

APPENDIX C

THIRD QUARTER 2011 SUMMARY TABLES, DISCHARGE  
MONITORING DATA

**THIRD QUARTER 2011  
REPORTING SUMMARY NOTES  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

**Notes:**

1. For Dioxins and Furans, laboratory results may have been reported in picograms/liter (pg/L). However, the permit limit is stated in micrograms/liter ( $\mu\text{g/L}$ ). To evaluate permit compliance, the laboratory results have been converted to  $\mu\text{g/L}$ , as necessary, to calculate the TCDD TEQ.
2. TCDD TEQs for the purpose of determining permit compliance are the sum of the products of the detected dioxin congener concentration multiplied by that congener's TEF. The resulting compliance TCDD TEQ does not include those congener concentrations that are reported as DNQ, as specified on Page 40 of the NPDES permit.
3. For some sample dates, pH was determined with a field instrument and was noted as such. These results were not validated. Since pH does not have an RL, the possible pH range is shown in the RL column.
4. The NPDES permit limit or benchmark limit for mercury of 0.10  $\mu\text{g/L}$  (Outfalls 001, 002, 011, 018 and 019) and 0.13  $\mu\text{g/L}$  (Outfalls 003-010) are not achievable by the laboratory; therefore, the laboratory reporting limit of 0.20  $\mu\text{g/L}$  was used to determine compliance.
5. All of the following abbreviations and/or notes may not occur on every table.

-92.9 +/-200	A negative radiochemical analytical result indicates the count rate of the sample was less than the background condition
\$	reported result or other information was incorrectly reported by the laboratory; result was corrected by the data validator
--	based on validation of the data, a qualifier was not required
-/-	no permit limit established for daily maximum or monthly average
<(value)	analyte not detected at a concentration greater than or equal to the DL, MDL, or RL (see laboratory

**THIRD QUARTER 2011  
REPORTING SUMMARY NOTES**

**THIRD QUARTER 2011  
REPORTING SUMMARY NOTES  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

pg/L	picograms per liter
Q	matrix spike recovery outside of control limits
R	as a validation qualifier, results are rejected; the presence or absence of analyte cannot be verified
R	(reason code in parentheses) %R for calibration not within control limits
RL	laboratory reporting limit
RL-1	reporting limit raised due to sample matrix effects
%RSD	percent relative standard deviation
S	surrogate recovery was outside control limits
TEQ	toxic equivalent
T	presumed contamination, as indicated by a detect in the trip blank
TU <sub>c</sub>	toxicity units (chronic)
U	result not detected
µg/L	micrograms per liter
UJ	result not detected at the estimated reporting limit
umhos/cm	micromhos per centimeter
WHO TEF	World Health Organization toxic equivalency factor
^	analysis not completed due to hold time exceedence or insufficient sample volume
#	Per ORDER NO. R4-2010-0090 page 23 Footnote 1. The effluent limitations for total suspended solids and settleable solids are not applicable for discharges during wet weather. During wet weather flow, a discharge event is greater than 0.1 inches of rainfall in a 24-hour period. No more than one sample per week need be obtained during extended periods of rainfall or the discharge of collected stormwater. A storm event must be preceded by at least 72 hours of dry weather.
(4.0)3.1/-	Represents (Dry Weather Limit) Wet Weather Limit / Monthly Average Limit.

**OUTFALL 002 (South Slope below R-2 Pond)**

**THIRD QUARTER 2011 REPORTING SUMMARY  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

**July 1 through September 30, 2011**

ANALYTE	UNITS	Benchmark Limit Daily Max/Monthly Avg	07/20/2011-07/21/2011 <sup>(a)</sup>		
			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
Ammonia as Nitrogen (N)	mg/L	10.1/-	Comp	ND < 0.500	*
Biochemical Oxygen Demand (BOD 5 day)	mg/L	30/-	Comp	1.7	Ja* (DNQ)
Chloride	mg/L	150/-	Comp	42	*
Dissolved Oxygen	mg/L	-/-	Grab	3.81	*
Specific Conductivity (Lab)	umhos/cm	-/-	Grab	630	--
Surfactants (MBAS)	mg/L	0.5/-	Comp	0.093	Ja* (DNQ)
Fluoride	mg/L	1.6/-	ANR	ANR	ANR
Nitrate + Nitrite as Nitrogen (N)	mg/L	8/-	Comp	ND < 0.15	*
Nitrate as Nitrogen (N)	mg/L	8/-	Comp	0.088	Ja* (DNQ)
Nitrite-N	mg/L	1/-	Comp	ND < 0.090	*
Oil & Grease	mg/L	15/-	Grab	ND < 1.4	*
Perchlorate	ug/L	6.0/-	Comp	ND < 0.95	U
pH (Field)	pH units	6.5-8.5/-	Grab	7.2	*
Total Settleable Solids	ml/L	0.3/-	Grab	ND < 0.10	*
Sulfate	mg/L	300/-	Comp	140	*
Temperature	deg. F	86/-	Grab	76	*
Total Cyanide	ug/L	8.5/-	Comp	ND < 2.2	*
Total Dissolved Solids	mg/L	950/-	Comp	440	*
Total Organic Carbon	mg/L	-/-	ANR	ANR	ANR
Total Residual Chlorine (Field)	mg/L	0.1/-	ANR	ANR	ANR
Total Suspended Solids	mg/L	45/-	Comp	ND < 1.0	*
Turbidity	NTU	-/-	Comp	0.84	J (DNQ)
Volume Discharged	MGD	160/-	ANR	1.3997	ANR
<b>METALS</b>					
Antimony	ug/L	6.0/-	ANR	ANR	ANR
Arsenic	ug/L	10/-	ANR	ANR	ANR
Barium	mg/L	1.0/-	ANR	ANR	ANR
Beryllium	ug/L	4.0/-	ANR	ANR	ANR
Boron	mg/L	-/-	ANR	ANR	ANR
Cadmium	ug/L	(4.0) 3.1/-	Comp	ND < 0.10	*
Cadmium, dissolved	ug/L	-/-	Comp	ND < 0.10	*
Chromium	ug/L	16/-	ANR	ANR	ANR
Chromium VI	ug/L	16/-	ANR	ANR	ANR
Cobalt	ug/L	-/-	ANR	ANR	ANR
Copper	ug/L	14/-	Comp	0.968	Ja* (DNQ)
Copper, dissolved	ug/L	-/-	Comp	0.824	Ja*
Iron	mg/L	0.3/-	Comp	0.041	B*

**OUTFALL 002 (South Slope below R-2 Pond)**

**THIRD QUARTER 2011 REPORTING SUMMARY  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

**July 1 through September 30, 2011**

ANALYTE	UNITS	Benchmark Limit Daily Max/Monthly Avg	07/20/2011-07/21/2011 <sup>(a)</sup>		
			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
Iron, dissolved	mg/L	-/-	Comp	ND < 0.015	*
Lead	ug/L	5.2/-	Comp	ND < 0.20	*
Lead, dissolved	ug/L	-/-	Comp	ND < 0.20	*
Manganese	ug/L	50/-	ANR	ANR	ANR
Mercury	ug/L	0.10/-	Comp	ND < 0.10	U
Mercury, dissolved	ug/L	-/-	Comp	ND < 0.10	U
Nickel	ug/L	96/-	ANR	ANR	ANR
Selenium	ug/L	(5) 8.2/-	Comp	ND < 0.50	*
Selenium, dissolved	ug/L	-/-	Comp	ND < 0.50	*
Silver	ug/L	4.1/-	ANR	ANR	ANR
Thallium	ug/L	2.0/-	ANR	ANR	ANR
Vanadium	ug/L	-/-	ANR	ANR	ANR
Zinc	ug/L	119/-	Comp	ND < 6.00	*
Zinc, Dissolved	ug/L	-/-	Comp	ND < 6.00	*
<b>ORGANICS</b>					
Benzene	ug/L	-/-	Grab	ND < 0.28	*
Carbon Tetrachloride	ug/L	-/-	Grab	ND < 0.28	*
Chloroform	ug/L	-/-	Grab	ND < 0.33	*
1,1-Dichloroethane	ug/L	-/-	Grab	ND < 0.40	*
1,2-Dichloroethane	ug/L	0.5/-	Grab	ND < 0.28	*
1,1-Dichloroethene	ug/L	6.0/-	Grab	ND < 0.42	*
1,4-Dioxane	ug/L	-/-	ANR	ANR	ANR
Ethylbenzene	ug/L	-/-	Grab	ND < 0.25	*
Tetrachloroethene	ug/L	-/-	Grab	ND < 0.32	*
Toluene	ug/L	-/-	Grab	ND < 0.36	*
Xylenes (Total)	ug/L	-/-	Grab	ND < 0.90	*
1,1,1-Trichloroethane	ug/L	-/-	Grab	ND < 0.30	*
1,1,2-Trichloroethane	ug/L	-/-	Grab	ND < 0.30	*
Trichloroethene	ug/L	5.0/-	Grab	ND < 0.26	*
Trichlorofluoromethane	ug/L	-/-	Grab	ND < 0.34	*
Trichlorotrifluoroethane (Freon 113)	ug/L	-/-	Grab	ND < 0.50	*
Vinyl Chloride	ug/L	-/-	Grab	ND < 0.40	*
<b>TPH</b>					
EFH (C13 - C22)	mg/L	-/-	ANR	ANR	ANR
GRO (C4 - C12)	mg/L	-/-	ANR	ANR	ANR
<b>ADDITIONAL ANALYTES</b>					
1,2-Dichloro-1,1,2-trifluoroethane	ug/L	-/-	ANR	ANR	ANR
1,1,2,2-Tetrachloroethane	ug/L	-/-	ANR	ANR	ANR

See attached notes for abbreviations, definitions, and other explanations for the data presented.

<sup>(a)</sup> Based on peak LA River flow, sampling event on 7/20-7/21/11 is a dry discharge.

**OUTFALL 002 (South Slope below R-2 Pond)**

**THIRD QUARTER 2011 REPORTING SUMMARY  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

**July 1 through September 30, 2011**

ANALYTE	UNITS	Benchmark Limit Daily Max/Monthly Avg	07/20/2011-07/21/2011 <sup>(a)</sup>		
			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
1,2,4-Trichlorobenzene	ug/L	-/-	ANR	ANR	ANR
1,2-Dichlorobenzene	ug/L	-/-	ANR	ANR	ANR
1,2-Dichloropropane	ug/L	-/-	ANR	ANR	ANR
1,2-Diphenylhydrazine/Azobenzene	ug/L	-/-	ANR	ANR	ANR
1,3-Dichlorobenzene	ug/L	-/-	ANR	ANR	ANR
1,4-Dichlorobenzene	ug/L	-/-	ANR	ANR	ANR
2,4,6-Trichlorophenol	ug/L	13/-	Comp	ND < 0.0952	*
2,4-Dichlorophenol	ug/L	-/-	ANR	ANR	ANR
2,4-Dimethylphenol	ug/L	-/-	ANR	ANR	ANR
2,4-Dinitrophenol	ug/L	-/-	ANR	ANR	ANR
2,4-Dinitrotoluene	ug/L	18/-	Comp	ND < 0.190	*
2,6-Dinitrotoluene	ug/L	-/-	ANR	ANR	ANR
2-Chloroethylvinylether	ug/L	-/-	ANR	ANR	ANR
2-Chloronaphthalene	ug/L	-/-	ANR	ANR	ANR
2-Chlorophenol	ug/L	-/-	ANR	ANR	ANR
2-Methyl-4,6-dinitrophenol	ug/L	-/-	ANR	ANR	ANR
2-Nitrophenol	ug/L	-/-	ANR	ANR	ANR
3,3'-Dichlorobenzidine	ug/L	-/-	ANR	ANR	ANR
4,4'-DDD	ug/L	-/-	ANR	ANR	ANR
4,4'-DDE	ug/L	-/-	ANR	ANR	ANR
4,4'-DDT	ug/L	-/-	ANR	ANR	ANR
4-Bromophenylphenylether	ug/L	-/-	ANR	ANR	ANR
4-Chloro-3-methylphenol	ug/L	-/-	ANR	ANR	ANR
4-Chlorophenylphenylether	ug/L	-/-	ANR	ANR	ANR
4-Nitrophenol	ug/L	-/-	ANR	ANR	ANR
Acenaphthene	ug/L	-/-	ANR	ANR	ANR
Acrolein	ug/L	-/-	ANR	ANR	ANR
Acrylonitrile	ug/L	-/-	ANR	ANR	ANR
Acute Toxicity	% SURVIVAL	70-100/-	ANR	ANR	ANR
Aldrin	ug/L	-/-	ANR	ANR	ANR
alpha-BHC	ug/L	0.03/-	Comp	ND < 0.0024	*
Anthracene	ug/L	-/-	ANR	ANR	ANR
Aroclor-1016	ug/L	-/-	ANR	ANR	ANR
Aroclor-1221	ug/L	-/-	ANR	ANR	ANR
Aroclor-1232	ug/L	-/-	ANR	ANR	ANR
Aroclor-1242	ug/L	-/-	ANR	ANR	ANR
Aroclor-1248	ug/L	-/-	ANR	ANR	ANR
Aroclor-1254	ug/L	-/-	ANR	ANR	ANR
Comp	ANR				

**OUTFALL 002 (South Slope below R-2 Pond)**

**THIRD QUARTER 2011 REPORTING SUMMARY  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

**July 1 through September 30, 2011**

ANALYTE	UNITS	Benchmark Limit Daily Max/Monthly Avg	07/20/2011-07/21/2011 <sup>(a)</sup>		
			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
Aroclor-1260	ug/L	-/-	ANR	ANR	ANR
Benzidine	ug/L	-/-	ANR	ANR	ANR
Benzo(a)anthracene	ug/L	-/-	ANR	ANR	ANR
Benzo(a)pyrene	ug/L	-/-	ANR	ANR	ANR
Benzo(b)fluoranthene	ug/L	-/-	ANR	ANR	ANR
Benzo(g,h,i)perylene	ug/L	-/-	ANR	ANR	ANR
Benzo(k)fluoranthene	ug/L	-/-	ANR	ANR	ANR
beta-BHC	ug/L	-/-	ANR	ANR	ANR
bis (2-Chloroethyl) ether	ug/L	-/-	ANR	ANR	ANR
bis (2-ethylhexyl) Phthalate	ug/L	4.0/-	Comp	ND < 1.62	*
bis(2-Chloroethoxy) methane	ug/L	-/-	ANR	ANR	ANR
bis(2-Chloroisopropyl) ether	ug/L	-/-	ANR	ANR	ANR
Bromodichloromethane	ug/L	-/-	ANR	ANR	ANR
Bromoform	ug/L	-/-	ANR	ANR	ANR
Bromomethane	ug/L	-/-	ANR	ANR	ANR
Butylbenzylphthalate	ug/L	-/-	ANR	ANR	ANR
Chlordane	ug/L	-/-	ANR	ANR	ANR
Chlorobenzene	ug/L	-/-	ANR	ANR	ANR
Chloroethane	ug/L	-/-	ANR	ANR	ANR
Chloromethane	ug/L	-/-	ANR	ANR	ANR
Chronic Toxicity	TUC	1.0/-	ANR	ANR	ANR
Chrysene	ug/L	-/-	ANR	ANR	ANR
cis-1,2-Dichloroethene	ug/L	-/-	ANR	ANR	ANR
cis-1,3-Dichloropropene	ug/L	-/-	ANR	ANR	ANR
Cyclohexane	ug/L	-/-	ANR	ANR	ANR
delta-BHC	ug/L	-/-	ANR	ANR	ANR
Dibenzo(a,h)anthracene	ug/L	-/-	ANR	ANR	ANR
Dibromochloromethane	ug/L	-/-	ANR	ANR	ANR
Dieldrin	ug/L	-/-	ANR	ANR	ANR
Diethylphthalate	ug/L	-/-	ANR	ANR	ANR
Dimethylphthalate	ug/L	-/-	ANR	ANR	ANR
Di-n-butylphthalate	ug/L	-/-	ANR	ANR	ANR
Di-n-octylphthalate	ug/L	-/-	ANR	ANR	ANR
Endosulfan I	ug/L	-/-	ANR	ANR	ANR
Endosulfan II	ug/L	-/-	ANR	ANR	ANR
Endosulfan sulfate	ug/L	-/-	ANR	ANR	ANR
Endrin	ug/L	-/-	ANR	ANR	ANR
Endrin aldehyde	ug/L	-/-	ANR	ANR	ANR

See attached notes for abbreviations, definitions, and other explanations for the data presented.

<sup>(a)</sup> Based on peak LA River flow, sampling event on 7/20-7/21/11 is a dry discharge.



**OUTFALL 002 (South Slope below R-2 Pond)**

**THIRD QUARTER 2011 REPORTING SUMMARY  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

**July 1 through September 30, 2011**

ANALYTE	UNITS	Benchmark Limit Daily Max/Monthly Avg	07/20/2011-07/21/2011 <sup>(a)</sup>		
			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
Fluoranthene	ug/L	-/-	ANR	ANR	ANR
Fluorene	ug/L	-/-	ANR	ANR	ANR
Heptachlor	ug/L	-/-	ANR	ANR	ANR
Heptachlor epoxide	ug/L	-/-	ANR	ANR	ANR
Hexachlorobenzene	ug/L	-/-	ANR	ANR	ANR
Hexachlorobutadiene	ug/L	-/-	ANR	ANR	ANR
Hexachlorocyclopentadiene	ug/L	-/-	ANR	ANR	ANR
Hexachloroethane	ug/L	-/-	ANR	ANR	ANR
Indeno(1,2,3-cd)pyrene	ug/L	-/-	ANR	ANR	ANR
Isophorone	ug/L	-/-	ANR	ANR	ANR
Lindane (gamma-BHC)	ug/L	-/-	ANR	ANR	ANR
Methylene Chloride	ug/L	-/-	ANR	ANR	ANR
Monomethyl Hydrazine	ug/L	-/-	ANR	ANR	ANR
Naphthalene	ug/L	-/-	ANR	ANR	ANR
Nitrobenzene	ug/L	-/-	ANR	ANR	ANR
n-Nitrosodimethylamine	ug/L	16/-	Comp	ND < 0.0952	*
n-Nitroso-di-n-propylamine	ug/L	-/-	ANR	ANR	ANR
n-Nitrosodiphenylamine	ug/L	-/-	ANR	ANR	ANR
Pentachlorophenol	ug/L	16.5/-	Comp	ND < 0.0952	*
Phenanthrene	ug/L	-/-	ANR	ANR	ANR
Phenol	ug/L	-/-	ANR	ANR	ANR
Pyrene	ug/L	-/-	ANR	ANR	ANR
Toxaphene	ug/L	-/-	ANR	ANR	ANR
trans-1,2-Dichloroethene	ug/L	-/-	ANR	ANR	ANR
trans-1,3-Dichloropropene	ug/L	-/-	ANR	ANR	ANR

See attached notes for abbreviations, definitions, and other explanations for the data presented.

<sup>(a)</sup> Based on peak LA River flow, sampling event on 7/20-7/21/11 is a dry discharge.



**OUTFALL 002 (South Slope below R-2 Pond)**

**THIRD QUARTER 2011 REPORTING SUMMARY  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

July 1 through September 30, 2011

ANALYTE	UNITS	Benchmark Limit Daily Max/Monthly Avg	07/20/2011-07/21/2011		
			Sample Type	Result	Concentration Result Validation Qualifier
Max Discharge for event	MGD	160	Meas	0.75727	
Ammonia as Nitrogen (N)	LBS/DAY	13,500/-	Comp	ND	*
Biochemical Oxygen Demand (BOD 5 day)	LBS/DAY	40,032/-	Comp	10.74	Ja* (DNQ)
Chloride	LBS/DAY	200,160/-	Comp	265.25	*
Surfactants (MBAS)	LBS/DAY	667/-	Comp	0.59	Ja* (DNQ)
Nitrate + Nitrite as Nitrogen (N)	LBS/DAY	10,700/-	Comp	ND	*
Nitrate as Nitrogen (N)	LBS/DAY	10,700/-	Comp	0.56	Ja* (DNQ)
Nitrite-N	LBS/DAY	1,334/-	Comp	ND	*
Oil & Grease	LBS/DAY	20,016/-	Grab	ND	*
Perchlorate	LBS/DAY	8.0/-	Comp	ND	U
Sulfate	LBS/DAY	400,320/-	Comp	884.18	*
Total Cyanide	LBS/DAY	11/-	Comp	ND	*
Total Dissolved Solids	LBS/DAY	1,270,000/-	Comp	2778.86	*
Total Suspended Solids	LBS/DAY	60,048/-	Comp	ND	*
Cadmium	LBS/DAY	4.1/-	Comp	ND	*
Copper	LBS/DAY	19/-	Comp	0.01	Ja* (DNQ)
Iron	LBS/DAY	400/-	Comp	0.26	B*
Lead	LBS/DAY	6.9/-	Comp	ND	*
Mercury	LBS/DAY	0.13/-	Comp	ND	U
Selenium	LBS/DAY	11/-	Comp	ND	*
Zinc	LBS/DAY	159/-	Comp	ND	*
1,2-Dichloroethane	LBS/DAY	0.67/-	Grab	ND	*
1,1-Dichloroethene	LBS/DAY	8.0/-	Grab	ND	*
Trichloroethene	LBS/DAY	6.7/-	Grab	ND	*
2,4,6-Trichlorophenol	LBS/DAY	17/-	Comp	ND	*
2,4-Dinitrotoluene	LBS/DAY	24/-	Comp	ND	*
alpha-BHC	LBS/DAY	0.04/-	Comp	ND	*
bis (2-ethylhexyl) Phthalate	LBS/DAY	5.3/-	Comp	ND	*
n-Nitrosodimethylamine	LBS/DAY	22/-	Comp	ND	*
Pentachlorophenol	LBS/DAY	22/-	Comp	ND	*
TCDD TEQ_NoDNQ	LBS/DAY	3.70E-08/-	Comp	ND	--

**OUTFALL 018**

**THIRD QUARTER 2011 REPORTING SUMMARY  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

**July 1 through September 30, 2011**

ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg	SAMPLE TYPE	07/19/2011-07/20/2011 <sup>(a)</sup>	
				RESULT	VALIDATION QUALIFIER
Ammonia as Nitrogen (N)	mg/L	10.1/-	Comp	ND < 0.500	*
Biochemical Oxygen Demand (BOD 5 day)	mg/L	30/-	Comp	ND < 0.50	*
Chloride	mg/L	150/-	Comp	42	*
Dissolved Oxygen	mg/L	-/-	Grab	4.98	*
Specific Conductivity (Lab)	umhos/cm	-/-	Grab	570	--
Surfactants (MBAS)	mg/L	0.5/-	Comp	0.057	Ja* (DNQ)
Fluoride	mg/L	1.6/-	ANR	ANR	ANR
Nitrate + Nitrite as Nitrogen (N)	mg/L	8/-	Comp	ND < 0.15	*
Nitrate as Nitrogen (N)	mg/L	8/-	Comp	0.089	Ja* (DNQ)
Nitrite-N	mg/L	1/-	Comp	ND < 0.090	*
Oil & Grease	mg/L	15/-	Grab	ND < 1.3	*
Perchlorate	ug/L	6.0/-	Comp	ND < 0.90	U
pH (Field)	pH units	6.5-8.5/-	Grab	6.8	*
Total Settleable Solids	ml/L	0.3/-	Grab	ND < 0.10	*
Sulfate	mg/L	300/-	Comp	140	*
Temperature	deg. F	86/-	Grab	77	*
Total Cyanide	ug/L	8.5/-	Comp	ND < 2.2	*
Total Dissolved Solids	mg/L	950/-	Comp	400	*
Total Organic Carbon	mg/L	-/-	ANR	ANR	ANR
Total Residual Chlorine (Field)	mg/L	0.1/-	ANR	ANR	ANR
Total Suspended Solids	mg/L	45/-	Comp	ND < 1.0	*
Turbidity	NTU	-/-	Comp	0.090	J (DNQ)

**OUTFALL 018**

**THIRD QUARTER 2011 REPORTING SUMMARY  
THE BOEING COMPANY**

## OUTFALL 018

**OUTFALL 018**

**THIRD QUARTER 2011 REPORTING SUMMARY  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

**July 1 through September 30, 2011**

ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg	07/19/2011-07/20/2011 <sup>(a)</sup>		
			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
Aroclor-1260	ug/L	-/-	ANR	ANR	ANR
Benzidine	ug/L	-/-	ANR	ANR	ANR
Benzo(a)anthracene	ug/L	-/-	ANR	ANR	ANR
Benzo(a)pyrene	ug/L	-/-	ANR	ANR	ANR
Benzo(b)fluoranthene	ug/L	-/-	ANR	ANR	ANR
Benzo(g,h,i)perylene	ug/L	-/-	ANR	ANR	ANR
Benzo(k)fluoranthene	ug/L	-/-	ANR	ANR	ANR
beta-BHC	ug/L	-/-	ANR	ANR	ANR
bis (2-Chloroethyl) ether	ug/L	-/-	ANR	ANR	ANR
bis (2-ethylhexyl) Phthalate	ug/L	4.0/-	Comp	ND < 1.60	*
bis(2-Chloroethoxy) methane	ug/L	-/-	ANR	ANR	ANR
bis(2-Chloroisopropyl) ether	ug/L	-/-	ANR	ANR	ANR
Bromodichloromethane	ug/L	-/-	ANR	ANR	ANR
Bromoform	ug/L	-/-	ANR	ANR	ANR
Bromomethane	ug/L	-/-	ANR	ANR	ANR
Butylbenzylphthalate	ug/L	-/-	ANR	ANR	ANR
Chlordane	ug/L	-/-	ANR	ANR	ANR
Chlorobenzene	ug/L	-/-	ANR	ANR	ANR
Chloroethane	ug/L	-/-	ANR	ANR	ANR
Chloromethane	ug/L	-/-	ANR	ANR	ANR
Chronic Toxicity	TUC	1.0/-	ANR	ANR	ANR
Chrysene	ug/L	-/-	ANR	ANR	ANR
cis-1,2-Dichloroethene	ug/L	-/-	ANR	ANR	ANR
cis-1,3-Dichloropropene	ug/L	-/-	ANR	ANR	ANR
Cyclohexane	ug/L	-/-	ANR	ANR	ANR
delta-BHC	ug/L	-/-	ANR	ANR	ANR
Dibenzo(a,h)anthracene	ug/L	-/-	ANR	ANR	ANR
Dibromochloromethane	ug/L	-/-	ANR	ANR	ANR
Dieldrin	ug/L	-/-	ANR	ANR	ANR
Diethylphthalate	ug/L	-/-	ANR	ANR	ANR
Dimethylphthalate	ug/L	-/-	ANR	ANR	ANR
Di-n-butylphthalate	ug/L	-/-	ANR	ANR	ANR
Di-n-octylphthalate	ug/L	-/-	ANR	ANR	ANR
Endosulfan I	ug/L	-/-	ANR	ANR	ANR
Endosulfan II	ug/L	-/-	ANR	ANR	ANR
Endosulfan sulfate	ug/L	-/-	ANR	ANR	ANR
Endrin	ug/L	-/-	ANR	ANR	ANR
Endrin aldehyde	ug/L	-/-	ANR	ANR	ANR

See attached notes for abbreviations, definitions, and other explanations for the data presented.

<sup>(a)</sup> Based on peak LA River flow, sampling event on 7/19-7/20/11 is a dry discharge.

**OUTFALL 018**

**THIRD QUARTER 2011 REPORTING SUMMARY  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

July 1 through September 30, 2011

ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg	07/19/2011-07/20/2011 <sup>(a)</sup>		
			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
Fluoranthene	ug/L	-/-	ANR	ANR	ANR
Fluorene	ug/L	-/-	ANR	ANR	ANR
Heptachlor	ug/L	-/-	ANR	ANR	ANR
Heptachlor epoxide	ug/L	-/-	ANR	ANR	ANR
Hexachlorobenzene	ug/L	-/-	ANR	ANR	ANR
Hexachlorobutadiene	ug/L	-/-	ANR	ANR	ANR
Hexachlorocyclopentadiene	ug/L	-/-	ANR	ANR	ANR
Hexachloroethane	ug/L	-/-	ANR	ANR	ANR
Indeno(1,2,3-cd)pyrene	ug/L	-/-	ANR	ANR	ANR
Isophorone	ug/L	-/-	ANR	ANR	ANR
Lindane (gamma-BHC)	ug/L	-/-	ANR	ANR	ANR
Methylene Chloride	ug/L	-/-	ANR	ANR	ANR
Monomethyl Hydrazine	ug/L	-/-	ANR	ANR	ANR
Naphthalene	ug/L	-/-	ANR	ANR	ANR
Nitrobenzene	ug/L	-/-	ANR	ANR	ANR
n-Nitrosodimethylamine	ug/L	16/-	Comp	ND < 0.0943	*
n-Nitroso-di-n-propylamine	ug/L	-/-	ANR	ANR	ANR
n-Nitrosodiphenylamine	ug/L	-/-	ANR	ANR	ANR
Pentachlorophenol	ug/L	16.5/-	Comp	ND < 0.0943	*
Phenanthrene	ug/L	-/-	ANR	ANR	ANR
Phenol	ug/L	-/-	ANR	ANR	ANR
Pyrene	ug/L	-/-	ANR	ANR	ANR
Toxaphene	ug/L	-/-	ANR	ANR	ANR
trans-1,2-Dichloroethene	ug/L	-/-	ANR	ANR	ANR
trans-1,3-Dichloropropene	ug/L	-/-	ANR	ANR	ANR

See attached notes for abbreviations, definitions, and other explanations for the data presented.

<sup>(a)</sup> Based on peak LA River flow, sampling event on 7/19-7/20/11 is a dry discharge.



8-HxCDD	9.70E-07
8-HxCDF	5.00E-07
8-HxCDD	8.50E-07
8-HxCDF	5.20E-07
9-HxCDD	8.70E-07
9-HxCDF	5.20E-07
-PeCDD	1.50E-06
-PeCDF	6.40E-07
8-HxCDF	4.40E-07
-PeCDF	7.00E-07
CDD	8.40E-07
CDF	6.90E-07
	7.10E-07
	8.20E-07

**TEQ w/out DNQ Values**

ched notes for abbreviations, definitions, and c

UJ (*III)	0.1	0.3	ND
J (DNQ)	0.1	0.08	ND
UJ (*III)	0.1	0.1	ND
J (DNQ)	0.1	0.2	ND
UJ (*III)	0.1	0.1	ND
J (DNQ)	0.1	0.6	ND
U	1	0.9	ND
U	0.05	0.2	ND
UJ (*III)	0.1	0.7	ND
U	0.5	1.6	ND
U	1	1	ND
U	0.1	0.8	ND
U (B)	0.0001	0.01	ND
U (B)	0.0001	0.02	ND

ND

**TCDD TEQ PERMIT LIMIT = 2.80E-08**

he data presented in this table.

**OUTFALL 018 (R-2 Spillway)**

**THIRD QUARTER 2011 REPORTING SUMMARY  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

**July 1 through September 30, 2011**

<b>ANALYTE</b>	<b>UNITS</b>	<b>Permit Limit Daily Max/Monthly A</b>	<b>07/19/2011-07/20/2011</b>
----------------	--------------	---	------------------------------

**OUTFALL 019 (Treatment System)**

**THIRD QUARTER 2011 REPORTING SUMMARY  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

**July 1 through September 30, 2011**

ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg	08/10/2011-08/11/2011 <sup>(a)</sup>		
			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
Ammonia as Nitrogen (N)	mg/L	10.1/1.96	Comp	ND < 0.500	*
Biochemical Oxygen Demand (BOD 5 day)	mg/L	30/20	Comp	ND < 0.50	*
Chloride	mg/L	150/-	Comp	120	*
Dissolved Oxygen	mg/L	-/-	Grab	8.36	*
Specific Conductivity (Lab)	umhos/cm	-/-	Grab	930	--
Surfactants (MBAS)	mg/L	0.5/-	Comp	ND < 0.050	*
Fluoride	mg/L	1.6/-	ANR	ANR	ANR
Nitrate + Nitrite as Nitrogen (N)	mg/L	8/-	Comp	ND < 0.15	*
Nitrate as Nitrogen (N)	mg/L	8/-	Comp	0.13	*
Nitrite-N	mg/L	1/-	Comp	ND < 0.090	*
Oil & Grease	mg/L	15/10	Grab	ND < 1.3	*
Perchlorate	ug/L	6.0/-	Comp	ND < 0.95	U
pH (Field)	pH units	6.5-8.5/-	Grab	7.5	*
Total Settleable Solids	ml/L	0.3/0.1	Grab	ND < 0.10	*
Sulfate	mg/L	300/-	Comp	120	*
Temperature	deg. F	86/-	Grab	72	*
Total Cyanide	ug/L	8.5/4.3	Comp	ND < 2.2	*
Total Dissolved Solids	mg/L	950/-	Comp	650	*
Hardness	mg/L	-/-	Comp	390	--
Hardness, dissolved	mg/L	-/-	Comp	430	--
Total Organic Carbon	mg/L	-/-	Comp	5.1	--
Total Residual Chlorine (Field)	mg/L	0.1/-	ANR	ANR	ANR
Total Suspended Solids	mg/L	45/15	Comp	ND < 1.0	*
Turbidity	NTU	-/-	Comp	ND < 0.040	*
Volume Discharged	MGD	160/-	Meas	0.049	*
<b>METALS</b>					
Antimony	ug/L	6.0/-	ANR	ANR	ANR
Arsenic	ug/L	10/-	ANR	ANR	ANR
Barium	mg/L	1.0/-	ANR	ANR	ANR
Beryllium	ug/L	4.0/-	ANR	ANR	ANR
Boron	mg/L	-/-	ANR	ANR	ANR
Cadmium	ug/L	(4.0) 3.1/2.0	Comp	ND < 0.10	*
Cadmium, dissolved	ug/L	-/-	Comp	ND < 0.10	*
Calcium	mg/L	-/-	Comp	120	--
Calcium, Dissolved	mg/L	-/-	Comp	130	--
Chromium	ug/L	16/8	ANR	ANR	ANR
Chromium VI	ug/L	16/8	ANR	ANR	ANR
Cobalt	ug/L	-/-	ANR	ANR	ANR
Copper	ug/L	14/7.1	Comp	ND < 0.500	*

See attached notes for abbreviations, definitions, and other explanations for the data presented.

<sup>(a)</sup> Based on peak LA River flow, sampling event on 8/10-8/11/11 and 9/7-9/8/11 are dry discharges.

**OUTFALL 019 (Treatment System)**

**THIRD QUARTER 2011 REPORTING SUMMARY  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

July 1 through September 30, 2011

ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg	08/10/2011-08/11/2011 <sup>(a)</sup>		
			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
Copper, dissolved	ug/L	-/-	Comp	0.613	Ja* (DNQ)
Iron	mg/L	0.3/-	ANR	ANR	ANR
Lead	ug/L	5.2/2.6	Comp	ND < 0.20	*
Lead, dissolved	ug/L	-/-	Comp	ND < 0.20	*
Magnesium	mg/L	-/-	Comp	21	--
Magnesium, Dissolved	mg/L	-/-	Comp	24	--
Manganese	ug/L	50/-	ANR	ANR	ANR
Mercury	ug/L	0.10/0.05	Comp	ND < 0.10	U
Mercury, dissolved	ug/L	-/-	Comp	ND < 0.10	U
Nickel	ug/L	96/35	ANR	ANR	ANR
Selenium	ug/L	(5) 8.2/4.1	Comp	ND < 0.50	*
Selenium, dissolved	ug/L	-/-	Comp	ND < 0.50	*
Silver	ug/L	4.1/2.0	ANR	ANR	ANR
Thallium	ug/L	2.0/-	ANR	ANR	ANR
Vanadium	ug/L	-/-	ANR	ANR	ANR
Zinc	ug/L	119/54	Comp	ND < 6.00	U
Zinc, Dissolved	ug/L	-/-	Comp	6.79	J (DNQ)
<b>ORGANICS</b>					
Benzene	ug/L	-/-	Grab	ND < 0.28	*
Carbon Tetrachloride	ug/L	-/-	Grab	ND < 0.28	*
Chloroform	ug/L	-/-	Grab	ND < 0.33	*
1,1-Dichloroethane	ug/L	-/-	Grab	ND < 0.40	*
1,2-Dichloroethane	ug/L	-/-	Grab	ND < 0.28	*
1,1-Dichloroethene	ug/L	6.0/3.2	Grab	ND < 0.42	*
1,4-Dioxane	ug/L	-/-	ANR	ANR	ANR
Ethylbenzene	ug/L	-/-	Grab	ND < 0.25	*
Tetrachloroethene	ug/L	-/-	Grab	ND < 0.32	*
Toluene	ug/L	-/-	Grab	ND < 0.36	*
Xylenes (Total)	ug/L	-/-	Grab	ND < 0.90	*
1,1,1-Trichloroethane	ug/L	-/-	Grab	ND < 0.30	*
1,1,2-Trichloroethane	ug/L	-/-	Grab	ND < 0.30	*
Trichloroethene	ug/L	5.0/-	Grab	ND < 0.26	*
Trichlorofluoromethane	ug/L	-/-	Grab	ND < 0.34	*
Trichlorotrifluoroethane (Freon 113)	ug/L	-/-	Grab	ND < 0.50	*
Vinyl Chloride	ug/L	-/-	Grab	ND < 0.40	*
<b>TPH</b>					
EFH (C13 - C22)	mg/L	-/-	ANR	ANR	ANR
GRO (C4 - C12)	mg/L	-/-	ANR	ANR	ANR
<b>ADDITIONAL ANALYTES</b>					
1,2-Dichloro-1,1,2-trifluoroethane	ug/L	-/-	ANR	ANR	ANR

See attached notes for abbreviations, definitions, and other explanations for the data presented.

<sup>(a)</sup> Based on peak LA River flow, sampling event on 8/10-8/11/11 and 9/7-9/8/11 are dry discharges.

## OUTFALL 019 (Treatment System)

### THIRD QUARTER 2011 REPORTING SUMMARY THE BOEING COMPANY SANTA SUSANA FIELD LABORATORY NPDES PERMIT CA0001309

July 1 through September 30, 2011

ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg	08/10/2011-08/11/2011 <sup>(a)</sup>		
			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
1,1,2,2-Tetrachloroethane	ug/L	-/-	ANR	ANR	ANR
1,2,4-Trichlorobenzene	ug/L	-/-	ANR	ANR	ANR
1,2-Dichlorobenzene	ug/L	-/-	ANR	ANR	ANR
1,2-Dichloropropane	ug/L	-/-	ANR	ANR	ANR
1,2-Diphenylhydrazine/Azobenzene	ug/L	-/-	ANR	ANR	ANR
1,3-Dichlorobenzene	ug/L	-/-	ANR	ANR	ANR
1,4-Dichlorobenzene	ug/L	-/-	ANR	ANR	ANR
2,4,6-Trichlorophenol	ug/L	13/6.5	Comp	ND < 0.100	*
2,4-Dichlorophenol	ug/L	-/-	ANR	ANR	ANR
2,4-Dimethylphenol	ug/L	-/-	ANR	ANR	ANR
2,4-Dinitrophenol	ug/L	-/-	ANR	ANR	ANR
2,4-Dinitrotoluene	ug/L	18/9.1	Comp	ND < 0.200	*
2,6-Dinitrotoluene	ug/L	-/-	ANR	ANR	ANR
2-Chloroethylvinylether	ug/L	-/-	ANR	ANR	ANR
2-Chloronaphthalene	ug/L	-/-	ANR	ANR	ANR
2-Chlorophenol	ug/L	-/-	ANR	ANR	ANR
2-Methyl-4,6-dinitrophenol	ug/L	-/-	ANR	ANR	ANR
2-Nitrophenol	ug/L	-/-	ANR	ANR	ANR
3,3'-Dichlorobenzidine	ug/L	-/-	ANR	ANR	ANR
4,4'-DDD	ug/L	-/-	ANR	ANR	ANR
4,4'-DDE	ug/L	-/-	ANR	ANR	ANR
4,4'-DDT	ug/L	-/-	ANR	ANR	ANR
4-Bromophenylphenylether	ug/L	-/-	ANR	ANR	ANR
4-Chloro-3-methylphenol	ug/L	-/-	ANR	ANR	ANR
4-Chlorophenylphenylether	ug/L	-/-	ANR	ANR	ANR
4-Nitrophenol	ug/L	-/-	ANR	ANR	ANR
Acenaphthene	ug/L	-/-	ANR	ANR	ANR
Acrolein	ug/L	-/-	ANR	ANR	ANR
Acrylonitrile	ug/L	-/-	ANR	ANR	ANR
Acute Toxicity	% SURVIVAL	70-100/-	Comp	100	*
Aldrin	ug/L	-/-	ANR	ANR	ANR
alpha-BHC	ug/L	0.03/0.01	Comp	ND < 0.0024	*
Anthracene	ug/L	-/-	ANR	ANR	ANR
Aroclor-1016	ug/L	-/-	ANR	ANR	ANR
Aroclor-1221	ug/L	-/-	ANR	ANR	ANR
Aroclor-1232	ug/L	-/-	ANR	ANR	ANR
Aroclor-1242	ug/L	-/-	ANR	ANR	ANR
Aroclor-1248	ug/L	-/-	ANR	ANR	ANR
Aroclor-1254	ug/L	-/-	ANR	ANR	ANR
Aroclor-1260	ug/L	-/-	ANR	ANR	ANR

See attached notes for abbreviations, definitions, and other explanations for the data presented.

<sup>(a)</sup> Based on peak LA River flow, sampling event on 8/10-8/11/11 and 9/7-9/8/11 are dry discharges.

**OUTFALL 019 (Treatment System)**

**THIRD QUARTER 2011 REPORTING SUMMARY  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

**July 1 through September 30, 2011**

ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg	08/10/2011-08/11/2011 <sup>(a)</sup>		
			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
Benzidine	ug/L	-/-	ANR	ANR	ANR
Benzo(a)anthracene	ug/L	-/-	ANR	ANR	ANR
Benzo(a)pyrene	ug/L	-/-	ANR	ANR	ANR
Benzo(b)fluoranthene	ug/L	-/-	ANR	ANR	ANR
Benzo(g,h,i)perylene	ug/L	-/-	ANR	ANR	ANR
Benzo(k)fluoranthene	ug/L	-/-	ANR	ANR	ANR
beta-BHC	ug/L	-/-	ANR	ANR	ANR
bis (2-Chloroethyl) ether	ug/L	-/-	ANR	ANR	ANR
bis (2-ethylhexyl) Phthalate	ug/L	4.0/-	Comp	ND < 1.70	*
bis(2-Chloroethoxy) methane	ug/L	-/-	ANR	ANR	ANR
bis(2-Chloroisopropyl) ether	ug/L	-/-	ANR	ANR	ANR
Bromodichloromethane	ug/L	-/-	ANR	ANR	ANR
Bromoform	ug/L	-/-	ANR	ANR	ANR
Bromomethane	ug/L	-/-	ANR	ANR	ANR
Butylbenzylphthalate	ug/L	-/-	ANR	ANR	ANR
Chlordane	ug/L	-/-	ANR	ANR	ANR
Chlorobenzene	ug/L	-/-	ANR	ANR	ANR
Chloroethane	ug/L	-/-	ANR	ANR	ANR
Chloromethane	ug/L	-/-	ANR	ANR	ANR
Chronic Toxicity	TUC	1.0/-	ANR	ANR	ANR
Chrysene	ug/L	-/-	ANR	ANR	ANR
cis-1,2-Dichloroethene	ug/L	-/-	ANR	ANR	ANR
cis-1,3-Dichloropropene	ug/L	-/-	ANR	ANR	ANR
Cyclohexane	ug/L	-/-	ANR	ANR	ANR
delta-BHC	ug/L	-/-	ANR	ANR	ANR
Dibenzo(a,h)anthracene	ug/L	-/-	ANR	ANR	ANR
Dibromochloromethane	ug/L	-/-	ANR	ANR	ANR
Dieldrin	ug/L	-/-	ANR	ANR	ANR
Diethylphthalate	ug/L	-/-	ANR	ANR	ANR
Dimethylphthalate	ug/L	-/-	ANR	ANR	ANR
Di-n-butylphthalate	ug/L	-/-	ANR	ANR	ANR
Di-n-octylphthalate	ug/L	-/-	ANR	ANR	ANR
Endosulfan I	ug/L	-/-	ANR	ANR	ANR
Endosulfan II	ug/L	-/-	ANR	ANR	ANR
Endosulfan sulfate	ug/L	-/-	ANR	ANR	ANR
Endrin	ug/L	-/-	ANR	ANR	ANR
Endrin aldehyde	ug/L	-/-	ANR	ANR	ANR
Fluoranthene	ug/L	-/-	ANR	ANR	ANR
Fluorene	ug/L	-/-	ANR	ANR	ANR
Heptachlor	ug/L	-/-	ANR	ANR	ANR

**OUTFALL 019 (Treatment System)**

**THIRD QUARTER 2011 REPORTING SUMMARY  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

**July 1 through September 30, 2011**

ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg	08/10/2011-08/11/2011 <sup>(a)</sup>		
			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
Heptachlor epoxide	ug/L	-/-	ANR	ANR	ANR
Hexachlorobenzene	ug/L	-/-	ANR	ANR	ANR
Hexachlorobutadiene	ug/L	-/-	ANR	ANR	ANR
Hexachlorocyclopentadiene	ug/L	-/-	ANR	ANR	ANR
Hexachloroethane	ug/L	-/-	ANR	ANR	ANR
Indeno(1,2,3-cd)pyrene	ug/L	-/-	ANR	ANR	ANR
Isophorone	ug/L	-/-	ANR	ANR	ANR
Lindane (gamma-BHC)	ug/L	-/-	ANR	ANR	ANR
Methylene Chloride	ug/L	-/-	ANR	ANR	ANR
Monomethyl Hydrazine	ug/L	-/-	ANR	ANR	ANR
Naphthalene	ug/L	-/-	ANR	ANR	ANR
Nitrobenzene	ug/L	-/-	ANR	ANR	ANR
n-Nitrosodimethylamine	ug/L	16/8.1	Comp	ND < 0.100	*
n-Nitroso-di-n-propylamine	ug/L	-/-	ANR	ANR	ANR
n-Nitrosodiphenylamine	ug/L	-/-	ANR	ANR	ANR
Pentachlorophenol	ug/L	16.5/8.2	Comp	ND < 0.100	*
Phenanthrene	ug/L	-/-	ANR	ANR	ANR
Phenol	ug/L	-/-	ANR	ANR	ANR
Pyrene	ug/L	-/-	ANR	ANR	ANR
Toxaphene	ug/L	-/-	ANR	ANR	ANR
trans-1,2-Dichloroethene	ug/L	-/-	ANR	ANR	ANR
trans-1,3-Dichloropropene	ug/L	-/-	ANR	ANR	ANR

See attached notes for abbreviations, definitions, and other explanations for the data presented.

<sup>(a)</sup> Based on peak LA River flow, sampling event on 8/10-8/11/11 and 9/7-9/8/11 are dry discharges.

## OUTFALL 019 (Treatment System)

### THIRD QUARTER 2011 REPORTING SUMMARY THE BOEING COMPANY SANTA SUSANA FIELD LABORATORY NPDES PERMIT CA0001309

July 1 through September 30, 2011

ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg	09/07/2011-09/08/2011 <sup>(a)</sup>		
			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
Ammonia as Nitrogen (N)	mg/L	10.1/1.96	Comp	ND < 0.500	*
Biochemical Oxygen Demand (BOD 5 day)	mg/L	30/20	Comp	ND < 0.50	*
Chloride	mg/L	150/-	Comp	170	--
Dissolved Oxygen	mg/L	-/-	Grab	6.82	*
Specific Conductivity (Lab)	umhos/cm	-/-	ANR	ANR	ANR
Surfactants (MBAS)	mg/L	0.5/-	Comp	ND < 0.050	*
Fluoride	mg/L	1.6/-	ANR	ANR	ANR
Nitrate + Nitrite as Nitrogen (N)	mg/L	8/-	Comp	ND < 0.15	U
Nitrate as Nitrogen (N)	mg/L	8/-	Comp	0.092	J (DNQ)
Nitrite-N	mg/L	1/-	Comp	ND < 0.090	U
Oil & Grease	mg/L	15/10	Grab	ND < 1.3	*
Perchlorate	ug/L	6.0/-	Comp	ND < 0.95	U
pH (Field)	pH units	6.5-8.5/-	Grab	7.6	*
Total Settleable Solids	ml/L	0.3/0.1	Comp	ND < 0.10	*
Sulfate	mg/L	300/-	Comp	140	--
Temperature	deg. F	86/-	Grab	77	*
Total Cyanide	ug/L	8.5/4.3	Comp	ND < 2.2	*
Total Dissolved Solids	mg/L	950/-	Comp	740	*
Hardness	mg/L	-/-	Comp	460	--
Hardness, dissolved	mg/L	-/-	Comp	460	--
Total Organic Carbon	mg/L	-/-	Comp	3.3	--
Total Residual Chlorine (Field)	mg/L	0.1/-	ANR	ANR	ANR
Total Suspended Solids	mg/L	45/15	Comp	ND < 1.0	*
Turbidity	NTU	-/-	Comp	0.060	J (DNQ)
Volume Discharged	MGD	160/-	Meas	0.01403	*
<b>METALS</b>					
Antimony	ug/L	6.0/-	ANR	ANR	ANR
Arsenic	ug/L	10/-	ANR	ANR	ANR
Barium	mg/L	1.0/-	ANR	ANR	ANR
Beryllium	ug/L	4.0/-	ANR	ANR	ANR
Boron	mg/L	-/-	ANR	ANR	ANR
Cadmium	ug/L	(4.0) 3.1/2.0	Comp	ND < 0.10	*
Cadmium, dissolved	ug/L	-/-	Comp	ND < 0.10	*
Calcium	mg/L	-/-	Comp	150	--
Calcium, Dissolved	mg/L	-/-	Comp	150	--
Chromium	ug/L	16/8	ANR	ANR	ANR
Chromium VI	ug/L	16/8	ANR	ANR	ANR
Cobalt	ug/L	-/-	ANR	ANR	ANR
Copper	ug/L	14/7.1	Comp	ND < 0.500	*

See attached notes for abbreviations, definitions, and other explanations for the data presented.

<sup>(a)</sup> Based on peak LA River flow, sampling event on 8/10-8/11/11 and 9/7-9/8/11 are dry discharges.



# OUTFALL 019 (Treatment System)

## THIRD QUARTER 2011 REPORTING SUMMARY THE BOEING COMPANY SANTA SUSANA FIELD LABORATORY NPDES PERMIT CA0001309

July 1 through September 30, 2011

ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg	09/07/2011-09/08/2011 <sup>(a)</sup>		
			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
Copper, dissolved	ug/L	-/-	Comp	0.796	Ja* (DNQ)
Iron	mg/L	0.3/-	ANR	ANR	ANR
Lead	ug/L	5.2/2.6	Comp	0.22	Ja* (DNQ)
Lead, dissolved	ug/L	-/-	Comp	0.20	Ja*
Magnesium	mg/L	-/-	Comp	19	--
Magnesium, Dissolved	mg/L	-/-	Comp	19	--
Manganese	ug/L	50/-	ANR	ANR	ANR
Mercury	ug/L	0.10/0.05	Comp	ND < 0.10	U
Mercury, dissolved	ug/L	-/-	Comp	ND < 0.10	U
Nickel	ug/L	96/35	ANR	ANR	ANR
Selenium	ug/L	(5) 8.2/4.1	Comp	0.53	Ja* (DNQ)
Selenium, dissolved	ug/L	-/-	Comp	0.51	Ja*
Silver	ug/L	4.1/2.0	ANR	ANR	ANR
Thallium	ug/L	2.0/-	ANR	ANR	ANR
Vanadium	ug/L	-/-	ANR	ANR	ANR
Zinc	ug/L	119/54	Comp	7.67	J (DNQ)
Zinc, Dissolved	ug/L	-/-	Comp	7.28	J (DNQ)
<b>ORGANICS</b>					
Benzene	ug/L	-/-	Grab	ND < 0.28	*
Carbon Tetrachloride	ug/L	-/-	Grab	ND < 0.28	*
Chloroform	ug/L	-/-	Grab	ND < 0.33	*
1,1-Dichloroethane	ug/L	-/-	Grab	ND < 0.40	*
1,2-Dichloroethane	ug/L	-/-	Grab	ND < 0.28	*
1,1-Dichloroethene	ug/L	6.0/3.2	Grab	ND < 0.42	*
1,4-Dioxane	ug/L	-/-	ANR	ANR	ANR
Ethylbenzene	ug/L	-/-	Grab	ND < 0.25	*
Tetrachloroethene	ug/L	-/-	Grab	ND < 0.32	*
Toluene	ug/L	-/-	Grab	ND < 0.36	*
Xylenes (Total)	ug/L	-/-	Grab	ND < 0.90	*
1,1,1-Trichloroethane	ug/L	-/-	Grab	ND < 0.30	*
1,1,2-Trichloroethane	ug/L	-/-	Grab	ND < 0.30	*
Trichloroethene	ug/L	5.0/-	Grab	ND < 0.26	*
Trichlorofluoromethane	ug/L	-/-	Grab	ND < 0.34	*
Trichlorotrifluoroethane (Freon 113)	ug/L	-/-	Grab	ND < 0.50	*
Vinyl Chloride	ug/L	-/-	Grab	ND < 0.40	*
<b>TPH</b>					
EFH (C13 - C22)	mg/L	-/-	ANR	ANR	ANR
GRO (C4 - C12)	mg/L	-/-	ANR	ANR	ANR
<b>ADDITIONAL ANALYTES</b>					
1,2-Dichloro-1,1,2-trifluoroethane	ug/L	-/-	ANR	ANR	ANR

See attached notes for abbreviations, definitions, and other explanations for the data presented.

<sup>(a)</sup> Based on peak LA River flow, sampling event on 8/10-8/11/11 and 9/7-9/8/11 are dry discharges.

## OUTFALL 019 (Treatment System)

### THIRD QUARTER 2011 REPORTING SUMMARY THE BOEING COMPANY SANTA SUSANA FIELD LABORATORY NPDES PERMIT CA0001309

July 1 through September 30, 2011

ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg	09/07/2011-09/08/2011 <sup>(a)</sup>		
			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
1,1,2,2-Tetrachloroethane	ug/L	-/-	ANR	ANR	ANR
1,2,4-Trichlorobenzene	ug/L	-/-	ANR	ANR	ANR
1,2-Dichlorobenzene	ug/L	-/-	ANR	ANR	ANR
1,2-Dichloropropane	ug/L	-/-	ANR	ANR	ANR
1,2-Diphenylhydrazine/Azobenzene	ug/L	-/-	ANR	ANR	ANR
1,3-Dichlorobenzene	ug/L	-/-	ANR	ANR	ANR
1,4-Dichlorobenzene	ug/L	-/-	ANR	ANR	ANR
2,4,6-Trichlorophenol	ug/L	13/6.5	Comp	ND < 0.0952	*
2,4-Dichlorophenol	ug/L	-/-	ANR	ANR	ANR
2,4-Dimethylphenol	ug/L	-/-	ANR	ANR	ANR
2,4-Dinitrophenol	ug/L	-/-	ANR	ANR	ANR
2,4-Dinitrotoluene	ug/L	18/9.1	Comp	ND < 0.190	*
2,6-Dinitrotoluene	ug/L	-/-	ANR	ANR	ANR
2-Chloroethylvinylether	ug/L	-/-	ANR	ANR	ANR
2-Chloronaphthalene	ug/L	-/-	ANR	ANR	ANR
2-Chlorophenol	ug/L	-/-	ANR	ANR	ANR
2-Methyl-4,6-dinitrophenol	ug/L	-/-	ANR	ANR	ANR
2-Nitrophenol	ug/L	-/-	ANR	ANR	ANR
3,3'-Dichlorobenzidine	ug/L	-/-	ANR	ANR	ANR
4,4'-DDD	ug/L	-/-	ANR	ANR	ANR
4,4'-DDE	ug/L	-/-	ANR	ANR	ANR
4,4'-DDT	ug/L	-/-	ANR	ANR	ANR
4-Bromophenylphenylether	ug/L	-/-	ANR	ANR	ANR
4-Chloro-3-methylphenol	ug/L	-/-	ANR	ANR	ANR
4-Chlorophenylphenylether	ug/L	-/-	ANR	ANR	ANR
4-Nitrophenol	ug/L	-/-	ANR	ANR	ANR
Acenaphthene	ug/L	-/-	ANR	ANR	ANR
Acrolein	ug/L	-/-	ANR	ANR	ANR
Acrylonitrile	ug/L	-/-	ANR	ANR	ANR
Acute Toxicity	% SURVIVAL	70-100/-	ANR	ANR	ANR
Aldrin	ug/L	-/-	ANR	ANR	ANR
alpha-BHC	ug/L	0.03/0.01	Comp	ND < 0.0024	*
Anthracene	ug/L	-/-	ANR	ANR	ANR
Aroclor-1016	ug/L	-/-	ANR	ANR	ANR
Aroclor-1221	ug/L	-/-	ANR	ANR	ANR
Aroclor-1232	ug/L	-/-	ANR	ANR	ANR
Aroclor-1242	ug/L	-/-	ANR	ANR	ANR
Aroclor-1248	ug/L	-/-	ANR	ANR	ANR
Aroclor-1254	ug/L	-/-	ANR	ANR	ANR
Aroclor-1260	ug/L	-/-	ANR	ANR	ANR

See attached notes for abbreviations, definitions, and other explanations for the data presented.

# OUTFALL 019 (Treatment System)

## THIRD QUARTER 2011 REPORTING SUMMARY THE BOEING COMPANY SANTA SUSANA FIELD LABORATORY NPDES PERMIT CA0001309

July 1 through September 30, 2011

ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg
Benzidine	ug/L	-/-
Benzo(a)anthracene	ug/L	-/-
Benzo(a)pyrene	ug/L	-/-
Benzo(b)fluoranthene	ug/L	-/-
Benzo(g,h,i)perylene	ug/L	-/-
Benzo(k)fluoranthene	ug/L	-/-
beta-BHC	ug/L	-/-
bis (2-Chloroethyl) ether	ug/L	-/-
bis (2-ethylhexyl) Phthalate	ug/L	4.0/-
bis(2-Chloroethoxy) methane	ug/L	-/-
bis(2-Chloroisopropyl) ether	ug/L	-/-
Bromodichloromethane	ug/L	-/-
Bromoform	ug/L	-/-
Bromomethane	ug/L	-/-
Butylbenzylphthalate	ug/L	-/-
Chlordane	ug/L	-/-

**OUTFALL 019 (Treatment System)**

**THIRD QUARTER 2011 REPORTING SUMMARY  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

**July 1 through September 30, 2011**

ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg	09/07/2011-09/08/2011 <sup>(a)</sup>		
			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
Heptachlor epoxide	ug/L	-/-	ANR	ANR	ANR
Hexachlorobenzene	ug/L	-/-	ANR	ANR	ANR
Hexachlorobutadiene	ug/L	-/-	ANR	ANR	ANR
Hexachlorocyclopentadiene	ug/L	-/-	ANR	ANR	ANR
Hexachloroethane	ug/L	-/-	ANR	ANR	ANR
Indeno(1,2,3-cd)pyrene	ug/L	-/-	ANR	ANR	ANR
Isophorone	ug/L	-/-	ANR	ANR	ANR
Lindane (gamma-BHC)	ug/L	-/-	ANR	ANR	ANR
Methylene Chloride	ug/L	-/-	ANR	ANR	ANR
Monomethyl Hydrazine	ug/L	-/-	ANR	ANR	ANR
Naphthalene	ug/L	-/-	ANR	ANR	ANR
Nitrobenzene	ug/L	-/-	ANR	ANR	ANR
n-Nitrosodimethylamine	ug/L	16/8.1	Comp	ND < 0.0952	*
n-Nitroso-di-n-propylamine	ug/L	-/-	ANR	ANR	ANR
n-Nitrosodiphenylamine	ug/L	-/-	ANR	ANR	ANR
Pentachlorophenol	ug/L	16.5/8.2	Comp	ND < 0.0952	*
Phenanthrene	ug/L	-/-	ANR	ANR	ANR
Phenol	ug/L	-/-	ANR	ANR	ANR
Pyrene	ug/L	-/-	ANR	ANR	ANR
Toxaphene	ug/L	-/-	ANR	ANR	ANR
trans-1,2-Dichloroethene	ug/L	-/-	ANR	ANR	ANR
trans-1,3-Dichloropropene	ug/L	-/-	ANR	ANR	ANR

See attached notes for abbreviations, definitions, and other explanations for the data presented.

<sup>(a)</sup> Based on peak LA River flow, sampling event on

**Outfall 019 (Treatment System)**

**THIRD QUARTER 2011 REPORTING SUMMARY**



**OUTFALL 019 (Treatment System)**

**THIRD QUARTER 2011 REPORTING SUMMARY  
THE BOEING COMPANY  
SANTA SUSANA FIELD LABORATORY  
NPDES PERMIT CA0001309**

**July 1 through September 30, 2011**

ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg	08/10/2011-08/11/2011			09/07/2011-09/08/2011		
			Sample Type	Result	Concentration Result Validation Qualifier	Sample Type	Result	Concentration Result Validation Qualifier
Max Discharge for event	MGD	160	Meas	0.049		Meas	0.01403	
Ammonia as Nitrogen (N)	LBS/DAY	13,500/2615	Comp	ND	*	Comp	ND	*
Biochemical Oxygen Demand (BOD 5 day)	LBS/DAY	40,032/26,700	Comp	ND	*	Comp	ND	*
Chloride	LBS/DAY	200,160/-	Comp	49.04	*	Comp	19.89	--
Surfactants (MBAS)	LBS/DAY	667/-	Comp	ND	*	Comp	ND	*
Nitrate + Nitrite as Nitrogen (N)	LBS/DAY	10,700/-	Comp	ND	*	Comp	ND	U

**ARROYO SIMI (Frontier Park)**

**THIRD QUARTER 2011 REPORTING SUMMARY  
THE BOEING COMPANY**