APPENDIX F

SUMMARY OF PERMIT LIMIT EXCEEDENCES

SECOND QUARTER 2005 REPORTING SUMMARY THE BOEING COMPANY-ROCKETDYNE SANTA SUSANA FIELD LABORATORY NPDES PERMIT CA0001309

April 1 through June 30, 2005

		SAMPLE		PERMIT LIMIT DAILY MAX/	RESULT DAILY MAX		VALIDATION
OUTFALL	LOCATIONS	DATE	ANALYTE	MONTHLY AVERAGE	MONTHLY AVERAGE	UNITS	QUALIFIER
Outfall 001	South Slope below Perimeter Pond	28-Apr-05	Iron	0.3/-	0.36/-	mø/L	
Outfall 001	South Slope below Perimeter Pond	28-Apr-05	TCDD TEQ_NoDNQ	2.80E -08/1.40E-08	3.73E-08/ND	ug/L	# H
Outfall 002	South Slope below R-2 Pond	01-Apr-05	Sulfate	300/-	310/-	mo/L	
Outfall 002	South Slope below R-2 Pond	08-Apr-05	Sulfate	300/-	360/-	mo/I.	
Outfall 002	South Slope below R-2 Pond	15-Apr-05	Sulfate	300/-	400/-	mø/I.	***
Outfall 002	South Slope below R-2 Pond	22-Apr-05	Sulfate	300/-	400/-	me/I.	***
Outfall 002	South Slope below R-2 Pond	22-Apr-05	Total Dissolved Solids	950/-	1000/-	mg/L	ž t
Outfall 002	South Slope below R-2 Pond	28-Apr-05	TCDD TEQ_NoDNQ	2.80E -08/1.40E-08	6.28E-07/ND	ug/L	-+
Outfall 003 (13267 Study)	RMHF	28-Apr-05	Strontium 90 (unfiltered)	8,0/	11.4/±0.82	DC://	J(H)

2nd QUARTER 2005 REPORTING SUMMARY NOTES THE BOEING COMPANY - ROCKETDYNE SANTA SUSANA FIELD LABORATORY NPDES PERMIT CA0001309

Notes:

- For Dioxins and Furans, laboratory results may have been reported in picograms/liter (pg/L). However, the permit limit is stated in micrograms/liter (μg/L). To evaluate permit compliance, the laboratory results have been converted to μg/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 limits for mercury of 0.10 μg/L (Outfalls 1-2) and 0.13 μg/L (Outfalls 3-7) are not achievable by the laboratory; therefore, the laboratory reporting limit of 0.20 μg/L was used to determine compliance.
- 5. The volume discharged at the Alfa Test Stand (Outfall 012) is estimated based on the run time of the test.
- 6. 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 report for specific detail)
*	result not validated
*1	improper preservation of sample
*2	the ICP/MS ppb check standard was recovered above the control limit; therefore, the constituent detected was qualified as estimated (J)
*3	initial and or continuing calibration recoveries were outside acceptable control limits

2nd QUARTER 2005 REPORTING SUMMARY NOTES THE BOEING COMPANY - ROCKETDYNE SANTA SUSANA FIELD LABORATORY NPDES PERMIT CA0001309

*5	blank spike/blank spike duplicate relative percent difference was outside the control limit
*10	value was estimated detect or estimated non detect (J,UJ) due to deficiencies in quantitation of the constituent including constituents reported by the laboratory as Estimated Maximum Possible Concentration (EMPC) values
*11	no calibration was performed for this compound; result is reported as a tentatively identified compound (TIC)
ANR	analysis not required; e.g., constituent or outfall was not required by the permit to be sampled and analyzed (annual, semi-annual, etc.)
В	laboratory method blank contamination
С	calibration %RSD or %D were noncompliant
C5	Calibration verification %R was outside method control limits
%D	
7025	percent difference between the initial and continuing calibration relative response factors
deg F	degrees Fahrenheit
DL	detection limit
DNQ	
DNQ	detected but not quantified (constituent value greater than or equal to the
Е	laboratory method detection limit and less then the laboratory reporting limit)
H	duplicates show poor agreement
I	holding time was exceeded
J	ICP interference check solution results were unsatisfactory
K	estimated value
V	The sample dilution's set-up did not meet the oxygen depletion criteria of at
L2	least 2 mg/l. Therefore, the reported result is an estimated value only.
L2 L	the laboratory control sample %R was below the method control limits
LOD	laboratory control sample %R was outside control limits
	limit of detection
M1	matrix spike (MS) and/or MS duplicate were above the acceptance limits due
3.60	to sample matrix interference
M2	the MS and/or MS duplicate were below the acceptance limits due to sample
MOT	matrix interference
MDL	method detection limit
MGD	million gallons per day
mg/L ml/L/hr	milligrams per liter
nivi/nr NA	milliliters per liter per hour
NA ND	not applicable; no permit limit established for the constituent and/or outfall
	analyte value less than the LOD or MDL
NM NTU	not measured or determined
pCi/L	nephelometric turbidity unit
•	picocurries per liter
pg/L	picograms per liter
Q R	matrix spike recovery outside of control limits
N	as a validation qualifier, results are rejected; the presence or absence of
	analyte cannot be verified

2nd QUARTER 2005 REPORTING SUMMARY NOTES THE BOEING COMPANY - ROCKETDYNE SANTA SUSANA FIELD LABORATORY NPDES PERMIT CA0001309

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_c 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