

SEMI-ANNUAL RADIOACTIVE EFFLUENT
RELEASE REPORT

January - June

1985

Public Service Company of Colorado

Fort St. Vrain
Nuclear Generating Station

August 1985

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1.0 Summary

This report summarizes the radiological effluent released from the Fort St. Vrain Nuclear Generating Station for the period January through June, 1985. In addition, Table 3.1 provides a general summary of the plant systems under radiological surveillance, and Table 4.1 summarizes the solid radioactive waste removed from the site during the aforementioned time period. This information is provided pursuant to the requirements of Section 7.5.1e of the Fort St. Vrain Technical Specifications.

The large number of radionuclides discharged via the liquid pathway during this reporting period can be attributed to the extensive decontamination efforts involved with the control rod drive refurbishment program. Of the gamma emitting radionuclides measured, the most significant were ^{60}Co with a total discharge of 450 microcuries and ^{137}Cs with a total of 125.9 microcuries. As compared to the previous reporting period the tritium released via the liquid pathway was down significantly from approximately 100 curies to approximately 4 curies. This reduction was due to the reactor being in a shutdown and depressurized condition.

There were no radionuclides discharged via the gaseous pathway except for gaseous tritium.

No solid radioactive low level waste was removed from the station during this reporting period. Work is continuing on the station program for 10CFR61 compliance. This program should be completed during the next reporting period.

There were no unplanned gaseous or liquid radioactive releases from the site to the unrestricted area during this reporting period.

During the first half of 1985, one change was made to the Offsite Dose Calculation Manual (SUSMAP-2) which more clearly delineated the sample site descriptions for our Radiological Environmental Surveillance Program.

No changes were made to the Process Control Program (SUSMAP-3) during the reporting period.

No license-initiated major changes to the radioactive waste systems were made during this reporting period.

TABLE 1.1 - RADIOACTIVE LIQUID EFFLUENT RELEASES FOR 2nd QUARTER, 1985

	UNITS	APR	MAY	JUN	QUARTERLY TOTAL	
1. Gross Beta Radioactivity						
a) Total Release	Curies	6.76E-04	1.81E-04	9.82E-06	8.66E-04	
b) Avg. Conc. before Dilution	µCi/ml	1.67E-05	4.48E-06	4.48E-07	8.87E-06 *	
Avg Conc. Released	µCi/ml					
c) after Dilution	above bkgd	1.82E-08	9.17E-09	1.55E-09	1.14E-08 *	
2. Tritium						
a) Total Release	Curies	2.52E-02	6.67E-03	9.70E-03	4.15E-02	
b) Avg. Conc. before Dilution	µCi/ml	5.65E-04	1.66E-04	4.39E-04	3.95E-04 *	
Avg Conc. Released	µCi/ml					
c) after Dilution	above bkgd	7.18E-08	3.85E-07	1.58E-06	7.84E-07 *	
3. Dissolved Noble Gases						
a) Total Release	Curies	NSA	NSA	NSA	NSA	
b) Avg. Conc. before Dilution	µCi/ml	NSA	NSA	NSA	NSA *	
Avg Conc. Released	µCi/ml					
c) after Dilution	above bkgd	NSA	NSA	NSA	NSA *	
4. Gross Alpha Radioactivity						
a) Total Release	Curies	1.48E-06	9.54E-07	3.84E-07	2.82E-06	
5. Total Volume of Liquid Released before Dilution						
	Liters	4.18E+04	4.06E+04	2.24E+04	1.05E+05	
6. Total Volume of Liquid Used for Dilution						
	Liters	3.93E+07	1.69E+07	6.87E+06	6.31E+07	
7. Estimated Total Radioactivity Released by Radio-Isotope above Background						
Nuclide	MPCw (µCi/ml)	Curies			Curies	
3H	3.00E-03		2.52E-02	6.67E-03	9.70E-03	4.15E-02
137Cs	2.00E-05		7.45E-05	2.28E-05	4.69E-07	9.78E-05
134Cs	9.00E-06		6.92E-07	NSA	NSA	6.92E-07
60Co	3.00E-05		8.06E-05	2.38E-05	1.11E-06	1.06E-04
110Agm	3.00E-05		2.19E-06	NSA	NSA	2.19E-06
54Mn	1.00E-04		2.42E-06	6.33E-07	NSA	3.06E-06
35S	6.00E-05		4.44E-04	NSA	NSA	4.44E-04

*Represents a "weighted" average.

$$4.7E-05 = 4.7 \times 10^{-5}$$

$$5.2E+03 = 5.2 \times 10^3$$

NSA means no significant activity.

LIQUID WASTE SUMMARY FOR RELEASE NUMBER : 878

RELEASE MADE FROM	:	TANK	T-6204		
RELEASE START	:	DATE	4 885	TIME	1909
RELEASE COMPLETION	:	DATE	4 985	TIME	155
RELEASE DURATION	:	HRS.	6.77	MIN.	406.
TANK LEVEL [INCHES]	:	INITIAL	90.0	FINAL	6.0
BLOWDOWN INTEGRATOR READINGS	:	INITIAL	3695230.	FINAL	3742800.
TOTAL VOLUME RELEASED	:	LITERS	5536.	GALS	1463.
TOTAL VOLUME USED FOR RELEASE	:	LITERS	3601049.	GALS	951400.
AVERAGE RELEASE RATE	:	LPM	13.63	GPM	3.60
AVERAGE BLOWDOWN RATE	:	LPM	8869.58	GPM	2343.35

DESCRIPTIONS :

A = LIQUID WASTE RELEASE SAMPLE NUMBER ONE
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 C = RIVER SAMPLE - UPSTREAM BEFORE RELEASE
 D = RIVER SAMPLE - DOWNSTREAM AFTER RELEASE
 E = BLOWDOWN SAMPLE - DURING RELEASE
 F = BLOWDOWN SAMPLE - AFTER RELEASE
 G = BLOWDOWN SAMPLE - WEEKLY

RC- NUMBER	DATE	TIME	ALPHA UCI/ML	BETA UCI/ML	TRIT. UCI/ML	DNG UCI/ML	MCA NUMBER
A 33.045	4 885	525	2.55E-08	1.11E-05	1.76E-04	0.00E-01	SD 382
B 33.046	4 885	30	2.55E-08	1.11E-05	1.79E-04	0.00E-01	SD 383
E 7.016	4 885	2240	7.46E-09	2.00E-08	5.47E-07		
G 9.014	41085	700	7.50E-09	7.45E-09	3.48E-07		

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	TOTAL CURIES	UCI/ML BEF.DIL.	UCI/ML AFT.DIL.	% OF LIMIT OR MPCW
GROSS ALPHA	1.41E-07	2.55E-08	2.77E-11	N/A
GROSS BETA	6.14E-05	1.11E-05	1.70E-08	5.67E+01
TRITIUM	9.91E-04	1.79E-04	2.74E-07	9.15E-03
137CS	7.03E-06	1.27E-06	1.95E-09	9.75E-03
134CS	1.80E-07	3.25E-08	4.99E-11	5.54E-04
60CO	5.45E-06	9.85E-07	1.51E-09	5.04E-03

LIQUID WASTE SUMMARY FOR RELEASE NUMBER : 879

RELEASE MADE FROM	:	TANK	T-6204		
RELEASE START	:	DATE	41085	TIME	1827
RELEASE COMPLETION	:	DATE	41185	TIME	1032
RELEASE DURATION	:	HRS.	16.08	MIN.	965.
TANK LEVEL [INCHES]	:	INITIAL	127.0	FINAL	6.0
BLOWDOWN INTEGRATOR READINGS	:	INITIAL	3929330.	FINAL	4041396.
TOTAL VOLUME RELEASED	:	LITERS	7974.	GALS	2107.
TOTAL VOLUME USED FOR RELEASE	:	LITERS	8483396.	GALS	2241320.
AVERAGE RELEASE RATE	:	LPM	8.26	GPM	2.18
AVERAGE BLOWDOWN RATE	:	LPM	8791.08	GPM	2322.61

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RC- NUMBER	DATE	TIME	ALPHA UCI/ML	BETA UCI/ML	TRIT. UCI/ML	DNG UCI/ML	MCA NUMBER
A 33.047	41085	605	4.37E-08	1.34E-05	1.18E-03	0.00E-01	SD 395
B 33.048	41085	610	1.79E-08	1.38E-05	1.16E-03	0.00E-01	SD 396
E 7.017	41185	230	7.25E-09	7.96E-09	5.53E-07		
G 9.014	41085	700	7.50E-09	7.45E-09	3.48E-07		

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	TOTAL CURIES	UCI/ML BEF.DIL.	UCI/ML AFT.DIL.	% OF LIMIT OR MPCW
GROSS ALPHA	3.49E-07	4.37E-08	3.40E-11	N/A
GROSS BETA	1.10E-04	1.38E-05	1.29E-08	4.31E+01
TRITIUM	9.40E-03	1.18E-03	1.11E-06	3.69E-02
137CS	1.03E-05	1.29E-06	1.21E-09	6.06E-03
60CO	9.89E-06	1.24E-06	1.16E-09	3.88E-03

TABLE 1.2 (PAGE 3 OF 14)

LIQUID WASTE SUMMARY FOR RELEASE NUMBER : 880

RELEASE MADE FROM	:	TANK	T-6204		
RELEASE START	:	DATE	42085	TIME	1512
RELEASE COMPLETION	:	DATE	42185	TIME	910
RELEASE DURATION	:	HRS.	17.97	MIN.	1078.
TANK LEVEL [INCHES]	:	INITIAL	128.0	FINAL	8.0
BLOWDOWN INTEGRATOR READINGS	:	INITIAL	5117052.	FINAL	5242250.
TOTAL VOLUME RELEASED	:	LITERS	7908.	GALS	2089.
TOTAL VOLUME USED FOR RELEASE	:	LITERS	9477489.	GALS	2503960.
AVERAGE RELEASE RATE	:	LPM	7.34	GPM	1.94
AVERAGE BLOWDOWN RATE	:	LPM	8791.73	GPM	2322.78

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 G = BLOWDOWN SAMPLE - WEEKLY

RC- NUMBER	DATE	TIME	ALPHA UCI/ML	BETA UCI/ML	TRIT. UCI/ML	DNG UCI/ML	MCA NUMBER
A 33.053	42085	700	2.73E-08	2.02E-05	2.74E-04	0.00E-01	SD 441
B 33.054	42085	700	4.37E-08	2.04E-05	2.71E-04	0.00E-01	SD 442
E 7.018	42185	840	9.77E-09	1.43E-08	3.47E-07		
G 9.016	42585	730	2.82E-09	7.08E-09	3.42E-07		

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	TOTAL CURIES	UCI/ML BEF.DIL.	UCI/ML AFT.DIL.	% OF LIMIT OR MPCW
GROSS ALPHA	3.46E-07	4.37E-08	3.41E-11	N/A
GROSS BETA	1.61E-04	2.04E-05	1.70E-08	5.66E+01
TRITIUM	2.16E-03	2.74E-04	2.28E-07	7.59E-03
137CS	1.84E-05	2.33E-06	1.94E-09	9.71E-03
110AGM	2.19E-06	2.77E-07	2.31E-10	7.70E-04
60CO	1.89E-05	2.39E-06	1.99E-09	6.64E-03

TABLE 1.2 (PAGE 4 OF 14)

LIQUID WASTE SUMMARY FOR RELEASE NUMBER : 881

RELEASE MADE FROM	:	TANK	T-6203		
RELEASE START	:	DATE	42885	TIME	410
RELEASE COMPLETION	:	DATE	42885	TIME	1303
RELEASE DURATION	:	HRS.	8.88	MIN.	533.
TANK LEVEL [INCHES]	:	INITIAL	117.0	FINAL	4.0
BLOWDOWN INTEGRATOR READINGS	:	INITIAL	6038000.	FINAL	6100035.
TOTAL VOLUME RELEASED	:	LITERS	7447.	GALS	1967.
TOTAL VOLUME USED FOR RELEASE	:	LITERS	4696050.	GALS	1240700.
AVERAGE RELEASE RATE	:	LPM	13.97	GPM	3.69
AVERAGE BLOWDOWN RATE	:	LPM	8810.60	GPM	2327.77

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 G = BLOWDOWN SAMPLE - WEEKLY

RC- NUMBER	DATE	TIME	ALPHA UCI/ML	BETA UCI/ML	TRIT. UCI/ML	DNG UCI/ML	MCA NUMBER
A 33.059	42785	2041	2.55E-08	1.48E-05	6.49E-04	0.00E-01	SD 482
B 33.060	42785	2042	2.54E-08	1.50E-05	6.35E-04	0.00E-01	SD 483
E 7.019	42885	930	7.38E-09	1.05E-08	3.54E-07		
G 9.017	43085	700	9.94E-09	8.39E-09	3.62E-07		

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	TOTAL CURIES	UCI/ML BEF.DIL.	UCI/ML AFT.DIL.	% OF LIMIT OR MPCW
GROSS ALPHA	1.90E-07	2.55E-08	2.46E-11	N/A
GROSS BETA	1.12E-04	1.50E-05	2.38E-08	7.92E+01
TRITIUM	4.83E-03	6.49E-04	1.03E-06	3.42E-02
137CS	1.21E-05	1.63E-06	2.58E-09	1.29E-02
54MN	7.67E-07	1.03E-07	1.63E-10	1.63E-04
60CO	1.37E-05	1.84E-06	2.91E-09	9.71E-03
35S	1.50E-04	2.02E-05	3.20E-08	5.33E-02

LIQUID WASTE SUMMARY FOR RELEASE NUMBER : 882

RELEASE MADE FROM	:	TANK	T-6204		
RELEASE START	:	DATE	42985	TIME	1459
RELEASE COMPLETION	:	DATE	43085	TIME	810
RELEASE DURATION	:	HRS.	17.18	MIN.	1031.
TANK LEVEL [INCHES]	:	INITIAL	79.0	FINAL	7.0
BLOWDOWN INTEGRATOR READINGS	:	INITIAL	6226580.	FINAL	6345690.
TOTAL VOLUME RELEASED	:	LITERS	4745.	GALS	1254.
TOTAL VOLUME USED FOR RELEASE	:	LITERS	9016627.	GALS	2382200.
AVERAGE RELEASE RATE	:	LPM	4.60	GPM	1.22
AVERAGE BLOWDOWN RATE	:	LPM	8745.52	GPM	2310.57

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 E = BLOWDOWN SAMPLE - DURING RELEASE
 F = BLOWDOWN SAMPLE - AFTER RELEASE
 G = BLOWDOWN SAMPLE - WEEKLY

RC- NUMBER	DATE	TIME	ALPHA UCI/ML	BETA UCI/ML	TRIT. UCI/ML	DNG UCI/ML	MCA NUMBER
A 33.057	42785	1008	4.13E-08	2.85E-05	3.83E-04	0.00E-01	SD 478
B 33.058	42785	1011	5.83E-08	2.65E-05	3.88E-04	0.00E-01	SD 479
E 7.020	42985	2100	4.37E-09	8.05E-09	3.62E-07		
G 9.017	43085	700	9.94E-09	8.39E-09	3.62E-07		

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	TOTAL CURIES	UCI/ML BEF.DIL.	UCI/ML AFT.DIL.	% OF LIMIT OR MPCW
GROSS ALPHA	2.77E-07	5.83E-08	2.54E-11	N/A
GROSS BETA	1.35E-04	2.85E-05	1.50E-08	4.99E+01
TRITIUM	1.84E-03	3.88E-04	2.04E-07	6.79E-03
137CS	1.46E-05	3.08E-06	1.62E-09	8.10E-03
54MN	1.35E-06	2.85E-07	1.50E-10	1.50E-04
60CO	1.79E-05	3.78E-06	1.99E-09	6.63E-03
134CS	5.12E-07	1.08E-07	5.68E-11	6.31E-04
35S	1.71E-04	3.61E-05	1.90E-08	3.16E-02

LIQUID WASTE SUMMARY FOR RELEASE NUMBER : 883

RELEASE MADE FROM	:	TANK	T-6203		
RELEASE START	:	DATE	43085	TIME	1720
RELEASE COMPLETION	:	DATE	5 185	TIME	55
RELEASE DURATION	:	HRS.	7.58	MIN.	455.
TANK LEVEL [INCHES]	:	INITIAL	129.0	FINAL	4.0
BLOWDOWN INTEGRATOR READINGS	:	INITIAL	6410000.	FINAL	6463450.
TOTAL VOLUME RELEASED	:	LITERS	8238.	GALS	2176.
TOTAL VOLUME USED FOR RELEASE	:	LITERS	4046165.	GALS	1069000.
AVERAGE RELEASE RATE	:	LPM	18.10	GPM	4.78
AVERAGE BLOWDOWN RATE	:	LPM	8892.67	GPM	2349.45

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 G = BLOWDOWN SAMPLE - WEEKLY

RC- NUMBER	DATE	TIME	ALPHA UCI/ML	BETA UCI/ML	TRIT. UCI/ML	DNG UCI/ML	MCA NUMBER
A 33.061	42985	658	2.19E-08	1.17E-05	7.22E-04	0.00E-01	SD 487
B 33.062	42985	659	2.20E-08	1.11E-05	7.05E-04	0.00E-01	SD 488
E 7.021	43085	2300	3.50E-09	1.88E-08	4.23E-07		
G 9.017	43085	700	9.94E-09	8.39E-09	3.62E-07		

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	TOTAL CURIES	UCI/ML BEF.DIL.	UCI/ML AFT.DIL.	% OF LIMIT OR MPCW
GROSS ALPHA	1.81E-07	2.20E-08	2.45E-11	N/A
GROSS BETA	9.66E-05	1.17E-05	2.38E-08	7.93E+01
TRITIUM	5.95E-03	7.22E-04	1.47E-06	4.89E-02
137CS	1.20E-05	1.46E-06	2.97E-09	1.48E-02
54MN	3.04E-07	3.69E-08	7.50E-11	7.50E-05
60CO	1.47E-05	1.79E-06	3.64E-09	1.21E-02
35S	1.23E-04	1.49E-05	3.03E-08	5.05E-02

LIQUID WASTE SUMMARY FOR RELEASE NUMBER : 884

RELEASE MADE FROM	:	TANK	T-6204		
RELEASE START	:	DATE	5 885	TIME	1840
RELEASE COMPLETION	:	DATE	5 985	TIME	601
RELEASE DURATION	:	HRS.	11.35	MIN.	681.
TANK LEVEL [INCHES]	:	INITIAL	128.0	FINAL	8.0
BLOWDOWN INTEGRATOR READINGS	:	INITIAL	7347880.	FINAL	7427880.
TOTAL VOLUME RELEASED	:	LITERS	7908.	GALS	2089.
TOTAL VOLUME USED FOR RELEASE	:	LITERS	6056000.	GALS	1600000.
AVERAGE RELEASE RATE	:	LPM	11.61	GPM	3.07
AVERAGE BLOWDOWN RATE	:	LPM	8892.80	GPM	2349.49

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 F = BLOWDOWN SAMPLE - AFTER RELEASE
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RC- NUMBER	DATE	TIME	ALPHA UCI/ML	BETA UCI/ML	TRIT. UCI/ML	DNG UCI/ML	MCA NUMBER
A 33.063	5 885	1040	1.25E-08	9.85E-06	2.93E-04	0.00E-01	SD 532
B 33.064	5 885	1044	3.77E-08	1.04E-05	2.92E-04	0.00E-01	SD 533
E 7.022	5 985	350	4.20E-09	1.49E-08	3.59E-07		
G 9.018	5 885	1520	4.03E-09	6.93E-09	3.48E-07		

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	TOTAL CURIES	UCI/ML BEF.DIL.	UCI/ML AFT.DIL.	% OF LIMIT OR MPCW
GROSS ALPHA	2.98E-07	3.77E-08	4.39E-11	N/A
GROSS BETA	8.20E-05	1.04E-05	1.35E-08	4.50E+01
TRITIUM	2.31E-03	2.93E-04	3.81E-07	1.27E-02
137CS	1.09E-05	1.38E-06	1.80E-09	9.00E-03
60CO	1.19E-05	1.51E-06	1.97E-09	6.56E-03

TABLE 1.2 (PAGE 8 OF 14)

LIQUID WASTE SUMMARY FOR RELEASE NUMBER : 885

RELEASE MADE FROM	:	TANK	T-6204		
RELEASE START	:	DATE	52085	TIME	1925
RELEASE COMPLETION	:	DATE	52185	TIME	245
RELEASE DURATION	:	HRS.	7.33	MIN.	440.
TANK LEVEL [INCHES]	:	INITIAL	131.0	FINAL	7.0
BLOWDOWN INTEGRATOR READINGS	:	INITIAL	8758200.	FINAL	8810250.
TOTAL VOLUME RELEASED	:	LITERS	8172.	GALS	2159.
TOTAL VOLUME USED FOR RELEASE	:	LITERS	3940185.	GALS	1041000.
AVERAGE RELEASE RATE	:	LPM	18.57	GPM	4.91
AVERAGE BLOWDOWN RATE	:	LPM	8954.97	GPM	2365.91

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 F = BLOWDOWN SAMPLE - AFTER RELEASE
 G = BLOWDOWN SAMPLE - WEEKLY

RC- NUMBER	DATE	TIME	ALPHA UCI/ML	BETA UCI/ML	TRIT. UCI/ML	DNG UCI/ML	MCA NUMBER
A 33.065	52085	1002	2.14E-08	5.32E-06	1.75E-04	0.00E-01	SD 572
B 33.066	52085	1005	1.24E-08	5.63E-06	1.68E-04	0.00E-01	SD 573
E 7.023	52185	120	3.23E-09	8.36E-09	3.38E-07		
G 9.020	52285	754	4.35E-09	1.71E-08	3.47E-07		

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	TOTAL CURIES	UCI/ML BEF.DIL.	UCI/ML AFT.DIL.	% OF LIMIT OR MPCW
GROSS ALPHA	1.75E-07	2.14E-08	3.53E-11	N/A
GROSS BETA	4.60E-05	5.63E-06	1.16E-08	3.87E+01
TRITIUM	1.43E-03	1.75E-04	3.62E-07	1.21E-02
137CS	6.17E-06	7.55E-07	1.56E-09	7.81E-03
60CO	4.87E-06	5.96E-07	1.23E-09	4.11E-03

LIQUID WASTE SUMMARY FOR RELEASE NUMBER : 886

RELEASE MADE FROM	:	TANK	T-6204		
RELEASE START	:	DATE	52485	TIME	1737
RELEASE COMPLETION	:	DATE	52485	TIME	2249
RELEASE DURATION	:	HRS.	5.20	MIN.	312.
TANK LEVEL [INCHES]	:	INITIAL	128.0	FINAL	5.0
BLOWDOWN INTEGRATOR READINGS	:	INITIAL	9251590.	FINAL	9287500.
TOTAL VOLUME RELEASED	:	LITERS	8106.	GALS	2142.
TOTAL VOLUME USED FOR RELEASE	:	LITERS	2718387.	GALS	718200.
AVERAGE RELEASE RATE	:	LPM	25.98	GPM	6.86
AVERAGE BLOWDOWN RATE	:	LPM	8712.78	GPM	2301.92

DESCRIPTIONS :

A = LIQUID WASTE RELEASE SAMPLE NUMBER ONE
 B = LIQUID WASTE RELEASE SAMPLE NUMBER ONE
 C = RIVER SAMPLE - UPSTREAM BEFORE RELEASE
 D = RIVER SAMPLE - DOWNSTREAM AFTER RELEASE
 E = BLOWDOWN SAMPLE - DURING RELEASE
 F = BLOWDOWN SAMPLE - AFTER RELEASE
 G = BLOWDOWN SAMPLE - WEEKLY

RC- NUMBER	DATE	TIME	ALPHA UCI/ML	BETA UCI/ML	TRIT. UCI/ML	DNG UCI/ML	MCA NUMBER
A 33.067	52385	7	2.50E-08	3.83E-06	2.52E-04	0.00E-01	SD 585
B 33.068	52385	13	2.50E-08	3.94E-06	2.55E-04	0.00E-01	SD 586
E 7.024	52485	2130	6.61E-09	1.05E-08	3.53E-07		
G 9.020	52285	754	4.35E-09	1.71E-08	3.47E-07		

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	TOTAL CURIES	UCI/ML BEF.DIL.	UCI/ML AFT.DIL.	% OF LIMIT OR MPCW
GROSS ALPHA	2.03E-07	2.50E-08	6.15E-11	N/A
GROSS BETA	3.19E-05	3.94E-06	1.17E-08	3.89E+01
TRITIUM	2.07E-03	2.55E-04	7.58E-07	2.53E-02
137CS	4.81E-06	5.94E-07	1.77E-09	8.83E-03
54MN	6.33E-07	7.81E-08	2.32E-10	2.32E-04
60CO	3.53E-06	4.35E-07	1.29E-09	4.31E-03

TABLE 1.2 (PAGE 10 OF 14)

LIQUID WASTE SUMMARY FOR RELEASE NUMBER : 887

RELEASE MADE FROM	:	TANK	T-6204		
RELEASE START	:	DATE	52785	TIME	1742
RELEASE COMPLETION	:	DATE	52785	TIME	2246
RELEASE DURATION	:	HRS.	5.07	MIN.	304.
TANK LEVEL [INCHES]	:	INITIAL	130.0	FINAL	11.0
BLOWDOWN INTEGRATOR READINGS	:	INITIAL	9610520.	FINAL	9634246.
TOTAL VOLUME RELEASED	:	LITERS	7842.	GALS	2072.
TOTAL VOLUME USED FOR RELEASE	:	LITERS	1796058.	GALS	474520.
AVERAGE RELEASE RATE	:	LPM	25.80	GPM	6.82
AVERAGE BLOWDOWN RATE	:	LPM	5908.09	GPM	1560.92

DESCRIPTIONS :

A = LIQUID WASTE RELEASE SAMPLE NUMBER ONE
 B = LIQUID WASTE RELEASE SAMPLE NUMBER ONE
 C = RIVER SAMPLE - UPSTREAM BEFORE RELEASE
 D = RIVER SAMPLE - DOWNSTREAM AFTER RELEASE
 E = BLOWDOWN SAMPLE - DURING RELEASE
 F = BLOWDOWN SAMPLE - AFTER RELEASE
 G = BLOWDOWN SAMPLE - WEEKLY

RC- NUMBER	DATE	TIME	ALPHA UCI/ML	BETA UCI/ML	TRIT. UCI/ML	DNG UCI/ML	MCA NUMBER
A 33.069	52785	737	1.23E-08	5.10E-07	6.58E-05	0.00E-01	SD 596
B 33.070	52785	740	1.23E-08	4.37E-07	6.70E-05	0.00E-01	SD 597
E 7.025	52785	1900	3.85E-09	8.39E-09	3.53E-07		
G 9.020	52285	754	4.35E-09	1.71E-08	3.47E-07		

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	TOTAL CURIES	UCI/ML BEF.DIL.	UCI/ML AFT.DIL.	% OF LIMIT OR MPCW
GROSS ALPHA	9.64E-08	1.23E-08	3.45E-11	N/A
GROSS BETA	4.00E-06	5.10E-07	2.14E-09	7.14E+00
TRITIUM	5.25E-04	6.70E-05	2.90E-07	9.66E-03
137CS	2.75E-07	3.51E-08	1.53E-10	7.63E-04
60CO	4.18E-07	5.33E-08	2.32E-10	7.72E-04

TABLE 1.2 (PAGE 11 OF 14)

LIQUID WASTE SUMMARY FOR RELEASE NUMBER : 888

RELEASE MADE FROM	:	TANK	T-6204		
RELEASE START	:	DATE	53085	TIME	1753
RELEASE COMPLETION	:	DATE	53185	TIME	30
RELEASE DURATION	:	HRS.	6.62	MIN.	397.
TANK LEVEL [INCHES]	:	INITIAL	142.0	FINAL	12.0
BLOWDOWN INTEGRATOR READINGS	:	INITIAL	9926268.	FINAL	9958000.
TOTAL VOLUME RELEASED	:	LITERS	8567.	GALS	2263.
TOTAL VOLUME USED FOR RELEASE	:	LITERS	2402113.	GALS	634640.
AVERAGE RELEASE RATE	:	LPM	21.58	GPM	5.70
AVERAGE BLOWDOWN RATE	:	LPM	6050.66	GPM	1598.59

DESCRIPTIONS :

A = LIQUID WASTE RELEASE SAMPLE NUMBER ONE
 B = LIQUID WASTE RELEASE SAMPLE NUMBER ONE
 C = RIVER SAMPLE - UPSTREAM BEFORE RELEASE
 D = RIVER SAMPLE - DOWNSTREAM AFTER RELEASE
 E = BLOWDOWN SAMPLE - DURING RELEASE
 F = BLOWDOWN SAMPLE - AFTER RELEASE
 G = BLOWDOWN SAMPLE - WEEKLY

RC- NUMBER	DATE	TIME	ALPHA UCI/ML	BETA UCI/ML	TRIT. UCI/ML	DNG UCI/ML	MCA NUMBER
A 33.071	53085	800	2.13E-08	1.96E-06	3.76E-05	0.00E-01	SD 611
B 33.072	53085	801	1.59E-08	1.77E-06	3.80E-05	0.00E-01	SD 612
E 7.026	53085	2250	4.66E-09	7.09E-09	3.58E-07		
G 9.021	52985	832	9.12E-09	1.01E-08	3.40E-07		

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	TOTAL CURIES	UCI/ML BEF.DIL.	UCI/ML AFT.DIL.	% OF LIMIT OR MPCW
GROSS ALPHA	1.82E-07	2.13E-08	4.32E-11	N/A
GROSS BETA	1.68E-05	1.96E-06	6.92E-09	2.31E+01
TRITIUM	3.25E-04	3.80E-05	1.34E-07	4.46E-03
137CS	6.74E-07	7.87E-08	2.80E-10	1.40E-03
60CO	3.03E-06	3.54E-07	1.26E-09	4.19E-03

TABLE 1.2 (PAGE 12 OF 14)

LIQUID WASTE SUMMARY FOR RELEASE NUMBER : 889

RELEASE MADE FROM	:	TANK	T-6204		
RELEASE START	:	DATE	6 185	TIME	1740
RELEASE COMPLETION	:	DATE	6 285	TIME	137
RELEASE DURATION	:	HRS.	7.95	MIN.	477.
TANK LEVEL [INCHES]	:	INITIAL	128.0	FINAL	8.0
BLOWDOWN INTEGRATOR READINGS	:	INITIAL	154200.	FINAL	192886.
TOTAL VOLUME RELEASED	:	LITERS	7908.	GALS	2089.
TOTAL VOLUME USED FOR RELEASE	:	LITERS	2928530.	GALS	773720.
AVERAGE RELEASE RATE	:	LPM	16.58	GPM	4.38
AVERAGE BLOWDOWN RATE	:	LPM	6139.48	GPM	1622.05

DESCRIPTIONS :

A = LIQUID WASTE RELEASE SAMPLE NUMBER ONE
 B = LIQUID WASTE RELEASE SAMPLE NUMBER ONE
 C = RIVER SAMPLE - UPSTREAM BEFORE RELEASE
 D = RIVER SAMPLE - DOWNSTREAM AFTER RELEASE
 E = BLOWDOWN SAMPLE - DURING RELEASE
 F = BLOWDOWN SAMPLE - AFTER RELEASE
 G = BLOWDOWN SAMPLE - WEEKLY

RC- NUMBER	DATE	TIME	ALPHA UCI/ML	BETA UCI/ML	TRIT. UCI/ML	DNG UCI/ML	MCA NUMBER
A 33.073	6 185	515	1.73E-08	1.82E-07	3.37E-05	0.00E-01	SD 621
B 33.074	6 185	515	1.73E-08	8.88E-08	3.23E-05	0.00E-01	SD 622
E 7.027	6 185	2030	4.26E-09	7.90E-09	3.58E-07		
G 9.022	6 585	1035	1.26E-08	1.06E-08	3.36E-07		

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	TOTAL CURIES	UCI/ML BEF.DIL.	UCI/ML AFT.DIL.	% OF LIMIT OR MPCW
GROSS ALPHA	1.37E-07	1.73E-08	1.27E-11	N/A
GROSS BETA	1.44E-06	1.82E-07	4.61E-10	1.54E+00
TRITIUM	2.67E-04	3.37E-05	9.00E-08	3.00E-03
60CO	2.32E-07	2.94E-08	7.92E-11	2.64E-04

TABLE 1.2 (PAGE 13 OF 14)

LIQUID WASTE SUMMARY FOR RELEASE NUMBER : 890

RELEASE MADE FROM	:	TANK	T-6204		
RELEASE START	:	DATE	6 685	TIME	1600
RELEASE COMPLETION	:	DATE	6 685	TIME	2140
RELEASE DURATION	:	HRS.	5.67	MIN.	340.
TANK LEVEL [INCHES]	:	INITIAL	138.0	FINAL	32.0
BLOWDOWN INTEGRATOR READINGS	:	INITIAL	650295.	FINAL	674860.
TOTAL VOLUME RELEASED	:	LITERS	6985.	GALS	1846.
TOTAL VOLUME USED FOR RELEASE	:	LITERS	1859571.	GALS	491300.
AVERAGE RELEASE RATE	:	LPM	20.55	GPM	5.43
AVERAGE BLOWDOWN RATE	:	LPM	5469.33	GPM	1445.00

DESCRIPTIONS :

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 C = RIVER SAMPLE - UPSTREAM BEFORE RELEASE
 D = RIVER SAMPLE - DOWNSTREAM AFTER RELEASE
 E = BLOWDOWN SAMPLE - DURING RELEASE
 F = BLOWDOWN SAMPLE - AFTER RELEASE
 G = BLOWDOWN SAMPLE - WEEKLY

RC- NUMBER	DATE	TIME	ALPHA UCI/ML	BETA UCI/ML	TRIT. UCI/ML	DNG UCI/ML	MCA NUMBER
A 33.075	6 585	1118	1.24E-08	6.65E-07	3.83E-04	0.00E-01	SD 642
B 33.076	6 585	1120	1.24E-08	6.37E-07	3.80E-04	0.00E-01	SD 643
E 7.028	6 685	2055	3.93E-09	8.34E-09	1.53E-06		
G 9.022	6 585	1035	1.26E-08	1.06E-08	3.36E-07		

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	TOTAL CURIES	UCI/ML BEF.DIL.	UCI/ML AFT.DIL.	% OF LIMIT OR MPCW
GROSS ALPHA	8.66E-08	1.24E-08	-7.99E-13	N/A
GROSS BETA	4.65E-06	6.65E-07	2.45E-09	8.17E+00
TRITIUM	2.67E-03	3.83E-04	1.43E-06	4.77E-02
60CO	8.80E-07	1.26E-07	4.72E-10	1.57E-03
137CS	4.69E-07	6.71E-08	2.51E-10	1.26E-03

TABLE 1.2 (PAGE 14 OF 14)

LIQUID WASTE SUMMARY FOR RELEASE NUMBER : 891

RELEASE MADE FROM	:	TANK	T-6204		
RELEASE START	:	DATE	62185	TIME	1740
RELEASE COMPLETION	:	DATE	62185	TIME	2358
RELEASE DURATION	:	HRS.	6.30	MIN.	378.
TANK LEVEL [INCHES]	:	INITIAL	122.0	FINAL	8.0
BLOWDOWN INTEGRATOR READINGS	:	INITIAL	2094600.	FINAL	2122160.
TOTAL VOLUME RELEASED	:	LITERS	7513.	GALS	1985.
TOTAL VOLUME USED FOR RELEASE	:	LITERS	2086292.	GALS	551200.
AVERAGE RELEASE RATE	:	LPM	19.87	GPM	5.25
AVERAGE BLOWDOWN RATE	:	LPM	5519.29	GPM	1458.20

DESCRIPTIONS :

A = LIQUID WASTE RELEASE SAMPLE NUMBER ONE
 B = LIQUID WASTE RELEASE SAMPLE NUMBER ONE
 C = RIVER SAMPLE - UPSTREAM BEFORE RELEASE
 D = RIVER SAMPLE - DOWNSTREAM AFTER RELEASE
 E = BLOWDOWN SAMPLE - DURING RELEASE
 F = BLOWDOWN SAMPLE - AFTER RELEASE
 G = BLOWDOWN SAMPLE - WEEKLY

RC- NUMBER	DATE	TIME	ALPHA UCI/ML	BETA UCI/ML	TRIT. UCI/ML	DNG UCI/ML	MCA NUMBER
A 33.077	62185	1100	2.13E-08	3.84E-07	8.87E-04	0.00E-01	SD 699
B 33.078	62185	1104	2.12E-08	4.97E-07	9.00E-04	0.00E-01	SD 700
E 7.029	62185	2145	1.08E-08	1.32E-08	2.92E-06		
G 9.024	61985	1000	1.53E-08	1.17E-08	2.75E-06		

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	TOTAL CURIES	UCI/ML BEF.DIL.	UCI/ML AFT.DIL.	% OF LIMIT OR MPCW
GROSS ALPHA	1.60E-07	2.13E-08	2.16E-11	N/A
GROSS BETA	3.73E-06	4.97E-07	1.74E-09	5.80E+00
TRITIUM	6.76E-03	9.00E-04	3.22E-06	1.07E-01

TABLE 1.3: LIQUID EFFLUENT RELEASED VIA THE TURBINE
BUILDING SUMP AND THE REACTOR BUILDING SUMP
(CONTINUOUS RELEASE)

2nd QUARTER 1985

TURBINE BUILDING SUMP

	MONTH	APR	MAY	JUN	QUARTERLY TOTAL
VOLUME	LITERS	2.59E+06	3.64E+06	4.75E+06	1.10E+07
TRITIUM	AVERAGE $\mu\text{Ci/ml}$	4.10E-07	3.66E-07	4.48E-07	4.06E-07*
	TOTAL CURIES	1.06E-03	1.33E-03	2.13E-03	4.47E-03
GROSS $\beta\gamma$	AVERAGE $\mu\text{Ci/ml}$	7.04E-08	7.04E-08	7.10E-08	7.06E-08*
	TOTAL CURIES	1.82E-04	2.56E-04	3.37E-04	7.77E-04
GROSS α	AVERAGE $\mu\text{Ci/ml}$	1.84E-08	1.58E-08	2.00E-08	1.80E-08*
	TOTAL CURIES	4.77E-05	5.75E-05	9.50E-05	1.98E-04

REACTOR BUILDING SUMP

	MONTH	APR	MAY	JUN	QUARTERLY TOTAL
VOLUME	LITERS	7.33E+05	5.80E+05	6.42E+05	1.96E+06
TRITIUM	AVERAGE $\mu\text{Ci/ml}$	8.20E-06	1.12E-05	1.60E-05	1.15E-05*
	TOTAL CURIES	6.02E-03	6.50E-03	1.03E-02	2.25E-02
GROSS $\beta\gamma$	AVERAGE $\mu\text{Ci/ml}$	7.18E-08	7.13E-08	7.32E-08	7.20E-08*
	TOTAL CURIES	5.27E-05	4.14E-05	4.70E-05	1.41E-04
GROSS α	AVERAGE $\mu\text{Ci/ml}$	1.90E-08	1.65E-08	2.09E-08	1.86E-08*
	TOTAL CURIES	1.39E-05	9.57E-06	1.34E-05	3.65E-05

* Represents "weighted" average

TABLE 2.1 - RADIOACTIVE GASEOUS EFFLUENT RELEASES FOR 2nd QUARTER, 1985

		UNITS	APR	MAY	JUN	QUARTERLY TOTAL
1a. Total Noble Gases		Curies	NSA	NSA	NSA	NSA
1b. Total Tritium		Curies	8.03E-03	9.07E-03	5.09E-03	2.22E-02
1c. Total Halogens		Curies	NSA	NSA	NSA	NSA
1d. Total Particulate Gross (β, γ) Activity RT-7325		Curies	1.09E-08	2.92E-08	5.33E-08	9.34E-08
1e. Total Particulate Gross Alpha Activity RT-7325		Curies	6.73E-08	5.51E-09	1.49E-08	8.77E-08
2. Maximum Hourly Release Rate for Any One Hour Period		Ci/hr	3.09E-04	2.75E-04	2.24E-04	3.09E-04
3. Estimated Total Radioac- tivity Released by Nu- clide						
Particulates	MPCa	Curies	NSA	NSA	NSA	NSA
Halogens	MPCa(μ Ci/ml)	Curies	NSA	NSA	NSA	NSA
Gases	MPCa(μ Ci/ml)	Curies				
3H	2.00E-07		8.03E-03	9.07E-03	5.09E-03	2.22E-02

$$4.7E-05 = 4.7 \times 10^{-5}$$

$$5.2E+03 = 5.2 \times 10^{+3}$$

NSA means no significant activity.

TABLE 2.2 (PAGE 1 OF 14)

GAS WASTE SUMMARY FOR RELEASE NUMBER : 1242

RELEASE MADE FROM	:	TANK	T-6303		
RELEASE START	:	DATE	4 185	TIME	1925
RELEASE COMPLETION	:	DATE	4 285	TIME	1030
RELEASE DURATION	:	HRS.	15.08	OR MIN.	905.
TANK PRESSURE [PSIG]	:	INITIAL	410	FINAL	15
TANK TEMPERATURE	:	DEG-F	62		
AVERAGE RELEASE RATE	:	CFM	19.67		
TOTAL VOLUME OF GAS RELEASED	:	SCC	5.04E+08		

REACTOR BUILDING VENTILLATION SYSTEM

EXHAUST TEMPERATURE	:	DEG-F	85		
EXHAUST FLOW RATE	:	ACFM	32000.		
STABILITY @ START OF RELEASE	:	CATAGORY	" "		
RC-NUMBER	:	GRAB	34.015	TRITIUM	35.009

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	ACTIVITY UCI/SCC	MPC(A) UCI/SCC	ACTIVITY /MPC(A)	TOTAL CURIES
3H	7.00E-06	2.00E-07	3.50E+01	3.53E-03

TOTAL CURIES OF NOBEL GAS RELEASED : 0.00E-01

ACTIVITY RELEASED RATE	:	CI/HR	2.34E-04	UCI/SEC	6.50E-02
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PERCENT OF TECH. SPEC. LIMIT	:	< 0.01 %
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TABLE 2.2 (PAGE 2 OF 14)

GAS WASTE SUMMARY FOR RELEASE NUMBER : 1243

RELEASE MADE FROM	:	TANK	T-6304		
RELEASE START	:	DATE	42485	TIME	2105
RELEASE COMPLETION	:	DATE	42585	TIME	1140
RELEASE DURATION	:	HRS.	14.58	OR MIN.	875.
TANK PRESSURE [PSIG]	:	INITIAL	320	FINAL	10
TANK TEMPERATURE	:	DEG-F	88		
AVERAGE RELEASE RATE	:	CFM	15.21		
TOTAL VOLUME OF GAS RELEASED	:	SCC	3.77E+08		

REACTOR BUILDING VENTILLATION SYSTEM

EXHAUST TEMPERATURE	:	DEG-F	91		
EXHAUST FLOW RATE	:	ACFM	31000.		
STABILITY @ START OF RELEASE	:	CATAGORY	" "		
RC-NUMBER	:	GRAB	34.018	TRITIUM	35.011

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	ACTIVITY UCI/SCC	MPC(A) UCI/SCC	ACTIVITY /MPC(A)	TOTAL CURIES
3H	1.19E-05	2.00E-07	5.97E+01	4.50E-03

TOTAL CURIES OF NOBEL GAS RELEASED : 0.00E-01

ACTIVITY RELEASED RATE	:	CI/HR	3.09E-04	UCI/SEC	8.57E-02
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PERCENT OF TECH. SPEC. LIMIT	:	< 0.01 %
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TABLE 2.2 (PAGE 3 OF 14)

GAS WASTE SUMMARY FOR RELEASE NUMBER : 1244

RELEASE MADE FROM	:	TANK	T-6303		
RELEASE START	:	DATE	5 785	TIME	2150
RELEASE COMPLETION	:	DATE	5 885	TIME	1045
RELEASE DURATION	:	HRS.	12.92	OR MIN.	775.
TANK PRESSURE [PSIG]	:	INITIAL	390	FINAL	30
TANK TEMPERATURE	:	DEG-F	85		
AVERAGE RELEASE RATE	:	CFM	20.05		
TOTAL VOLUME OF GAS RELEASED	:	SCC	4.40E+08		

REACTOR BUILDING VENTILLATION SYSTEM

EXHAUST TEMPERATURE	:	DEG-F	92		
EXHAUST FLOW RATE	:	ACFM	32000.		
STABILITY @ START OF RELEASE	:	CATAGORY	" "		
RC-NUMBER	:	GRAB	34.020	TRITIUM	35.012

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	ACTIVITY UCI/SCC	MPC(A) UCI/SCC	ACTIVITY /MPC(A)	TOTAL CURIES
3H	8.08E-06	2.00E-07	4.04E+01	3.55E-03

TOTAL CURIES OF NOBEL GAS RELEASED : 0.00E-01

ACTIVITY RELEASED RATE	:	CI/HR	2.75E-04	UCI/SEC	7.64E-02
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PERCENT OF TECH. SPEC. LIMIT	:	< 0.01 %
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TABLE 2.2 (PAGE 4 OF 14)

GAS WASTE SUMMARY FOR RELEASE NUMBER : 1245

RELEASE MADE FROM	:	TANK	T-6304		
RELEASE START	:	DATE	51085	TIME	1623
RELEASE COMPLETION	:	DATE	51185	TIME	400
RELEASE DURATION	:	HPS.	11.62	OR MIN.	697.
TANK PRESSURE [PSIG]	:	INITIAL	430	FINAL	5
TANK TEMPERATURE	:	DEG-F	88		
AVERAGE RELEASE RATE	:	CFM	26.17		
TOTAL VOLUME OF GAS RELEASED	:	SCC	5.17E+08		

REACTOR BUILDING VENTILLATION SYSTEM

EXHAUST TEMPERATURE	:	DEG-F	93		
EXHAUST FLOW RATE	:	ACFM	30000.		
STABILITY @ START OF RELEASE	:	CATAGORY	" "		
RC-NUMBER	:	GRAB	34.021	TRITIUM	35.013

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	ACTIVITY UCI/SCC	MPC(A) UCI/SCC	ACTIVITY /MPC(A)	TOTAL CURIES
3H	5.57E-09	2.00E-07	2.78E-02	2.88E-06

TOTAL CURIES OF NOBEL GAS RELEASED : 0.00E-01

ACTIVITY RELEASED RATE	:	CI/HR	2.48E-07	UCI/SEC	6.88E-05
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PERCENT OF TECH. SPEC. LIMIT	:		< 0.01 %
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TABLE 2.2 (PAGE 5 OF 14)

GAS WASTE SUMMARY FOR RELEASE NUMBER : 1246

RELEASE MADE FROM	:	TANK	T-6303		
RELEASE START	:	DATE	51285	TIME	1325
RELEASE COMPLETION	:	DATE	51385	TIME	4
RELEASE DURATION	:	HRS.	10.65	OR MIN.	639.
TANK PRESSURE [PSIG]	:	INITIAL	430	FINAL	15
TANK TEMPERATURE	:	DEG-F	84		
AVERAGE RELEASE RATE	:	CFM	28.08		
TOTAL VOLUME OF GAS RELEASED	:	SCC	5.08E+08		

REACTOR BUILDING VENTILLATION SYSTEM

EXHAUST TEMPERATURE	:	DEG-F	95		
EXHAUST FLOW RATE	:	ACFM	31000.		
STABILITY @ START OF RELEASE	:	CATAGORY	" "		
RC-NUMBER	:	GRAB	34.022	TRITIUM	35.014

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	ACTIVITY UCI/SCC	MPC(A) UCI/SCC	ACTIVITY /MPC(A)	TOTAL CURIES
3H	8.00E-07	2.00E-07	4.00E+00	4.07E-04

TOTAL CURIES OF NOBEL GAS RELEASED : 0.00E-01

ACTIVITY RELEASED RATE	:	CI/HR	3.82E-05	UCI/SEC	1.06E-02
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PERCENT OF TECH. SPEC. LIMIT	:	< 0.01 %
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TABLE 2.2 (PAGE 6 OF 14)

GAS WASTE SUMMARY FOR RELEASE NUMBER : 1247

RELEASE MADE FROM	:	TANK	T-6304		
RELEASE START	:	DATE	51485	TIME	1907
RELEASE COMPLETION	:	DATE	51585	TIME	600
RELEASE DURATION	:	HRS.	10.88	OR MIN.	653.
TANK PRESSURE [PSIG]	:	INITIAL	420	FINAL	40
TANK TEMPERATURE	:	DEG-F	88		
AVERAGE RELEASE RATE	:	CFM	24.98		
TOTAL VOLUME OF GAS RELEASED	:	SCC	4.62E+08		

REACTOR BUILDING VENTILLATION SYSTEM

EXHAUST TEMPERATURE	:	DEG-F	90		
EXHAUST FLOW RATE	:	ACFM	30000.		
STABILITY @ START OF RELEASE	:	CATAGORY	" "		
RC-NUMBER	:	GRAB	34.023	TRITIUM	35.015

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	ACTIVITY UCI/SCC	MPC(A) UCI/SCC	ACTIVITY /MPC(A)	TOTAL CURIES
3H	2.76E-06	2.00E-07	1.38E+01	1.28E-03

TOTAL CURIES OF NOBEL GAS RELEASED : 0.00E-01

ACTIVITY RELEASED RATE	:	CI/HR	1.17E-04	UCI/SEC	3.26E-02
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PERCENT OF TECH. SPEC. LIMIT : < 0.01 %

TABLE 2.2 (PAGE 7 OF 14)

GAS WASTE SUMMARY FOR RELEASE NUMBER : 1248

RELEASE MADE FROM	:	TANK	T-6303		
RELEASE START	:	DATE	51585	TIME	1745
RELEASE COMPLETION	:	DATE	51685	TIME	58
RELEASE DURATION	:	HRS.	7.22	OR	MIN. 433.
TANK PRESSURE [PSIG]	:	INITIAL	340	FINAL	20
TANK TEMPERATURE	:	DEG-F	82		
AVERAGE RELEASE RATE	:	CFM	32.07		
TOTAL VOLUME OF GAS RELEASED	:	SCC	3.93E+08		

REACTOR BUILDING VENTILLATION SYSTEM

EXHAUST TEMPERATURE	:	DEG-F	91		
EXHAUST FLOW RATE	:	ACFM	30000.		
STABILITY @ START OF RELEASE	:	CATAGORY	" "		
RC-NUMBER	:	GRAB	34.024	TRITIUM	35.016

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	ACTIVITY UCI/SCC	MPC(A) UCI/SCC	ACTIVITY /MPC(A)	TOTAL CURIES
3H	1.87E-06	2.00E-07	9.36E+00	7.36E-04

TOTAL CURIES OF NOBEL GAS RELEASED : 0.00E-01

ACTIVITY RELEASED RATE	:	CI/HR	1.02E-04	UCI/SEC	2.83E-02
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PERCENT OF TECH. SPEC. LIMIT	:	< 0.01 %
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GAS WASTE SUMMARY FOR RELEASE NUMBER : 1249

RELEASE MADE FROM	:	TANK	T-6304		
RELEASE START	:	DATE	51885	TIME	2220
RELEASE COMPLETION	:	DATE	51985	TIME	1146
RELEASE DURATION	:	HRS.	13.43	OR MIN.	806.
TANK PRESSURE [PSIG]	:	INITIAL	420	FINAL	8
TANK TEMPERATURE	:	DEG-F	86		
AVERAGE RELEASE RATE	:	CFM	22.02		
TOTAL VOLUME OF GAS RELEASED	:	SCC	5.03E+08		

REACTOR BUILDING VENTILLATION SYSTEM

EXHAUST TEMPERATURE	:	DEG-F	90		
EXHAUST FLOW RATE	:	ACFM	31000.		
STABILITY @ START OF RELEASE	:	CATAGORY	" "		
RC-NUMBER	:	GRAB	34.025	TRITIUM	35.017

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	ACTIVITY UCI/SCC	MPC(A) UCI/SCC	ACTIVITY /MPC(A)	TOTAL CURIES
3H	2.01E-06	2.00E-07	1.00E+01	1.01E-03

TOTAL CURIES OF NOBEL GAS RELEASED : 0.00E-01

ACTIVITY RELEASED RATE	:	CI/HR	7.51E-05	UCI/SEC	2.08E-02
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PERCENT OF TECH. SPEC. LIMIT	:	< 0.01 %
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GAS WASTE SUMMARY FOR RELEASE NUMBER : 1250

RELEASE MADE FROM	:	TANK	T-6303		
RELEASE START	:	DATE	52085	TIME	2125
RELEASE COMPLETION	:	DATE	52185	TIME	552
RELEASE DURATION	:	HRS.	8.45	OR	MIN. 507.
TANK PRESSURE [PSIG]	:	INITIAL	420	FINAL	30
TANK TEMPERATURE	:	DEG-F	81		
AVERAGE RELEASE RATE	:	CFM	33.44		
TOTAL VOLUME OF GAS RELEASED	:	SCC	4.80E+08		

REACTOR BUILDING VENTILLATION SYSTEM

EXHAUST TEMPERATURE	:	DEG-F	90		
EXHAUST FLOW RATE	:	ACFM	31000.		
STABILITY @ START OF RELEASE	:	CATAGORY	" "		
RC-NUMBER	:	GRAB	34.026	TRITIUM	35.018

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	ACTIVITY UCI/SCC	MPC(A) UCI/SCC	ACTIVITY /MPC(A)	TOTAL CURIES
3H	1.90E-06	2.00E-07	9.48E+00	9.10E-04

TOTAL CURIES OF NOBEL GAS RELEASED : 0.00E-01

ACTIVITY RELEASED RATE	:	CI/HR	1.08E-04	UCI/SEC	2.99E-02
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PERCENT OF TECH. SPEC. LIMIT	:	< 0.01 %
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TABLE 2.2 (PAGE 10 OF 14)

GAS WASTE SUMMARY FOR RELEASE NUMBER : 1251

RELEASE MADE FROM	:	TANK	T-6304		
RELEASE START	:	DATE	53185	TIME	1707
RELEASE COMPLETION	:	DATE	6 185	TIME	640
RELEASE DURATION	:	HRS.	13.55	OR MIN.	813.
TANK PRESSURE [PSIG]	:	INITIAL	350	FINAL	10
TANK TEMPERATURE	:	DEG-F	85		
AVERAGE RELEASE RATE	:	CFM	18.05		
TOTAL VOLUME OF GAS RELEASED	:	SCC	4.15E+08		

REACTOR BUILDING VENTILLATION SYSTEM

EXHAUST TEMPERATURE	:	DEG-F	92		
EXHAUST FLOW RATE	:	ACFM	31000.		
STABILITY @ START OF RELEASE	:	CATAGORY	" "		
RC-NUMBER	:	GRAB	34.027	TRITIUM	35.019

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	ACTIVITY UCI/SCC	MPC(A) UCI/SCC	ACTIVITY /MPC(A)	TOTAL CURIES
3H	2.82E-06	2.00E-07	1.41E+01	1.17E-03

TOTAL CURIES OF NOBEL GAS RELEASED : 0.00E-01

ACTIVITY RELEASED RATE	:	CI/HR	8.66E-05	UCI/SEC	2.41E-02
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PERCENT OF TECH. SPEC. LIMIT	:	< 0.01 %
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TABLE 2.2 (PAGE 11 OF 14)

GAS WASTE SUMMARY FOR RELEASE NUMBER : 1252

RELEASE MADE FROM	:	TANK	T-6303		
RELEASE START	:	DATE	6 685	TIME	1720
RELEASE COMPLETION	:	DATE	6 785	TIME	603
RELEASE DURATION	:	HRS.	12.72	OR MIN.	763.
TANK PRESSURE [PSIG]	:	INITIAL	420	FINAL	12
TANK TEMPERATURE	:	DEG-F	83		
AVERAGE RELEASE RATE	:	CFM	23.16		
TOTAL VOLUME OF GAS RELEASED	:	SCC	5.00E+08		

REACTOR BUILDING VENTILLATION SYSTEM

EXHAUST TEMPERATURE	:	DEG-F	92		
EXHAUST FLOW RATE	:	ACFM	31000.		
STABILITY @ START OF RELEASE	:	CATAGORY	" "		
RC-NUMBER	:	GRAB	34.028	TRITIUM	35.020

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	ACTIVITY UCI/SCC	MPC(A) UCI/SCC	ACTIVITY /MPC(A)	TOTAL CURIES
3H	1.51E-06	2.00E-07	7.54E+00	7.55E-04

TOTAL CURIES OF NOBEL GAS RELEASED : 0.00E-01

ACTIVITY RELEASED RATE	:	CI/HR	5.94E-05	UCI/SEC	1.65E-02
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PERCENT OF TECH. SPEC. LIMIT	:	< 0.01 %
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TABLE 2.2 (PAGE 12 OF 14)

GAS WASTE SUMMARY FOR RELEASE NUMBER : 1253

RELEASE MADE FROM	:	TANK	T-6304		
RELEASE START	:	DATE	61585	TIME	2145
RELEASE COMPLETION	:	DATE	61785	TIME	515
RELEASE DURATION	:	HRS.	31.50	OR MIN.	1890.
TANK PRESSURE [PSIG]	:	INITIAL	400	FINAL	0
TANK TEMPERATURE	:	DEG-F	84		
AVERAGE RELEASE RATE	:	CFM	9.15		
TOTAL VOLUME OF GAS RELEASED	:	SCC	4.90E+08		

REACTOR BUILDING VENTILLATION SYSTEM

EXHAUST TEMPERATURE	:	DEG-F	90		
EXHAUST FLOW RATE	:	ACFM	31000.		
STABILITY @ START OF RELEASE	:	CATAGORY	" "		
RC-NUMBER	:	GRAB	34.030	TRITIUM	35.021

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	ACTIVITY UCI/SCC	MPC(A) UCI/SCC	ACTIVITY /MPC(A)	TOTAL CURIES
3H	2.34E-06	2.00E-07	1.17E+01	1.15E-03

TOTAL CURIES OF NOBEL GAS RELEASED : 0.00E-01

ACTIVITY RELEASED RATE	:	CI/HR	3.64E-05	UCI/SEC	1.01E-02
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PERCENT OF TECH. SPEC. LIMIT	:	< 0.01 %
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TABLE 2.2 (PAGE 13 OF 14)

GAS WASTE SUMMARY FOR RELEASE NUMBER : 1254

RELEASE MADE FROM	:	TANK	T-6303		
RELEASE START	:	DATE	61785	TIME	1723
RELEASE COMPLETION	:	DATE	61885	TIME	815
RELEASE DURATION	:	HRS.	14.87	OR MIN.	892.
TANK PRESSURE [PSIG]	:	INITIAL	280	FINAL	0
TANK TEMPERATURE	:	DEG-F	80		
AVERAGE RELEASE RATE	:	CFM	13.67		
TOTAL VOLUME OF GAS RELEASED	:	SCC	3.45E+08		

REACTOR BUILDING VENTILLATION SYSTEM

EXHAUST TEMPERATURE	:	DEG-F	89		
EXHAUST FLOW RATE	:	ACFM	31000.		
STABILITY @ START OF RELEASE	:	CATAGORY	" "		
RC-NUMBER	:	GRAB	34.031	TRITIUM	35.022

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	ACTIVITY UCI/SCC	MPC(A) UCI/SCC	ACTIVITY /MPC(A)	TOTAL CURIES
3H	1.37E-06	2.00E-07	6.84E+00	4.73E-04

TOTAL CURIES OF NOBEL GAS RELEASED : 0.00E-01

ACTIVITY RELEASED RATE	:	CI/HR	3.18E-05	UCI/SEC	8.83E-03
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PERCENT OF TECH. SPEC. LIMIT	:	< 0.01 %
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TABLE 2.2 (PAGE 14 OF 14)

GAS WASTE SUMMARY FOR RELEASE NUMBER : 1255

RELEASE MADE FROM	:	TANK	T-6304		
RELEASE START	:	DATE	62785	TIME	1758
RELEASE COMPLETION	:	DATE	62885	TIME	605
RELEASE DURATION	:	HRS.	12.12	OR MIN.	727.
TANK PRESSURE [PSIG]	:	INITIAL	300	FINAL	10
TANK TEMPERATURE	:	DEG-F	82		
AVERAGE RELEASE RATE	:	CFM	17.31		
TOTAL VOLUME OF GAS RELEASED	:	SCC	3.56E+08		

REACTOR BUILDING VENTILLATION SYSTEM

EXHAUST TEMPERATURE	:	DEG-F	89		
EXHAUST FLOW RATE	:	ACFM	30000.		
STABILITY @ START OF RELEASE	:	CATAGORY	" "		
RC-NUMBER	:	GRAB	34.032	TRITIUM	35.023

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	ACTIVITY UCI/SCC	MPC(A) UCI/SCC	ACTIVITY /MPC(A)	TOTAL CURIES
3H	7.62E-06	2.00E-07	3.81E+01	2.71E-03

TOTAL CURIES OF NOBEL GAS RELEASED : 0.00E-01

ACTIVITY RELEASED RATE	:	CI/HR	2.24E-04	UCI/SEC	6.22E-02
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PERCENT OF TECH. SPEC. LIMIT	:	< 0.01 %
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SYSTEM	ALPHA	BETA	TRITIUM	
FARM POND				
	4.62E-08	7.77E-08	7.31E-07	MAXIMUM
	1.24E-08	6.94E-08	3.35E-07	MINIMUM
	2.28E-08 (9)	7.27E-08 (9)	4.21E-07 (9)	AVERAGE
COOLING TOWER B/D-DURING				
	1.08E-08	2.00E-08	2.92E-06	MAXIMUM
	3.23E-09	7.09E-09	3.38E-07	MINIMUM
	5.80E-09 (14)	1.13E-08 (14)	6.54E-07 (14)	AVERAGE
COOLING TOWER B/D-WEEKLY				
	2.64E-08	2.96E-08	2.75E-06	MAXIMUM
	2.05E-09	6.93E-09	3.35E-07	MINIMUM
	9.01E-09 (13)	1.18E-08 (13)	6.84E-07 (13)	AVERAGE
REACTOR BLDG. SUMP				
	4.50E-08	9.31E-08	8.35E-05	MAXIMUM
	1.21E-08	6.05E-08	3.50E-07	MINIMUM
	1.86E-08 (92)	7.20E-08 (92)	1.15E-05 (92)	AVERAGE
TURBINE BLDG. SUMP				
	2.80E-08	7.88E-08	8.86E-07	MAXIMUM
	1.22E-08	6.05E-08	3.20E-07	MINIMUM
	1.80E-08 (39)	7.06E-08 (39)	4.06E-07 (39)	AVERAGE
SYSTEM 21, LOOP 1				
	2.14E-08	8.93E-08	5.95E-05	MAXIMUM
	2.12E-08	6.75E-08	5.51E-06	MINIMUM
	2.13E-08 (2)	7.84E-08 (2)	3.25E-05 (2)	AVERAGE
SYSTEM 21, Loop 2				
				MAXIMUM
				MINIMUM
	1.73E-08 (1)	7.20E-08 (1)	1.14E-06 (1)	AVERAGE
SYSTEM 31				
				MAXIMUM
				MINIMUM
	(0)	(0)	(0)	AVERAGE
SYSTEM 41				
				MAXIMUM
				MINIMUM
	(0)	(0)	(0)	AVERAGE
SYSTEM 42				
	1.73E-08	7.84E-08	3.58E-07	MAXIMUM
	1.24E-08	7.03E-08	3.28E-07	MINIMUM
	1.42E-08 (3)	7.36E-08 (3)	3.45E-07 (3)	AVERAGE

- NOTES: 1. All activities expressed in units of $\mu\text{Ci/ml}$
 2. () Represents the number of samples represented by the average value.

SYSTEM	ALPHA	BETA	TRITIUM	
SYSTEM 46, LOOP 1				MAXIMUM
				MINIMUM
	1.73E-08 (1)	7.20E-08 (1)	3.64E-05 (1)	AVERAGE
SYSTEM 46, LOOP 2				MAXIMUM
	2.14E-08	6.81E-08	8.92E-06	MINIMUM
	2.12E-08	6.75E-08	5.25E-06	AVERAGE
	2.13E-08 (2)	6.78E-08 (2)	7.09E-06 (2)	
SYSTEM 47, LOOP 1				MAXIMUM
	2.14E-08	7.20E-08	2.37E-04	MINIMUM
	1.73E-08	6.75E-08	4.77E-05	AVERAGE
	1.99E-08 (3)	6.92E-08 (3)	1.18E-04 (3)	
SYSTEM 47, LOOP 2				MAXIMUM
				MINIMUM
	(0)	(0)	(0)	AVERAGE

- NOTES: 1. All activities expressed in units of $\mu\text{Ci/ml}$
 2. () Represents the number of samples represented by the average value.

TABLE 1.1 - RADIOACTIVE LIQUID EFFLUENT RELEASES FOR 1st QUARTER, 1985

	UNITS	JAN	FEB	MAR	QUARTERLY TOTAL
1. Gross Beta Radioactivity					
a) Total Release	Curies	2.76E-04	9.08E-05	2.30E-04	5.97E-04
b) Avg. Conc. before Dilution	μCi/ml	5.73E-06	2.45E-06	8.26E-06	5.48E-06 *
Avg Conc. Released	μCi/ml				
c) after Dilution	above bkgd	2.11E-08	6.98E-09	1.21E-08	1.34E-08 *
2. Tritium					
a) Total Release	Curies	3.85E+00	4.13E-01	7.64E-03	4.27E+00
b) Avg. Conc. before Dilution	μCi/ml	8.25E-02	8.76E-03	2.90E-04	3.05E-02 *
Avg Conc. Released	μCi/ml				
c) after Dilution	above bkgd	3.47E-04	2.25E-05	4.61E-07	1.23E-04 *
3. Dissolved Noble Gases		NSA	NSA	NSA	NSA
a) Total Release	Curies	N/A	N/A	N/A	N/A
b) Avg. Conc. before Dilution	μCi/ml	N/A	N/A	N/A	N/A *
Avg Conc. Released	μCi/ml				
c) after Dilution	above bkgd	N/A	N/A	N/A	N/A *
4. Gross Alpha Radioactivity					
a) Total Release	Curies	3.37E-06	1.11E-06	5.72E-07	5.05E-06
5. Total Volume of Liquid Released before Dilution	Liters	4.73E+04	4.33E+04	2.69E+04	1.18E+05
6. Total Volume of Liquid Used for Dilution	Liters	1.34E+07	1.37E+07	2.08E+07	4.79E+07
7. Estimated Total Radioactivity Released by Radioisotope above Background					
Nuclide	MPCw (μCi/ml)	Curies			Curies
137Cs	2.00E-05	8.32E-06	5.81E-06	1.40E-05	2.81E-05
54Mn	1.00E-04	2.32E-05	4.61E-06	5.12E-07	2.83E-05
60Co	3.00E-05	2.94E-04	2.52E-05	2.43E-05	3.44E-04
58Co	9.00E-05	2.33E-06	NSA	NSA	2.33E-06
110Agm	3.00E-05	6.42E-05	NSA	3.74E-07	6.46E-05
59Fe	5.00E-05	6.07E-06	NSA	NSA	6.07E-06
65Zn	1.00E-04	7.00E-06	NSA	NSA	7.00E-06

*Represents a "weighted" average.

$$4.7E-05 = 4.7 \times 10^{-5}$$

$$5.2E+03 = 5.2 \times 10^3$$

NSA means no significant activity.

TABLE 1.2 (PAGE 1 OF 17)

LIQUID WASTE SUMMARY FOR RELEASE NUMBER : 861

RELEASE MADE FROM	:	TANK	T-6204		
RELEASE START	:	DATE	1 885	TIME	1340
RELEASE COMPLETION	:	DATE	1 885	TIME	1840
RELEASE DURATION	:	HRS.	5.00	MIN.	300.
TANK LEVEL [INCHES]	:	INITIAL	129.0	FINAL	5.0
BLOWDOWN INTEGRATOR READINGS	:	INITIAL	3140860.	FINAL	3177340.
TOTAL VOLUME RELEASED	:	LITERS	8172.	GALS	2159.
TOTAL VOLUME USED FOR RELEASE	:	LITERS	2761536.	GALS	729600.
AVERAGE RELEASE RATE	:	LPM	27.24	GPM	7.20
AVERAGE BLOWDOWN RATE	:	LPM	9205.12	GPM	2432.00

DESCRIPTIONS :

A = LIQUID WASTE RELEASE SAMPLE NUMBER ONE

B = LIQUID WASTE RELEASE SAMPLE NUMBER ONE

C = BLOWDOWN SAMPLE - DURING RELEASE

D = BLOWDOWN SAMPLE - WEEKLY

RC- NUMBER	DATE	TIME	ALPHA UCI/ML	BETA UCI/ML	TRIT. UCI/ML	DNG UCI/ML	MCA NUMBER
A 33.001	1 885	610	2.07E-08	3.79E-06	6.93E-03	0.00E-01	SD 28
B 33.002	1 885	615	2.49E-08	3.39E-06	6.92E-03	0.00E-01	SD 29
C 7.001	1 885	1710	6.84E-09	8.76E-09	1.73E-05		
D 9.001	1 985	830	6.77E-09	8.75E-09	3.81E-07		

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	TOTAL CURIES	UCI/ML BEF. DIL.	UCI/ML AFT. DIL.	% OF LIMIT OR MPCW
GROSS ALPHA	2.03E-07	2.49E-08	5.35E-11	N/A
GROSS BETA	3.09E-05	3.79E-06	1.11E-08	3.71E+01
TRITIUM	5.66E-02	6.93E-03	2.04E-05	6.82E-01
137CS	1.25E-06	1.53E-07	4.51E-10	2.26E-03
54MN	1.26E-06	1.54E-07	4.54E-10	4.54E-04
60CO	7.08E-06	8.67E-07	2.56E-09	8.53E-03

TABLE 1.2 (PAGE 2 OF 17)

LIQUID WASTE SUMMARY FOR RELEASE NUMBER : 862

RELEASE MADE FROM	:	TANK	T-6204		
RELEASE START	:	DATE	11485	TIME	1720
RELEASE COMPLETION	:	DATE	11485	TIME	2145
RELEASE DURATION	:	HRS.	4.42	MIN.	265.
TANK LEVEL [INCHES]	:	INITIAL	128.0	FINAL	5.0
BLOWDOWN INTEGRATOR READINGS	:	INITIAL	3784000.	FINAL	3811000.
TOTAL VOLUME RELEASED	:	LITERS	8106.	GALS	2142.
TOTAL VOLUME USED FOR RELEASE	:	LITERS	2043900.	GALS	540000.
AVERAGE RELEASE RATE	:	LPM	30.59	GPM	8.08
AVERAGE BLOWDOWN RATE	:	LPM	7712.83	GPM	2037.74

DESCRIPTIONS :

A = LIQUID WASTE RELEASE SAMPLE NUMBER ONE
 B = LIQUID WASTE RELEASE SAMPLE NUMBER ONE
 C = BLOWDOWN SAMPLE - DURING RELEASE
 D = BLOWDOWN SAMPLE - WEEKLY

RC- NUMBER	DATE	TIME	ALPHA UCI/ML	BETA UCI/ML	TRIT. UCI/ML	DNG UCI/ML	MCA NUMBER
A 33.007	11485	610	1.32E-07	2.19E-05	1.85E-03	0.00E-01	SD 49
B 33.008	11485	615	1.69E-07	2.23E-05	1.82E-03	0.00E-01	SD 50
C 7.002	11485	2040	5.00E-09	3.66E-08	4.89E-06		
D 9.002	11685	1015	4.18E-09	8.03E-09	5.58E-07		

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	TOTAL CURIES	UCI/ML BEF. DIL.	UCI/ML AFT. DIL.	% OF LIMIT OR MPCW
GROSS ALPHA	1.37E-06	1.69E-07	6.51E-10	N/A
GROSS BETA	1.81E-04	2.23E-05	8.80E-08	2.93E+02
TRITIUM	1.50E-02	1.85E-03	7.31E-06	2.44E-01
137CS	5.80E-06	7.16E-07	2.83E-09	1.41E-02
54MN	1.75E-05	2.16E-06	8.53E-09	8.53E-03
58CO	2.33E-06	2.88E-07	1.14E-09	1.26E-03
110AGM	4.90E-05	6.05E-06	2.39E-08	7.97E-02
59FE	6.07E-06	7.49E-07	2.96E-09	5.92E-03
65ZN	7.00E-06	8.63E-07	3.41E-09	3.41E-03
60CO	2.25E-04	2.77E-05	1.09E-07	3.65E-01

TABLE 1.2 (PAGE 3 OF 17)

LIQUID WASTE SUMMARY FOR RELEASE NUMBER : 863

RELEASE MADE FROM	:	TANK	T-6204		
RELEASE START	:	DATE	11785	TIME	1722
RELEASE COMPLETION	:	DATE	11785	TIME	2228
RELEASE DURATION	:	HRS.	5.10	MIN.	306.
TANK LEVEL [INCHES]	:	INITIAL	124.0	FINAL	6.0
BLOWDOWN INTEGRATOR READINGS	:	INITIAL	4202930.	FINAL	4237550.
TOTAL VOLUME RELEASED	:	LITERS	7776.	GALS	2054.
TOTAL VOLUME USED FOR RELEASE	:	LITERS	2620734.	GALS	692400.
AVERAGE RELEASE RATE	:	LPM	25.41	GPM	6.71
AVERAGE BLOWDOWN RATE	:	LPM	8564.49	GPM	2262.75

DESCRIPTIONS :

A = LIQUID WASTE RELEASE SAMPLE NUMBER ONE

B = LIQUID WASTE RELEASE SAMPLE NUMBER ONE

C = BLOWDOWN SAMPLE - DURING RELEASE

D = BLOWDOWN SAMPLE - WEEKLY

RC- NUMBER	DATE	TIME	ALPHA UCI/ML	BETA UCI/ML	TRIT. UCI/ML	DNG UCI/ML	MCA NUMBER
A 33.009	11785	630	1.17E-07	5.03E-06	1.40E-03	0.00E-01	SD 71
B 33.010	11785	635	5.04E-08	5.15E-06	1.38E-03	0.00E-01	SD 73
C 7.003	11785	2055	4.33E-09	1.04E-08	2.26E-06		
D 7.002	11685	1015	4.18E-09	8.03E-09	5.58E-07		

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	TOTAL CURIES	UCI/ML BEF. DIL.	UCI/ML AFT. DIL.	% OF LIMIT OR MPCW
GROSS ALPHA	9.10E-07	1.17E-07	3.34E-10	N/A
GROSS BETA	4.01E-05	5.15E-06	1.52E-08	5.07E+01
TRITIUM	1.09E-02	1.40E-03	4.13E-06	1.38E-01
137CS	1.27E-06	1.63E-07	4.82E-10	2.41E-03
54MN	3.76E-06	4.84E-07	1.43E-09	1.43E-03
110AGM	1.21E-05	1.56E-06	4.62E-09	1.54E-02
60CO	5.02E-05	6.45E-06	1.91E-08	6.36E-02

TABLE 1.2 (PAGE 4 OF 17)

LIQUID WASTE SUMMARY FOR RELEASE NUMBER : 864

RELEASE MADE FROM	:	TANK	T-6204		
RELEASE START	:	DATE	12185	TIME	1330
RELEASE COMPLETION	:	DATE	12185	TIME	1855
RELEASE DURATION	:	HRS.	5.42	MIN.	325.
TANK LEVEL [INCHES]	:	INITIAL	123.0	FINAL	5.0
BLOWDOWN INTEGRATOR READINGS	:	INITIAL	4761834.	FINAL	4795815.
TOTAL VOLUME RELEASED	:	LITERS	7776.	GALS	2054.
TOTAL VOLUME USED FOR RELEASE	:	LITERS	2572362.	GALS	679620.
AVERAGE RELEASE RATE	:	LPM	23.93	GPM	6.32
AVERAGE BLOWDOWN RATE	:	LPM	7914.96	GPM	2091.14

DESCRIPTIONS :

A = LIQUID WASTE RELEASE SAMPLE NUMBER ONE
 B = LIQUID WASTE RELEASE SAMPLE NUMBER ONE
 C = BLOWDOWN SAMPLE - DURING RELEASE
 D = BLOWDOWN SAMPLE - WEEKLY

RC- NUMBER	DATE	TIME	ALPHA UCI/ML	BETA UCI/ML	TRIT. UCI/ML	DNG UCI/ML	MCA NUMBER
A 33.011	12185	213	2.45E-08	7.24E-07	1.54E-01	0.00E-01	SD 82
B 33.012	12185	215	2.45E-08	7.24E-07	1.55E-01	0.00E-01	SD 83
C 7.004	12185	1630	1.35E-08	8.80E-09	5.28E-04		
D 9.003	12285	900	2.17E-08	2.92E-08	3.84E-07		

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	TOTAL CURIES	UCI/ML BEF. DIL.	UCI/ML AFT. DIL.	% OF LIMIT OR MPCW
GROSS ALPHA	1.91E-07	2.45E-08	8.49E-12	N/A
GROSS BETA	5.63E-06	7.24E-07	2.09E-09	6.98E+00
TRITIUM	1.20E+00	1.55E-01	4.67E-04	1.56E+01
54MN	6.94E-07	8.93E-08	2.69E-10	2.69E-04
110AGM	2.35E-06	3.02E-07	9.10E-10	3.03E-03
60CO	7.78E-06	1.00E-06	3.01E-09	1.00E-02

TABLE 1.2 (PAGE 5 OF 17)

LIQUID WASTE SUMMARY FOR RELEASE NUMBER : 865

RELEASE MADE FROM	:	TANK	T-6204		
RELEASE START	:	DATE	12385	TIME	1415
RELEASE COMPLETION	:	DATE	12385	TIME	1850
RELEASE DURATION	:	HRS.	4.58	MIN.	275.
TANK LEVEL [INCHES]	:	INITIAL	123.0	FINAL	5.0
BLOWDOWN INTEGRATOR READINGS	:	INITIAL	4991490.	FINAL	5011224.
TOTAL VOLUME RELEASED	:	LITERS	7776.	GALS	2054.
TOTAL VOLUME USED FOR RELEASE	:	LITERS	1493864.	GALS	394680.
AVERAGE RELEASE RATE	:	LPM	28.28	GPM	7.47
AVERAGE BLOWDOWN RATE	:	LPM	5432.23	GPM	1435.20

DESCRIPTIONS :

A = LIQUID WASTE RELEASE SAMPLE NUMBER ONE

B = LIQUID WASTE RELEASE SAMPLE NUMBER ONE

C = BLOWDOWN SAMPLE - DURING RELEASE

D = BLOWDOWN SAMPLE - WEEKLY

RC- NUMBER	DATE	TIME	ALPHA UCI/ML	BETA UCI/ML	TRIT. UCI/ML	DNG UCI/ML	MCA NUMBER
A 33.013	12385	202	2.63E-08	4.24E-07	2.22E-01	0.00E-01	SD 92
B 33.014	12385	204	3.69E-08	4.32E-07	2.23E-01	0.00E-01	SD 93
C 7.005	12385	1731	2.07E-08	1.83E-08	9.81E-04		
D 9.003	12285	900	2.17E-08	2.92E-08	3.84E-07		

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	TOTAL CURIES	UCI/ML BEF. DIL.	UCI/ML AFT. DIL.	% OF LIMIT OR MPCW
GROSS ALPHA	2.87E-07	3.69E-08	7.84E-11	N/A
GROSS BETA	3.36E-06	4.32E-07	2.09E-09	6.95E+00
TRITIUM	1.73E+00	2.23E-01	1.15E-03	3.84E+01
110AGM	6.82E-07	8.77E-08	4.54E-10	1.51E-03
60CO	2.05E-06	2.63E-07	1.36E-09	4.54E-03

TABLE 1.2 (PAGE 6 OF 17)

LIQUID WASTE SUMMARY FOR RELEASE NUMBER : 866

RELEASE MADE FROM	:	TANK	T-6204		
RELEASE START	:	DATE	12685	TIME	1248
RELEASE COMPLETION	:	DATE	12685	TIME	1849
RELEASE DURATION	:	HRS.	6.02	MIN.	361.
TANK LEVEL [INCHES]	:	INITIAL	123.0	FINAL	6.0
BLOWDOWN INTEGRATOR READINGS	:	INITIAL	5294625.	FINAL	5319800.
TOTAL VOLUME RELEASED	:	LITERS	7710.	GALS	2037.
TOTAL VOLUME USED FOR RELEASE	:	LITERS	1905748.	GALS	503500.
AVERAGE RELEASE RATE	:	LPM	21.36	GPM	5.64
AVERAGE BLOWDOWN RATE	:	LPM	5279.08	GPM	1394.74

DESCRIPTIONS :

A = LIQUID WASTE RELEASE SAMPLE NUMBER ONE

B = LIQUID WASTE RELEASE SAMPLE NUMBER ONE

C = BLOWDOWN SAMPLE - DURING RELEASE

D = BLOWDOWN SAMPLE - WEEKLY

RC- NUMBER	DATE	TIME	ALPHA UCI/ML	BETA UCI/ML	TRIT. UCI/ML	DNG UCI/ML	MCA NUMBER
A 33.015	12685	445	5.27E-08	2.01E-06	1.07E-01	0.00E-01	SD 100
B 33.016	12685	445	2.63E-08	2.01E-06	1.07E-01	0.00E-01	SD 101
C 7.006	12685	1706	2.64E-08	2.42E-08	3.51E-04		
D 9.003	12285	900	2.17E-08	2.92E-08	3.84E-07		

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	TOTAL CURIES	UCI/ML BEF. DIL.	UCI/ML AFT. DIL.	% OF LIMIT OR MPCW
GROSS ALPHA	4.06E-07	5.27E-08	1.25E-10	N/A
GROSS BETA	1.55E-05	2.01E-06	8.00E-09	2.67E+01
TRITIUM	8.27E-01	1.07E-01	4.32E-04	1.44E+01
50CD	2.23E-06	2.89E-07	1.16E-09	3.88E-03

TABLE 1.2 (PAGE 7 OF 17)

LIQUID WASTE SUMMARY FOR RELEASE NUMBER : 867

RELEASE MADE FROM	:	TANK	T-6204		
RELEASE START	:	DATE	2 185	TIME	2131
RELEASE COMPLETION	:	DATE	2 285	TIME	500
RELEASE DURATION	:	HRS.	7.48	MIN.	449.
TANK LEVEL [INCHES]	:	INITIAL	130.0	FINAL	6.0
BLOWDOWN INTEGRATOR READINGS	:	INITIAL	6193700.	FINAL	6237900.
TOTAL VOLUME RELEASED	:	LITERS	8172.	GALS	2159.
TOTAL VOLUME USED FOR RELEASE	:	LITERS	3345940.	GALS	884000.
AVERAGE RELEASE RATE	:	LPM	18.20	GPM	4.81
AVERAGE BLOWDOWN RATE	:	LPM	7451.98	GPM	1968.32

DESCRIPTIONS :

A = LIQUID WASTE RELEASE SAMPLE NUMBER ONE
 B = LIQUID WASTE RELEASE SAMPLE NUMBER ONE
 C = BLOWDOWN SAMPLE - DURING RELEASE
 D = BLOWDOWN SAMPLE - WEEKLY

RC- NUMBER	DATE	TIME	ALPHA UCI/ML	BETA UCI/ML	TRIT. UCI/ML	DNG UCI/ML	MCA NUMBER
A 33.017	2 185	1144	2.66E-08	2.68E-06	3.58E-02	0.00E-01	SD 132
B 33.018	2 185	1149	2.47E-08	2.50E-06	3.53E-02	0.00E-01	SD 133
C 7.007	2 285	231	4.21E-09	1.77E-08	7.66E-05		
D 9.004	13085	900	8.16E-09	1.09E-08	3.74E-07		

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	TOTAL CURIES	UCI/ML BEF. DIL.	UCI/ML AFT. DIL.	% OF LIMIT OR MPCW
GROSS ALPHA	2.17E-07	2.66E-08	4.48E-11	N/A
GROSS BETA	2.19E-05	2.68E-06	6.50E-09	2.17E+01
TRITIUM	2.93E-01	3.58E-02	8.73E-05	2.91E+00
137CS	1.57E-06	1.92E-07	4.68E-10	2.34E-03
54MN	2.49E-06	3.05E-07	7.43E-10	7.43E-04
60CO	8.12E-06	9.94E-07	2.42E-09	8.07E-03

TABLE 1.2 (PAGE 8 OF 17)

LIQUID WASTE SUMMARY FOR RELEASE NUMBER : 868

RELEASE MADE FROM	:	TANK	T-6204		
RELEASE START	:	DATE	2 585	TIME	1830
RELEASE COMPLETION	:	DATE	2 685	TIME	38
RELEASE DURATION	:	HRS.	6.13	MIN.	368.
TANK LEVEL [INCHES]	:	INITIAL	116.0	FINAL	5.0
BLOWDOWN INTEGRATOR READINGS	:	INITIAL	6741428.	FINAL	6768390.
TOTAL VOLUME RELEASED	:	LITERS	7315.	GALS	1933.
TOTAL VOLUME USED FOR RELEASE	:	LITERS	2041024.	GALS	539240.
AVERAGE RELEASE RATE	:	LPM	19.88	GPM	5.25
AVERAGE BLOWDOWN RATE	:	LPM	5546.26	GPM	1465.33

DESCRIPTIONS :

A = LIQUID WASTE RELEASE SAMPLE NUMBER ONE

B = LIQUID WASTE RELEASE SAMPLE NUMBER ONE

C = BLOWDOWN SAMPLE - DURING RELEASE

D = BLOWDOWN SAMPLE - WEEKLY

RC- NUMBER	DATE	TIME	ALPHA UCI/ML	BETA UCI/ML	TRIT. UCI/ML	DNG UCI/ML	MCA NUMBER
A 33.019	2 585	625	2.45E-08	5.44E-07	1.11E-02	0.00E-01	SD 142
B 33.020	2 585	627	2.45E-08	6.25E-07	1.10E-02	0.00E-01	SD 143
C 7.008	2 585	2240	1.22E-08	1.22E-08	3.24E-05		
D 9.005	2 785	830	3.78E-09	1.47E-08	3.79E-07		

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	TOTAL CURIES	UCI/ML BEF. DIL.	UCI/ML AFT. DIL.	% OF LIMIT OR MPCW
GROSS ALPHA	1.79E-07	2.45E-08	7.41E-11	N/A
GROSS BETA	4.57E-06	6.25E-07	2.18E-09	7.26E+00
TRITIUM	8.13E-02	1.11E-02	3.97E-05	1.32E+00
60CO	2.12E-06	2.90E-07	1.04E-09	3.45E-03

TABLE 1.2 (PAGE 9 OF 17)

LIQUID WASTE SUMMARY FOR RELEASE NUMBER : 869

RELEASE MADE FROM	:	TANK	T-6204		
RELEASE START	:	DATE	2 985	TIME	1727
RELEASE COMPLETION	:	DATE	2 985	TIME	2058
RELEASE DURATION	:	HRS.	3.52	MIN.	211.
TANK LEVEL [INCHES]	:	INITIAL	113.0	FINAL	4.0
BLOWDOWN INTEGRATOR READINGS	:	INITIAL	7157640.	FINAL	7173136.
TOTAL VOLUME RELEASED	:	LITERS	7183.	GALS	1898.
TOTAL VOLUME USED FOR RELEASE	:	LITERS	1173047.	GALS	309920.
AVERAGE RELEASE RATE	:	LPM	34.04	GPM	8.99
AVERAGE BLOWDOWN RATE	:	LPM	5559.47	GPM	1468.82

DESCRIPTIONS :

A = LIQUID WASTE RELEASE SAMPLE NUMBER ONE

B = LIQUID WASTE RELEASE SAMPLE NUMBER ONE

C = BLOWDOWN SAMPLE - DURING RELEASE

D = BLOWDOWN SAMPLE - WEEKLY

RC- NUMBER	DATE	TIME	ALPHA UCI/ML	BETA UCI/ML	TRIT. UCI/ML	DNG UCI/ML	MCA NUMBER
A 33.021	2 985	550	2.12E-08	1.49E-07	1.85E-03	0.00E-01	SD 156
B 33.022	2 985	555	2.12E-08	2.06E-07	1.87E-03	0.00E-01	SD 157
C 7.009	2 985	2000	7.87E-09	7.98E-09	8.65E-06		
D 9.006	21385	915	7.40E-09	1.11E-08	4.62E-06		

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	TOTAL CURIES	UCI/ML BEF. DIL.	UCI/ML AFT. DIL.	% OF LIMIT OR MPCW
GROSS ALPHA	1.52E-07	2.12E-08	8.40E-11	N/A
GROSS BETA	1.48E-06	2.06E-07	1.19E-09	3.95E+00
TRITIUM	1.34E-02	1.87E-03	1.13E-05	3.78E-01
60CO	4.88E-07	6.80E-08	4.14E-10	1.38E-03

TABLE 1.2 (PAGE 10 OF 17)

LIQUID WASTE SUMMARY FOR RELEASE NUMBER : 870

RELEASE MADE FROM	:	TANK	T-6204		
RELEASE START	:	DATE	21385	TIME	658
RELEASE COMPLETION	:	DATE	21385	TIME	1250
RELEASE DURATION	:	HRS.	5.87	MIN.	352.
TANK LEVEL [INCHES]	:	INITIAL	118.0	FINAL	6.0
BLOWDOWN INTEGRATOR READINGS	:	INITIAL	7530450.	FINAL	7556220.
TOTAL VOLUME RELEASED	:	LITERS	7381.	GALS	1950.
TOTAL VOLUME USED FOR RELEASE	:	LITERS	1950789.	GALS	515400.
AVERAGE RELEASE RATE	:	LPM	20.97	GPM	5.54
AVERAGE BLOWDOWN RATE	:	LPM	5542.01	GPM	1464.20

DESCRIPTIONS :

A = LIQUID WASTE RELEASE SAMPLE NUMBER ONE
 B = LIQUID WASTE RELEASE SAMPLE NUMBER ONE
 C = BLOWDOWN SAMPLE - DURING RELEASE
 D = BLOWDOWN SAMPLE - WEEKLY

RC- NUMBER	DATE	TIME	ALPHA UCI/ML	BETA UCI/ML	TRIT. UCI/ML	DNG UCI/ML	MCA NUMBER
A 33.023	21285	830	2.14E-08	1.64E-06	1.43E-03	0.00E-01	SD 166
B 33.024	21285	835	1.25E-08	1.78E-06	1.46E-03	0.00E-01	SD 167
C 7.010	21385	1045	6.21E-09	7.42E-09	4.67E-06		
D 9.006	21385	915	7.40E-09	1.11E-08	4.62E-06		

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	TOTAL CURIES	UCI/ML BEF. DIL.	UCI/ML AFT. DIL.	% OF LIMIT OR MPCW
GROSS ALPHA	1.58E-07	2.14E-08	5.29E-11	N/A
GROSS BETA	1.31E-05	1.78E-06	6.65E-09	2.22E+01
TRITIUM	1.07E-02	1.46E-03	5.47E-06	1.82E-01
137CS	2.02E-07	2.74E-08	1.03E-10	5.16E-04
54MN	1.03E-06	1.40E-07	5.28E-10	5.28E-04
60CO	5.02E-06	6.80E-07	2.56E-09	8.54E-03

TABLE 1.2 (PAGE 11 OF 17)

LIQUID WASTE SUMMARY FOR RELEASE NUMBER : 871

RELEASE MADE FROM	:	TANK	T-6204		
RELEASE START	:	DATE	21985	TIME	1815
RELEASE COMPLETION	:	DATE	21985	TIME	2333
RELEASE DURATION	:	HRS.	5.30	MIN.	318.
TANK LEVEL [INCHES]	:	INITIAL	103.0	FINAL	6.0
BLOWDOWN INTEGRATOR READINGS	:	INITIAL	8205180.	FINAL	8227870.
TOTAL VOLUME RELEASED	:	LITERS	6392.	GALS	1689.
TOTAL VOLUME USED FOR RELEASE	:	LITERS	1717633.	GALS	453800.
AVERAGE RELEASE RATE	:	LPM	20.10	GPM	5.31
AVERAGE BLOWDOWN RATE	:	LPM	5401.36	GPM	1427.04

DESCRIPTIONS :

A = LIQUID WASTE RELEASE SAMPLE NUMBER ONE
 B = LIQUID WASTE RELEASE SAMPLE NUMBER ONE
 C = BLOWDOWN SAMPLE - DURING RELEASE
 D = BLOWDOWN SAMPLE - WEEKLY

RC- NUMBER	DATE	TIME	ALPHA UCI/ML	BETA UCI/ML	TRIT. UCI/ML	DNG UCI/ML	MCA NUMBER
A 33.025	21985	805	2.11E-08	3.77E-06	1.62E-03	0.00E-01	SD 185
B 33.026	21985	807	2.11E-08	3.90E-06	1.61E-03	0.00E-01	SD 186
D 9.007	22085	900	4.44E-09	1.28E-08	4.01E-07		

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	TOTAL CURIES	UCI/ML BEF. DIL.	UCI/ML AFT. DIL.	% OF LIMIT OR MPCW
GROSS ALPHA	1.35E-07	2.11E-08	6.18E-11	N/A
GROSS BETA	2.49E-05	3.90E-06	1.44E-08	4.80E+01
TRITIUM	1.04E-02	1.62E-03	6.01E-06	2.00E-01
137CS	9.59E-07	1.50E-07	5.56E-10	2.78E-03
60CO	3.87E-06	6.05E-07	2.24E-09	7.48E-03

TABLE 1.2 (PAGE 12 OF 17)

LIQUID WASTE SUMMARY FOR RELEASE NUMBER : 872

RELEASE MADE FROM	:	TANK	T-6204		
RELEASE START	:	DATE	22585	TIME	1920
RELEASE COMPLETION	:	DATE	22685	TIME	351
RELEASE DURATION	:	HRS.	8.52	MIN.	511
TANK LEVEL [INCHES]	:	INITIAL	110.0	FINAL	6.0
BLOWDOWN INTEGRATOR READINGS	:	INITIAL	8839000.	FINAL	8884410.
TOTAL VOLUME RELEASED	:	LITERS	6854.	GALS	1811.
TOTAL VOLUME USED FOR RELEASE	:	LITERS	3437537.	GALS	908200.
AVERAGE RELEASE RATE	:	LPM	13.41	GPM	3.54
AVERAGE BLOWDOWN RATE	:	LPM	6727.08	GPM	1777.30

DESCRIPTIONS :

A = LIQUID WASTE RELEASE SAMPLE NUMBER ONE

B = LIQUID WASTE RELEASE SAMPLE NUMBER ONE

C = BLOWDOWN SAMPLE - DURING RELEASE

D = BLOWDOWN SAMPLE - WEEKLY

RC- NUMBER	DATE	TIME	ALPHA UCI/ML	BETA UCI/ML	TRIT. UCI/ML	DNG UCI/ML	MCA NUMBER
A 33.027	22585	600	3.85E-08	5.27E-06	6.45E-04	0.00E-01	SD 207
B 33.028	22585	605	1.28E-08	5.53E-06	6.35E-04	0.00E-01	SD 209
C 7.011	22685	130	8.11E-09	1.85E-08	6.42E-07		
D 9.008	22785	800	5.27E-09	1.05E-08	3.57E-07		

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	TOTAL CURIES	UCI/ML BEF. DIL.	UCI/ML AFT. DIL.	% OF LIMIT OR MPCW
GROSS ALPHA	2.64E-07	3.85E-08	6.61E-11	N/A
GROSS BETA	3.79E-05	5.53E-06	1.10E-08	3.66E+01
TRITIUM	4.42E-03	6.45E-04	1.28E-06	4.28E-02
137CS	3.08E-06	4.50E-07	8.95E-10	4.48E-03
54MN	1.08E-06	1.58E-07	3.14E-10	3.14E-04
60CO	5.61E-06	8.18E-07	1.63E-09	5.43E-03

TABLE 1.2 (PAGE 13 OF 17)

LIQUID WASTE SUMMARY FOR RELEASE NUMBER : 873

RELEASE MADE FROM	:	TANK	T-6204		
RELEASE START	:	DATE	3 885	TIME	1754
RELEASE COMPLETION	:	DATE	3 985	TIME	355
RELEASE DURATION	:	HRS.	10. 02	MIN.	601.
TANK LEVEL [INCHES]	:	INITIAL	110. 0	FINAL	6. 0
BLOWDOWN INTEGRATOR READINGS	:	INITIAL	237370.	FINAL	299300.
TOTAL VOLUME RELEASED	:	LITERS	6854.	GALS	1811.
TOTAL VOLUME USED FOR RELEASE	:	LITERS	4688101.	GALS	1238600.
AVERAGE RELEASE RATE	:	LPM	11. 40	GPM	3. 01
AVERAGE BLOWDOWN RATE	:	LPM	7800. 50	GPM	2060. 90

DESCRIPTIONS :

A = LIQUID WASTE RELEASE SAMPLE NUMBER ONE

B = LIQUID WASTE RELEASE SAMPLE NUMBER ONE

C = BLOWDOWN SAMPLE - DURING RELEASE

D = BLOWDOWN SAMPLE - WEEKLY

RC-	DATE	TIME	ALPHA	BETA	TRIT.	DNG	MCA
NUMBER			UCI/ML	UCI/ML	UCI/ML	UCI/ML	NUMBER
A 33. 031	3 885	745	1. 61E-08	1. 04E-05	4. 05E-04	0. 00E-01	SD 253
B 33. 032	3 885	750	1. 24E-08	1. 09E-05	3. 97E-04	0. 00E-01	SD 254
C 7. 012	3 885	2305	4. 93E-09	8. 04E-09	3. 67E-07		
D 9. 009	3 785	830	9. 65E-09	8. 55E-09	3. 64E-07		

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	TOTAL CURIES	UCI/ML BEF. DIL.	UCI/ML AFT. DIL.	% OF LIMIT OR MPCW
GROSS ALPHA	1. 11E-07	1. 61E-08	9. 49E-12	N/A
GROSS BETA	7. 50E-05	1. 09E-05	1. 60E-08	5. 32E+01
TRITIUM	2. 78E-03	4. 05E-04	5. 91E-07	1. 97E-02
137CS	4. 00E-06	5. 84E-07	8. 53E-10	4. 26E-03
60CO	9. 87E-06	1. 44E-06	2. 10E-09	7. 01E-03

TABLE 1.2 (PAGE 14 OF 17)

LIQUID WASTE SUMMARY FOR RELEASE NUMBER : 874

RELEASE MADE FROM	:	TANK	T-6204		
RELEASE START	:	DATE	31385	TIME	1942
RELEASE COMPLETION	:	DATE	31385	TIME	2132
RELEASE DURATION	:	HRS.	1.83	MIN.	110.
TANK LEVEL [INCHES]	:	INITIAL	123.0	FINAL	94.0
BLOWDOWN INTEGRATOR READINGS	:	INITIAL	798000.	FINAL	812000.
TOTAL VOLUME RELEASED	:	LITERS	1911.	GALS	505.
TOTAL VOLUME USED FOR RELEASE	:	LITERS	1059800.	GALS	280000.
AVERAGE RELEASE RATE	:	LPM	17.37	GPM	4.59
AVERAGE BLOWDOWN RATE	:	LPM	9634.54	GPM	2545.45

DESCRIPTIONS :

A = LIQUID WASTE RELEASE SAMPLE NUMBER ONE

B = LIQUID WASTE RELEASE SAMPLE NUMBER ONE

C = BLOWDOWN SAMPLE - DURING RELEASE

D = BLOWDOWN SAMPLE - WEEKLY

RC- NUMBER	DATE	TIME	ALPHA UCI/ML	BETA UCI/ML	TRIT. UCI/ML	DNG UCI/ML	MCA NUMBER
A 33.033	31385	735	2.23E-08	7.65E-06	3.04E-04	0.00E-01	SD 283
B 33.034	31385	735	2.24E-08	7.87E-06	3.05E-04	0.00E-01	SD 284
D 9.010	31385	1100	4.20E-09	6.78E-09	3.76E-07		

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	TOTAL CURIES	UCI/ML BEF. DIL.	UCI/ML AFT. DIL.	% OF LIMIT OR MPCW
GROSS ALPHA	4.28E-08	2.24E-08	3.27E-11	N/A
GROSS BETA	1.50E-05	7.87E-06	1.42E-08	4.72E+01
TRITIUM	5.84E-04	3.05E-04	5.49E-07	1.83E-02
137CS	1.21E-06	6.35E-07	1.14E-09	5.72E-03
54MN	2.06E-07	1.08E-07	1.94E-10	1.94E-04
60CO	1.83E-06	9.59E-07	1.73E-09	5.75E-03

TABLE 1.2 (PAGE 15 OF 17)

LIQUID WASTE SUMMARY FOR RELEASE NUMBER : 875

RELEASE MADE FROM	:	TANK	T-6204		
RELEASE START	:	DATE	31485	TIME	1824
RELEASE COMPLETION	:	DATE	31485	TIME	2235
RELEASE DURATION	:	HRS.	4.18	MIN.	251.
TANK LEVEL [INCHES]	:	INITIAL	81.0	FINAL	5.0
BLOWDOWN INTEGRATOR READINGS	:	INITIAL	915300.	FINAL	944444.
TOTAL VOLUME RELEASED	:	LITERS	5008.	GALS	1323.
TOTAL VOLUME USED FOR RELEASE	:	LITERS	2206201.	GALS	582880.
AVERAGE RELEASE RATE	:	LPM	19.95	GPM	5.27
AVERAGE BLOWDOWN RATE	:	LPM	8789.64	GPM	2322.23

DESCRIPTIONS :

A = LIQUID WASTE RELEASE SAMPLE NUMBER ONE
 B = LIQUID WASTE RELEASE SAMPLE NUMBER ONE
 C = BLOWDOWN SAMPLE - DURING RELEASE
 D = BLOWDOWN SAMPLE - WEEKLY

RC- NUMBER	DATE	TIME	ALPHA UCI/ML	BETA UCI/ML	TRIT. UCI/ML	DNG UCI/ML	MCA NUMBER
A 33.035	31485	342	2.20E-08	5.21E-06	2.88E-04	0.00E-01	SD 288
B 33.036	31485	344	2.21E-08	5.25E-06	2.95E-04	0.00E-01	SD 289
C 7.013	31485	2020	9.39E-09	1.39E-08	3.76E-07		
D 9.010	31385	1100	4.20E-09	6.78E-09	3.76E-07		

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	TOTAL CURIES	UCI/ML BEF. DIL.	UCI/ML AFT. DIL.	% OF LIMIT OR MPCW
GROSS ALPHA	1.10E-07	2.21E-08	4.04E-11	N/A
GROSS BETA	2.63E-05	5.25E-06	1.19E-08	3.96E+01
TRITIUM	1.48E-03	2.95E-04	6.67E-07	2.22E-02
137CS	1.92E-06	3.83E-07	8.67E-10	4.34E-03
110AGM	3.74E-07	7.46E-08	1.69E-10	5.63E-04
60CO	2.49E-06	4.97E-07	1.13E-09	3.75E-03

TABLE 1.2 (PAGE 16 OF 17)

LIQUID WASTE SUMMARY FOR RELEASE NUMBER : 876

RELEASE MADE FROM	:	TANK	T-6204		
RELEASE START	:	DATE	31885	TIME	1213
RELEASE COMPLETION	:	DATE	31885	TIME	2025
RELEASE DURATION	:	HRS.	8.20	MIN.	492.
TANK LEVEL [INCHES]	:	INITIAL	84.0	FINAL	6.0
BLOWDOWN INTEGRATOR READINGS	:	INITIAL	1378120.	FINAL	1430600.
TOTAL VOLUME RELEASED	:	LITERS	5140.	GALS	1358.
TOTAL VOLUME USED FOR RELEASE	:	LITERS	3972736.	GALS	1049600.
AVERAGE RELEASE RATE	:	LPM	10.45	GPM	2.76
AVERAGE BLOWDOWN RATE	:	LPM	8074.67	GPM	2133.33

DESCRIPTIONS :

A = LIQUID WASTE RELEASE SAMPLE NUMBER ONE

B = LIQUID WASTE RELEASE SAMPLE NUMBER ONE

C = BLOWDOWN SAMPLE - DURING RELEASE

D = BLOWDOWN SAMPLE - WEEKLY

RC-			ALPHA	BETA	TRIT.	DNG	MCA
NUMBER	DATE	TIME	UCI/ML	UCI/ML	UCI/ML	UCI/ML	NUMBER
A 33.037	31685	1745	1.63E-08	8.27E-06	2.54E-04	0.00E-01	SD 295
B 33.038	31685	1745	2.69E-08	8.24E-06	2.56E-04	0.00E-01	SD 296
C 7.014	31885	1800	8.77E-09	8.92E-09	3.55E-07		
D 9.010	31385	1100	4.20E-09	6.78E-09	3.76E-07		

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	TOTAL CURIES	UCI/ML BEF. DIL.	UCI/ML AFT. DIL.	% OF LIMIT OR MPCW
GROSS ALPHA	1.38E-07	2.69E-08	2.94E-11	N/A
GROSS BETA	4.25E-05	8.27E-06	1.07E-08	3.56E+01
TRITIUM	1.31E-03	2.56E-04	3.30E-07	1.10E-02
137CS	2.55E-06	4.97E-07	6.42E-10	3.21E-03
60CO	3.88E-06	7.54E-07	9.74E-10	3.25E-03
54MN	3.05E-07	5.94E-08	7.68E-11	7.68E-05

TABLE 1.2 (PAGE 17 OF 17)

LIQUID WASTE SUMMARY FOR RELEASE NUMBER : 877

RELEASE MADE FROM	:	TANK	T-6204		
RELEASE START	:	DATE	32485	TIME	2230
RELEASE COMPLETION	:	DATE	32585	TIME	1541
RELEASE DURATION	:	HRS.	17.18	MIN.	1031.
TANK LEVEL [INCHES]	:	INITIAL	128.0	FINAL	7.0
BLOWDOWN INTEGRATOR READINGS	:	INITIAL	2030800.	FINAL	2148500.
TOTAL VOLUME RELEASED	:	LITERS	7974.	GALS	2107.
TOTAL VOLUME USED FOR RELEASE	:	LITERS	8909890.	GALS	2354000.
AVERAGE RELEASE RATE	:	LPM	7.73	GPM	2.04
AVERAGE BLOWDOWN RATE	:	LPM	8641.99	GPM	2283.22

DESCRIPTIONS :

A = LIQUID WASTE RELEASE SAMPLE NUMBER ONE
 B = LIQUID WASTE RELEASE SAMPLE NUMBER ONE
 C = BLOWDOWN SAMPLE - DURING RELEASE
 D = BLOWDOWN SAMPLE - WEEKLY

RC- NUMBER	DATE	TIME	ALPHA UCI/ML	BETA UCI/ML	TRIT. UCI/ML	DNG UCI/ML	MCA NUMBER
A 33.039	32485	805	2.12E-08	8.93E-06	1.81E-04	0.00E-01	SD 324
B 33.040	32485	811	2.13E-08	8.69E-06	1.86E-04	0.00E-01	SD 325
C 7.015	32585	1050	5.01E-09	1.23E-08	3.48E-07		
D 9.012	32685	700	5.68E-09	2.44E-08	3.56E-07		

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	TOTAL CURIES	UCI/ML BEF. DIL.	UCI/ML AFT. DIL.	% OF LIMIT OR MPCW
GROSS ALPHA	1.70E-07	2.13E-08	1.40E-11	N/A
GROSS BETA	7.12E-05	8.93E-06	7.97E-09	2.66E+01
TRITIUM	1.49E-03	1.86E-04	1.66E-07	5.55E-03
137CS	4.27E-06	5.36E-07	4.79E-10	2.40E-03
60CO	6.24E-06	7.83E-07	7.00E-10	2.33E-03

LIQUID WASTE SUMMARY FOR RELEASES 861 THROUGH 877

REPORT PERIOD OF 1st QUARTER, 1985

AVG. GROSS ALPHA ACT. BEFORE DILUTION:	4.04E-08	UCI/ML
AVG. GROSS ALPHA ACT. AFTER DILUTION :	1.04E-10	UCI/ML
TOTAL GROSS ALPHA ACTIVITY :	5.04E-06	CURIES
AVG. GROSS BETA ACT. BEFORE DILUTION :	5.32E-06	UCI/ML
AVG. GROSS BETA ACT. AFTER DILUTION :	1.35E-08	UCI/ML
TOTAL GROSS BETA ACTIVITY :	6.10E-04	CURIES
AVG. TRITIUM ACT. BEFORE DILUTION :	3.23E-02	UCI/ML
AVG. TRITIUM ACT. AFTER DILUTION :	1.32E-04	UCI/ML
TOTAL TRITIUM ACTIVITY :	4.27E+00	CURIES
AVG. DIS. NOBLE ACT. BEFORE DILUTION :	0.00E-01	UCI/ML
AVG. DIS. NOBLE ACT. AFTER DILUTION :	0.00E-01	UCI/ML
TOTAL DISOLVED GAS ACTIVITY :	0.00E-01	CURIES
TOTAL VOLUME OF WASTE RELEASED :	1.17E+05	LITERS
TOTAL VOLUME USED FOR DILUTION :	4.79E+07	LITERS
AVG. 137CS ACT. BEFORE DILUTION :	3.74E-07	UCI/ML
AVG. 137CS ACT. AFTER DILUTION :	8.14E-10	UCI/ML
TOTAL 137CS ACTIVITY RELEASED :	2.81E-05	CURIES
AVG. 54MN ACT. BEFORE DILUTION :	4.06E-07	UCI/ML
AVG. 54MN ACT. AFTER DILUTION :	1.39E-09	UCI/ML
TOTAL 54MN ACTIVITY RELEASED :	2.83E-05	CURIES
AVG. 60CO ACT. BEFORE DILUTION :	2.62E-06	UCI/ML
AVG. 60CO ACT. AFTER DILUTION :	9.03E-09	UCI/ML
TOTAL 60CO ACTIVITY RELEASED :	3.43E-04	CURIES
AVG. 58CO ACT. BEFORE DILUTION :	2.88E-07	UCI/ML
AVG. 58CO ACT. AFTER DILUTION :	1.14E-09	UCI/ML
TOTAL 58CO ACTIVITY RELEASED :	2.33E-06	CURIES
AVG. 110AGM ACT. BEFORE DILUTION :	1.61E-06	UCI/ML
AVG. 110AGM ACT. AFTER DILUTION :	6.01E-09	UCI/ML
TOTAL 110AGM ACTIVITY RELEASED :	6.46E-05	CURIES
AVG. 59FE ACT. BEFORE DILUTION :	7.49E-07	UCI/ML
AVG. 59FE ACT. AFTER DILUTION :	2.96E-09	UCI/ML
TOTAL 59FE ACTIVITY RELEASED :	6.07E-06	CURIES
AVG. 65ZN ACT. BEFORE DILUTION :	8.63E-07	UCI/ML
AVG. 65ZN ACT. AFTER DILUTION :	3.41E-09	UCI/ML
TOTAL 65ZN ACTIVITY RELEASED :	7.00E-06	CURIES

TABLE 1.3: LIQUID EFFLUENT RELEASED VIA THE TURBINE
BUILDING SUMP AND THE REACTOR BUILDING SUMP
(CONTINUOUS RELEASE)

1st QUARTER 1985

TURBINE BUILDING SUMP

	MONTH	JAN	FEB	MAR	QUARTERLY TOTAL
VOLUME	LITERS	3.14E+06	2.97E+06	2.49E+06	8.60E+06
TRITIUM	AVERAGE $\mu\text{Ci/ml}$	4.05E-06	6.05E-07	3.63E-07	1.67E-06*
	TOTAL CURIES	1.27E-02	1.80E-03	9.04E-04	1.54E-02
GROSS $\beta\gamma$	AVERAGE $\mu\text{Ci/ml}$	7.76E-08	7.33E-08	6.99E-08	7.36E-08*
	TOTAL CURIES	2.44E-04	2.18E-04	1.74E-04	6.36E-04
GROSS α	AVERAGE $\mu\text{Ci/ml}$	1.89E-08	1.87E-08	2.04E-08	1.93E-08*
	TOTAL CURIES	5.93E-05	5.55E-05	5.08E-05	1.66E-04

REACTOR BUILDING SUMP

	MONTH	JAN	FEB	MAR	QUARTERLY TOTAL
VOLUME	LITERS	1.24E+06	4.53E+05	1.07E+06	2.76E+06
TRITIUM	AVERAGE $\mu\text{Ci/ml}$	2.71E-05	3.67E-05	1.55E-05	2.64E-05*
	TOTAL CURIES	3.36E-02	1.66E-02	1.66E-02	6.68E-02
GROSS $\beta\gamma$	AVERAGE $\mu\text{Ci/ml}$	7.78E-08	7.25E-08	6.78E-08	7.27E-08*
	TOTAL CURIES	9.65E-05	3.28E-05	7.26E-05	2.02E-04
GROSS α	AVERAGE $\mu\text{Ci/ml}$	1.79E-08	2.02E-08	1.98E-08	1.93E-08*
	TOTAL CURIES	2.22E-05	9.15E-06	2.12E-05	5.26E-05

* Represents "weighted" average

TABLE 2.1 - RADIOACTIVE GASEOUS EFFLUENT RELEASES FOR 1st QUARTER, 1985

		UNITS	JAN	FEB	MAR	QUARTERLY TOTAL
1a. Total Noble Gases		Curies	NSA	NSA	NSA	NSA
1b. Total Tritium		Curies	NSA	4.92E-03	5.77E-03	1.07E-02
1c. Total Halogens		Curies	NSA	NSA	NSA	NSA
1d. Total Particulate Gross (β, γ) Activity RT-7325		Curies	5.64E-08	5.38E-08	6.03E-08	1.71E-07
1e. Total Particulate Gross Alpha Activity RT-7325		Curies	1.51E-08	1.39E-08	1.51E-08	4.41E-08
2. Maximum Hourly Release Rate for Any One Hour Period		Ci/hr	N/A	3.78E-04	2.20E-04	3.78E-04
3. Estimated Total Radioac- tivity Released by Nu- clide						
Particulates	MPCa	Curies	NSA	NSA	NSA	NSA
Halogens	MPCa(μ Ci/ml)	Curies				
			NSA	NSA	NSA	NSA
Gases	MPCa(μ Ci/ml)	Curies				
3H	2.00E-07		NSA	4.92E-03	5.77E-03	1.07E-02

$$4.7E-05 = 4.7 \times 10^{-5}$$

$$5.2E+03 = 5.2 \times 10^{+3}$$

NSA means no significant activity.

TABLE 2.2 (PAGE 1 OF 7)

GAS WASTE SUMMARY FOR RELEASE NUMBER : 1235

RELEASE MADE FROM	:	TANK	T-6304		
RELEASE START	:	DATE	2 185	TIME	2017
RELEASE COMPLETION	:	DATE	2 285	TIME	545
RELEASE DURATION	:	HRS.	9.47	OR MIN.	568.
TANK PRESSURE [PSIG]	:	INITIAL	210	FINAL	15
TANK TEMPERATURE	:	DEG-F	67		
AVERAGE RELEASE RATE	:	CFM	15.32		
TOTAL VOLUME OF GAS RELEASED	:	SCC	2.46E+08		

REACTOR BUILDING VENTILLATION SYSTEM

EXHAUST TEMPERATURE	:	DEG-F	86		
EXHAUST FLOW RATE	:	ACFM	33000.		
STABILITY @ START OF RELEASE	:	CATAGORY	" "		
RC-NUMBER	:	GRAB	34.005	TRITIUM	35.001

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	ACTIVITY UCI/SCC	MPC(A) UCI/SCC	ACTIVITY /MPC(A)	TOTAL CURIES
3H	1.45E-05	2.00E-07	7.25E+01	3.58E-03

TOTAL CURIES OF NOBEL GAS RELEASED : 0.00E-01

ACTIVITY RELEASED RATE	:	CI/HR	3.78E-04	UCI/SEC	1.05E-01
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PERCENT OF TECH. SPEC. LIMIT	:	< 0.01 %
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TABLE 2.2 (PAGE 2 OF 7)

GAS WASTE SUMMARY FOR RELEASE NUMBER : 1236

RELEASE MADE FROM	:	TANK	T-6303		
RELEASE START	:	DATE	22285	TIME	1807
RELEASE COMPLETION	:	DATE	22385	TIME	512
RELEASE DURATION	:	HRS.	11.08	OR MIN.	665.
TANK PRESSURE [PSIG]	:	INITIAL	205	FINAL	10
TANK TEMPERATURE	:	DEG-F	68		
AVERAGE RELEASE RATE	:	CFM	13.06		
TOTAL VOLUME OF GAS RELEASED	:	SCC	2.46E+08		

REACTOR BUILDING VENTILLATION SYSTEM

EXHAUST TEMPERATURE	:	DEG-F	91		
EXHAUST FLOW RATE	:	ACFM	30000.		
STABILITY @ START OF RELEASE	:	CATAGORY	" "		
RC-NUMBER	:	GRAB	34.008	TRITIUM	35.002

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	ACTIVITY UCI/SCC	MPC(A) UCI/SCC	ACTIVITY /MPC(A)	TOTAL CURIES
3H	5.45E-06	2.00E-07	2.73E+01	1.34E-03

TOTAL CURIES OF NOBEL GAS RELEASED : 0.00E-01

ACTIVITY RELEASED RATE	:	CI/HR	1.21E-04	UCI/SEC	3.36E-02
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PERCENT OF TECH. SPEC. LIMIT	:	< 0.01 %
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TABLE 2.2 (PAGE 3 OF 7)

GAS WASTE SUMMARY FOR RELEASE NUMBER : 1237

RELEASE MADE FROM	:	TANK	T-6304		
RELEASE START	:	DATE	3 485	TIME	2252
RELEASE COMPLETION	:	DATE	3 585	TIME	1015
RELEASE DURATION	:	HRS.	11.38	OR MIN.	683.
TANK PRESSURE [PSIG]	:	INITIAL	265	FINAL	15
TANK TEMPERATURE	:	DEG-F	70		
AVERAGE RELEASE RATE	:	CFM	16.24		
TOTAL VOLUME OF GAS RELEASED	:	SCC	3.14E+08		

REACTOR BUILDING VENTILLATION SYSTEM

EXHAUST TEMPERATURE	:	DEG-F	91		
EXHAUST FLOW RATE	:	ACFM	33000.		
STABILITY @ START OF RELEASE	:	CATAGORY	" "		
RC-NUMBER	:	GRAB	34.010	TRITIUM	35.004

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	ACTIVITY UCI/SCC	MPC(A) UCI/SCC	ACTIVITY /MPC(A)	TOTAL CURIES
3H	7.99E-06	2.00E-07	3.99E+01	2.51E-03

TOTAL CURIES OF NOBEL GAS RELEASED : 0.00E-01

ACTIVITY RELEASED RATE	:	CI/HR	2.20E-04	UCI/SEC	6.12E-02
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PERCENT OF TECH. SPEC. LIMIT : < 0.01 %

TABLE 2.2 (PAGE 4 OF 7)

GAS WASTE SUMMARY FOR RELEASE NUMBER : 1238

RELEASE MADE FROM	:	TANK	T-6303		
RELEASE START	:	DATE	31085	TIME	1725
RELEASE COMPLETION	:	DATE	31185	TIME	744
RELEASE DURATION	:	HRS.	14.32	OR MIN.	859.
TANK PRESSURE [PSIG]	:	INITIAL	440	FINAL	20
TANK TEMPERATURE	:	DEG-F	67		
AVERAGE RELEASE RATE	:	CFM	21.82		
TOTAL VOLUME OF GAS RELEASED	:	SCC	5.31E+08		

REACTOR BUILDING VENTILLATION SYSTEM

EXHAUST TEMPERATURE	:	DEG-F	90		
EXHAUST FLOW RATE	:	ACFM	32000.		
STABILITY @ START OF RELEASE	:	CATAGORY	" "		
RC-NUMBER	:	GRAB	34.011	TRITIUM	35.005

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	ACTIVITY UCI/SCC	MPC(A) UCI/SCC	ACTIVITY /MPC(A)	TOTAL CURIES
3H	8.62E-07	2.00E-07	4.31E+00	4.58E-04

TOTAL CURIES OF NOBEL GAS RELEASED : 0.00E-01

ACTIVITY RELEASED RATE	:	CI/HR	3.20E-05	UCI/SEC	8.88E-03
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PERCENT OF TECH. SPEC. LIMIT	:	< 0.01 %
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TABLE 2.2 (PAGE 5 OF 7)

GAS WASTE SUMMARY FOR RELEASE NUMBER : 1239

RELEASE MADE FROM	:	TANK	T-6304		
RELEASE START	:	DATE	31785	TIME	132
RELEASE COMPLETION	:	DATE	31785	TIME	2201
RELEASE DURATION	:	HRS.	20.48	OR MIN.	1229.
TANK PRESSURE [PSIG]	:	INITIAL	345	FINAL	0
TANK TEMPERATURE	:	DEG-F	37		
AVERAGE RELEASE RATE	:	CFM	12.53		
TOTAL VOLUME OF GAS RELEASED	:	SCC	4.36E+08		

REACTOR BUILDING VENTILLATION SYSTEM

EXHAUST TEMPERATURE	:	DEG-F	93		
EXHAUST FLOW RATE	:	ACFM	32000.		
STABILITY @ START OF RELEASE	:	CATAGORY	" "		
RC-NUMBER	:	GRAB	34.012	TRITIUM	35.006

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	ACTIVITY UCI/SCC	MPC(A) UCI/SCC	ACTIVITY /MPC(A)	TOTAL CURIES
3H	2.52E-06	2.00E-07	1.26E+01	1.10E-03

TOTAL CURIES OF NOBEL GAS RELEASED : 0.00E-01

ACTIVITY RELEASED RATE	:	CI/HR	5.37E-05	UCI/SEC	1.49E-02
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PERCENT OF TECH. SPEC. LIMIT	:	< 0.01 %
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TABLE 2.2 (PAGE 6 OF 7)

GAS WASTE SUMMARY FOR RELEASE NUMBER : 1240

RELEASE MADE FROM	:	TANK	T-6303		
RELEASE START	:	DATE	32285	TIME	1715
RELEASE COMPLETION	:	DATE	32385	TIME	1200
RELEASE DURATION	:	HRS.	18.75	OR MIN.	1125.
TANK PRESSURE [PSIG]	:	INITIAL	305	FINAL	10
TANK TEMPERATURE	:	DEG-F	66		
AVERAGE RELEASE RATE	:	CFM	11.73		
TOTAL VOLUME OF GAS RELEASED	:	SCC	3.74E+08		

REACTOR BUILDING VENTILLATION SYSTEM

EXHAUST TEMPERATURE	:	DEG-F	88		
EXHAUST FLOW RATE	:	ACFM	32000.		
STABILITY @ START OF RELEASE	:	CATAGORY	" "		
RC-NUMBER	:	GRAB	34.013	TRITIUM	35.007

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	ACTIVITY UCI/SCC	MPC(A) UCI/SCC	ACTIVITY /MPC(A)	TOTAL CURIES
3H	2.45E-06	2.00E-07	1.23E+01	9.15E-04

TOTAL CURIES OF NOBEL GAS RELEASED : 0.00E-01

ACTIVITY RELEASED RATE	:	CI/HR	4.88E-05	UCI/SEC	1.36E-02
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PERCENT OF TECH. SPEC. LIMIT	:	< 0.01 %
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TABLE 2.2 (PAGE 7 OF 7)

GAS WASTE SUMMARY FOR RELEASE NUMBER : 1241

RELEASE MADE FROM	:	TANK	T-6304		
RELEASE START	:	DATE	32985	TIME	1900
RELEASE COMPLETION	:	DATE	33085	TIME	1145
RELEASE DURATION	:	HRS.	16.75	OR MIN.	1005.
TANK PRESSURE [PSIG]	:	INITIAL	395	FINAL	10
TANK TEMPERATURE	:	DEG-F	66		
AVERAGE RELEASE RATE	:	CFM	17.13		
TOTAL VOLUME OF GAS RELEASED	:	SCC	4.87E+08		

REACTOR BUILDING VENTILLATION SYSTEM

EXHAUST TEMPERATURE	:	DEG-F	84		
EXHAUST FLOW RATE	:	ACFM	32000.		
STABILITY @ START OF RELEASE	:	CATAGORY	" "		
RC-NUMBER	:	GRAB	34.014	TRITIUM	35.008

ACTIVITY RELEASED BY NUCLIDE

ISOTOPE	ACTIVITY UCI/SCC	MPC(A) UCI/SCC	ACTIVITY /MPC(A)	TOTAL CURIES
3H	1.61E-06	2.00E-07	8.07E+00	7.87E-04

TOTAL CURIES OF NOBEL GAS RELEASED : 0.00E-01

ACTIVITY RELEASED RATE	:	CI/HR	4.70E-05	UCI/SEC	1.30E-02
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PERCENT OF TECH. SPEC. LIMIT	:	< 0.01 %
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GAS WASTE SUMMARY FOR RELEASE 1235 THROUGH 1241

REPORT PERIOD OF : 1st QUARTER, 1985

ISOTOPE TOTAL CURIES

3H 1.07E-02

TOTAL NOBEL GAS RELEASED : CURIES 0.00E-01

TOTAL TRITIUM RELEASED : CURIES 1.07E-02

MAXIMUM AVERAGE RELEASE RATE : CI/HR 3.78E-04
 : UCI/SEC 1.05E-01

TOTAL VOLUME GAS RELEASED : CC 2.63E+09

SYSTEM	ALPHA	BETA	TRITIUM	
FARM POND				
	3.29E-08	1.25E-07	2.03E-05	MAXIMUM
	1.26E-08	6.60E-08	3.48E-07	MINIMUM
	2.21E-08 (9)	7.76E-08 (9)	2.99E-06 (9)	AVERAGE
COOLING TOWER B/D-DURING				
	2.64E-08	3.66E-08	9.81E-04	MAXIMUM
	4.21E-09	7.42E-09	3.48E-07	MINIMUM
	9.57E-09 (15)	1.43E-08 (15)	1.34E-04 (15)	AVERAGE
COOLING TOWER B/D-WEEKLY				
	2.17E-08	2.92E-08	4.62E-06	MAXIMUM
	3.78E-09	6.78E-09	3.56E-07	MINIMUM
	7.24E-09 (12)	1.36E-08 (12)	7.42E-07 (12)	AVERAGE
REACTOR BLDG. SUMP				
	3.36E-08	9.44E-08	1.72E-04	MAXIMUM
	1.22E-09	1.21E-08	3.71E-07	MINIMUM
	1.93E-08 (98)	7.28E-08 (98)	2.62E-05 (98)	AVERAGE
TURBINE BLDG. SUMP				
	3.90E-08	9.66E-08	1.92E-05	MAXIMUM
	1.17E-08	6.06E-08	3.48E-07	MINIMUM
	1.96E-08 (38)	7.34E-08 (38)	1.70E-06 (38)	AVERAGE
SYSTEM 21, LOOP 1				
	2.85E-08	7.93E-08	2.52E-05	MAXIMUM
	2.85E-08	7.93E-08	2.52E-05	MINIMUM
	2.85E-08 (1)	7.93E-08 (1)	2.52E-05 (1)	AVERAGE
SYSTEM 21, Loop 2				
	2.74E-08	6.91E-08	4.49E-06	MAXIMUM
	2.74E-08	6.91E-08	4.49E-06	MINIMUM
	2.74E-08 (1)	6.91E-08 (1)	4.49E-06 (1)	AVERAGE
SYSTEM 31				
				MAXIMUM
				MINIMUM
	(0)	(0)	(0)	AVERAGE
SYSTEM 41				
				MAXIMUM
				MINIMUM
	(0)	(0)	(0)	AVERAGE
SYSTEM 42				
	2.85E-08	7.93E-08	3.78E-07	MAXIMUM
	1.22E-08	6.60E-08	3.55E-07	MINIMUM
	2.06E-08 (3)	7.05E-08 (3)	3.65E-07 (3)	AVERAGE

- NOTES: 1. All activities expressed in units of $\mu\text{Ci/ml}$
 2. () Represents the number of samples represented by the average value.

SYSTEM	ALPHA	BETA	TRITIUM	
SYSTEM 46, LOOP 1				
	2.74E-08	6.91E-08	6.04E-05	MAXIMUM
	2.74E-08	6.91E-08	6.04E-05	MINIMUM
	2.74E-08 (1)	6.91E-08 (1)	6.04E-05 (1)	AVERAGE
SYSTEM 46, LOOP 2				
	2.85E-08	7.93E-08	6.76E-05	MAXIMUM
	2.45E-08	7.15E-08	6.05E-05	MINIMUM
	2.65E-08 (2)	7.54E-08 (2)	6.41E-05 (2)	AVERAGE
SYSTEM 47, LOOP 1				
	2.85E-08	7.93E-08	2.47E-03	MAXIMUM
	2.74E-08	6.91E-08	2.42E-03	MINIMUM
	2.79E-08 (2)	7.42E-08 (2)	2.45E-03 (2)	AVERAGE
SYSTEM 47, LOOP 2				
	2.74E-08	7.06E-08	2.46E-03	MAXIMUM
	1.23E-08	6.91E-08	7.62E-05	MINIMUM
	1.99E-08 (2)	6.99E-08 (2)	1.27E-03 (2)	AVERAGE

- NOTES: 1. All activities expressed in units of $\mu\text{Ci/ml}$
 2. () Represents the number of samples represented by the average value.



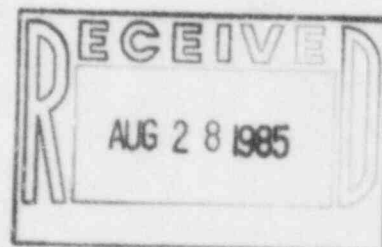
Public Service

Public Service
Company of Colorado

16805 WCR 19 1/2, Platteville, Colorado 80651-9298

August 26, 1985
Fort St. Vrain
Unit #1
P-85295

Regional Administrator
Attn: Mr. Dorwin Hunter
Region IV
U. S. Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76011



Docket No. 50-267

SUBJECT: Semi-Annual Radioactive Effluent
Release Report

Dear Mr. Hunter:

Attached please find the Semi-Annual Radioactive Effluent Release Report for the Fort St. Vrain Nuclear Generating Station.

This report covers the period January 1, 1985 through June 30, 1985, and is submitted pursuant to Section 7.5.1e of the Fort St. Vrain Technical Specifications.

Please contact Mr. Mike Holmes at (303) 571-8409 if you have any questions regarding this report.

Sincerely,

J. W. Gahm
Manager, Nuclear Production
Fort St. Vrain Nuclear
Generating Station

JWG:VJM/skd

Attachments

H005
1/1

85-728

cc w/attachments:

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