2	4	--	0.27	0.37	2	0.12
Mercury-STLC	mg/l	--	--	--	0.2	--	--	<0.0010	--
Molybdenum	mg/kg	3,500	3,500	--	--	0.67 J	0.68 J	0.66 J	0.58 J
Nickel	mg/kg	2,000	200	--	--	13	12	13	11
Selenium	mg/kg	100	10	20	--	<0.99	<0.99	<1	<0.99
Silver	mg/kg	500	50	100	--	<0.79	<0.79	<0.8	<0.79
Thallium	mg/kg	700	70	--	--	<0.79	<0.79	<0.8	<0.79
Vanadium	mg/kg	2,400	240	--	--	34	31	35	32
Zinc	mg/kg	5,000	2,500	--	--	65	47	81	150
<b>TPH</b>									
Gasoline Range Organics (C6-C12)	mg/kg	--	--	--	--	<0.37 {<0.14}	<0.37 {<0.14}	<0.39 {<0.14}	<0.38 {<0.14}
EFH (C10 - C24)	mg/kg	--	--	--	--	4.6 J	<5 {<3.5}	8.8	7.3
EFH (C10 - C40)	mg/kg	--	--	--	--	24	18	53	28
EFH (C25 - C40)	mg/kg	--	--	--	--	19	16	44	21
<b>PCBs</b>									
Aroclor 1016	ug/kg	50,000	50,000	--	--	<50 {<12}	<50 {<12}	<50 {<12}	<50 {<12}
Aroclor 1221	ug/kg	50,000	50,000	--	--	<50 {<12}	<50 {<12}	<50 {<12}	<50 {<12}
Aroclor 1232	ug/kg	50,000	50,000	--	--	<50 {<12}	<50 {<12}	<50 {<12}	<50 {<12}
Aroclor 1242	ug/kg	50,000	50,000	--	--	<50 {<12}	<50 {<12}	<50 {<12}	<50 {<12}
Aroclor 1248	ug/kg	50,000	50,000	--	--	<50 {<12}	<50 {<12}	<50 {<12}	<50 {<12}
Aroclor 1254	ug/kg	50,000	50,000	--	--	<50 {<12}	<50 {<12}	<50 {<12}	<50 {<12}
Aroclor 1260	ug/kg	50,000	50,000	--	--	<50 {<12}	<50 {<12}	<50 {<12}	<50 {<12}
<b>SVOCs</b>									
1,2,4-Trichlorobenzene	ug/kg	--	--	--	--	<670 {<100}	<500 {<75}	<670 {<100}	<670 {<100}
1,2-Dichlorobenzene	ug/kg	--	--	--	--	<670 {<120}	<500 {<90}	<670 {<120}	<670 {<120}
1,2-Diphenylhydrazine	ug/kg	--	--	--	--	<670 {<120}	<500 {<90}	<670 {<120}	<670 {<120}



**INTERIM SOURCE REMOVAL ACTION (ISRA) - OUTFALL 009**

**WASTE CHARACTERIZATION SAMPLE RESULTS – B1-2 STOCKPILE  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY**

ANALYTE	UNITS	TTLIC	Object Name: Sample Name: Collection Date: Sample Depth (feet):			B1ST0001 B1ST0001S001 9/2/2010 0 - 0.5	B1ST0002 B1ST0002S001 9/2/2010 0 - 0.5	B1ST0003 B1ST0003S001 9/2/2010 3.5 - 4	B1ST0004 B1ST0004S001 9/2/2010 2 - 2.5
			WET Leachate Testing Trigger <sup>a</sup>	TCLP Leachate Testing Trigger <sup>b</sup>	STLC	RESULT <sup>c</sup>	RESULT <sup>c</sup>	RESULT <sup>c</sup>	RESULT <sup>c</sup>
1,3-Dichlorobenzene	ug/kg	--	--	--	--	<670 {<180}	<500 {<130}	<670 {<180}	<670 {<180}
1,4-Dichlorobenzene	ug/kg	--	--	150,000	--	<670 {<130}	<500 {<97}	<670 {<130}	<670 {<130}
2,4,5-Trichlorophenol	ug/kg	--	--	8,000,000	--	<670 {<260}	<500 {<190}	<670 {<260}	<670 {<260}
2,4,6-Trichlorophenol	ug/kg	--	--	40,000	--	<670 {<150}	<500 {<110}	<670 {<150}	<670 {<150}
2,4-Dichlorophenol	ug/kg	--	--	--	--	<670 {<120}	<500 {<90}	<670 {<120}	<670 {<120}
2,4-Dimethylphenol	ug/kg	--	--	--	--	<670 {<200}	<500 {<150}	<670 {<200}	<670 {<200}
2,4-Dinitrophenol	ug/kg	--	--	--	--	<1300 {<220}	<990 {<160}	<1300 {<220}	<1300 {<220}
2,4-Dinitrotoluene	ug/kg	--	--	2,600	--	<670 {<160}	<500 {<120}	<670 {<160}	<670 {<160}
2,6-Dinitrotoluene	ug/kg	--	--	--	--	<670 {<190}	<500 {<140}	<670 {<190}	<670 {<190}
2-Chloronaphthalene	ug/kg	--	--	--	--	<670 {<130}	<500 {<97}	<670 {<130}	<670 {<130}
2-Chlorophenol	ug/kg	--	--	--	--	<670 {<140}	<500 {<100}	<670 {<140}	<670 {<140}
2-Methylnaphthalene	ug/kg	--	--	--	--	<670 {<140}	<500 {<100}	<670 {<140}	<670 {<140}
2-Methylphenol	ug/kg	--	--	200	--	<670 {<160}	<500 {<120}	<670 {<160}	<670 {<160}
2-Nitroaniline	ug/kg	--	--	--	--	<670 {<120}	<500 {<90}	<670 {<120}	<670 {<120}
2-Nitrophenol	ug/kg	--	--	--	--	<670 {<120}	<500 {<90}	<670 {<120}	<670 {<120}
3,3'-Dichlorobenzidine	ug/kg	--	--	--	--	<1700 {<300}	<1200 {<220}	<1700 {<300}	<1700 {<300}
3-Nitroaniline	ug/kg	--	--	--	--	<670 {<150}	<500 {<110}	<670 {<150}	<670 {<150}
4,6-Dinitro-2-methylphenol	ug/kg	--	--	--	--	<830 {<220}	<620 {<160}	<830 {<220}	<830 {<220}
4-Bromophenyl phenyl ether	ug/kg	--	--	--	--	<670 {<150}	<500 {<110}	<670 {<150}	<670 {<150}
4-Chloro-3-Methylphenol	ug/kg	--	--	--	--	<670 {<140}	<500 {<100}	<670 {<140}	<670 {<140}
4-Chlorophenyl phenyl ether	ug/kg	--	--	--	--	<670 {<170}	<500 {<130}	<670 {<170}	<670 {<170}
4-Methylphenol	ug/kg	--	--	200	--	<670 {<160}	<500 {<120}	<670 {<160}	<670 {<160}
4-Nitrophenol	ug/kg	--	--	--	--	<1700 {<280}	<1200 {<210}	<1700 {<280}	<1700 {<280}
Acenaphthene	ug/kg	--	--	--	--	<670 {<120}	<500 {<90}	<670 {<120}	<670 {<120}
Acenaphthylene	ug/kg	--	--	--	--	<670 {<140}	<500 {<100}	<670 {<140}	<670 {<140}
Aniline	ug/kg	--	--	--	--	<830 {<170}	<620 {<130}	<830 {<170}	<830 {<170}
Anthracene	ug/kg	--	--	--	--	<670 {<160}	<500 {<120}	<670 {<160}	<670 {<160}
Benzidine	ug/kg	--	--	--	--	<1300 {<1300}	<990 {<990}	<1300 {<1300}	<1300 {<1300}
Benzo(a)anthracene	ug/kg	--	--	--	--	<670 {<140}	<500 {<100}	<670 {<140}	180 J
Benzo(a)pyrene	ug/kg	--	--	--	--	<670 {<110}	<500 {<82}	<670 {<110}	160 J
Benzo(b)fluoranthene	ug/kg	--	--	--	--	<670 {<100}	<500 {<75}	<670 {<100}	240 J
Benzo(ghi)perylene	ug/kg	--	--	--	--	<670 {<220}	<500 {<160}	<670 {<220}	<670 {<220}
Benzo(k)fluoranthene	ug/kg	--	--	--	--	<670 {<140}	<500 {<100}	<670 {<140}	<670 {<140}
Benzoic acid	ug/kg	--	--	--	--	<1700 {<300}	<1200 {<220}	<1700 {<300}	<1700 {<300}
Benzyl alcohol	ug/kg	--	--	--	--	<670 {<400}	<500 {<300}	<670 {<400}	<670 {<400}
bis(2-Chloroethoxy)methane	ug/kg	--	--	--	--	<670 {<140}	<500 {<100}	<670 {<140}	<670 {<140}

**INTERIM SOURCE REMOVAL ACTION (ISRA) - OUTFALL 009**

**WASTE CHARACTERIZATION SAMPLE RESULTS – B1-2 STOCKPILE  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY**

			Object Name: Sample Name: Collection Date: Sample Depth (feet):			B1ST0001 B1ST0001S001 9/2/2010 0 - 0.5	B1ST0002 B1ST0002S001 9/2/2010 0 - 0.5	B1ST0003 B1ST0003S001 9/2/2010 3.5 - 4	B1ST0004 B1ST0004S001 9/2/2010 2 - 2.5
ANALYTE	UNITS	TTLC	WET Leachate Testing Trigger <sup>a</sup>	TCLP Leachate Testing Trigger <sup>b</sup>	STLC	RESULT <sup>c</sup>	RESULT <sup>c</sup>	RESULT <sup>c</sup>	RESULT <sup>c</sup>
bis(2-Chloroisopropyl)ether	ug/kg	--	--	--	--	<670 {<120}	<500 {<90}	<670 {<120}	<670 {<120}
bis(2-Ethylhexyl) phthalate	ug/kg	--	--	--	--	<670 {<180}	<500 {<130}	<670 {<180}	<670 {<180}
Butyl benzyl phthalate	ug/kg	--	--	--	--	<670 {<160}	<500 {<120}	<670 {<160}	<670 {<160}
Chrysene	ug/kg	--	--	--	--	<670 {<150}	<500 {<110}	<670 {<150}	200 J
Dibenzo(a,h)anthracene	ug/kg	--	--	--	--	<830 {<200}	<620 {<150}	<830 {<200}	<830 {<200}
Dibenzofuran	ug/kg	--	--	--	--	<670 {<120}	<500 {<90}	<670 {<120}	<670 {<120}
Diethyl phthalate	ug/kg	--	--	--	--	<670 {<190}	<500 {<140}	<670 {<190}	<670 {<190}
Dimethyl phthalate	ug/kg	--	--	--	--	<670 {<130}	<500 {<97}	<670 {<130}	<670 {<130}
Di-n-butyl phthalate	ug/kg	--	--	--	--	<670 {<180}	<500 {<130}	<670 {<180}	<670 {<180}
Di-n-octyl phthalate	ug/kg	--	--	--	--	<670 {<180}	<500 {<130}	<670 {<180}	<670 {<180}
Fluoranthene	ug/kg	--	--	--	--	<670 {<140}	<500 {<100}	<670 {<140}	240 J
Fluorene	ug/kg	--	--	--	--	<670 {<140}	<500 {<100}	<670 {<140}	<670 {<140}
Hexachlorobenzene	ug/kg	--	--	2,600	--	<670 {<140}	<500 {<100}	<670 {<140}	<670 {<140}
Hexachlorocyclopentadiene	ug/kg	--	--	--	--	<1700 {<180}	<1200 {<130}	<1700 {<180}	<1700 {<180}
Hexachloroethane	ug/kg	--	--	60,000	--	<670 {<130}	<500 {<97}	<670 {<130}	<670 {<130}
Indeno(1,2,3-cd)pyrene	ug/kg	--	--	--	--	<670 {<260}	<500 {<190}	<670 {<260}	<670 {<260}
Isophorone	ug/kg	--	--	--	--	<670 {<120}	<500 {<90}	<670 {<120}	<670 {<120}
Naphthalene	ug/kg	--	--	--	--	<670 {<120}	<500 {<90}	<670 {<120}	<670 {<120}
Nitrobenzene	ug/kg	--	--	40,000	--	<670 {<140}	<500 {<100}	<670 {<140}	<670 {<140}
n-Nitroso-di-n-propylamine	ug/kg	--	--	--	--	<500 {<140}	<370 {<100}	<500 {<140}	<500 {<140}
N-Nitrosodiphenylamine	ug/kg	--	--	--	--	<670 {<160}	<500 {<120}	<670 {<160}	<670 {<160}
p-Chloroaniline	ug/kg	--	--	--	--	<670 {<240}	<500 {<180}	<670 {<240}	<670 {<240}
Pentachlorophenol	ug/kg	17,000	17,000	2,000,000	--	<1700 {<300}	<1200 {<220}	<1700 {<300}	<1700 {<300}
Phenanthrene	ug/kg	--	--	--	--	<670 {<120}	<500 {<90}	<670 {<120}	<670 {<120}
Phenol	ug/kg	--	--	--	--	<670 {<180}	<500 {<130}	<670 {<180}	<670 {<180}
p-Nitroaniline	ug/kg	--	--	--	--	<1700 {<180}	<1200 {<130}	<1700 {<180}	<1700 {<180}
Pyrene	ug/kg	--	--	--	--	<670 {<160}	<500 {<120}	<670 {<160}	250 J
Pyridine	ug/kg	--	--	--	--	--	--	--	--
<b>VOCs</b>									
1,1,1,2-Tetrachloroethane	ug/kg	--	--	--	--	<2 {<0.57}	<1.9 {<0.55}	<2 {<0.57}	<2 {<0.57}
1,1,1-Trichloroethane	ug/kg	--	--	--	--	<1 {<0.7}	<0.97 {<0.68}	<1 {<0.7}	<0.99 {<0.69}
1,1,2,2-Tetrachloroethane	ug/kg	--	--	--	--	<2 {<0.86}	<1.9 {<0.83}	<2 {<0.86}	<2 {<0.85}
1,1,2-Trichloroethane	ug/kg	--	--	--	--	<1 {<0.87}	<0.97 {<0.84}	<1 {<0.87}	<0.99 {<0.86}
1,1-Dichloroethane	ug/kg	--	--	--	--	<1 {<0.5}	<0.97 {<0.48}	<1 {<0.5}	<0.99 {<0.5}
1,1-Dichloroethene	ug/kg	--	--	14,000	--	<2 {<0.6}	<1.9 {<0.58}	<2 {<0.6}	<2 {<0.6}
1,1-Dichloropropene	ug/kg	--	--	--	--	<1 {<0.4}	<0.97 {<0.39}	<1 {<0.4}	<0.99 {<0.4}

**INTERIM SOURCE REMOVAL ACTION (ISRA) - OUTFALL 009**

**WASTE CHARACTERIZATION SAMPLE RESULTS – B1-2 STOCKPILE  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY**

ANALYTE	UNITS	TTLIC	Object Name: Sample Name: Collection Date: Sample Depth (feet):			B1ST0001 B1ST0001S001 9/2/2010 0 - 0.5	B1ST0002 B1ST0002S001 9/2/2010 0 - 0.5	B1ST0003 B1ST0003S001 9/2/2010 3.5 - 4	B1ST0004 B1ST0004S001 9/2/2010 2 - 2.5
			WET Leachate Testing Trigger <sup>a</sup>	TCLP Leachate Testing Trigger <sup>b</sup>	STLC	RESULT <sup>c</sup>	RESULT <sup>c</sup>	RESULT <sup>c</sup>	RESULT <sup>c</sup>
1,2,3-Trichlorobenzene	ug/kg	--	--	--	--	<2 {<1}	<1.9 {<0.97}	<2 {<1}	<2 {<0.99}
1,2,3-Trichloropropane	ug/kg	--	--	--	--	<2 {<1}	<1.9 {<0.97}	<2 {<1}	<2 {<0.99}
1,2,4-Trichlorobenzene	ug/kg	--	--	--	--	<670 {<100}	<500 {<75}	<670 {<100}	<670 {<100}
1,2,4-Trimethylbenzene	ug/kg	--	--	--	--	<1 {<0.78}	<0.97 {<0.75}	<1 {<0.78}	<0.99 {<0.77}
1,2-Dibromo-3-chloropropane	ug/kg	--	--	--	--	<10 {<1.5}	<9.7 {<1.5}	<10 {<1.5}	<9.9 {<1.5}
1,2-Dibromoethane	ug/kg	--	--	--	--	<1 {<0.8}	<0.97 {<0.77}	<1 {<0.8}	<0.99 {<0.79}
1,2-Dichlorobenzene	ug/kg	--	--	--	--	<670 {<120}	<500 {<90}	<670 {<120}	<670 {<120}
1,2-Dichloroethane	ug/kg	--	--	10,000	--	<1 {<0.8}	<0.97 {<0.77}	<1 {<0.8}	<0.99 {<0.79}
1,2-Dichloropropane	ug/kg	--	--	--	--	<1 {<0.8}	<0.97 {<0.77}	<1 {<0.8}	<0.99 {<0.79}
1,3,5-Trimethylbenzene	ug/kg	--	--	--	--	<1 {<0.63}	<0.97 {<0.61}	<1 {<0.63}	<0.99 {<0.62}
1,3-Dichlorobenzene	ug/kg	--	--	--	--	<670 {<180}	<500 {<130}	<670 {<180}	<670 {<180}
1,3-Dichloropropane	ug/kg	--	--	--	--	<1 {<0.63}	<0.97 {<0.61}	<1 {<0.63}	<0.99 {<0.62}
1,4-Dichlorobenzene	ug/kg	--	--	--	--	<670 {<130}	<500 {<97}	<670 {<130}	<670 {<130}
2,2-Dichloropropane	ug/kg	--	--	--	--	<1 {<0.6}	<0.97 {<0.58}	<1 {<0.6}	<0.99 {<0.6}
2-Butanone (MEK)	ug/kg	--	--	4,000,000	--	<10 {<6}	<9.7 {<5.8}	24	<9.9 {<6}
2-Chloroethylvinyl ether	ug/kg	--	--	--	--	<330 {<120}	<250 {<90}	<330 {<120}	<330 {<120}
2-Chlorotoluene	ug/kg	--	--	--	--	<2 {<0.87}	<1.9 {<0.84}	<2 {<0.87}	<2 {<0.86}
2-Hexanone	ug/kg	--	--	--	--	<10 {<9.1}	<9.7 {<8.8}	<10 {<9.1}	<9.9 {<9}
4-Chlorotoluene	ug/kg	--	--	--	--	<2 {<0.74}	<1.9 {<0.72}	<2 {<0.74}	<2 {<0.73}
4-Methyl-2-pentanone	ug/kg	--	--	--	--	<5 {<4.5}	<4.8 {<4.4}	<5 {<4.5}	<5 {<4.5}
Acetone	ug/kg	--	--	--	--	<10 {<8}	<9.7 {<7.7}	210	180
Benzene	ug/kg	--	--	10,000	--	<1 {<0.5}	<0.97 {<0.48}	<1 {<0.5}	<0.99 {<0.5}
Bromobenzene	ug/kg	--	--	--	--	<2 {<0.84}	<1.9 {<0.81}	<2 {<0.84}	<2 {<0.83}
Bromochloromethane	ug/kg	--	--	--	--	<2 {<0.9}	<1.9 {<0.87}	<2 {<0.9}	<2 {<0.89}
Bromodichloromethane	ug/kg	--	--	--	--	<1 {<0.5}	<0.97 {<0.48}	<1 {<0.5}	<0.99 {<0.5}
Bromoform	ug/kg	--	--	--	--	<2 {<0.8}	<1.9 {<0.77}	<2 {<0.8}	<2 {<0.79}
Bromomethane	ug/kg	--	--	--	--	<2 {<0.92}	<1.9 {<0.89}	<2 {<0.92}	<2 {<0.91}
Carbon disulfide	ug/kg	--	--	--	--	<5 {<0.97}	<4.8 {<0.94}	<5 {<0.97}	<5 {<0.96}
Carbon tetrachloride	ug/kg	--	--	10,000	--	<2 {<0.5}	<1.9 {<0.48}	<2 {<0.5}	<2 {<0.5}
Chlorobenzene	ug/kg	--	--	2,000,000	--	<1 {<0.52}	<0.97 {<0.5}	<1 {<0.52}	<0.99 {<0.52}
Chloroethane	ug/kg	--	--	--	--	<2 {<1.5}	<1.9 {<1.5}	<2 {<1.5}	<2 {<1.5}
Chloroform	ug/kg	--	--	120,000	--	<1 {<0.5}	<0.97 {<0.48}	<1 {<0.5}	<0.99 {<0.5}
Chloromethane	ug/kg	--	--	--	--	<2 {<1}	<1.9 {<0.97}	<2 {<1}	<2 {<0.99}
cis-1,2-Dichloroethene	ug/kg	--	--	--	--	<1 {<0.83}	<0.97 {<0.8}	<1 {<0.83}	<0.99 {<0.82}
cis-1,3-Dichloropropene	ug/kg	--	--	--	--	<1 {<0.44}	<0.97 {<0.43}	<1 {<0.44}	<0.99 {<0.44}
Dibromochloromethane	ug/kg	--	--	--	--	<1 {<0.7}	<0.97 {<0.68}	<1 {<0.7}	<0.99 {<0.69}

**INTERIM SOURCE REMOVAL ACTION (ISRA) - OUTFALL 009**

**WASTE CHARACTERIZATION SAMPLE RESULTS – B1-2 STOCKPILE  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY**

						Object Name:	B1ST0001	B1ST0002	B1ST0003	B1ST0004
						Sample Name:	B1ST0001S001	B1ST0002S001	B1ST0003S001	B1ST0004S001
						Collection Date:	9/2/2010	9/2/2010	9/2/2010	9/2/2010
						Sample Depth (feet):	0 - 0.5	0 - 0.5	3.5 - 4	2 - 2.5
ANALYTE	UNITS	TTLIC	WET Leachate Testing Trigger <sup>a</sup>	TCLP Leachate Testing Trigger <sup>b</sup>	STLC	RESULT <sup>c</sup>	RESULT <sup>c</sup>	RESULT <sup>c</sup>	RESULT <sup>c</sup>	
Dibromomethane	ug/kg	--	--	--	--	<1 {<0.9}	<0.97 {<0.87}	<1 {<0.9}	<0.99 {<0.89}	
Dichlorodifluoromethane	ug/kg	--	--	--	--	<5 {<1.5}	<4.8 {<1.5}	<5 {<1.5}	<5 {<1.5}	
Ethylbenzene	ug/kg	--	--	--	--	<1 {<0.5}	<0.97 {<0.48}	<1 {<0.5}	<0.99 {<0.5}	
Hexachlorobutadiene	ug/kg	--	--	--	--	<670 {<120}	<500 {<90}	<670 {<120}	<670 {<120}	
Isopropylbenzene	ug/kg	--	--	--	--	<1 {<0.54}	<0.97 {<0.52}	<1 {<0.54}	<0.99 {<0.54}	
m,p-Xylenes	ug/kg	--	--	--	--	<2 {<0.8}	<1.9 {<0.77}	<2 {<0.8}	<2 {<0.79}	
Methyl tert-butyl ether	ug/kg	--	--	--	--	<2 {<1}	<1.9 {<0.97}	<2 {<1}	<2 {<0.99}	
Methylene chloride	ug/kg	--	--	--	--	<10 {<6.5}	<9.7 {<6.3}	<10 {<6.5}	<9.9 {<6.4}	
Naphthalene	ug/kg	--	--	--	--	<670 {<120}	<500 {<90}	<670 {<120}	<670 {<120}	
n-Butylbenzene	ug/kg	--	--	--	--	<2 {<0.72}	<1.9 {<0.7}	<2 {<0.72}	<2 {<0.71}	
n-Propylbenzene	ug/kg	--	--	--	--	<1 {<0.61}	<0.97 {<0.59}	<1 {<0.61}	<0.99 {<0.61}	
o-Xylene	ug/kg	--	--	--	--	<1 {<0.5}	<0.97 {<0.48}	<1 {<0.5}	<0.99 {<0.5}	
p-Isopropyltoluene	ug/kg	--	--	--	--	<1 {<0.72}	<0.97 {<0.7}	0.86 J	<0.99 {<0.71}	
sec-Butylbenzene	ug/kg	--	--	--	--	<2 {<0.67}	<1.9 {<0.65}	<2 {<0.67}	<2 {<0.66}	
Styrene	ug/kg	--	--	--	--	<1 {<0.58}	<0.97 {<0.56}	<1 {<0.58}	<0.99 {<0.58}	
tert-Butylbenzene	ug/kg	--	--	--	--	<2 {<0.62}	<1.9 {<0.6}	<2 {<0.62}	<2 {<0.62}	
Tetrachloroethene	ug/kg	--	--	14,000	--	<1 {<0.49}	<0.97 {<0.47}	<1 {<0.49}	<0.99 {<0.49}	
Toluene	ug/kg	--	--	--	--	<1 {<0.5}	<0.97 {<0.48}	<1 {<0.5}	<0.99 {<0.5}	
trans-1,2-Dichloroethene	ug/kg	--	--	--	--	<1 {<0.7}	<0.97 {<0.68}	<1 {<0.7}	<0.99 {<0.69}	
trans-1,3-Dichloropropene	ug/kg	--	--	--	--	<1 {<0.61}	<0.97 {<0.59}	<1 {<0.61}	<0.99 {<0.61}	
Trichloroethene	ug/kg	2,040,000	2,040,000	10,000	--	<1 {<0.5}	<0.97 {<0.48}	<1 {<0.5}	<0.99 {<0.5}	
Trichlorofluoromethane	ug/kg	--	--	--	--	<2 {<0.54}	<1.9 {<0.52}	<2 {<0.54}	<2 {<0.54}	
Vinyl acetate	ug/kg	--	--	--	--	<5 {<2.5}	<4.8 {<2.4}	<5 {<2.5}	<5 {<2.5}	
Vinyl chloride	ug/kg	--	--	4,000	--	<2 {<0.91}	<1.9 {<0.88}	<2 {<0.91}	<2 {<0.9}	
<b>RADIONUCLIDES</b>	--	--	--	--	--	R	R	R	R	

**INTERIM SOURCE REMOVAL ACTION (ISRA) - OUTFALL 009**

**WASTE CHARACTERIZATION SAMPLE RESULTS – B1-2 STOCKPILE  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY**

**Notes:**

"--" - not analyzed / not applicable

<5 - Analyte not detected at or above the stated method detection limit (metals) or analyte not detected at or above the stated reporting limit (organics)

{<1} - Analyte not detected at or above the stated method detection limit (organics)

<sup>a</sup> - WET Leachate Testing Trigger = STLC limit \* 10

<sup>b</sup> - TCLP Leachate Testing Trigger = TCLP limit \* 20

<sup>c</sup> Waste characterization sample results not validated

J - Estimated value. Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). The user of this data should be aware that this data is of limited reliability.

µg/kg - micrograms per kilogram

mg/kg - milligrams per kilogram

mg/L - milligrams per liter

R - Radiological analysis includes gamma spectroscopy (Na-22, K-40, Mn-54, Co-60, Cs-134, Cs-137, Eu-152, Eu-154, Th-228, Th-232, U-235, U-238 and Am-241), strontium-90, and tritium. Boeing will be preparing a document that provides the radiological results and statistical analysis of these waste characterization samples.