Pratt & Whitney
A United Technologies Company

400 Main Street
East Hartford, Connecticut 06108

NMSB2

February 19, 2002

040-00791 030-03796

License Numbers: SMB-151, 06-07522-02

Mr. Ronald R. Bellamy
United States Nuclear Regulatory Commission
Region 1
475 Allendale Road
King of Prussia, PA 19406-1415

Dear Mr. Bellamy

Enclosed are copies of two close-out surveys conducted by Radiation Safety Associates of Hebron, Connecticut, for two closed Pratt & Whitney facilities located at Washington Avenue, North Haven, Connecticut and Divided Road, Rocky Hill, Connecticut. We request that upon acceptance of the survey results, you remove the Washington Avenue and Divided Road facilities from our source material license (SMB-151), and our byproduct material license (06-07522-02).

Please do not hesitate to contact me at (860) 565-9728 should you have any questions regarding the reports.

Sincerely,

Judy M. Harvey

Judy Harvey, CIH

Enclosure: Decommissioning Reports

FINAL RADIOLOGICAL STATUS REPORT
PRATT & WHITNEY
ROCKY HILL FACILITY

Prepared for
Pratt & Whitney

August 24, 2001

Performed by
Radiation Safety Associates, Inc.
19 Pendleton Drive, PO Box 107
Hebron, Connecticut 06248
(860) 228-0487

1.0 INTRODUCTION

1.1 General

Radiation Safety Associates, Inc. (RSA) of Hebron, Connecticut was contracted by Pratt & Whitney (P&W) to perform a radiological survey of its former Rocky Hill facility prior to a transfer of ownership. This facility had been listed as a place of use or storage of licensed radioactive material, but to the best recollection of P&W personnel, no licensed material had ever been in the facility.

1.2 Conditions at Time of Survey

On August 1, 2001, the date that radiological surveys began, the building had been abandoned by P&W, and virtually all machinery and equipment removed.

2.0 POTENTIAL CONTAMINANTS AND RELEASE GUIDELINES

Since P&W is only licensed for the possession and use of TD-Nickel, the isotopes of interest were natural thorium (Th-232 and Th-228) and its associated decay products.

The Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) method of site and building assessment was adapted to the Rocky Hill facility to determine numbers of measurements to be made, and to establish the release criteria. The primary criterion is that no member of the most-exposed group, after the facility has been released for unrestricted use, will receive an annual radiation dose in excess of 25 mrem from residual licensed material. In order to meet this criterion, the contamination limits in Table 1 below were used as screening values.

ACCEPTABLE SURFACE CONTAMINATION LEVELS

NUCLIDES	AVERAGE (dpm/100 cm^2)	MAXIMUM (dpm/100 cm^2)	REMOVABLE (dpm/100 cm^2)
Th-nat	1,000	3,000	200

Table 1. Applicable Free-release Guideline Values.

3.0 SURVEY OVERVIEW

3.1 Survey Objectives

The purpose of the survey was to determine whether or not the radiological conditions within the buildings at the Rocky Hill Site satisfy Nuclear Regulatory Commission guidelines for unrestricted radiological release, and whether the Rocky Hill facility can be released for unrestricted use. The specific objectives of the survey were to show that average surface activity levels are below the guideline values listed in Table 1, and that reasonable efforts have been made to identify, evaluate, and remove areas of contamination that are distinguishable from natural background radiation.

3.2 Organization and Responsibilities

The survey was carried out by a team of health physicists and technicians from Radiation Safety Associates, Inc. between August 1 and August 17, 2001. Wipe sample analyses were performed by RSA Laboratories, 21 Pendleton Drive, Hebron, CT 06248 (NRC License No. 06-30007-01, Connecticut Public Health Laboratory #PH-0111).

3.3 Instrumentation

Attachment A lists the instrumentation used in performing the surveys, along with parameters, detection sensitivities and statistical detection limits (L_c and MDA) for the instrumentation. All instruments used had been calibrated within the previous six months using NIST-traceable standards. Calibration certificates for the instruments used are included in Attachment A. Operational and background checks were performed each day that the instruments were used. For purposes of calculating detection sensitivity of alpha- and beta-detecting instruments, efficiency for ^{230}Th was used.

3.4 Survey Procedures

Surveys were planned and performed based on the principles established in the MARSSIM Manual. Procedures are described below.

3.4.1 Area Classification

Under the MARSSIM method of site survey for license termination, the Rocky Hill facility was determined to be a Class 3 area. The following surveys were performed:

a. A walkover gamma survey of all areas;

b. 10% floor surface scan in the manufacturing, shipping and receiving areas;

c. A scan survey of a small percentage (approximately 5%) of wall areas located in manufacturing areas; and

d. A wipe survey in the manufacturing areas, one sample for roughly every 1,000 ft^2.

Office spaces and outside areas received only a cursory examination. No soil samples were taken.

3.4.2 Survey Methods

The large-area (425 cm^2), thin-window gas proportional detector was used to scan 10% of the floor surfaces. Non-floor surfaces between the floor and a height of two meters were scanned with a large area (425 cm^2) thin window gas proportional detector. These surfaces received approximately 5% coverage.

A gamma detector was used to perform a waist-height survey of approximately 10% of the floor area in the manufacturing portions of the building.

Direct measurements for total surface contamination, using a two-minute count time were made with a gas-flow proportional counter.

The critical level (L_c) plus the local background count rate was used as a screening value. If exceeded, a quantitative follow-up survey was performed.

Scanning speeds did not exceed one detector-width per second. Audible indicators were used to help identify locations having elevated (> 1.25 times ambient background) levels of direct radiation.

3.5 Data Interpretation

Data conversions and evaluations were performed, following guidance in MARSSIM. Direct measurement data were converted to units of dpm/100 cm^2 (surface activity) for comparison with guideline values. Values were adjusted for contributions from natural background. Data for each survey unit were tested against the 95% confidence level objective.

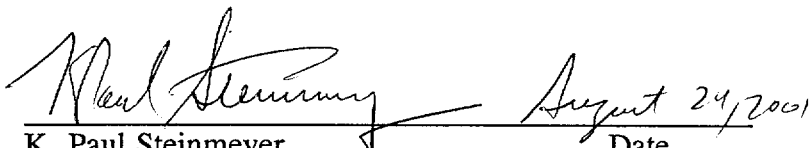
4.0 SURVEY FINDINGS AND RESULTS

4.1 Area and Room Surveys

No radioactivity distinguishable from background was detected in the areas surveyed. Locations initially found to slightly exceed the L_c screening value were revisited. Additional readings indicated that no radiation readings distinguishable from background were present. Locations and results of all radiation and contamination measurements are contained in Attachment B.

5.0 SUMMARY

Comprehensive radiological surveys of the Rocky Hill Plant were conducted between August 1 and August 17, 2001. No radioactive contamination or consistently elevated radiation levels were found during these surveys. It is unlikely that any radioactive material or radiation levels in excess of the free-release guideline values exist in the Rocky Hill Plant. Therefore no person is likely to receive an annual total effective dose equivalent (TEDE) of more than 25 mrem from any residual licensed material that might still be present at this facility.



August 24, 2001

K. Paul Steinmeyer — Date
Health Physicist, RRPT
Radiation Safety Associates, Inc.

ATTACHMENT A

Instrumentation

1 List of instruments used
2 Calibration certificates
3 Lc and MDA calculations

Table 1. Instrumentation for Radiological Surveys

Type of Measurement	Instrumentation		Bkgd.[a]	4π Eff. (%)	Detection Sensitivity
	Detector	Instrument			
Surface scans: alpha & beta	425 cm^2 gas prop, Floor monitor, Ludlum Model 43-37, sn 128615	Scaler/Count-rate meter[b], Ludlum, Model 2224-1, sn 129459	450 cpm	13.7 (^{230}Th)	Lc = 90.1 net cpm MDA = 326.7 dpm/100 cm^2
Surface Activity	425 cm^2 gas prop, Floor monitor, Ludlum Model 43-37, sn 128615	Scaler/Count-rate meter[b], Ludlum, Model 2224-1, sn 129459	450 cpm	13.7 (^{230}Th)	Lc = 36.48 net cpm MDA = 130.4 dpm/100 cm^2
Surface scans: alpha & beta	425 cm^2 gas prop, Floor monitor Ludlum, Model 43-37 sn 103776	Count-rate meter[b], Ludlum, Model 12, sn 102850	140 cpm	22.6 (^{230}Th)	Lc = 112.4 net cpm MDA = 286 dpm/100 cm^2
Surface scans: alpha & beta	425 cm^2 gas proportional, used as a wall monitor Ludlum, Model 43-37, sn 113573	Scaler/Count-rate meter[b], Ludlum, Model 2224, sn 129459	798 cpm	12.9 (^{230}Th)	Lc = 120 net cpm MDA = 455.9 dpm/100 cm^2
Exposure rate	Scintillation, NaI(Tl)	Ludlum Model 19 Micro-R Meter sn 95494	4 μR/h	N/A (^{137}Cs)	0.5 μR/h increments
Wipe Counter	Ludlum Model 120, sn 132217	Ludlum Model 2200 sn 112636	6 cpm α	19.0 (^{230}Th)	MDA = 60.27 dpm/100 cm^2

[a] Nominal Values
[b] Monitoring audible signal.

CERTIFICATE OF CALIBRATION
(COUNT-RATE INSTRUMENT)

RSA Laboratories, Inc.
21 Pendleton Drive, P.O. Box 61
Hebron, Connecticut 06248
(860) 228-0721 Fax (860) 228-4402

Customer and Contact: **Radiation Safety Associates, Inc. Attn: K. Paul Steinmeyer (860) 228-0487**
Customer Address: **P.O. Box 107, 19 Pendleton Drive, Hebron, CT 06248**

Inst. Mfr. & Model **Ludlum Model 2224-1**	Inst. Type **Scaler/Ratemeter**	Inst. s/n **129459**
Det. Mfr. & Model **Ludlum 43-37 (Floor Mon.)**	Det. Type **Gas-Proportional**	Det. s/n **128615**
Cal. Date **24 July 2001**	Due Date **24 January 2002**	Cal. Interval **6 months**

Environmental conditions: Temperature: 75°F Relative Humidity 51% Atmospheric Pressure 29.31 inches Hg

Pre-calibration Checks:

☒ Contamination survey	☒ Battery check	☐ Slow response check	
☒ Mechanical check	☒ Audio check	☒ Window operation	☒ Det. volts 1675 Vdc
☒ Meter zero	☒ Reset check	☒ Plateau check	
☒ Geotropism check	☐ Fast response check	☐ Alarm set	☒ Input sens. *See comments

☒ Pulse generator s/n 94926 ☐ Oscilloscope s/n 171-04928 ☒ Voltmeter s/n 57410002
☒ HV Readout (2 points) Ref./Inst. 900 V/ 900 V Ref./Inst. 1700 V/ 1700 V

Comments: * **Alpha threshold = 70 mV; Beta threshold = 4 mV; Beta window = 4 mV to 30 mV.**
Unit calibrated as floor monitor, Ludlum 239-1F #128826. Local background ≈ 8 cpm alpha, 627 cpm beta.

S/N of source used for precision check #6 Isotope Cs-137 Dedicated Source? ☐Yes ☒No
Reading #1 19,000 cpm Reading #2 19,000 cpm Reading #3 19,000 cpm Mean 19,000 cpm
Precision: ☒± < 10% ☐± 10-20% ☐Out of tolerance

Range Multiplier	Reference Calibration Point	Instrument Indication
x 1000	400,000 cpm	400,000 cpm
x 1000	100,000 cpm	100,000 cpm
x 100	40,000 cpm	40,000 cpm
x 100	10,000 cpm	10,000 cpm
x 10	4000 cpm	4000 cpm
x 10	1000 cpm	1000 cpm
x 1	400 cpm	400 cpm
x 1	100 cpm	100 cpm
1 min count	100,000 cpm	100,045 cpm

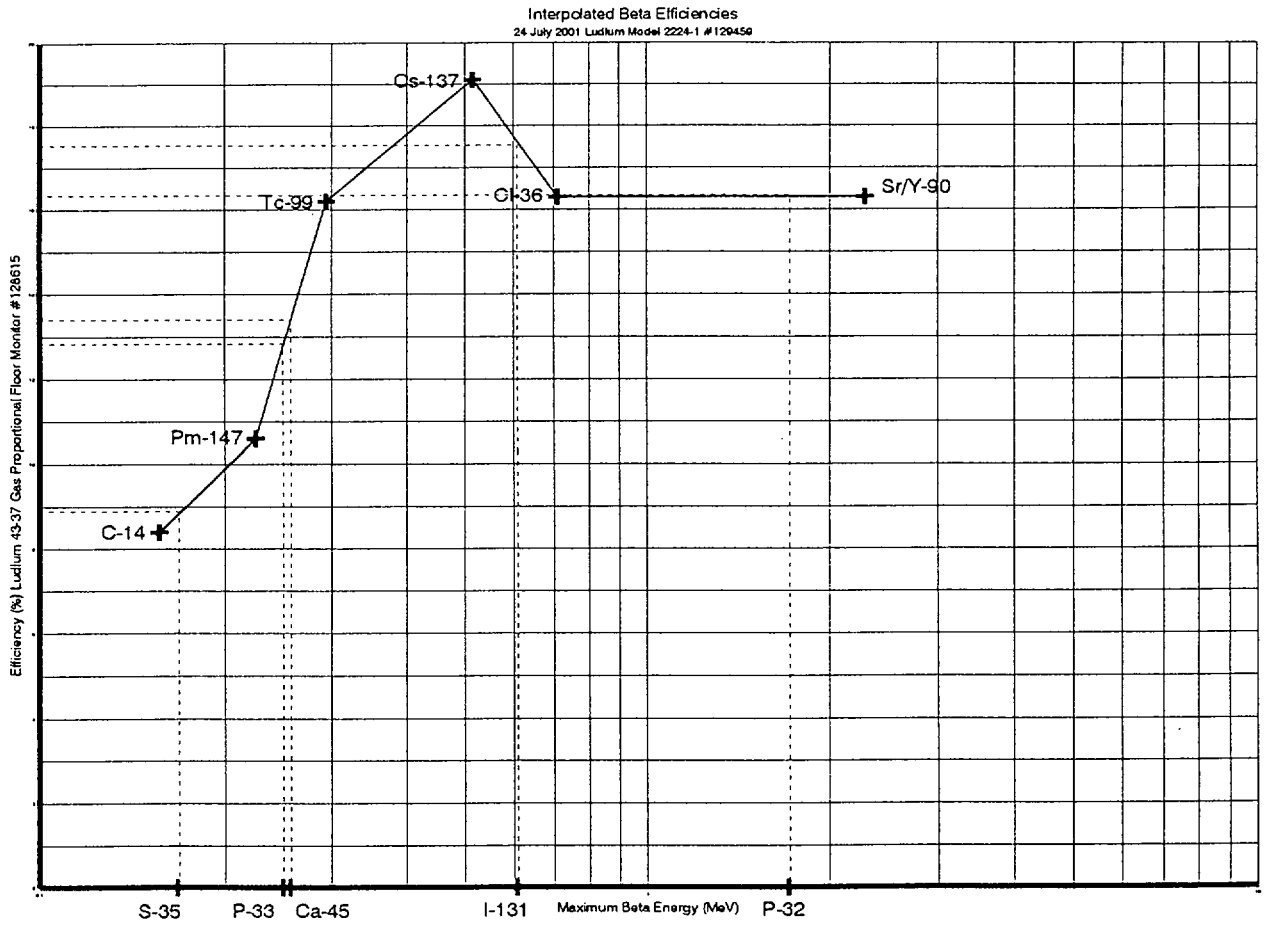
All ranges calibrated electronically.

Range Multiplier	Cal. Source Used (isotope and S/N)	Source Activity (dpm)	Instrument Reading (cpm)	4π Instrument Efficiency (%)
x 10	Th-230 #91TH2200210	38,900	5,344 (α)	13.7%
x 100	C-14 #4456	202,100	17,527	8.4%
x 10	Pm-147 #5381	19,588	2,708	10.6%
x 10	Tc-99 #D702	23,064	4,366	16.2%
x 10	Cs-137 #2886	19,124	4,286	19.1%
x 10	Cl-36 #D700	23,598	4,475	16.3%
x 100	Sr/Y-90 #D711	48,063	8,469	16.3%

RSA Laboratories ID# 5064. Instrument indicates within ±10% of calibration points unless otherwise indicated. Source-to-detector entry window distance for efficiency determinations is 1 cm unless otherwise specified. RSA Laboratories, Inc. certifies that the above instrument has been calibrated with standards traceable to the National Institute of Standards and Technology, or have been derived from accepted values of natural physical constants, or have been derived by the ratio-type of calibration techniques.

Calibrated by: **Paul R. Steinmeyer** Date 24 July 2001

Reviewed by: **David L. Judd** Date 24 July 2001



RSA Laboratories ID# **5064**.

Calibrated by: **Paul R. Steinmeyer** Paul R. Steinmeyer Date 24 July 2001

Reviewed by: **David L. Judd** David L. Judd Date 24 JULY 2001

CERTIFICATE OF CALIBRATION
(COUNT-RATE INSTRUMENT)

RSA Laboratories, Inc.
21 Pendleton Drive, P.O. Box 61
Hebron, Connecticut 06248
(860) 228-0721 Fax (860) 228-4402

Customer and Contact: **Radiation Safety Associates, Inc. Attn: K. Paul Steinmeyer (860) 228-0487**
Customer Address: **P.O. Box 107, 19 Pendleton Drive, Hebron, CT 06248**

Inst. Mfr. & Model **Ludlum Model 12**	Inst. Type **Count Rate Meter**	Inst. s/n **102850**
Det. Mfr. & Model **Ludlum 43-37 (Floor Mon.)**	Det. Type **Gas-Flow Proportional**	Det. s/n **103776**
Cal. Date **25 July 2001**	Due Date **25 January 2002**	Cal. Interval **6 months**

Environmental conditions: Temperature: **75°F** Relative Humidity **50%** Atmospheric Pressure **29.17** inches Hg

Pre-calibration Checks:

☒ Contamination survey	☒ Battery check	☒ Slow response check	
☒ Mechanical check	☒ Audio check	☐ Window operation	☒ Det. volts **1700** Vdc
☒ Meter zero	☒ Reset check	☒ Plateau check	
☒ Geotropism check	☒ Fast response check	☐ Alarm set	☒ Input sens. **4** mV

☒Pulse generator s/n 94926 ☐ Oscilloscope s/n 171-04928 ☒ Voltmeter s/n 57410002
☒HV Readout (2 points) Ref./Inst. **500** V/ **500** V Ref./Inst. **1800** V/ **1800** V

Comments: **Efficiency determined with source in contact with detector grill. Local background ≈ 200 cpm.**

S/N of source used for precision check **#6** Isotope **Cs-137** Dedicated Source? ☐Yes ☒No
Reading #1 **35,000 cpm** Reading #2 **35,000 cpm** Reading #3 **35,000 cpm** Mean **35,000 cpm**
Precision: ☒ ± <10% ☐ ±10-20% ☐Out of tolerance

Range Multiplier	Reference Calibration Point	Instrument Indication
x 100	400,000 cpm	400,000 cpm
x 100	100,000 cpm	100,000 cpm
x 10	40,000 cpm	40,000 cpm
x 10	10,000 cpm	10,000 cpm
x 1	4000 cpm	4000 cpm
x 1	1000 cpm	1000 cpm
x 0.1	400 cpm	400 cpm
x 0.1	100 cpm	100 cpm

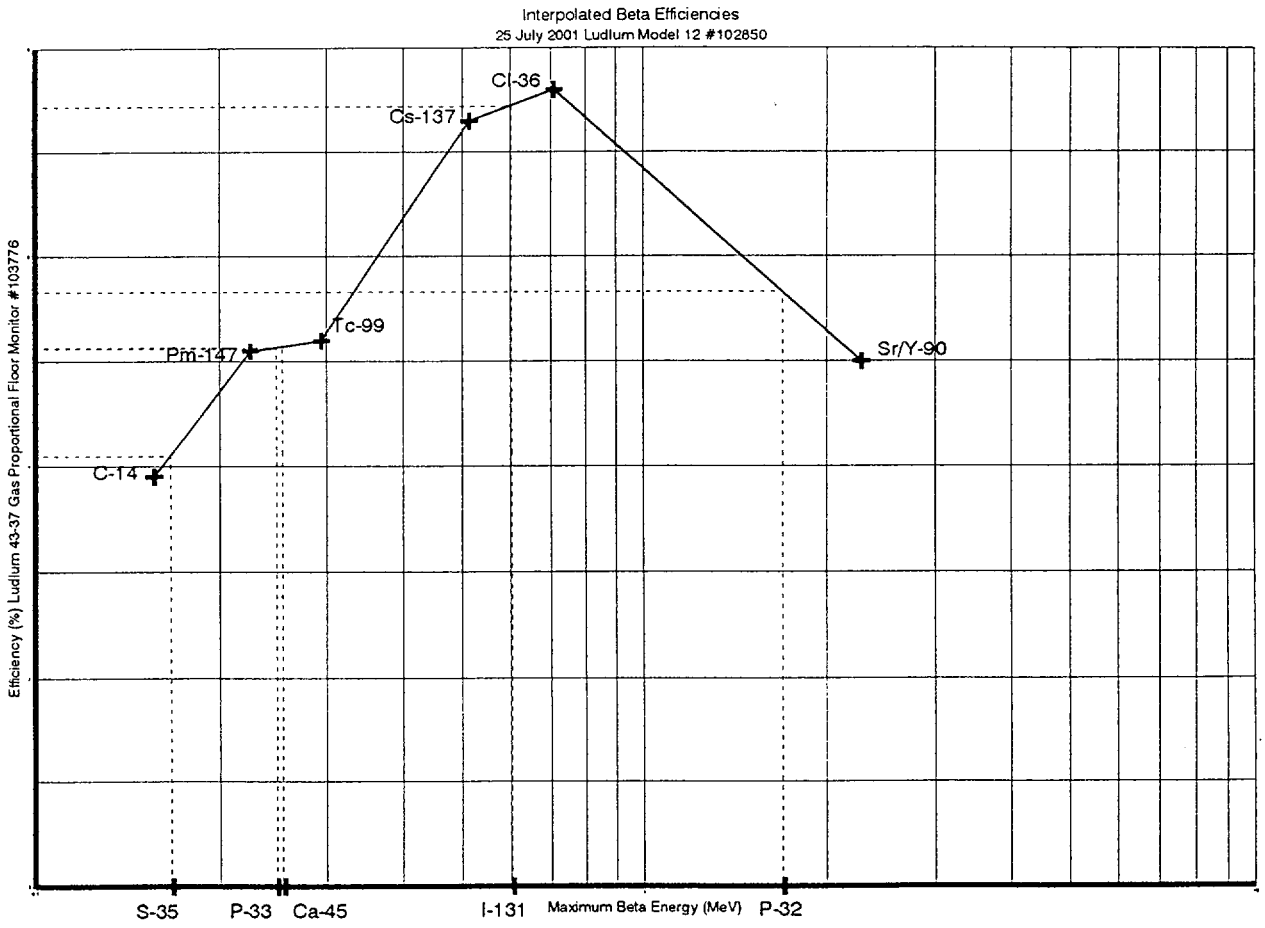
All ranges calibrated electronically.

Range Multiplier	Cal. Source Used (isotope and S/N)	Source Activity (dpm)	Instrument Reading (cpm)	4π Instrument Efficiency (%)
x 10	Th-230 #91TH2200210	38,900	9,000	22.6%
x 100	C-14 #4456	202,100	8,000	3.9%
x 10	Pm-147 #5381	19,588	1200	5.1%
x 10	Tc-99 #D702	23,064	1,400	5.2%
x 10	Cs-137 #2886	19,124	1,600	7.3%
x 10	Cl-36 #D700	23,598	2,000	7.6%
x 100	Sr/Y-90 #D711	48,063	2,600	5%

RSA Laboratories ID# 5066. Instrument indicates within ±10% of calibration points unless otherwise indicated. Source-to-detector entry window distance for efficiency determinations is 1 cm unless otherwise specified. RSA Laboratories, Inc. certifies that the above instrument has been calibrated with standards traceable to the National Institute of Standards and Technology, or have been derived from accepted values of natural physical constants, or have been derived by the ratio-type of calibration techniques.

Calibrated by: **Paul R. Steinmeyer** Pal R. Date 25 July 2001

Reviewed by: **David L. Judd** Date 25 JULY 2001



RSA Laboratories ID# 5066.

Calibrated by: **Paul R. Steinmeyer** Paul R. Steinmeyer Date 25 July 2001

Reviewed by: **David L. Judd** David L. Judd Date 25 JULY 2001

CERTIFICATE OF CALIBRATION
(COUNT-RATE INSTRUMENT)

RSA Laboratories, Inc.
21 Pendleton Drive, P.O. Box 61
Hebron, Connecticut 06248
(860) 228-0721 Fax (860) 228-4402

Customer and Contact: **Radiation Safety Associates, Inc. Attn: K. Paul Steinmeyer (860) 228-0487**
Customer Address: **P.O. Box 107, 19 Pendleton Drive, Hebron, CT 06248**

Inst. Mfr. & Model **Ludlum Model 2224-1**	Inst. Type **Scaler/Ratemeter**	Inst. s/n **129459**
Det. Mfr. & Model **Ludlum 43-37**	Det. Type **Gas-Proportional**	Det. s/n **113573**
Cal. Date **24 July 2001**	Due Date **24 January 2002**	Cal. Interval **6 months**

Environmental conditions: Temperature: 75°F Relative Humidity 51% Atmospheric Pressure 29.31 inches Hg

Pre-calibration Checks:

☒ Contamination survey	☒ Battery check	☐ Slow response check	
☒ Mechanical check	☒ Audio check	☒ Window operation	☒ Det. volts 1675 Vdc
☒ Meter zero	☒ Reset check	☒ Plateau check	
☒ Geotropism check	☐ Fast response check	☐ Alarm set	☒ Input sens. *See comments

☒ Pulse generator s/n 94926 ☐ Oscilloscope s/n 171-04928 ☒ Voltmeter s/n 57410002
☒ HV Readout (2 points) Ref./Inst. 900 V/ 900 V Ref./Inst. 1700 V/ 1700 V

Comments: * **Alpha threshold = 70 mV; Beta threshold = 4 mV; Beta window = 4 mV to 30 mV.**
Unit calibrated as hand held monitor. Local background ≈ 10 cpm alpha, 1152 cpm beta.

S/N of source used for precision check #6 Isotope Cs-137 Dedicated Source? ☐Yes ☒No
Reading #1 21,000 cpm Reading #2 21,000 cpm Reading #3 21,000 cpm Mean 21,000 cpm
Precision: ☒± <10% ☐±10-20% ☐Out of tolerance

Range Multiplier	Reference Calibration Point	Instrument Indication
x 1000	400,000 cpm	400,000 cpm
x 1000	100,000 cpm	100,000 cpm
x 100	40,000 cpm	40,000 cpm
x 100	10,000 cpm	10,000 cpm
x 10	4000 cpm	4000 cpm
x 10	1000 cpm	1000 cpm
x 1	400 cpm	400 cpm
x 1	100 cpm	100 cpm
1 min count	100,000 cpm	100,045 cpm

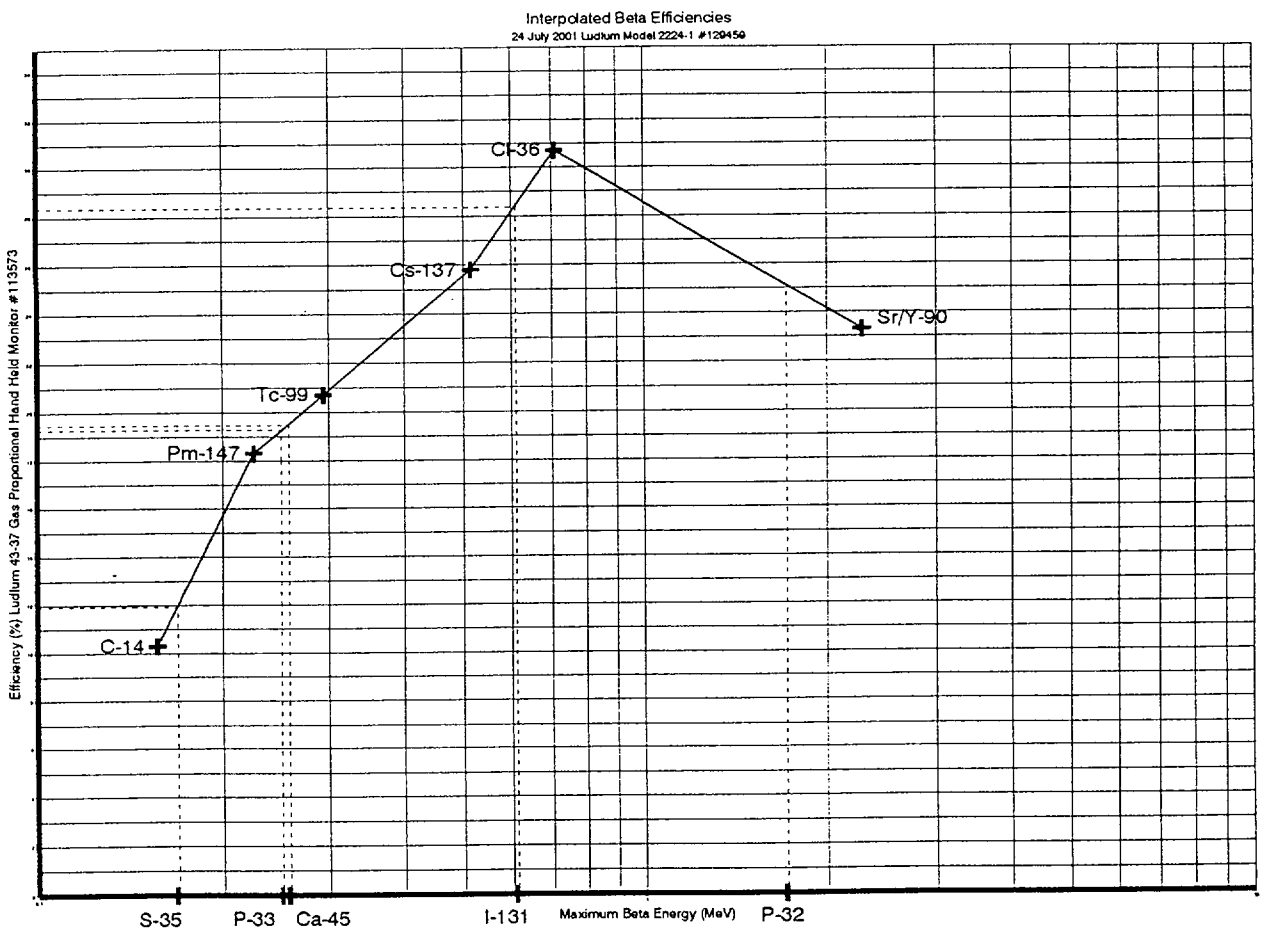
All ranges calibrated electronically.

Range Multiplier	Cal. Source Used (isotope and S/N)	Source Activity (dpm)	Instrument Reading (cpm)	4π Instrument Efficiency (%)
x 10	Th-230 #91TH2200210	38,900	6,155 (α)	12.9%
x 100	C-14 #4456	202,100	22,020	10.3%
x 10	Pm-147 #5381	19,588	4,740	18.3%
x 10	Tc-99 #D702	23,064	5,922	20.7%
x 10	Cs-137 #2886	19,124	6,086	25.8%
x 10	Cl-36 #D700	23,598	8,386	30.7%
x 100	Sr/Y-90 #D711	48,063	12,343	23.3%

RSA Laboratories ID# 5064. Instrument indicates within ±10% of calibration points unless otherwise indicated. Source-to-detector entry window distance for efficiency determinations is 1 cm unless otherwise specified. RSA Laboratories, Inc. certifies that the above instrument has been calibrated with standards traceable to the National Institute of Standards and Technology, or have been derived from accepted values of natural physical constants, or have been derived by the ratio-type of calibration techniques.

Calibrated by: **Paul R. Steinmeyer** Paul R. Steinmeyer Date 24 July 2001

Reviewed by: **David L. Judd** David L. Judd Date 24 JULY 2001



RSA Laboratories ID# 5064.

Calibrated by: **Paul R. Steinmeyer** Paul R. Steinmeyer Date 24 July 2001

Reviewed by: **David L. Judd** David L. Judd Date 24 JULY 2001

CERTIFICATE OF CALIBRATION
(EXPOSURE RATE INSTRUMENT)

RSA Laboratories, Inc.
21 Pendleton Drive, P.O. Box 61
Hebron, Connecticut 06248
(860) 228-0721 Fax (860) 228-4402

Customer and Contact: **Radiation Safety Associates, Inc. Attn: K. Paul Steinmeyer (860) 228-0487**
Customer Address: **P.O. Box 107, 19 Pendleton Drive, Hebron, CT 06248**

Inst. Mfr. & Model **Ludlum Model 19**	Inst. Type **Micro R Meter**	Inst. s/n **95494**
Det. Mfr. & Model **N/A**	Det. Type **(internal sodium iodide)**	Det. s/n **N/A**
Cal. Date **10 May 2001**	Due Date **10 November 2001**	Cal. Interval **6 months**

Environmental conditions: Temperature: **72°F** Relative Humidity **38%** Atmospheric Pressure **29.35** inches Hg
Pre-calibration Checks:

☒ Contamination survey	☒ Battery check	☒ Slow response check	
☒ Mechanical check	☒ Audio check	☐ Window operation	☒ Det. volts 700 Vdc
☒ Meter zero	☒ Reset check	☐ Plateau check	
☒ Geotropism check	☒ Fast response check	☐ Alarm set	☐ Input sens.

☒Pulse generator s/n 94926 ☐ Oscilloscope s/n 171-04928 ☒ Voltmeter s/n 57410002
☐HV Readout (2 points) Ref./Inst. _____ V/ _____ V Ref./Inst. _____ V/ _____ V

Comments:

S/N of source used for precision check #6 Isotope **Cs-137** Dedicated Source? ☐Yes ☒No
Reading #1 **1800 μR/h** Reading #2 **1800 μR/h** Reading #3 **1800 μR/h** Mean **1800 μR/h**
Precision: ☒± <10% ☐± 10-20% ☐Out of tolerance

Range	Reference Calibration Point	Instrument Indication
5000 μR/h	3,488 μR/h	3,500 μR/h
5000 μR/h	914 μR/h	900 μR/h
500 μR/h	399 μR/h ≈ 30,500 cpm	400 μR/h
500 μR/h	116 μR/h ≈ 8,400 cpm	110 μR/h
250 μR/h	183 μR/h ≈ 13,200 cpm	180 μR/h
250 μR/h	54 μR/h ≈ 3,710 cpm	55 μR/h
50 μR/h	3,050 cpm	40 μR/h
50 μR/h	840 cpm	11 μR/h
25 μR/h	1,320 cpm	18 μR/h
25 μR/h	371 cpm	5.5 μR/h

50 and 25 μR/h ranges were calibrated electronically.

Sources used: ^{137}Cesium 750 mCi s/n KR-6244 and KR-6250, and ^{137}Cesium 750 μCi s/n 163.

RSA Laboratories Log ID# **4912**. Calibration points calculated to center of detector volume unless otherwise specified. Instrument indicates within ±10% of calibration points unless otherwise indicated. RSA Laboratories, Inc. certifies that the above instrument has been calibrated with standards traceable to the National Institute of Standards and Technology, or have been derived from accepted values of natural physical constants, or have been derived by the ratio-type of calibration techniques.

Calibrated by: **Paul R. Steinmeyer** Paul R. Steinmeyer Date 10 May 2001

Reviewed by: **David L. Judd** Date 10 MAY 2001

CERTIFICATE OF CALIBRATION
(COUNTER/SCALER)

RSA Laboratories, Inc.
19 Pendleton Drive, P.O. Box 61
Hebron, Connecticut 06248
(203) 228-0721 Fax (203) 228-4402

Customer and Contact: **Radiation Safety Associates, Inc. Attn: K. Paul Steinmeyer (860) 228-0487**
Customer Address: **P.O. Box 107, 19 Pendleton Drive, Hebron, CT 06248**

Inst. Mfr. & Model **Ludlum Model 2200**	Inst. Type **Scaler Ratemeter**	Inst. s/n **112636**
Det. Mfr. & Model **Ludlum Model 120**	Det. Type **Gas-Prop. Sample Counter**	Det. s/n **132217**
Cal. Date **01 August 2001**	Due Date **01 February 2002**	Cal. Interval **6 months**

Environmental conditions: Temperature: **72°F** Relative Humidity **55%** Atmospheric Pressure **29.30** inches Hg

Pre-calibration Checks:

☒ Contamination survey	☒ Battery check	☒ Slow response check	
☒ Mechanical check	☐ Audio check	☒ Window operation	☒ Det. volts **1500** Vdc (@600)
☒ Meter zero	☒ Reset check	☒ Plateau check	
☐ Geotropism check	☒ Fast response check	☐ Alarm set	☒ Input sens. **3** mV (@200)

☒Pulse generator s/n 94926 ☐ Oscilloscope s/n 171-04928 ☒ Voltmeter s/n 57410002
☒HV Readout (2 points) Ref./Inst. **500 V/500 V** Ref./Inst. **1000 V/ 1000 V**

Comments: **Efficiency determined with source at approximately 1 cm from detector window. Local background ≈ 1 cpm.**

S/N of source used for precision check **91TH220** Isotope **Th-230** Dedicated Source? ☐Yes ☒No
Reading #1 **7,134 cpm** Reading #2 **7,136 cpm** Reading #3 **7,132 cpm** Mean **7,134 cpm**
Precision: ☒± <10% ☐±10-20% ☐Out of tolerance

Range Multiplier	Reference Calibration Point	Instrument Indication
x 1K	400,000 cpm	400,000 cpm
x 1K	100,000 cpm	100,000 cpm
x 100	40,000 cpm	40,000 cpm
x 100	10,000 cpm	10,000 cpm
x 10	4,000 cpm	4,000 cpm
x 10	1,000 cpm	1,000 cpm
x 1	400 cpm	400 cpm
x 1	100 cpm	100 cpm
1 min. x 0.1	5,000 cpm (500 counts)	500 counts
1 min. x 1	5,000 cpm (5,000 counts)	4,997 counts

All ranges calibrated electronically.

Range Multiplier	Cal. Source Used (isotope and S/N)	Source Activity (dpm)	Instrument Reading (cpm)	4π Instrument Efficiency (%)
1 min. count	Th-230 #91TH2200210	38,900	7,134	18.3%

RSA Laboratories ID# 5156. Instrument indicates within ±10% of calibration points unless otherwise indicated. Source-to-detector entry window distance for efficiency determinations is 1 cm unless otherwise specified. RSA Laboratories, Inc. certifies that the above instrument has been calibrated with standards traceable to the National Institute of Standards and Technology, or have been derived from accepted values of natural physical constants, or have been derived by the ratio-type of calibration techniques.

Calibrated by: **Paul R. Steinmeyer** Paul R. Steinmeyer Date 01 Aug 2001

Reviewed by: **David L. Judd** David L. Judd Date 01 AUG 2001

Surface Scan

Ludlum Floor Monitor Model 43-37, sn 128615, with
Model 2224-1, sn 129459
DETECTION LIMITS--SURFACE CONTAMINATION

INPUT DATA:
Background Count = 450 cpm
Time Constant = 9 seconds
Background and Sample Counting Time = 0.3 minutes
Detector Efficiency = 13.7 %
Detector Area = 425 cm^2
Detector Efficiency = 13.7 %
Detector Area = 425 cm^2

RESULTS:
Critical Level (Lc) = 90.1 cpm above bkgd.
Detection Limit (Ld)) = 190.2 cpm above bkgd.
Minimum Detectable Activity (MDA) = 1388 dpm/detector
Minimum Detectable Activity (MDA) = 326.7 dpm/100 cm^2
Minimum Detectable Activity (MDA) = 23.14 Bq/detector
Minimum Detectable Activity (MDA) = 0.05444 Bq/1 cm^2

All values calculated to 95% CL via MARSSIM methods

Calculated by RadCalc version 1.1 on 8/23/01 at 12:52:32 PM

Surface Scan

Ludlum Monitor Model 43-37, sn 103776, with
Model 12, sn 102850
DETECTION LIMITS--SURFACE CONTAMINATION

INPUT DATA:
Background Count = 140 cpm
Time Constant = 1.8 seconds
Background and Sample Counting Time = 0.06 minutes
Detector Efficiency = 22.6 %
Detector Area = 425 cm^2
Detector Efficiency = 22.6 %
Detector Area = 425 cm^2

RESULTS:
Critical Level (Lc) = 112.4 cpm above bkgd.
Detection Limit (Ld)) = 274.7 cpm above bkgd.
Minimum Detectable Activity (MDA) = 1216 dpm/detector
Minimum Detectable Activity (MDA) = 286 dpm/100 cm^2
Minimum Detectable Activity (MDA) = 20.26 Bq/detector
Minimum Detectable Activity (MDA) = 0.04767 Bq/1 cm^2

All values calculated to 95% CL via MARSSIM methods

Calculated by RadCalc version 1.1 on 8/23/01 at 1:01:28 PM

Surface Scan--Walls

Ludlum Monitor Model 43-37, sn 113573, with
Model 2224-1, sn 129459
DETECTION LIMITS--SURFACE CONTAMINATION

INPUT DATA:
Background Count = 798 cpm
Time Constant = 9 seconds
Background and Sample Counting Time = 0.3 minutes
Detector Efficiency = 12.9 %
Detector Area = 425 cm^2
Detector Efficiency = 12.9 %
Detector Area = 425 cm^2

RESULTS:
Critical Level (Lc) = 120 cpm above bkgd.
Detection Limit (Ld)) = 250 cpm above bkgd.
Minimum Detectable Activity (MDA) = 1938 dpm/detector
Minimum Detectable Activity (MDA) = 455.9 dpm/100 cm^2
Minimum Detectable Activity (MDA) = 32.3 Bq/detector
Minimum Detectable Activity (MDA) = 0.07599 Bq/1 cm^2

All values calculated to 95% CL via MARSSIM methods

Calculated by RadCalc version 1.1 on 8/23/01 at 12:57:08 PM

Direct Contamination Measurement (1-minute counts)

Ludlum Floor Monitor Model 43-37, sn 128615, with
Model 2224-1, sn 129459
DETECTION LIMITS--SURFACE CONTAMINATION

INPUT DATA:
Background Count = 447 cpm
Background Counting Time = 10 minutes
Sample Counting Time = 1 minutes
Detector Efficiency = 13.7 %
Detector Area = 425 cm^2

RESULTS:
Critical Level (Lc) = 36.48 cpm above bkgd.
Detection Limit (Ld)) = 75.95 cpm above bkgd.
Minimum Detectable Activity (MDA) = 554.4 dpm/detector
Minimum Detectable Activity (MDA) = 130.4 dpm/100 cm^2
Minimum Detectable Activity (MDA) = 9.24 Bq/detector
Minimum Detectable Activity (MDA) = 0.02174 Bq/1 cm^2

All values calculated to 95% CL via MARSSIM methods

Calculated by RadCalc version 1.1 on 8/23/01 at 12:49:57 PM

Wipe Sample Detection Limits

Ludlum Model 2200, sn 112636 and
Ludlum Model 120, sn 132217

DETECTION LIMITS--WIPE SAMPLES

INPUT DATA:
Background Count = 6 total counts
Background Counting Time = 10 minutes
Sample Counting Time = 1 minutes
Detector Efficiency = 18.3 %
Detector Area = 32 cm^2

RESULTS:
Critical Level (Lc) = 1.336 cpm above bkgd.
Detection Limit (Ld)) = 5.67 cpm above bkgd.
Minimum Detectable Activity (MDA) = 31.00 dpm/detector
Minimum Detectable Activity (MDA) = 96.87 dpm/100 cm^2
Minimum Detectable Activity (MDA) = 0.517 Bq/detector
Minimum Detectable Activity (MDA) = 0.01615 Bq/1 cm^2

All values calculated to 95% CL via MARSSIM methods

Caclulated by RadCalc version 1.1 on 8/24/01 at 1:33:24 PM

ATTACHMENT B

Survey Results

1. Areas Included During Scan Survey With Floor Monitor
2. Location and Results of Direct Contamination Measurements
3. Location and Results of Gamma Survey
4. Location and Results of Wipe Survey

ATTACHMENT B-1

Areas Included During Scan Survey With Floor Monitor

AREAS SURVEYED
W/ FLOOR MONITOR
(indicated by X)
NORTH SIDE

BLDG. "A" STORAGE SHED OPEN

BLDG. "C" STORAGE SHED OPEN

BLDG. SHPC FINISHED STORES

OPEN STORAGE SHED

HAZARDOUS WASTE STORAGE

7A

BASEMENT

HOUSE

POWER HOUSE

MEZZ

AUTOCLAVE BUILDING D-7147

OPEN

NON-HAZARDOUS STORAGE D-7007

TRUCK WELL

OPEN

D-7034 COMP. TOOL ROOM

D-7034 TOOL ROOM

D-7052 RECEIVING

D-7052 OFFICE

CAFETERIA

SPOOL STORAGE D-7147

D-7041 TOOL CRIB

D-7041 TOOL CRIB

MFG. ENG. OFFICE

MEN

WOMEN

D-7027 BATT. MAINT.

D-7147 ROUTING

D-7147 WRAP

D-7034

D-7026

WOMEN

D-7979

D-7979 INSP.

TOOL ROOM.

PLANT ENG. OFFICE

CONF. ROOM

SHIPPING OFFICE

SHIPPING

MEN

WOMEN

ADMIN

ADMIN

D-7147 LAY-UP FACILITY

D-7147 CLEANING ROOM

D-7147 PREP ROOM

D-7147 PAINT

D-7147 COMPRESSORS

D-7147 SPRAY BOOTH

D-7147 BONDING CLEAN ROOM

OPEN

D-7147 INCOMING AREA

SUPPORT EQUIPMENT
OVER HEAD HOIST SUPPORTS
RYAN HERNIK LINE
TANK LINE
BAKER BROTHER ANODIZE LINE
539249
NOT APPROVED TEMPLATE

LOAD

UNLOAD

D-7147 DETAIL CRIB

SHPC OFFICE

OPEN

OPEN

OPEN

OPEN

CREDIT UNION

LOBBY

D-7026 WASTE TREATMENT PLANT CHEMICAL STORAGE

WOMEN

D-7031 OIL STORAGE

M

D-7147

MEN

ELECTRICAL TRANSFORMER ROOM SUB-STA #1

INDUSTRIAL WATERWASTE TREATMENT SYSTEM

MCL D-7953

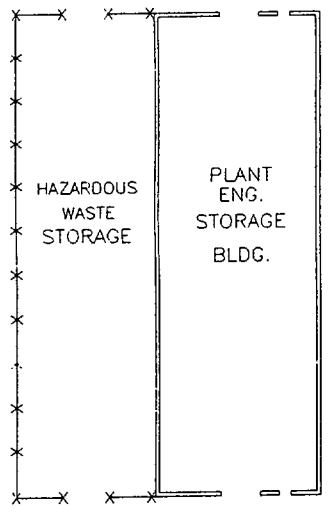
HAZ STORAGE | HAZ. STORAGE

RELOCATED TO MIDDLETOWN 1998

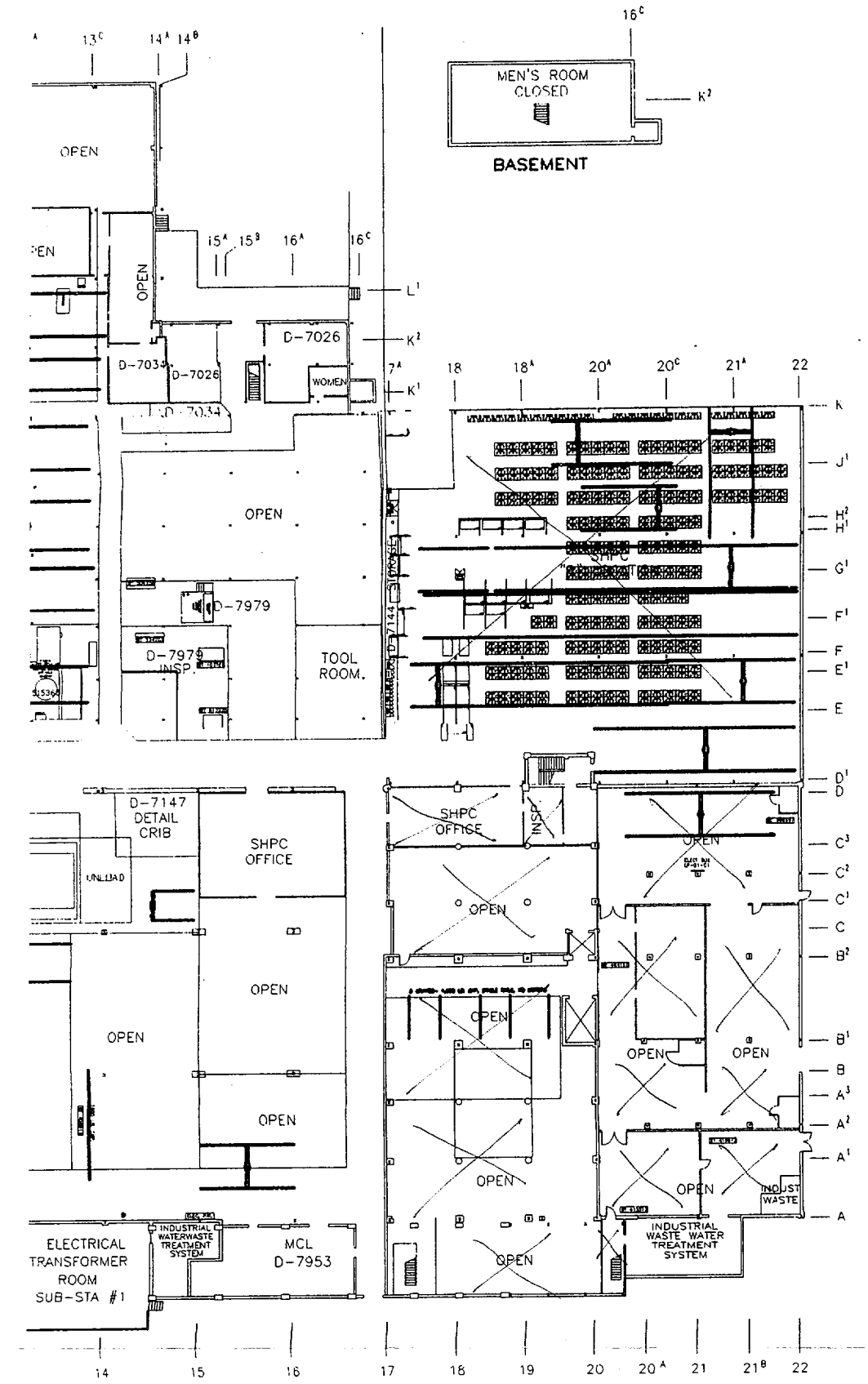
TRANSFORMER

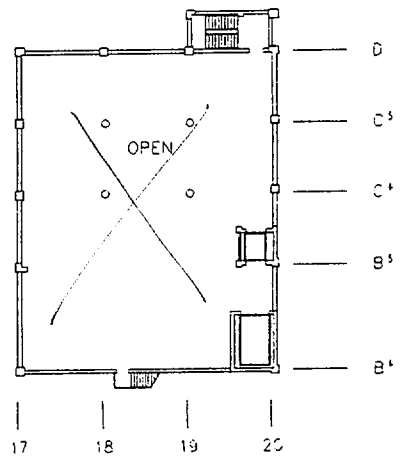
HI-VOLT. GENERAT

TOTAL SQUARE FOOTAGE = 269,200

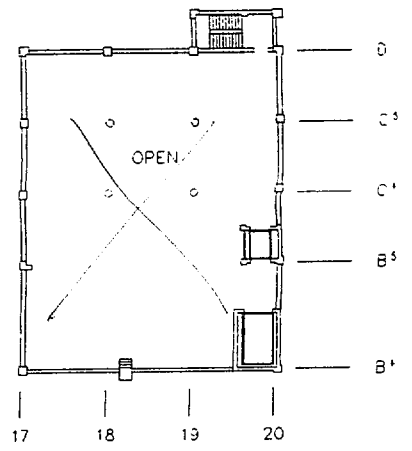


AREAS SURVEYED W/ FLOOR MONITOR
(indicated by X)
SOUTH SIDE

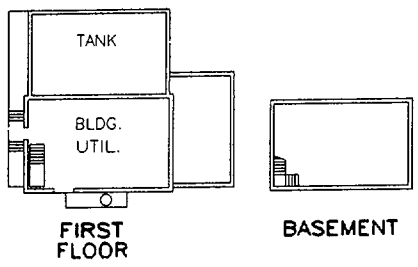




4TH FLOOR

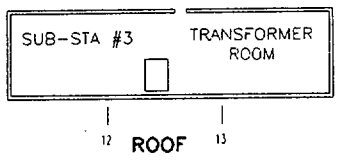


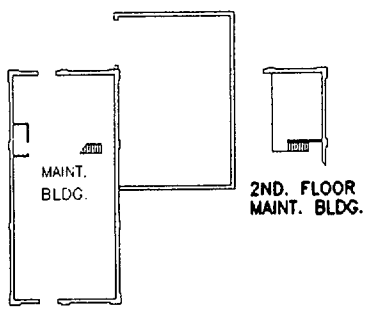
3RD FLOOR



FIRST FLOOR

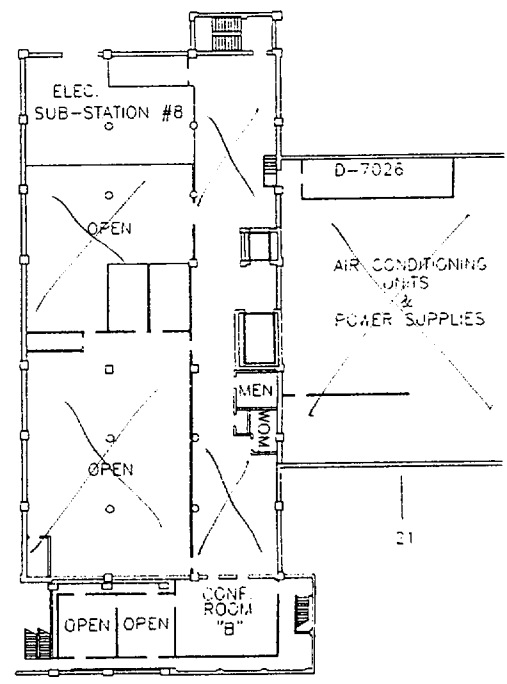
BASEMENT



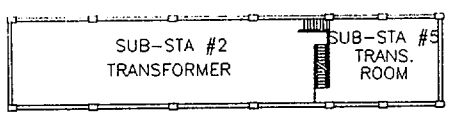


2ND. FLOOR
MAINT. BLDG.

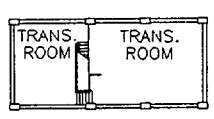
MAINT. BLDG.



2ND FLOOR



3RD FLOOR 4TH FLOOR



5TH FLOOR 6TH FLOOR

ROCKY HILL PLAN
PRATT & WHITNE
DRAWN BY MIDDLETOWN FACILITI

Pratt & Whitney
UNITED
TECHNOLOGIES
MANUFACTURING
DIVISION

PLANT ENGINEERING DEPARTMENT
MIDDLETOWN, CONNECTICUT 06457 U.S.A.

FROM DRAWING PLOTTED FROM DATA BELOW FILE NAME

WPLANT\ROCKHILL\RH-SITE.dwg Thu Nov 02 14:12:04 2000 Plotted by Misha Louis

ATTACHMENT B-2

Location and Results of Direct Contamination Measurements

Circled values are total counts in 2 minutes.
Un-circled values are dpm/100 cm^2

ALPHA / BETA READINGS

2 MINUTE COUNTS (indicated inside ⬭)

NORTH SIDE

L_c = 36 cpm

MDA = 130 dpm/100 cm²

BLDG. "A" STORAGE SHED OPEN

BLDG. "C" STORAGE SHED OPEN

BLDG. "B" SHPC FINISHED STORES

OPEN STORAGE SHED

HAZARDOUS WASTE STORAGE

7A

BASEMENT

NON-HAZARDOUS STORAGE D-7007

OPEN

TRUCK WELL

HOUSE

7026 TENANCE

POWER HOUSE

MEZZ

AUTOCLAVE BUILDING D-7147

OPEN

COMP. TOOL ROOM D-7034

COMP. TOOL ROOM

D-7052 RECEIVING

D-7052 OFFICE

CAFETERIA

SPOOL STORAGE

OPEN

D-7041 TOOL CRIB

D-7041 TOOL CRIB

MFG. ENG. OFFICE

MEN

WOMEN

D-7027 BATT. MAINT.

OPEN

OPEN

OPEN

OPEN

OPEN

D-7034

D-7026

WOMEN

D-7147 OUTING

D-7147 WRAP

D-7979 INSP.

D-7979

TOOL ROOM.

PLANT ENG OFFICE

CONF. ROOM

F.N.

B.U. OFFICE

B.U. OFFICE

MEN

WOMEN

ADMIN.

ADMIN.

LOBBY

CREDIT UNION

D-7160 LAY-UP FREEZER

D-7147 LAY-UP ROOM

D-7147 PREP. ROOM

D-7147 PAINT

D-7147 BONDING CLEAN ROOM

D-7147 COMPUTERS

D-7147 SPRAY BOOTH

D-7147

OPEN

D-7147 INCOMING AREA

OPEN

OPEN

D-7147 DETAIL CRIB

SHPC OFFICE

D-7026 WASTE TREATMENT PLANT CHEMICAL STORAGE

WOMEN

D-7031 OIL STORAGE

D-7147

MEN

ELECTRICAL TRANSFORMER ROOM SUB-STA #1

INDUSTRIAL WASTEWATER TREATMENT SYSTEM

MCL D-7953

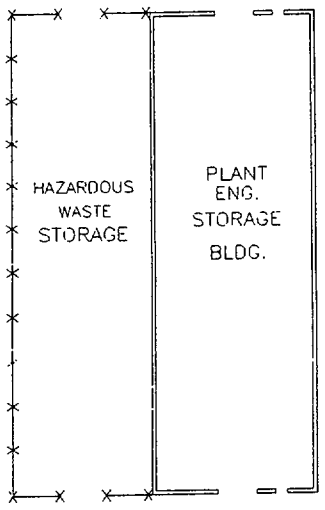
HAZ STORAGE | HAZ. STORAGE

RELOCATED TO MIDDLETOWN 1998

TRANSFORMER

HI-VOLT. GENERAT

TOTAL SQUARE FOOTAGE = 269,200

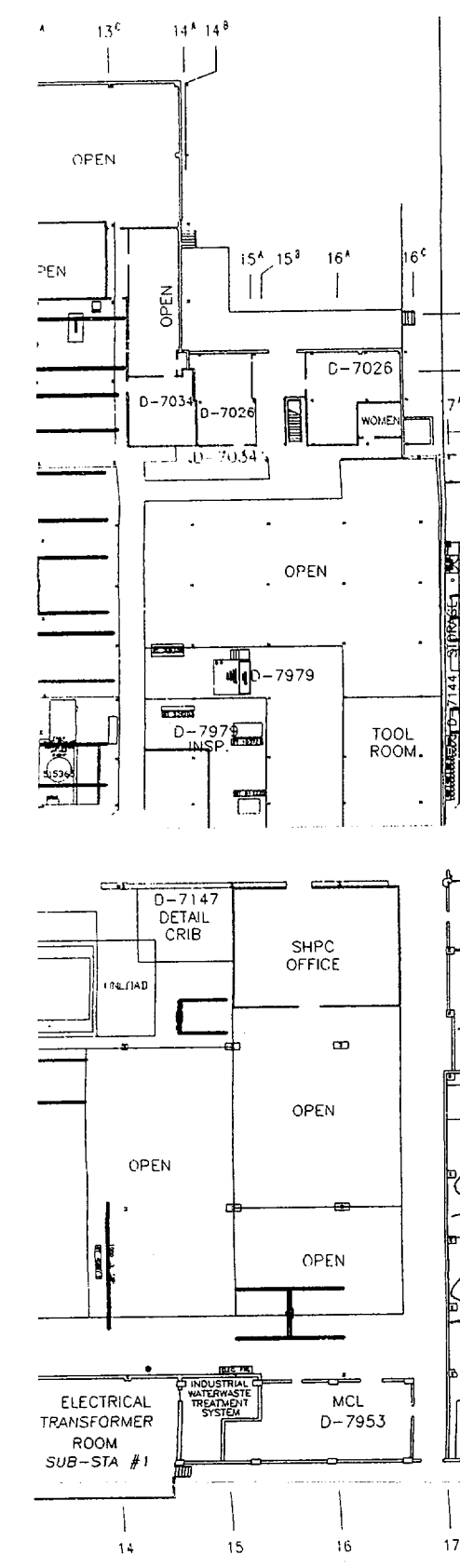


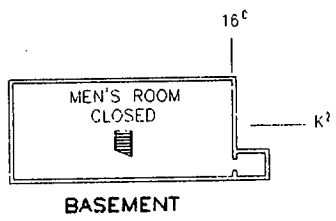
ALPHA / BETA READINGS
2 MINUTE COUNTS (indicated inside ○)

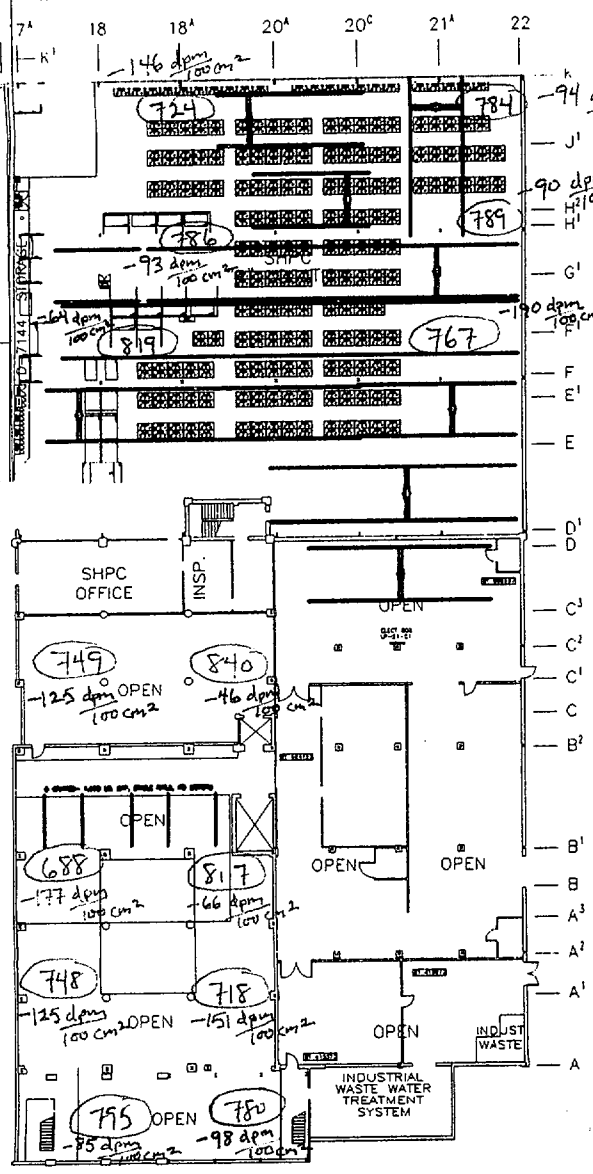
SOUTH SIDE

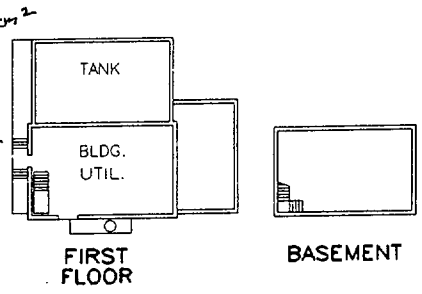
L_c = 36 cpm

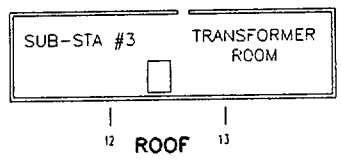
MDA = 130 dpm/100 cm²

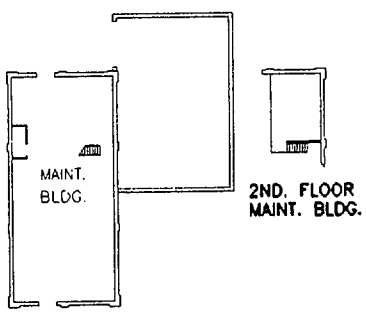


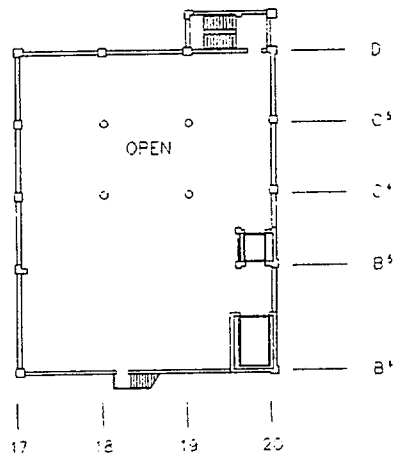


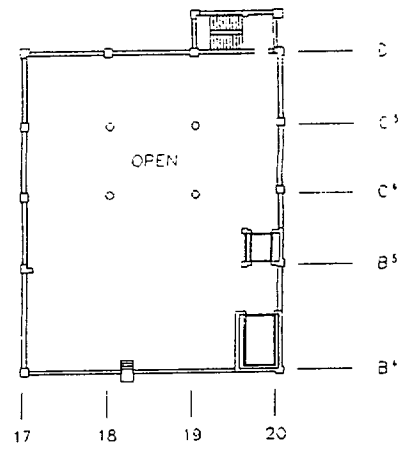


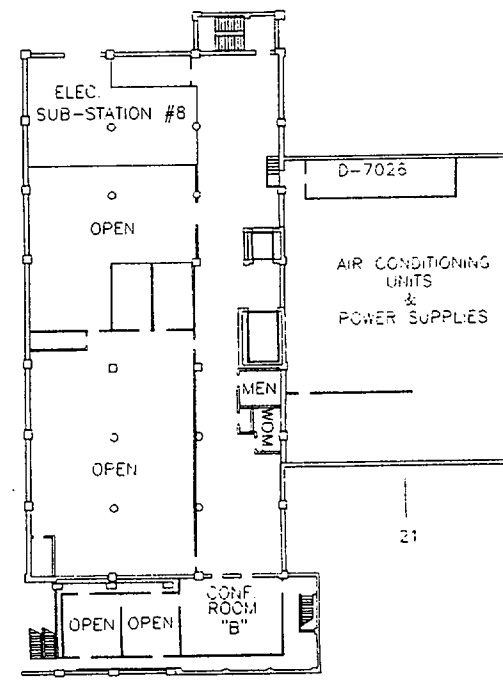


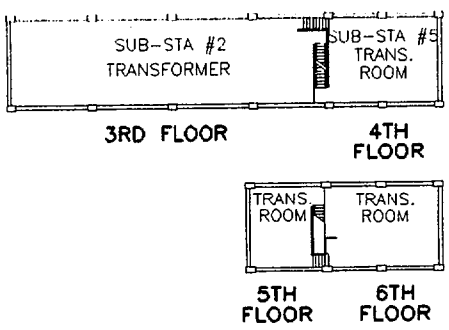












NORTH

ROCKY HILL PLAN
PRATT & WHITNE
DRAWN BY MIDDLETOWN FACILIT

Pratt & Whitney
UNITED TECHNOLOGIES
MANUFACTURING DIVISION

PLANT ENGINEERING DEPARTMENT
MIDDLETOWN, CONNECTICUT 06457 U.S.A.

FROM DRAWING PL-[illegible] FROM LOTUS BILLARD FILE NAME

ALPHA / BETA
READINGS
2 MINUTE COUNTS
(indicated inside ○)

NORTH SIDE
revisited

L_c = 36 cpm
MDA = 130 dpm/100cm²

BLDG. "A" STORAGE SHED OPEN

BLDG. "C" STORAGE SHED OPEN

BLDG. SHPC FINISHED STORES

OPEN STORAGE SHED

HAZARDOUS WASTE STORAGE

7A

BASEMENT

NON-HAZARDOUS STORAGE D-7007

OPEN

TRUCK WELL

OPEN

OPEN

-62 dpm/100cm²

822

OPEN

815

-68 dpm/100cm²

OPEN

HOUSE

7026 TENANCE

WER HOUSE

POWER HOUSE

MEZZ

AUTOCLAVE BUILDING D-7147

OPEN

D-7034 COMP. TOOL ROOM

D-7034

47 dpm/100cm²

1019

107 dpm/100cm²

949

D-7034 COMP. TOOL ROOM

D-7052 RECEIVING

71 dpm/100cm²

977

956

53 dpm/100cm²

D-7052 OFFICE

CAFETERIA

SPOOL STORAGE D-7147

937

37 dpm/100cm²

OPEN

D-7041 TOOL CRIB

32 dpm/100cm²

931

D-7041 TOOL CRIB

MFG. ENG. OFFICE

MEN

WOMEN

D-7027 BATT. MAINT.

OPEN

D-7147 OUTING

D-7147 WRAP

D-7034

D-7026

WOMEN

D-7034

-13 dpm/100cm²

879

OPEN

938

38 dpm/100cm²

D-7979

D-7979 INSP.

TOOL ROOM.

PLANT ENG OFFICE

CONF. ROOM

PIN.

MEN

WOMEN

ADMIN.

ADMIN.

LOBBY

CREDIT UNION

D-7147 LAY-UP ROOM

D-7147

D-7147 PREP. ROOM

D-7147 PAINT

D-7147 BONDING CLEAN ROOM

D-7147 COMPARTMENTS

D-7147 SPRAY BOOTH

OPEN

D-7147 DETAIL CRIB

SHPC OFFICE

SUPPORT EQUIPMENT OVER HEAD HOIST SUPPORTS AT 26'-4"

PAINT LINE

BAKER BROTHER ANODIZE LINE S39249

NOT APPROVED TEMPLATE

LOAD

UNLOAD

D-T147 INCOMING AREA

OPEN

OPEN

OPEN

D-7026 WASTE TREATMENT PLANT CHEMICAL STORAGE

WOMEN

D-7031 OIL STORAGE

D-7147

MEN

ELECTRICAL TRANSFORMER ROOM SUB-STA #1

INDUSTRIAL WATER/WASTE TREATMENT SYSTEM

MCL D-7953

HAZ STORAGE | HAZ. STORAGE

RELOCATED TO MIDDLETOWN 1998

TRANSFORMER

HI-VOLT. GENERAT

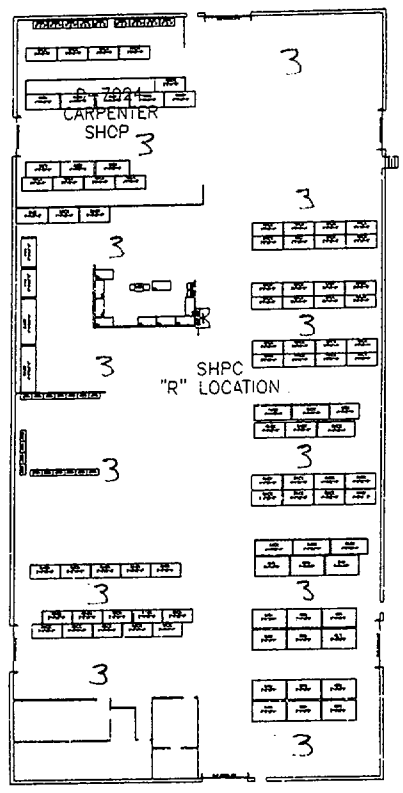
TOTAL SQUARE FOOTAGE = 269,200

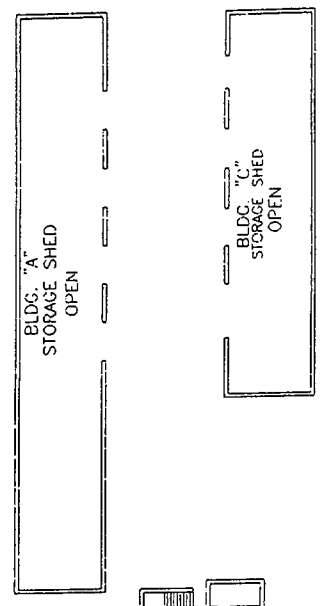
ATTACHMENT B-3

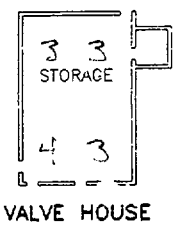
Location and Results of Gamma Survey

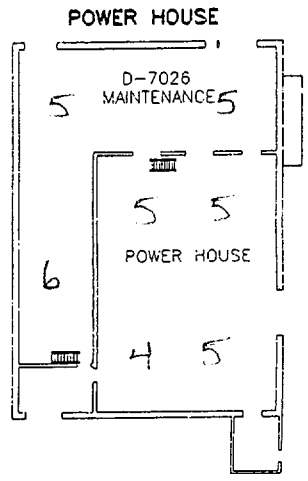
GAMMA READINGS
(μR/hr)

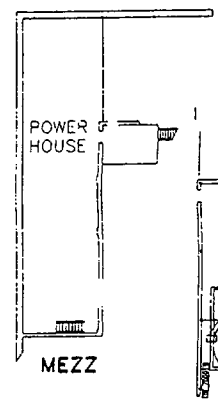
NORTH SIDE
OUTBUILDINGS ONLY

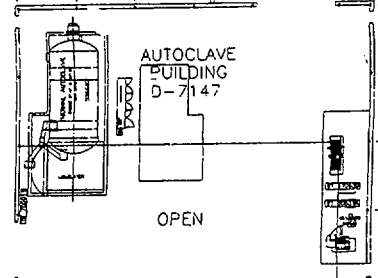


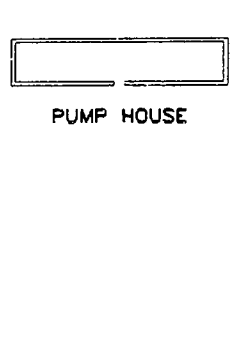


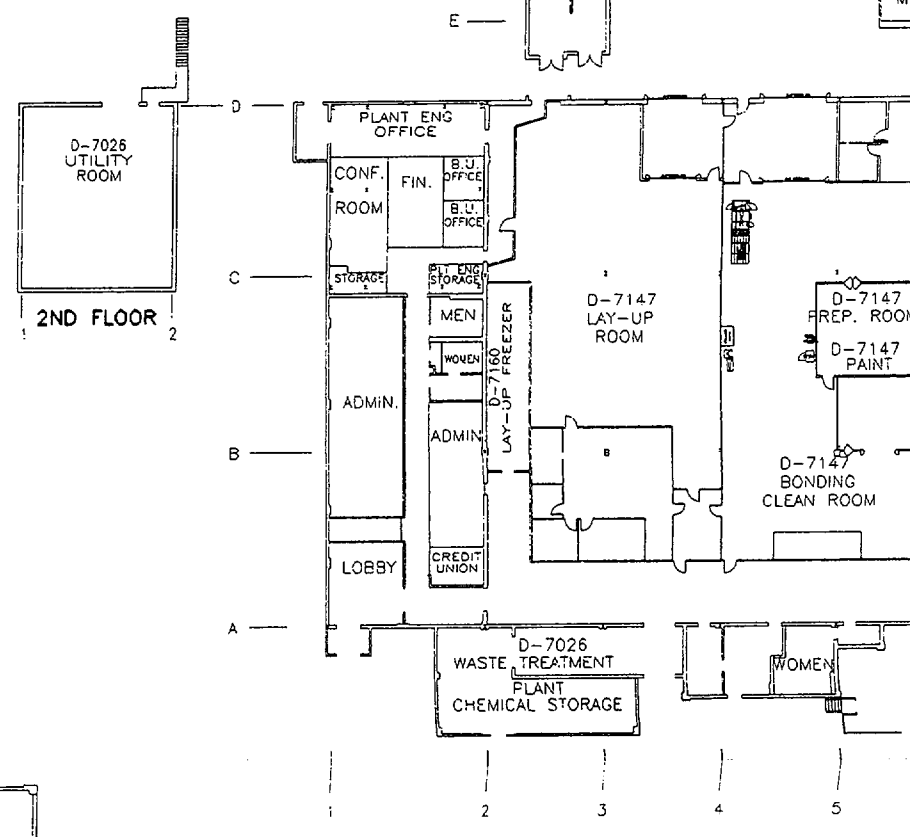


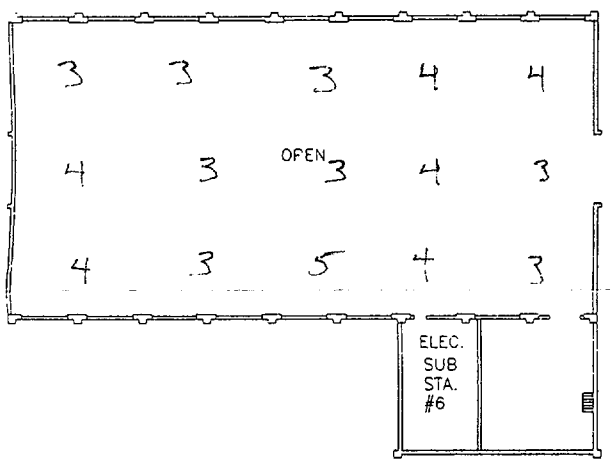




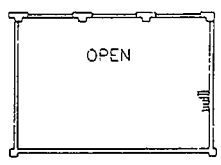








FORGE BUILDING
1ST. FLOOR



FORGE BUILDING
BASEMENT

GAMMA READINGS (μR/hr)

NORTH SIDE

BLDG. "A" STORAGE SHED OPEN

BLDG. "C" STORAGE SHED OPEN

BLDG. "B" SHPC FINISHED STORES

OPEN STORAGE SHED

HAZARDOUS WASTE STORAGE

BASEMENT

NON-HAZARDOUS STORAGE D-7007

TRUCK WELL

OPEN

D-7034 COMP. TOOL ROOM

D-7034 TOOL ROOM

D-7052 RECEIVING

D-7034 OFFICE

SPOOL STORAGE D-7147

CAFETERIA

D-7041 TOOL CRIB

D-7041 TOOL CRIB

MFG. ENG. OFFICE

D-7027 BATT. MAINT.

MEN

WOMEN

HOUSE

POWER HOUSE

MEZZ

AUTOCLAVE BUILDING D-7147

D-7147 WRAP

D-7147 DETAIL CRIB

SHPC OFFICE

D-7979

D-7979 INSP.

TOOL ROOM

D-7147 CLEAN UP ROOM

D-7147 PREP. POO

D-7147 PAINT

D-7147 BONDING CLEAN ROOM

D-7147 SPRAY BOOTH

D-7147 INCOMING AREA

D-7147

D-7026 WASTE TREATMENT PLANT CHEMICAL STORAGE

D-7031 OIL STORAGE

ELECTRICAL TRANSFORMER ROOM SUB-STA #1

INDUSTRIAL WASTEWATER TREATMENT SYSTEM

MCL D-7953

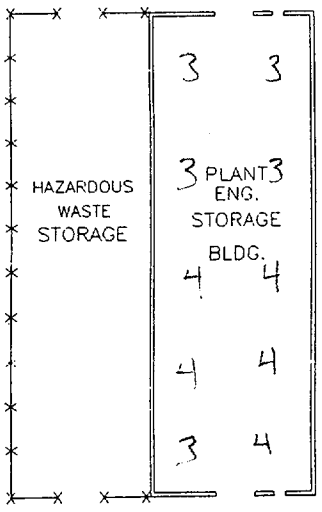
HAZ STORAGE | HAZ. STORAGE

RELOCATED TO MIDDLETOWN 1998

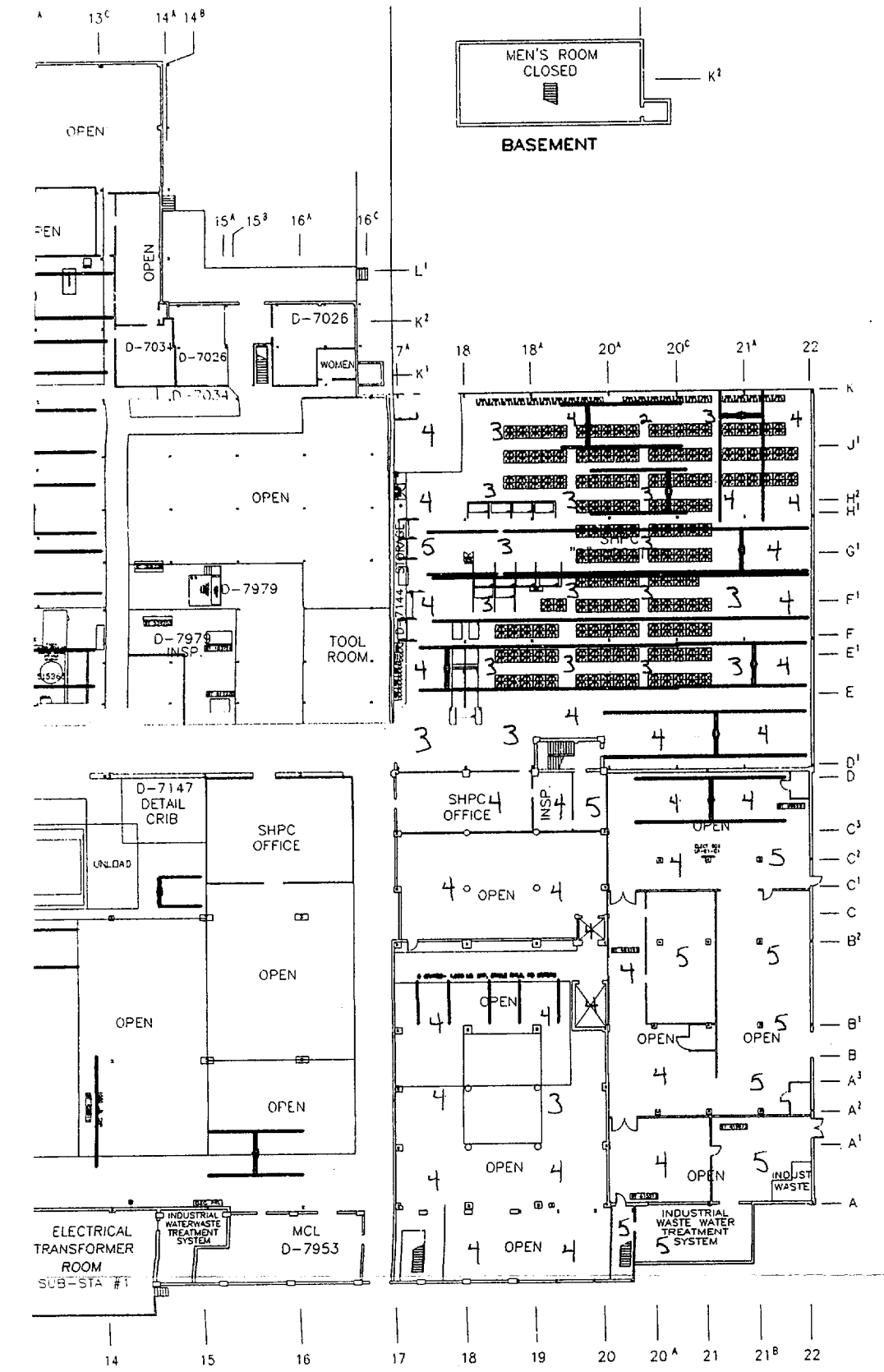
TRANSFORMER

HI-VOLT. GENERAT

TOTAL SQUARE FOOTAGE = 269,200



GAMMA READINGS (μR/hr)
SOUTH SIDE



NORTH

ROCKY HILL PLAN
PRATT & WHITNE
DRAWN BY MIDDLETOWN FACILIT

Pratt & Whitney
UNITED TECHNOLOGIES
MANUFACTURING DIVISION
PLANT ENGINEERING DEPARTMENT
MIDDLETOWN, CONNECTICUT 06457 U.S.A.

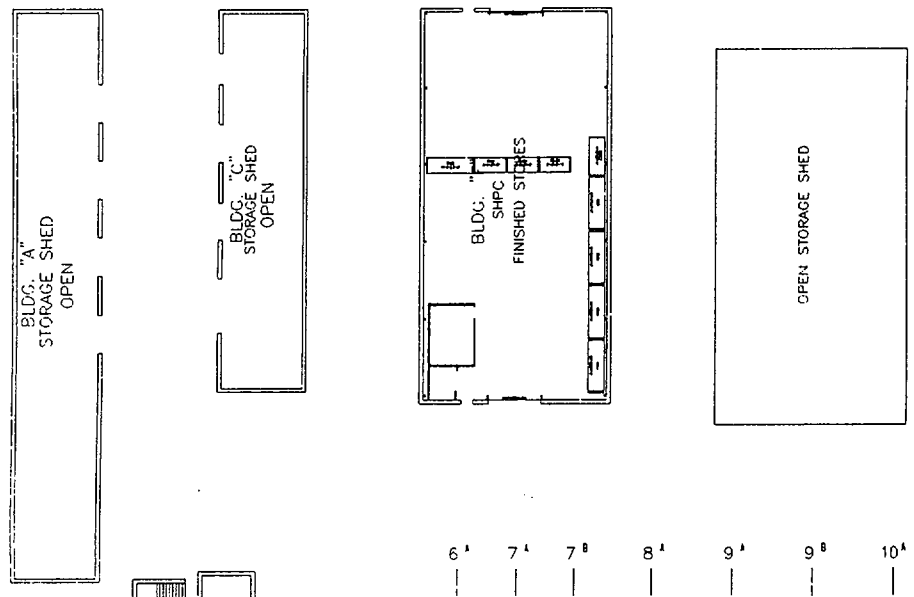
WPLANT\ROCKHILL\RH-SITE.dwg Thu Nov 02 14:12:04 2000 Plotted by Misha Louis

ATTACHMENT B-4

Locations and Results of Wipe Survey

FLOOR SWIPE LOCATIONS

NORTH SIDE



TOTAL SQUARE FOOTAGE = 269,200

WPLANT\ROCKHILL\RH-SITE.dwg Thu Nov 02 14:12:04 2000 Plotted by Misho Louis

PLANT ENGINEERING DEPARTMENT
MIDDLETOWN, CONNECTICUT 06457 U.S.A.
FROM DRAWING PL-19139-D FROM JANTZ BUILDING FILE NAME

Pratt & Whitney
UNITED TECHNOLOGIES

MANUFACTURING DIVISION

ROCKY HILL PLAN
PRATT & WHITNE
DRAWN BY MIDDLETOWN FACILIT

NORTH

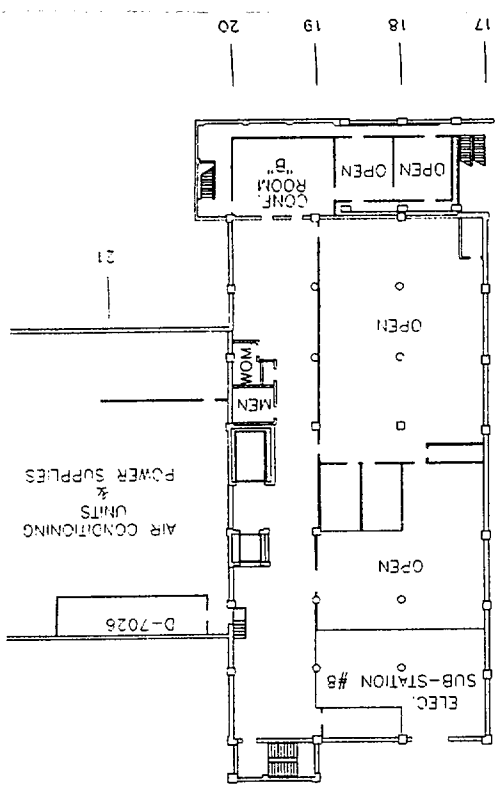
5TH FLOOR / 6TH FLOOR

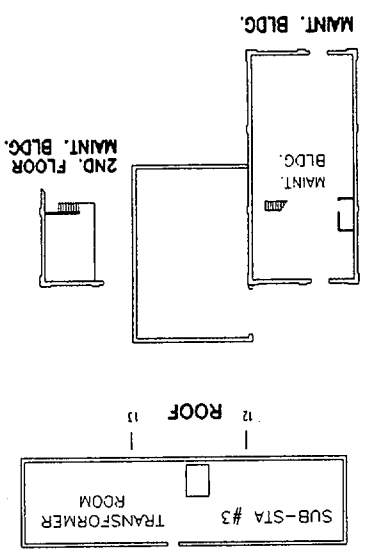
TRANS. ROOM

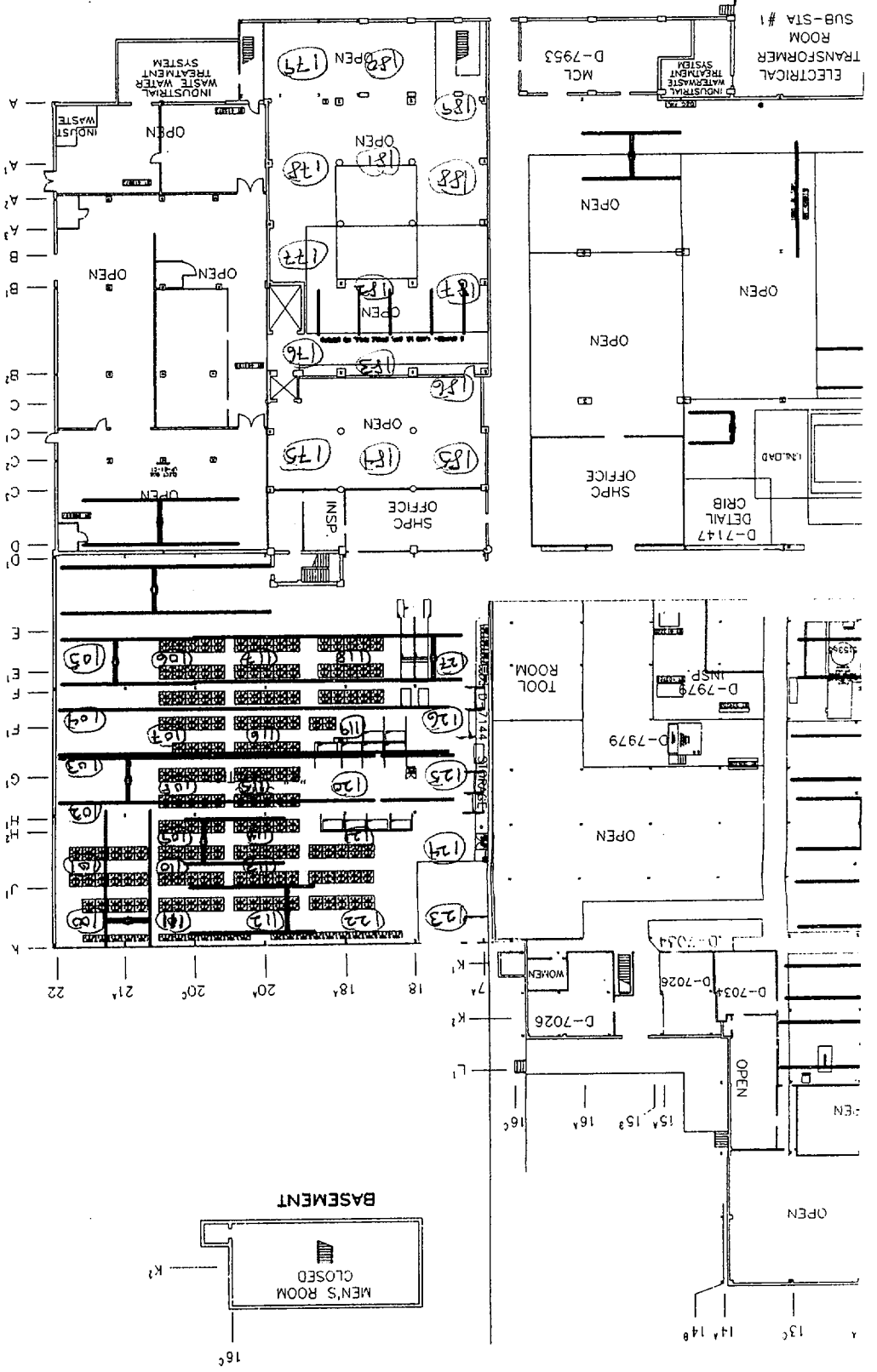
3RD FLOOR / 4TH FLOOR

SUB-STA #2 TRANSFORMER
SUB-STA #5 TRANS. ROOM

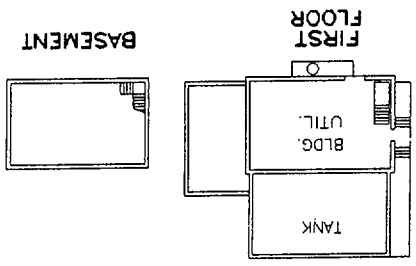
2ND FLOOR



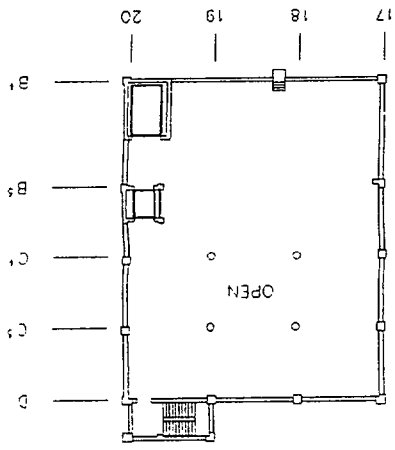




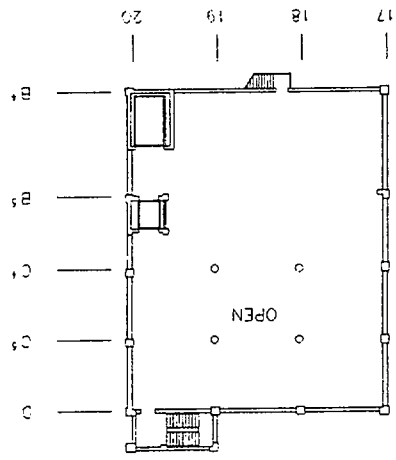
FIRST FLOOR / BASEMENT



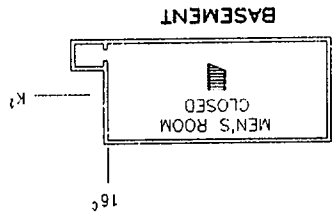
3RD FLOOR

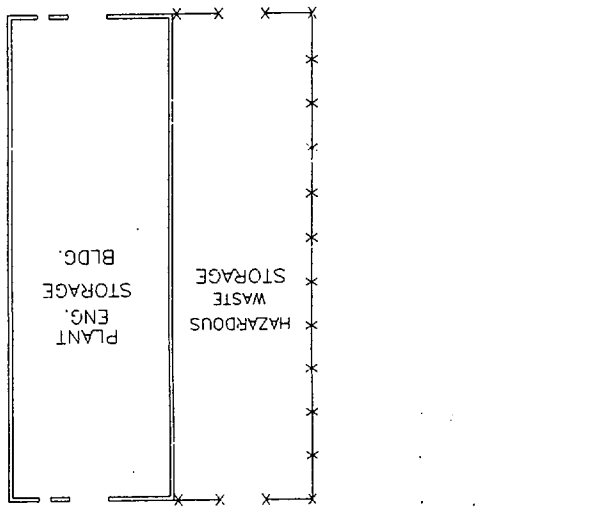


4TH FLOOR



BASEMENT





Floor Swipe Locations
South Side

Pratt & Whitney Rocky Hill Floor Swipes

bkgd: 0.6 cpm

Swipe #	Gross cp	Net cpm	dpm/100 cm^2
1	0	-0.6	0
2	0	-0.6	0
3	2	1.4	23
4	0	-0.6	0
5	0	-0.6	0
6	0	-0.6	0
7	0	-0.6	0
8	1	0.4	6.6
9	1	0.4	6.6
10	0	-0.6	0
11	0	-0.6	0
12	0	-0.6	0
13	0	-0.6	0
14	2	1.4	23
15	0	-0.6	0
16	0	-0.6	0
17	0	-0.6	0
18	0	-0.6	0
19	0	-0.6	0
20	0	-0.6	0
21	0	-0.6	0
22	1	0.4	6.6
23	0	-0.6	0
24	0	-0.6	0
25	0	-0.6	0
26	0	-0.6	0
27	0	-0.6	0
28	0	-0.6	0
29	0	-0.6	0
30	0	-0.6	0
31	0	-0.6	0
32	1	0.4	6.6
33	1	0.4	6.6
34	0	-0.6	0
35	0	-0.6	0
36	0	-0.6	0
37	0	-0.6	0
38	0	-0.6	0
39	0	-0.6	0
40	0	-0.6	0
41	1	0.4	6.6
42	0	-0.6	0
43	1	0.4	6.6
44	0	-0.6	0
45	0	-0.6	0
46	0	-0.6	0
47	0	-0.6	0
48	0	-0.6	0
49	0	-0.6	0
50	1	0.4	6.6
51	2	1.4	23
52	2	1.4	23
100	0	-0.6	0
101	1	0.4	6.6

Swipe #	Gross cp	Net cpm	dpm
102	0	-0.6	0
103	1	0.4	6.6
104	0	-0.6	0
105	0	-0.6	0
106	0	-0.6	0
107	0	-0.6	0
108	1	0.4	6.6
109	0	-0.6	0
110	1	0.4	6.6
111	0	-0.6	0
112	0	-0.6	0
113	0	-0.6	0
114	2	1.4	23
115	0	-0.6	0
116	0	-0.6	0
117	0	-0.6	0
118	2	1.4	23
119	0	-0.6	0
120	0	-0.6	0
121	1	0.4	6.6
122	1	0.4	6.6
123	0	-0.6	0
124	1	0.4	6.6
125	0	-0.6	0
126	0	-0.6	0
127	0	-0.6	0
128	0	-0.6	0
129	0	-0.6	0
130	1	0.4	6.6
131	1	0.4	6.6
132	1	0.4	6.6
133	1	0.4	6.6
134	2	1.4	23
135	0	-0.6	0
136	0	-0.6	0
137	0	-0.6	0
138	0	-0.6	0
139	0	-0.6	0
140	0	-0.6	0
141	1	0.4	6.6
142	0	-0.6	0
143	0	-0.6	0
144	0	-0.6	0
145	1	0.4	6.6
146	0	-0.6	0
147	0	-0.6	0
148	0	-0.6	0
149	0	-0.6	0
150	1	0.4	6.6
151	3	2.4	39.5
152	1	0.4	6.6
153	1	0.4	6.6
154	1	0.4	6.6
155	2	1.4	23
156	0	-0.6	0
157	0	-0.6	0

Swipe #	Gross cp	Net cpm	dpm
158	1	0.4	6.6
159	0	-0.6	0
160	0	-0.6	0
161	1	0.4	6.6
162	1	0.4	6.6
163	2	1.4	23
164	0	-0.6	0
165	0	-0.6	0
166	1	0.4	6.6
167	0	-0.6	0
168	0	-0.6	0
169	0	-0.6	0
170	0	-0.6	0
171	0	-0.6	0
172	0	-0.6	0
173	0	-0.6	0
174	0	-0.6	0
175	0	-0.6	0
176	2	1.4	23
177	1	0.4	6.6
178	1	0.4	6.6
179	0	-0.6	0
180	0	-0.6	0
181	1	0.4	6.6
182	2	1.4	23
183	2	1.4	23
184	2	1.4	23
185	0	-0.6	0
186	0	-0.6	0
187	1	0.4	6.6
188	1	0.4	6.6
189	0	-0.6	0
190	2	1.4	23
191	1	0.4	6.6
192	1	0.4	6.6
193	0	-0.6	0
194	1	0.4	6.6
195	1	0.4	6.6
196	3	2.4	39.5
197	1	0.4	6.6
198	1	0.4	6.6
199	1	0.4	6.6
200	0	-0.6	0
201	0	-0.6	0
202	1	0.4	6.6
203	1	0.4	6.6
204	1	0.4	6.6
205	1	0.4	6.6
206	2	1.4	23
207	3	2.4	39.5
208	0	-0.6	0
209	0	-0.6	0
210	0	-0.6	0
211	0	-0.6	0
212	1	0.4	6.6
213	2	1.4	23

Swipe #	Gross cp	Net cpm	dpm
214	0	-0.6	0
215	1	0.4	6.6
216	1	0.4	6.6
217	0	-0.6	0
218	0	-0.6	0

FINAL RADIOLOGICAL STATUS REPORT
PRATT & WHITNEY
NORTH HAVEN FACILITY

Surveys performed
Between October 16 and December 19, 2001

Prepared for
Pratt & Whitney

Report date
January 4, 2002

Performed by
Radiation Safety Associates, Inc.
19 Pendleton Drive, PO Box 107
Hebron, Connecticut 06248
(860) 228-0487

1.0 INTRODUCTION

1.1 General

Radiation Safety Associates, Inc. (RSA) of Hebron, Connecticut was contracted by Pratt & Whitney (P&W) to perform a radiological survey of the facility prior to a transfer of ownership. This facility had been listed as a place of use or storage of licensed radioactive material, but to the best recollection of P&W personnel, no licensed material had ever been in the facility.

1.2 Conditions at Time of Survey

On October 16, 2001, the date that radiological surveys began, the building was still in operation by P&W. Approximately half of the facility was occupied by operating machines, while the remainder of the facility's floor space was occupied by idle machinery and equipment awaiting removal.

2.0 POTENTIAL CONTAMINANTS AND RELEASE GUIDELINES

Since P&W is only licensed for the possession and use of TD-Nickel, the isotopes of interest were natural thorium and its associated decay products.

The Multi-Agency Radiological Site Survey and Investigation Manual (MARSSIM) method of site and building assessment was adapted to the North Haven facility to determine numbers of measurements and release criteria. The primary criterion is that no member of the most-exposed group, after the facility has been released for unrestricted use, will receive an annual radiation dose in excess of 25 mrem from residual licensed material. In order to meet this criterion, the contamination limits in Table 1 below were used as screening values.

ACCEPTABLE SURFACE CONTAMINATION LEVELS

NUCLIDES	AVERAGE (dpm/100 cm^2)	MAXIMUM (dpm/100 cm^2)	REMOVABLE (dpm/100 cm^2)
Th-nat	1,000	3,000	200

Table 1. Applicable Free-release Guideline Values.

3.0 SURVEY OVERVIEW

3.1 Survey Objectives

The purpose of the survey was to determine whether or not the radiological conditions within the buildings at the North Haven Site satisfy Nuclear Regulatory Commission guidelines for unrestricted radiological release. If this was found to be the case, P&W

North Haven could be released from restrictions for future use without radiological controls. The specific objectives of the survey were to show that average surface activity levels are at or below the guideline values listed in Table 1, and that reasonable efforts have been made to identify, evaluate, and remove areas of contamination that are distinguishable from natural background radiation.

3.2 Organization and Responsibilities

The survey was carried out by a team of health physicists and technicians from Radiation Safety Associates, Inc. between October 16 and December 19, 2001.

Laboratory analyses of wipe samples were performed by RSA Laboratories, 21 Pendleton Drive, Hebron, CT 06248 (NRC License No. 06-30007-01, Connecticut Public Health Laboratory #PH-0111). See Instrument #4 in Attachment A-1.

3.3 Instrumentation

Attachment A-1 lists the instrumentation used in performing the surveys, along with parameters and detection sensitivities for the instruments. All instruments used had been calibrated within the previous six months using NIST-traceable standards. Calibration certificates are included in Attachment A-2. Operational and background checks were performed each day that the instruments were used. For purposes of calculating detection sensitivity of alpha- and alpha/beta-detecting instruments, efficiency for ^{230}Th was used.

3.4 Survey Procedures

Surveys were planned and performed based on the principles established in the *Manual for Conducting Radiological Surveys in Support of License Termination*, NUREG/CR 5849. Procedures are described below.

3.4.1 Area Classification

Under the MARSSIM method of site survey for license termination, the North Haven facility was determined to be a Class 3 area. The following surveys were performed:

- A walkover gamma survey of all areas,
- A 10% floor surface scan in the manufacturing areas,
- A scan survey of a small percentage (approximately 5%) of wall areas located in manufacturing areas, and
- A wipe survey in the manufacturing areas, one sample in approximately every 1,000 ft^2.

Office spaces and outside areas received only a cursory examination. No soil samples were taken.

3.4.2 Survey Methods

A large-area (425 cm^2), thin-window gas proportional detector was used to scan 10% of the floor surfaces. Scan speed did not exceed 6" per second. See Instrument #1 & 2 in Attachment A-1.

Non-floor surfaces between the floor and a height of two meters were scanned with a large area (425 cm^2) thin window gas proportional detector. These surfaces received approximately 5% coverage. Scan speed did not exceed 6" per second. See Instrument #1 in Attachment A-1.

A gamma detector was used to perform a waist-high scan of approximately 10% of the floor surfaces inside the main facility and inside each out building. See Instrument #3 in Attachment A-1.

Direct measurements for total surface contamination were made with a large-area (425 cm^2), thin-window gas proportional detector using a one-minute count time. See Instrument #1 & 2 in Attachment A-1.

A 100 cm^2 wipe survey was performed in the manufacturing areas, one wipe for every (approximately) 1,000 ft^2. Locations and results of these wipe tests are contained in Attachment B-3.

L_c + local background count rate was used as a screening value. If exceeded, a quantitative follow-up survey was performed.

Scanning speeds did not exceed one detector-width per second. Audible indicators were used to help identify locations having elevated (>1.25 times ambient) levels of direct radiation.

3.5 Data Interpretation

Data conversions and evaluations were performed, following guidance in NUREG/CR 5849. Direct measurement data were converted to units of dpm/100 cm^2 (surface activity) for comparison with guidelines. Values were adjusted for contributions from natural background. Data for each survey unit were tested against the 95% confidence level objective.

L_cs and MDAs for the instruments used are included in Attachment A-3.

4.0 SURVEY FINDINGS AND RESULTS

4.1 Area and Room Surveys

No radioactivity attributable to licensed material and distinguishable from background was detected in the areas surveyed. A few locations were found to be slightly in excess of background. This was attributable to processes being performed in those areas that utilized powdered coatings and blast media that contained naturally occurring radioactive material. Photos of the manufacturing areas utilizing powdered coatings and blast media are contained in Attachment B-4.

5.0 SUMMARY

Radiological surveys of the North Haven Plant were conducted between October 16, 2001 and December 19, 2001. No radioactive contamination attributable to licensed material was found. It is unlikely that any radioactivity in excess of the free-release guideline values exists in the North Haven Plant. Any radioactive material remaining in the North Haven Plant is unlikely to cause any person to receive an annual total effective dose equivalent (TEDE) of more than 25 mrem.

Jan. 4, 2002

K. Paul Steinmeyer Date
Health Physicist, RRPT
Radiation Safety Associates, Inc.

ATTACHMENT A

Instrumentation

1. List of instruments used
2. Calibration certificates
3. Lc and MDA calculations

ATTACHMENT A-1

List of Instruments Used

Table 1. Instrumentation for Radiological Surveys

Type of Measurement	Instrumentation #	Detector	Instrument	Bkgd.[a]	4π Eff. (%)	Detection Sensitivity
Surface scans: alpha & beta	1	425 cm^2 gas prop., Floor monitor, Ludlum, Model 43-37 s/n 128615	Scaler/Count-rate meter[b], Ludlum Model 2224-1 s/n 129459	344 cpm (wood surface)	13.7 (^{230}Th)	Lc = 78.8 net cpm MDA = 288 dpm/100 cm^2
Surface Activity	1	425 cm2 gas prop., Floor monitor, Ludlum, Model 43-37 s/n 128615	Scaler/Count-rate meter[b], Ludlum Model 2224-1 s/n 129459	344 cpm (wood surface)	13.7 (^{230}Th)	Lc = 32.0 net cpm MDA = 115 dpm/100 cm^2
Surface scans: alpha & beta	1	425 cm2 gas prop., Floor monitor, Ludlum, Model 43-37 s/n 128615	Scaler/Count-rate meter[b], Ludlum Model 2224-1 s/n 129459	496 cpm (concrete surface)	13.7 (^{230}Th)	Lc = 94.6 net cpm MDA = 342 dpm/100 cm^2
Surface Activity	1	425 cm2 gas prop., Floor monitor, Ludlum, Model 43-37 s/n 128615	Scaler/Count-rate meter[b], Ludlum Model 2224-1 s/n 129459	496 cpm (concrete surface)	13.7 (^{230}Th)	Lc = 38.4 net cpm MDA = 137 dpm/100 cm^2
Surface scans: alpha & beta	1	425 cm2 gas prop., used as a wall monitor, Ludlum, Model 43-37 s/n 113573	Scaler/Count-rate meter[b], Ludlum Model 2224-1 s/n 129459	832 cpm	12.9 (^{230}Th)	Lc = 122.5 net cpm MDA = 465 dpm/100 cm^2
Surface scans: alpha & beta	2	425 cm2 gas prop., Floor monitor, Ludlum, Model 43-37 s/n 103776	Scaler/Count-rate meter[b], Ludlum Model 2224 s/n 119815	872 cpm (wood surface)	15 (^{230}Th)	Lc = 125.4 net cpm MDA = 409 dpm/100 cm^2
Surface Activity	2	425 cm2 gas prop., Floor monitor, Ludlum, Model 43-37 s/n 103776	Scaler/Count-rate meter[b], Ludlum Model 2224 s/n 119815	872 cpm (wood surface)	15 (^{230}Th)	Lc = 51.0 net cpm MDA = 165 dpm/100 cm^2
Surface scans: alpha & beta	2	425 cm2 gas prop., Floor monitor, Ludlum, Model 43-37 s/n 103776	Scaler/Count-rate meter[b], Ludlum Model 2224 s/n 119815	1082 cpm (concrete surface)	15 (^{230}Th)	Lc = 139.8 net cpm MDA = 454 dpm/100 cm^2
Surface Activity	2	425 cm2 gas prop., Floor monitor, Ludlum, Model 43-37 s/n 103776	Scaler/Count-rate meter[b], Ludlum Model 2224 s/n 119815	1082 cpm (concrete surface)	15 (^{230}Th)	Lc = 56.8 net cpm MDA = 183 dpm/100 cm^2
Exposure rates	3	Scintillation, NaI(Tl)	Ludlum Model 19 Micro-R Meter s/n 95494	4 μR/h	N/A (137Cs)	0.5 mR/h increments
Wipe Counter	4	Int Gas Proportional	Protean IPC 9025 s/n 236425	0.47 cpm (alpha) 3.6 cpm (beta)	1 (alpha) 8 (beta)	see Attachment B-3

[a]Nominal Values [b]Monitoring audible signal

ATTACHMENT A-2

Calibration Certificates

CERTIFICATE OF CALIBRATION
(COUNT-RATE INSTRUMENT)

RSA Laboratories, Inc.
21 Pendleton Drive, P.O. Box 61
Hebron, Connecticut 06248
(860) 228-0721 Fax (860) 228-4402

Customer and Contact: **Radiation Safety Associates, Inc. Attn: K. Paul Steinmeyer (860) 228-0487**
Customer Address: **P.O. Box 107, 19 Pendleton Drive, Hebron, CT 06248**

Inst. Mfr. & Model **Ludlum Model 2224-1**	Inst. Type **Scaler/Ratemeter**	Inst. s/n **129459**
Det. Mfr. & Model **Ludlum 43-37 (Floor Mon.)**	Det. Type **Gas-Proportional**	Det. s/n **128615**
Cal. Date **24 July 2001**	Due Date **24 January 2002**	Cal. Interval **6 months**

Environmental conditions: Temperature: **75°F** Relative Humidity **51%** Atmospheric Pressure **29.31** inches Hg

Pre-calibration Checks:

☒ Contamination survey	☒ Battery check	☐ Slow response check	
☒ Mechanical check	☒ Audio check	☒ Window operation	☒ Det. volts **1675** Vdc
☒ Meter zero	☒ Reset check	☒ Plateau check	
☒ Geotropism check	☐ Fast response check	☐ Alarm set	☒ Input sens. ***See comments**

☒ Pulse generator s/n 94926 ☐ Oscilloscope s/n 171-04928 ☒ Voltmeter s/n 57410002
☒ HV Readout (2 points) Ref./Inst. **900 V/ 900 V** Ref./Inst. **1700 V/ 1700 V**

Comments: *** Alpha threshold = 70 mV; Beta threshold = 4 mV; Beta window = 4 mV to 30 mV.**
Unit calibrated as floor monitor, Ludlum 239-1F #128826. Local background ≈ 8 cpm alpha, 627 cpm beta.

S/N of source used for precision check **#6** Isotope **Cs-137** Dedicated Source? ☐Yes ☒No
Reading #1 **19,000 cpm** Reading #2 **19,000 cpm** Reading #3 **19,000 cpm** Mean **19,000 cpm**
Precision: ☒± <10% ☐±10-20% ☐Out of tolerance

Range Multiplier	Reference Calibration Point	Instrument Indication
x 1000	400,000 cpm	400,000 cpm
x 1000	100,000 cpm	100,000 cpm
x 100	40,000 cpm	40,000 cpm
x 100	10,000 cpm	10,000 cpm
x 10	4000 cpm	4000 cpm
x 10	1000 cpm	1000 cpm
x 1	400 cpm	400 cpm
x 1	100 cpm	100 cpm
1 min count	100,000 cpm	100,045 cpm

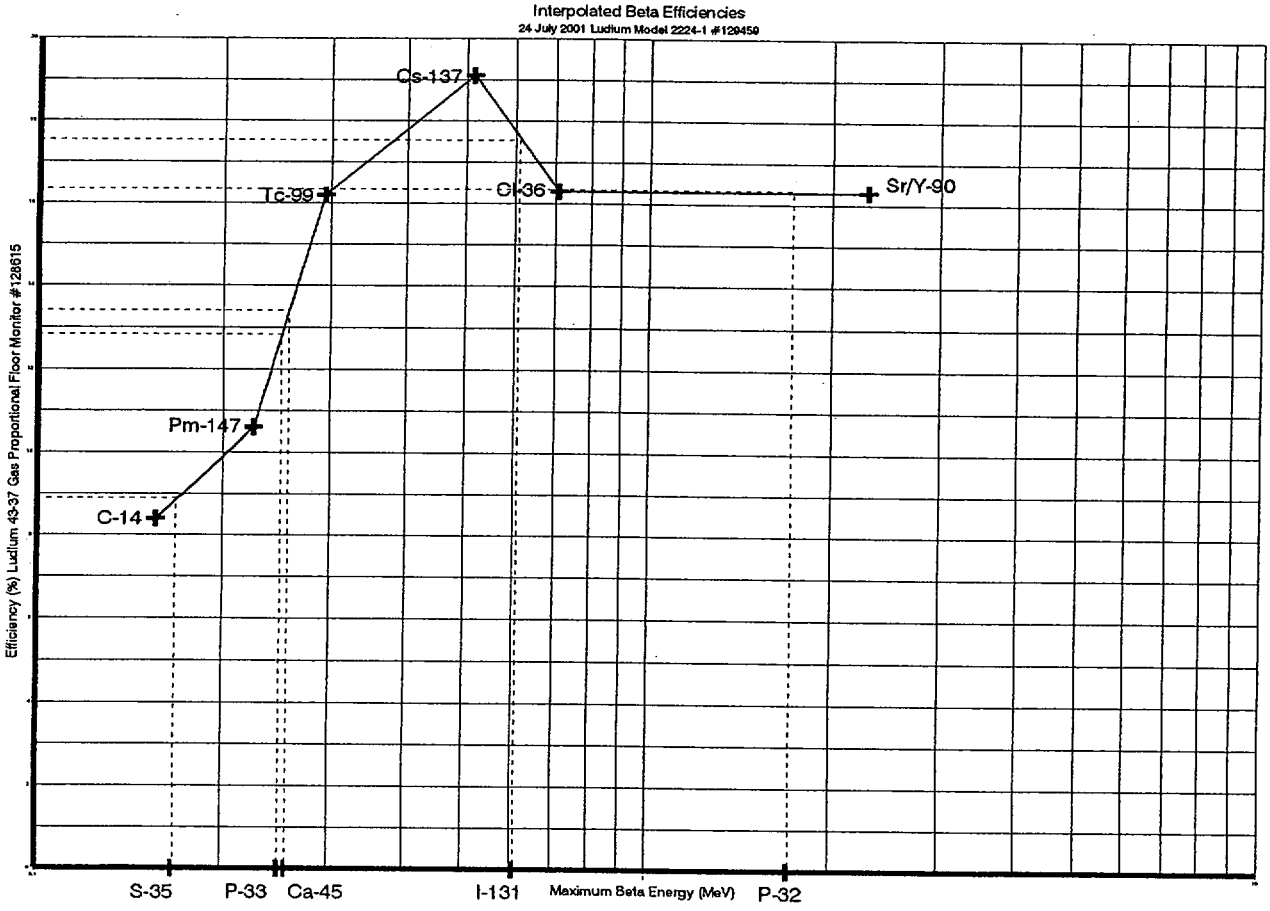
All ranges calibrated electronically.

Range Multiplier	Cal. Source Used (isotope and S/N)	Source Activity (dpm)	Instrument Reading (cpm)	4π Instrument Efficiency (%)
x 10	Th-230 #91TH2200210	38,900	5,344 (α)	13.7%
x 100	C-14 #4456	202,100	17,527	8.4%
x 10	Pm-147 #5381	19,588	2,708	10.6%
x 10	Tc-99 #D702	23,064	4,366	16.2%
x 10	Cs-137 #2886	19,124	4,286	19.1%
x 10	Cl-36 #D700	23,598	4,475	16.3%
x 100	Sr/Y-90 #D711	48,063	8,469	16.3%

RSA Laboratories ID# 5064. Instrument indicates within ±10% of calibration points unless otherwise indicated. Source-to-detector entry window distance for efficiency determinations is 1 cm unless otherwise specified. RSA Laboratories, Inc. certifies that the above instrument has been calibrated with standards traceable to the National Institute of Standards and Technology, or have been derived from accepted values of natural physical constants, or have been derived by the ratio-type of calibration techniques.

Calibrated by: **Paul R. Steinmeyer** Date 24 July 2001

Reviewed by: **David L. Judd** Date 24 July 2001



RSA Laboratories ID# **5064**.

Calibrated by: **Paul R. Steinmeyer** Date 24 July 2001

Reviewed by: **David L. Judd** Date 24 JULY 2001

CERTIFICATE OF CALIBRATION
(COUNT-RATE INSTRUMENT)

RSA Laboratories, Inc.
21 Pendleton Drive, P.O. Box 61
Hebron, Connecticut 06248
(860) 228-0721 Fax (860) 228-4402

Customer and Contact: **Radiation Safety Associates, Inc. Attn: K. Paul Steinmeyer (860) 228-0487**
Customer Address: **P.O. Box 107, 19 Pendleton Drive, Hebron, CT 06248**

Inst. Mfr. & Model **Ludlum Model 2224-1**	Inst. Type **Scaler/Ratemeter**	Inst. s/n **129459**
Det. Mfr. & Model **Ludlum 43-37**	Det. Type **Gas-Proportional**	Det. s/n **113573**
Cal. Date **24 July 2001**	Due Date **24 January 2002**	Cal. Interval **6 months**

Environmental conditions: Temperature: **75°F** Relative Humidity **51%** Atmospheric Pressure **29.31** inches Hg

Pre-calibration Checks:

☒ Contamination survey	☒ Battery check	☐ Slow response check	
☒ Mechanical check	☒ Audio check	☒ Window operation	☒ Det. volts **1675** Vdc
☒ Meter zero	☒ Reset check	☒ Plateau check	
☒ Geotropism check	☐ Fast response check	☐ Alarm set	☒ Input sens. ***See comments**

☒ Pulse generator s/n 94926 ☐ Oscilloscope s/n 171-04928 ☒ Voltmeter s/n 57410002
☒ HV Readout (2 points) Ref./Inst. **900 V/ 900 V** Ref./Inst. **1700 V/ 1700 V**

Comments: *** Alpha threshold = 70 mV; Beta threshold = 4 mV; Beta window = 4 mV to 30 mV.**
Unit calibrated as hand held monitor. Local background ≈ 10 cpm alpha, 1152 cpm beta.

S/N of source used for precision check **#6** Isotope **Cs-137** Dedicated Source? ☐Yes ☒No
Reading #1 **21,000 cpm** Reading #2 **21,000 cpm** Reading #3 **21,000 cpm** Mean **21,000 cpm**
Precision: ☒± <10% ☐±10-20% ☐Out of tolerance

Range Multiplier	Reference Calibration Point	Instrument Indication
x 1000	400,000 cpm	400,000 cpm
x 1000	100,000 cpm	100,000 cpm
x 100	40,000 cpm	40,000 cpm
x 100	10,000 cpm	10,000 cpm
x 10	4000 cpm	4000 cpm
x 10	1000 cpm	1000 cpm
x 1	400 cpm	400 cpm
x 1	100 cpm	100 cpm
1 min count	100,000 cpm	100,045 cpm

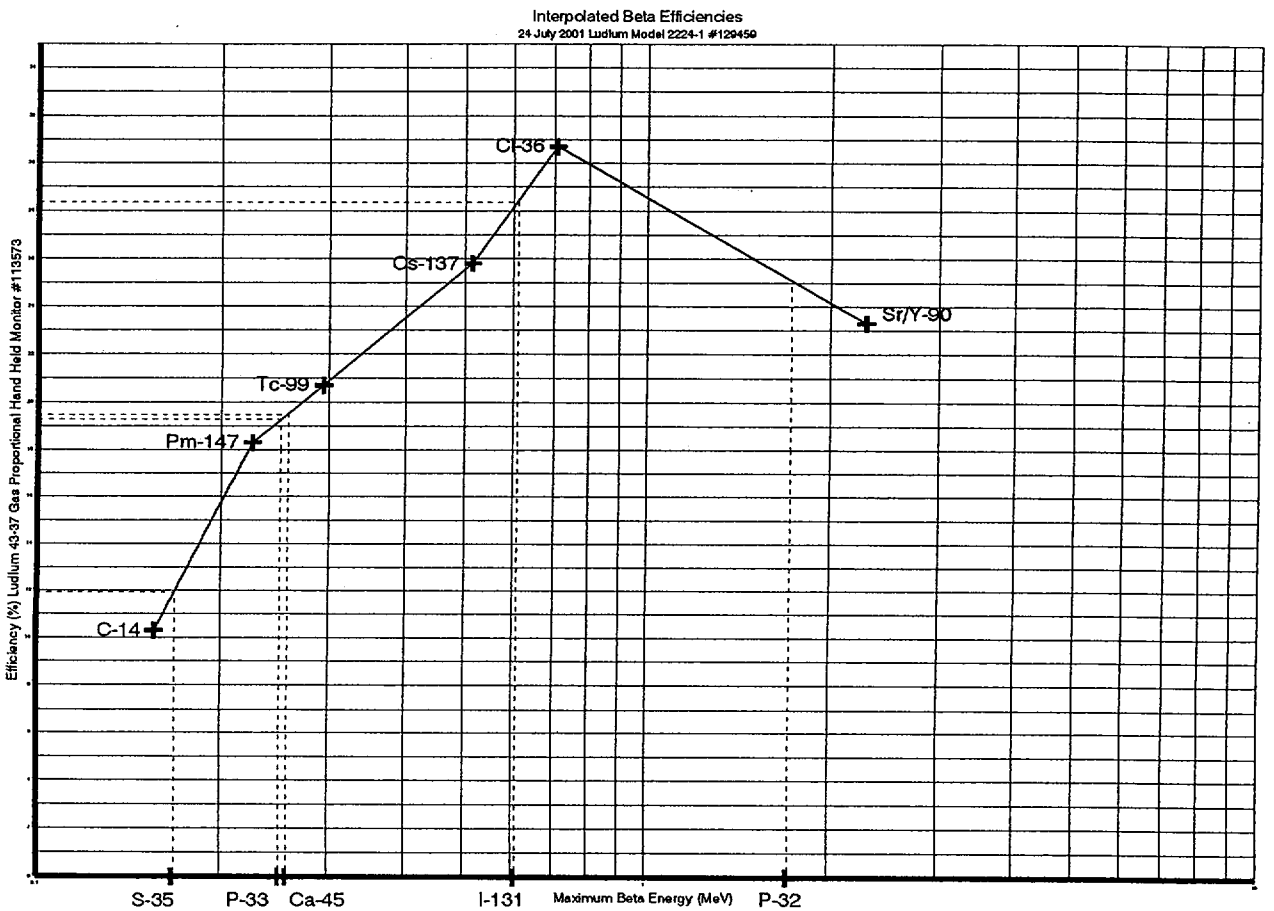
All ranges calibrated electronically.

Range Multiplier	Cal. Source Used (isotope and S/N)	Source Activity (dpm)	Instrument Reading (cpm)	4π Instrument Efficiency (%)
x 10	Th-230 #91TH2200210	38,900	6,155 (α)	12.9%
x 100	C-14 #4456	202,100	22,020	10.3%
x 10	Pm-147 #5381	19,588	4,740	18.3%
x 10	Tc-99 #D702	23,064	5,922	20.7%
x 10	Cs-137 #2886	19,124	6,086	25.8%
x 10	Cl-36 #D700	23,598	8,386	30.7%
x 100	Sr/Y-90 #D711	48,063	12,343	23.3%

RSA Laboratories ID# **5064**. Instrument indicates within ±10% of calibration points unless otherwise indicated. Source-to-detector entry window distance for efficiency determinations is 1 cm unless otherwise specified. RSA Laboratories, Inc. certifies that the above instrument has been calibrated with standards traceable to the National Institute of Standards and Technology, or have been derived from accepted values of natural physical constants, or have been derived by the ratio-type of calibration techniques.

Calibrated by: **Paul R. Steinmeyer** Paul R. Steinmeyer Date 24 July 2001

Reviewed by: **David L. Judd** David L. Judd Date 24 JULY 2001



RSA Laboratories ID# **5064.**

Calibrated by: **Paul R. Steinmeyer** Paul R. Steinmeyer Date 24 July 2001

Reviewed by: **David L. Judd** David L. Judd Date 24 JULY 2001

CERTIFICATE OF CALIBRATION
(COUNT-RATE INSTRUMENT)

RSA Laboratories, Inc.
21 Pendleton Drive, P.O. Box 61
Hebron, Connecticut 06248
(860) 228-0721 Fax (860) 228-4402

Customer and Contact: **Radiation Safety Associates, Inc. Attn: K. Paul Steinmeyer (860) 228-0487**
Customer Address: **P.O. Box 107, 19 Pendleton Drive, Hebron, CT 06248**

Inst. Mfr. & Model **Ludlum Model 2224**	Inst. Type **Scaler/Ratemeter**	Inst. s/n **119815**
Det. Mfr. & Model **Ludlum 43-37**	Det. Type **Gas-Proportional**	Det. s/n **103776**
Cal. Date **27 September 2001**	Due Date **27 March 2002**	Cal. Interval **6 months**

Environmental conditions: Temperature: **69°F** Relative Humidity **42%** Atmospheric Pressure **29.24** inches Hg

Pre-calibration Checks:

☒ Contamination survey	☒ Battery check	☐ Slow response check	
☒ Mechanical check	☒ Audio check	☐ Window operation	☒ Det. volts **1715** Vdc
☒ Meter zero	☒ Reset check	☒ Plateau check	
☒ Geotropism check	☐ Fast response check	☐ Alarm set	☒ Input sens. *See comments

☒ Pulse generator s/n 94926 ☐ Oscilloscope s/n 171-04928 ☒ Voltmeter s/n 57410002
☒ HV Readout (2 points) Ref./Inst. **900 V/ 900 V** Ref./Inst. **1700 V/ 1700 V**

Comments: * **Alpha threshold = 70 mV; Beta threshold = 3 mV; Beta window = 3 mV to 22 mV.**
Unit calibrated as floor monitor, Ludlum 239-1F #103873. Local background ≈ 11 cpm alpha, 852 cpm beta.

S/N of source used for precision check **#4456** Isotope **C-14** Dedicated Source? ☐Yes ☒No
Reading #1 **10,052 cpm** Reading #2 **9,381 cpm** Reading #3 **9,460 cpm** Mean **9,631 cpm**
Precision: ☒± <10% ☐± 10-20% ☐Out of tolerance

Range Multiplier	Reference Calibration Point	Instrument Indication
x 1000	400,000 cpm	400,000 cpm
x 1000	100,000 cpm	100,000 cpm
x 100	40,000 cpm	40,000 cpm
x 100	10,000 cpm	10,000 cpm
x 10	4000 cpm	4000 cpm
x 10	1000 cpm	1000 cpm
x 1	400 cpm	400 cpm
x 1	100 cpm	100 cpm
1 min count	100,000 cpm	100,037 cpm

All ranges calibrated electronically.

Range Multiplier	Cal. Source Used (isotope and S/N)	Source Activity (dpm)	Instrument Reading (cpm)	4π Instrument Efficiency (%)
1 min. count	Th-230 #91TH2200210	38,900	5,849 (α) 2,452 (β)	15%
1 min. count	C-14 #4456	202,100	15,307	7.2%
1 min. count	Pm-147 #5381	17,856	3,045	12.3%
1 min. count	Tc-99 #D702	23,064	4,549	16%
1 min. count	Cs-137 #2886	18,971	5,009	21.9%
1 min. count	Cl-36 #D700	23,598	6,283	23%
1 min. count	Sr/Y-90 #D711	47,656	13,528	26.5%

RSA Laboratories ID# **5241**. Instrument indicates within ±10% of calibration points unless otherwise indicated. Source-to-detector entry window distance for efficiency determinations is 1 cm unless otherwise specified. RSA Laboratories, Inc. certifies that the above instrument has been calibrated with standards traceable to the National Institute of Standards and Technology, or have been derived from accepted values of natural physical constants, or have been derived by the ratio-type of calibration techniques.

Calibrated by: Paul R. Steinmeyer Paul R. S Date 27 Sept 2001

Reviewed by: David L. Judd D L Judd Date 27 SEP 2001

CERTIFICATE OF CALIBRATION
(EXPOSURE RATE INSTRUMENT)

RSA Laboratories, Inc.
21 Pendleton Drive, P.O. Box 61
Hebron, Connecticut 06248
(860) 228-0721 Fax (860) 228-4402

Customer and Contact: **Radiation Safety Associates, Inc. Attn: K. Paul Steinmeyer (860) 228-0487**
Customer Address: **P.O. Box 107, 19 Pendleton Drive, Hebron, CT 06248**

Inst. Mfr. & Model **Ludlum Model 19**	Inst. Type **Micro R Meter**	Inst. s/n **95494**
Det. Mfr. & Model **N/A**	Det. Type **(internal sodium iodide)**	Det. s/n **N/A**
Cal. Date **10 May 2001**	Due Date **10 November 2001**	Cal. Interval **6 months**

Environmental conditions: Temperature: **72°F** Relative Humidity **38%** Atmospheric Pressure **29.35** inches Hg

Pre-calibration Checks:

☒ Contamination survey	☒ Battery check	☒ Slow response check	
☒ Mechanical check	☒ Audio check	☐ Window operation	☒ Det. volts 700 Vdc
☒ Meter zero	☒ Reset check	☐ Plateau check	
☒ Geotropism check	☒ Fast response check	☐ Alarm set	☐ Input sens.

☒Pulse generator s/n 94926 ☐ Oscilloscope s/n 171-04928 ☒ Voltmeter s/n 57410002
☐HV Readout (2 points) Ref./Inst. _____ V/ _____ V Ref./Inst. _____ V/ _____ V

Comments:

S/N of source used for precision check #6 Isotope **Cs-137** Dedicated Source? ☐Yes ☒No
Reading #1 **1800 μR/h** Reading #2 **1800 μR/h** Reading #3 **1800 μR/h** Mean **1800 μR/h**
Precision: ☒± <10% ☐±10-20% ☐Out of tolerance

Range	Reference Calibration Point	Instrument Indication
5000 μR/h	3,488 μR/h	3,500 μR/h
5000 μR/h	914 μR/h	900 μR/h
500 μR/h	399 μR/h ≈ 30,500 cpm	400 μR/h
500 μR/h	116 μR/h ≈ 8,400 cpm	110 μR/h
250 μR/h	183 μR/h ≈ 13,200 cpm	180 μR/h
250 μR/h	54 μR/h ≈ 3,710 cpm	55 μR/h
50 μR/h	3,050 cpm	40 μR/h
50 μR/h	840 cpm	11 μR/h
25 μR/h	1,320 cpm	18 μR/h
25 μR/h	371 cpm	5.5 μR/h

50 and 25 μR/h ranges were calibrated electronically.

Sources used: ^{137}Cesium 750 mCi s/n KR-6244 and KR-6250, and ^{137}Cesium 750 μCi s/n 163.

RSA Laboratories Log ID# **4912**. Calibration points calculated to center of detector volume unless otherwise specified. Instrument indicates within ±10% of calibration points unless otherwise indicated. RSA Laboratories, Inc. certifies that the above instrument has been calibrated with standards traceable to the National Institute of Standards and Technology, or have been derived from accepted values of natural physical constants, or have been derived by the ratio-type of calibration techniques.

Calibrated by: **Paul R. Steinmeyer** Paul R. Steinmeyer Date 10 May 2001

Reviewed by: **David L. Judd** Date 10 MAY 2001

CERTIFICATE OF CALIBRATION
(EXPOSURE RATE INSTRUMENT)

RSA Laboratories, Inc.
21 Pendleton Drive, P.O. Box 61
Hebron, Connecticut 06248
(860) 228-0721 Fax (860) 228-4402

Customer and Contact: **Radiation Safety Associates, Inc. Attn: K. Paul Steinmeyer (860) 228-0487**
Customer Address: **P.O. Box 107, 19 Pendleton Drive, Hebron, CT 06248**

Inst. Mfr. & Model **Ludlum Model 19**	Inst. Type **Micro R Meter**	Inst. s/n **95494**
Det. Mfr. & Model **N/A**	Det. Type **(internal sodium iodide)**	Det. s/n **N/A**
Cal. Date **12 November 2001**	Due Date **12 May 2002**	Cal. Interval **6 months**

Environmental conditions: Temperature: **72°F** Relative Humidity **22%** Atmospheric Pressure **29.56** inches Hg

Pre-calibration Checks:

☒ Contamination survey	☒ Battery check	☒ Slow response check	
☒ Mechanical check	☒ Audio check	☐ Window operation	☒ Det. volts 700 Vdc
☒ Meter zero	☒ Reset check	☐ Plateau check	
☒ Geotropism check	☒ Fast response check	☐ Alarm set	☐ Input sens.

☒Pulse generator s/n 94926 ☐ Oscilloscope s/n 171-04928 ☒ Voltmeter s/n 57410002
☐HV Readout (2 points) Ref./Inst. _____ V/ _____ V Ref./Inst. _____ V/ _____ V

Comments:

S/N of source used for precision check #6 Isotope **Cs-137** Dedicated Source? ☐Yes ☒No
Reading #1 **1800 μR/h** Reading #2 **1800 μR/h** Reading #3 **1800 μR/h** Mean **1800 μR/h**
Precision: ☒± <10% ☐±10-20% ☐Out of tolerance

Range	Reference Calibration Point	Instrument Indication
5000 μR/h	3,364 μR/h	3,500 μR/h
5000 μR/h	903 μR/h	900 μR/h
500 μR/h	386 μR/h ≈ 30,500 cpm	400 μR/h
500 μR/h	115 μR/h ≈ 8,800 cpm	115 μR/h
250 μR/h	176 μR/h ≈ 13,200 cpm	180 μR/h
250 μR/h	53 μR/h ≈ 3,710 cpm	55 μR/h
50 μR/h	3,050 cpm	40 μR/h
50 μR/h	880 cpm	12 μR/h
25 μR/h	1,320 cpm	18 μR/h
25 μR/h	371 cpm	5.5 μR/h

50 and 25 μR/h ranges were calibrated electronically.

Sources used: ^{137}Cesium 750 mCi s/n KR-6244 and KR-6250, and ^{137}Cesium 750 μCi s/n 163.

RSA Laboratories Log ID# 5420. Calibration points calculated to center of detector volume unless otherwise specified. Instrument indicates within ±10% of calibration points unless otherwise indicated. RSA Laboratories, Inc. certifies that the above instrument has been calibrated with standards traceable to the National Institute of Standards and Technology, or have been derived from accepted values of natural physical constants, or have been derived by the ratio-type of calibration techniques.

Calibrated by: **David L. Judd** _____ Date 12 NOV 2001

Reviewed by: **Kurt D. Newton** _____ Date 12 Nov 2001

ATTACHMENT A-3

Lc and MDA calculations

Surface Scan—**WOOD SURFACES:**

Ludlum Floor Monitor Model 43-37, s/n 128615, with
Model 2224-1, s/n 129459

DETECTION LIMITS—SURFACE CONTAMINATION

INPUT DATA:
Background Count = 344 cpm (on wooden floors)
Time Constant = 9 seconds
Background and Sample Counting Time = 0.3 minutes
Detector Efficiency = 13.7 %
Detector Area = 425 cm^2

RESULTS:
Critical Level (Lc) = 78.8 cpm above bkgd.
Detection Limit (Ld)) = 167.6 cpm above bkgd.
Minimum Detectable Activity (MDA) = 1223 dpm/detector
Minimum Detectable Activity (MDA) = 287.8 dpm/100 cm^2
Minimum Detectable Activity (MDA) = 20.38 Bq/detector
Minimum Detectable Activity (MDA) = 0.04796 Bq/1 cm^2

All values calculated to 95% CL via MARSSIM methods

Calculated by RadCalc version 1.1

Surface Scan—**CONCRETE SURFACES:**

Ludlum Floor Monitor Model 43-37, s/n 128615, with
Model 2224-1, s/n 129459

DETECTION LIMITS—SURFACE CONTAMINATION

INPUT DATA:
Background Count = 496 cpm (concrete surfaces)
Time Constant = 9 seconds
Background and Sample Counting Time = 0.3 minutes
Detector Efficiency = 13.7 %
Detector Area = 425 cm^2

RESULTS:
Critical Level (Lc) = 94.6 cpm above bkgd.
Detection Limit (Ld)) = 199.2 cpm above bkgd.
Minimum Detectable Activity (MDA) = 1454 dpm/detector
Minimum Detectable Activity (MDA) = 342.1 dpm/100 cm^2
Minimum Detectable Activity (MDA) = 24.23 Bq/detector
Minimum Detectable Activity (MDA) = 0.05701 Bq/1 cm^2

All values calculated to 95% CL via MARSSIM methods

Calculated by RadCalc version 1.1

Surface Scan—**WALLS**:

Ludlum Floor Monitor Model 43-37, s/n 113573, with
Model 2224-1, s/n 129459

DETECTION LIMITS—SURFACE CONTAMINATION

INPUT DATA:
Background Count = 832 cpm (walls)
Time Constant = 9 seconds
Background and Sample Counting Time = 0.3 minutes
Detector Efficiency = 12.9 %
Detector Area = 425 cm^2

RESULTS:
Critical Level (Lc) = 122.5 cpm above bkgd.
Detection Limit (Ld)) = 255.0 cpm above bkgd.
Minimum Detectable Activity (MDA) = 1977 dpm/detector
Minimum Detectable Activity (MDA) = 465.2 dpm/100 cm^2
Minimum Detectable Activity (MDA) = 32.95 Bq/detector
Minimum Detectable Activity (MDA) = 0.07753 Bq/1 cm^2

All values calculated to 95% CL via MARSSIM methods

Calculated by RadCalc version 1.1

Surface Scan—**WOOD SURFACES:**

Ludlum Floor Monitor Model 43-37, s/n 103776, with
Model 2224, s/n 119815

DETECTION LIMITS—SURFACE CONTAMINATION

INPUT DATA:
Background Count = 872 cpm (wood floors)
Time Constant = 9 seconds
Background and Sample Counting Time = 0.3 minutes
Detector Efficiency = 15 %
Detector Area = 425 cm^2

RESULTS:
Critical Level (Lc) = 125.4 cpm above bkgd.
Detection Limit (Ld)) = 260.9 cpm above bkgd.
Minimum Detectable Activity (MDA) = 1739 dpm/detector
Minimum Detectable Activity (MDA) = 409.2 dpm/100 cm^2
Minimum Detectable Activity (MDA) = 28.98 Bq/detector
Minimum Detectable Activity (MDA) = 0.06820 Bq/1 cm^2

All values calculated to 95% CL via MARSSIM methods

Calculated by RadCalc version 1.1

Surface Scan—**CONCRETE SURFACES:**

Ludlum Floor Monitor Model 43-37, s/n 103776, with
Model 2224, s/n 119815

DETECTION LIMITS—SURFACE CONTAMINATION

INPUT DATA:
Background Count = 1082 cpm (concrete floors)
Time Constant = 9 seconds
Background and Sample Counting Time = 0.3 minutes
Detector Efficiency = 15 %
Detector Area = 425 cm^2

RESULTS:
Critical Level (Lc) = 139.7 cpm above bkgd.
Detection Limit (Ld)) = 289.4 cpm above bkgd.
Minimum Detectable Activity (MDA) = 1930 dpm/detector
Minimum Detectable Activity (MDA) = 454.0 dpm/100 cm^2
Minimum Detectable Activity (MDA) = 32.16 Bq/detector
Minimum Detectable Activity (MDA) = 0.07567 Bq/1 cm^2

All values calculated to 95% CL via MARSSIM methods

Calculated by RadCalc version 1.1

Direct Contamination Measurement (1-minute counts)—**WOOD SURFACES:**

Ludlum Floor Monitor Model 43-37, s/n 128615, with
Model 2224-1, s/n 129459

DETECTION LIMITS—SURFACE CONTAMINATION

INPUT DATA:
Background Count = 344 cpm (wooden floors)
Background Counting Time = 10 minutes
Sample Counting Time = 1 minutes
Detector Efficiency = 13.7 %
Detector Area = 425 cm^2

RESULTS:
Critical Level (Lc) = 32.00 cpm above bkgd.
Detection Limit (Ld)) = 67.00 cpm above bkgd.
Minimum Detectable Activity (MDA) = 489.0 dpm/detector
Minimum Detectable Activity (MDA) = 115.1 dpm/100 cm^2
Minimum Detectable Activity (MDA) = 8.15 Bq/detector
Minimum Detectable Activity (MDA) = 0.01918 Bq/1 cm^2

All values calculated to 95% CL via MARSSIM methods

Calculated by RadCalc version 1.1

Direct Contamination Measurement (1-minute counts)—**CONCRETE SURFACES:**

Ludlum Floor Monitor Model 43-37, s/n 128615, with
Model 2224-1, s/n 129459

DETECTION LIMITS—SURFACE CONTAMINATION

INPUT DATA:
Background Count = 496 cpm (concrete floors)
Background Counting Time = 10 minutes
Sample Counting Time = 1 minutes
Detector Efficiency = 13.7 %
Detector Area = 425 cm^2

RESULTS:
Critical Level (Lc) = 38.42 cpm above bkgd.
Detection Limit (Ld)) = 79.85 cpm above bkgd.
Minimum Detectable Activity (MDA) = 582.8 dpm/detector
Minimum Detectable Activity (MDA) = 137.1 dpm/100 cm^2
Minimum Detectable Activity (MDA) = 9.71 Bq/detector
Minimum Detectable Activity (MDA) = 0.02286 Bq/1 cm^2

All values calculated to 95% CL via MARSSIM methods

Calculated by RadCalc version 1.1

Direct Contamination Measurement (1-minute counts)—**WOOD SURFACES:**

Ludlum Floor Monitor Model 43-37, s/n 103776, with
Model 2224, s/n 119815

DETECTION LIMITS—SURFACE CONTAMINATION

INPUT DATA:
Background Count = 872 cpm (wooden floors)
Background Counting Time = 10 minutes
Sample Counting Time = 1 minutes
Detector Efficiency = 15 %
Detector Area = 425 cm^2

RESULTS:
Critical Level (Lc) = 50.95 cpm above bkgd.
Detection Limit (Ld)) = 104.9 cpm above bkgd.
Minimum Detectable Activity (MDA) = 699.3 dpm/detector
Minimum Detectable Activity (MDA) = 164.5 dpm/100 cm^2
Minimum Detectable Activity (MDA) = 11.65 Bq/detector
Minimum Detectable Activity (MDA) = 0.02742 Bq/1 cm^2

All values calculated to 95% CL via MARSSIM methods

Calculated by RadCalc version 1.1

Direct Contamination Measurement (1-minute counts)—**CONCRETE SURFACES:**

Ludlum Floor Monitor Model 43-37, s/n 103776, with
Model 2224, s/n 119815

DETECTION LIMITS—SURFACE CONTAMINATION

INPUT DATA:
Background Count = 1082 cpm (concrete floor)
Background Counting Time = 10 minutes
Sample Counting Time = 1 minutes
Detector Efficiency = 15 %
Detector Area = 425 cm^2

RESULTS:
Critical Level (Lc) = 56.75 cpm above bkgd.
Detection Limit (Ld)) = 116.5 cpm above bkgd.
Minimum Detectable Activity (MDA) = 776.7 dpm/detector
Minimum Detectable Activity (MDA) = 182.8 dpm/100 cm^2
Minimum Detectable Activity (MDA) = 12.95 Bq/detector
Minimum Detectable Activity (MDA) = 0.03046 Bq/1 cm^2

All values calculated to 95% CL via MARSSIM methods

Calculated by RadCalc version 1.1

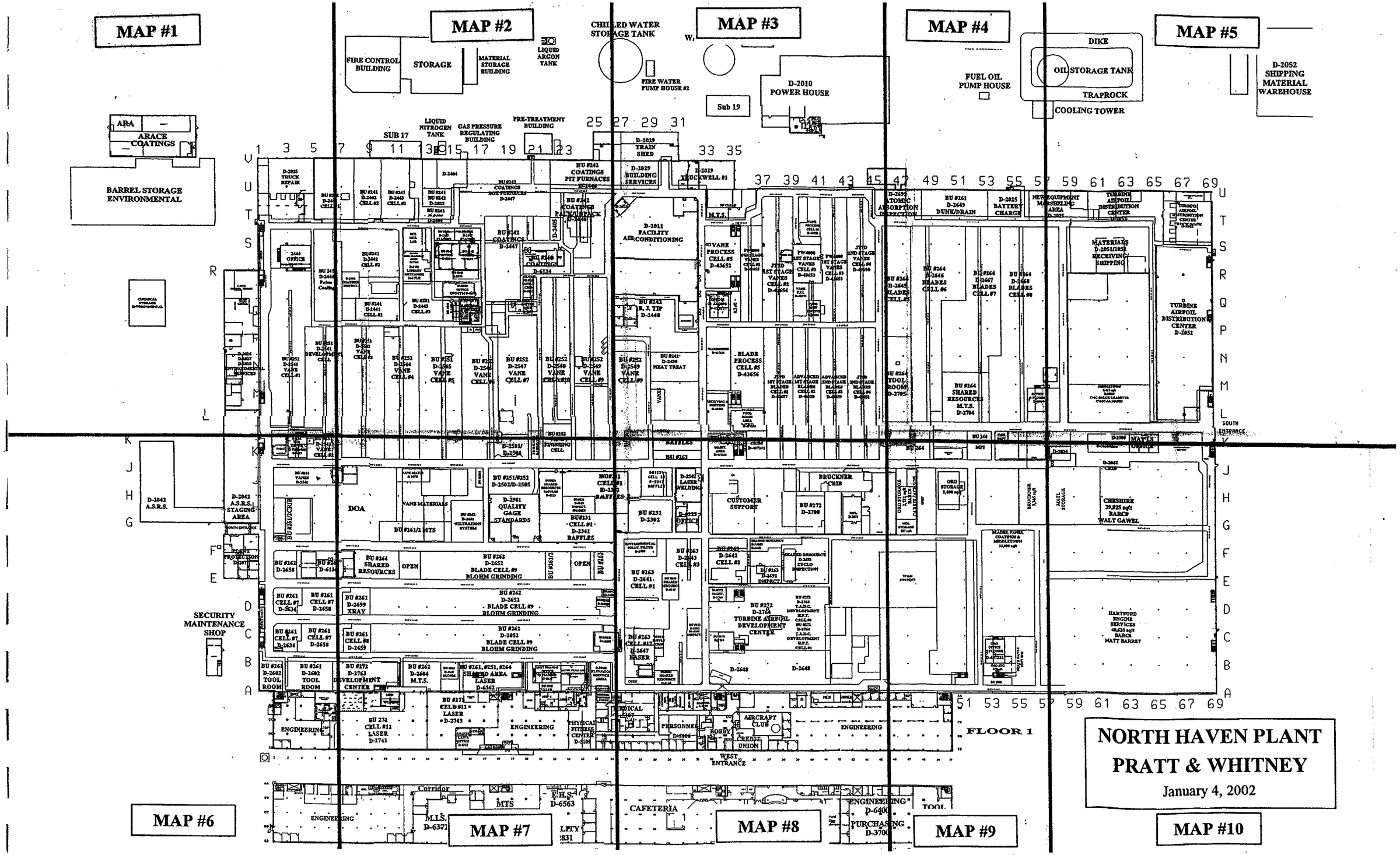
ATTACHMENT B

Survey Results

1. Floor Plan Showing Survey Units
2. Location and Results of Direct Contamination Measurements
3. Location and Results of Wipe Survey
4. Photos of Manufacturing Area Locations Utilizing Powdered Coatings and Blast Media

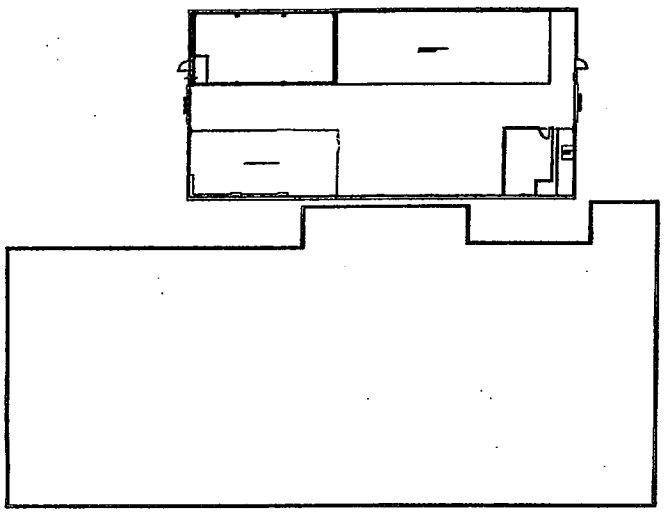
ATTACHMENT B-1

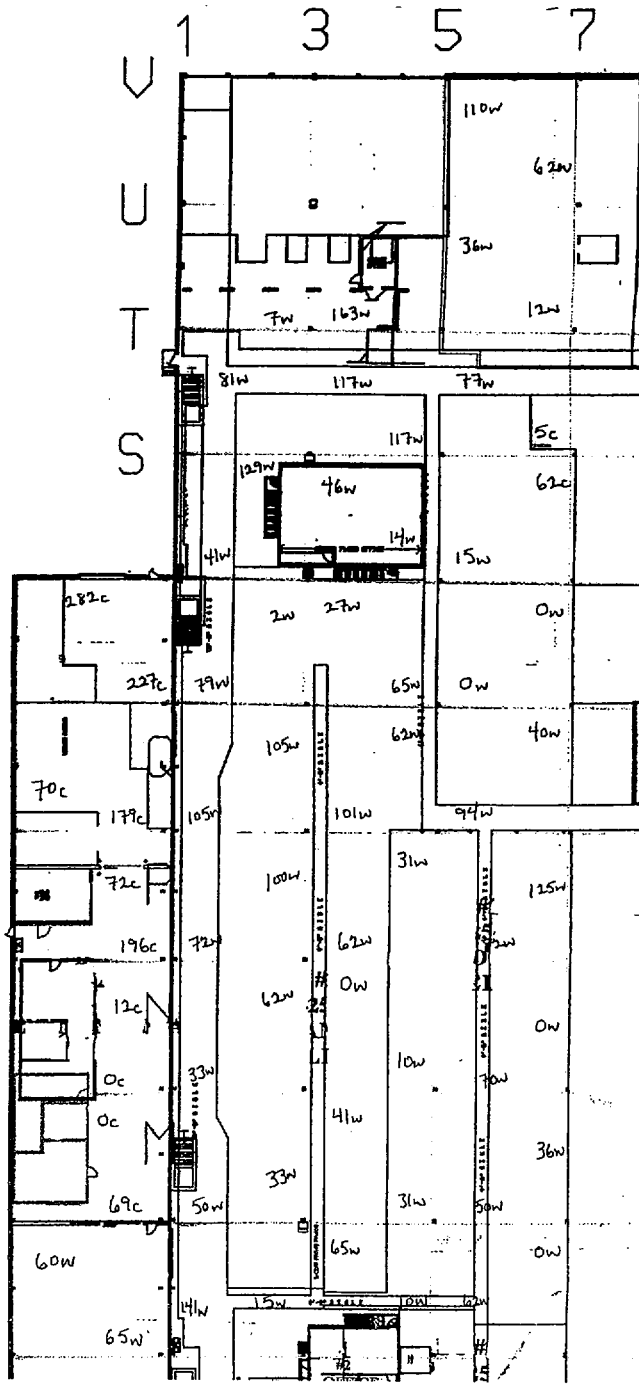
Floor Plan Showing Survey Units


MAP #1
MAP #2
MAP #3
MAP #4
MAP #5
MAP #6
MAP #7
MAP #8
MAP #9
MAP #10
CHILLED WATER STORAGE TANK
FIRE CONTROL BUILDING
STORAGE
MATERIAL STORAGE BUILDING
LIQUID ARGON TANK
FIRE WATER PUMP HOUSE #2
D-2010 POWER HOUSE
Sub 19
FUEL OIL PUMP HOUSE
DIKE
OIL STORAGE TANK
TRAPROCK
COOLING TOWER
D-2052 SHIPPING MATERIAL WAREHOUSE
ARA
ARACE COATINGS
BARREL STORAGE ENVIRONMENTAL
SUB 17
LIQUID NITROGEN TANK
GAS PRESSURE REGULATING BUILDING
PRE-TREATMENT BUILDING
D-2029 TRAIN SHED
D-2029 BUILDING SERVICES
D-2029 BUCKWELL #1
D-2011 FACILITY AIR CONDITIONING
D-2842 A.S.R.S.
A.S.R.S. STAGING AREA
SECURITY MAINTENANCE SHOP
DOA
CUSTOMER SUPPORT
BRUCKNER CRIB
CHESHIRE 39,825 sqft BARC# WALT GAWEL
HARTFORD ENGINEERING SERVICES 48,625 sqft BARC# MATT BARRET
TURBINE AIRFOIL DEVELOPMENT CENTER
TURBINE AIRFOIL DISTRIBUTION CENTER D-2052
MATERIALS D-2051/2052 RECEIVING/SHIPPING
SHARED RESOURCES M.T.S. D-2704
TOOL ROOM D-2705
ENGINEERING
CAFETERIA
PURCHASING D-3700
FLOOR 1
NORTH HAVEN PLANT
PRATT & WHITNEY
January 4, 2002

ATTACHMENT B-2

Location and Results of Direct Contamination Measurements

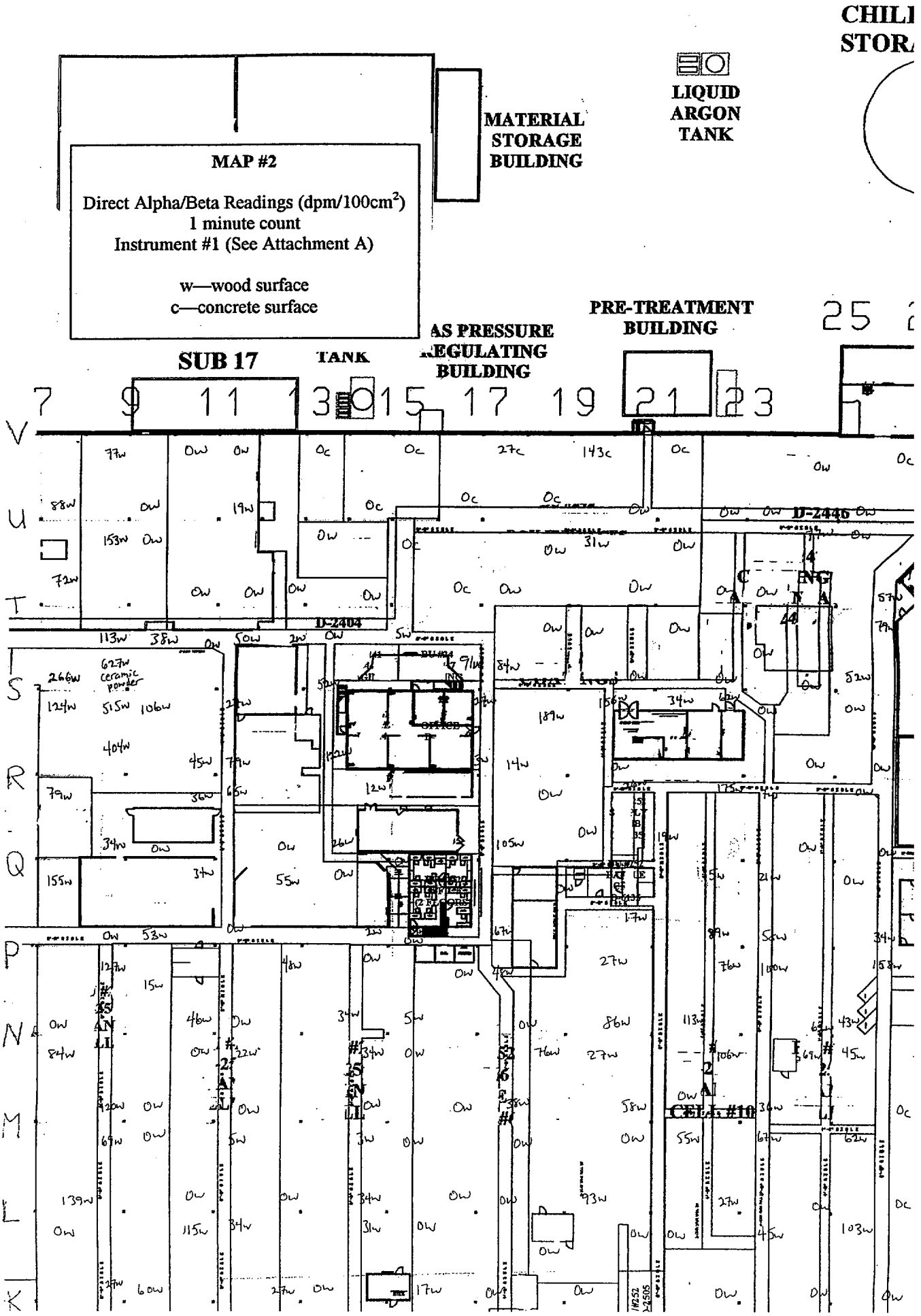


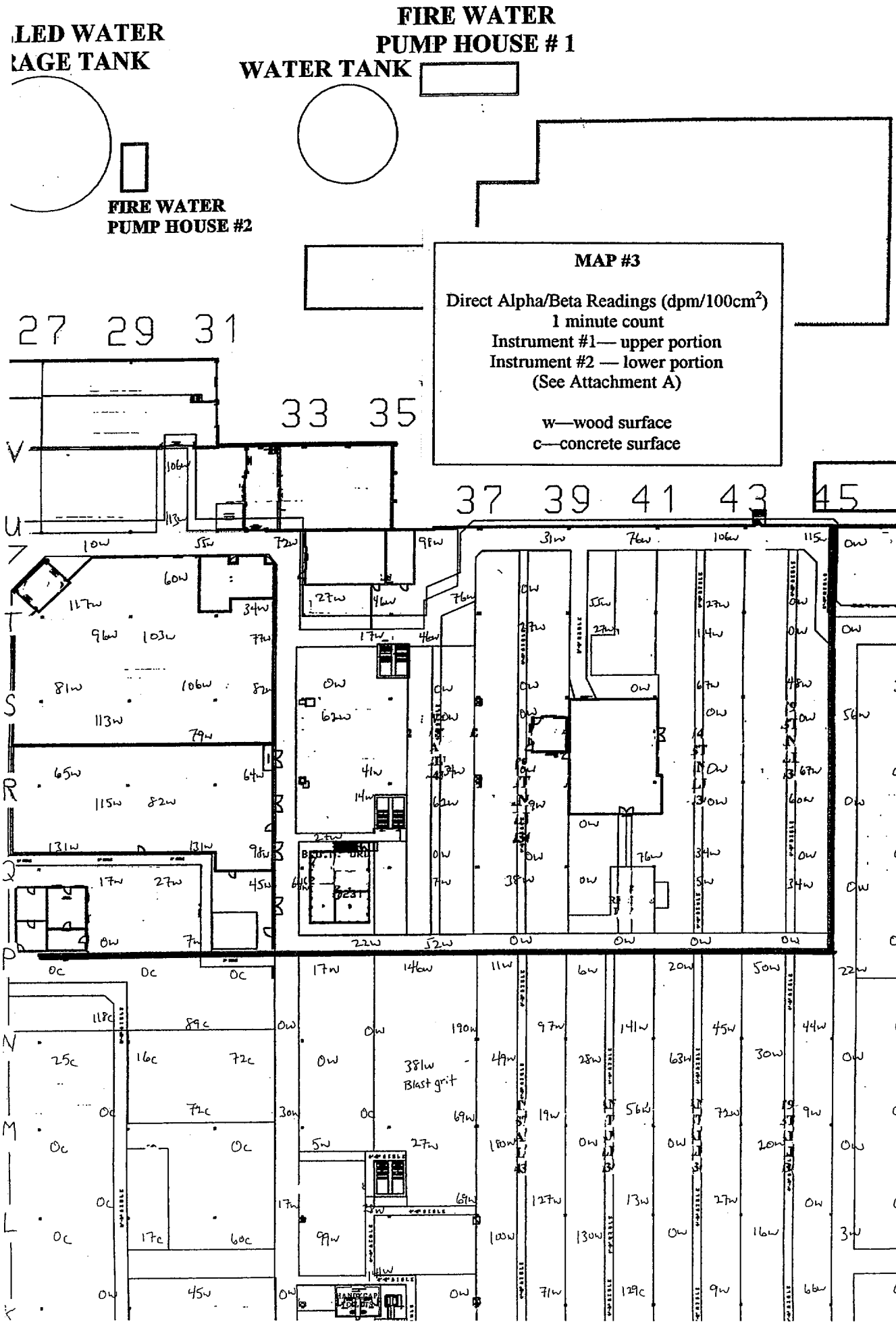


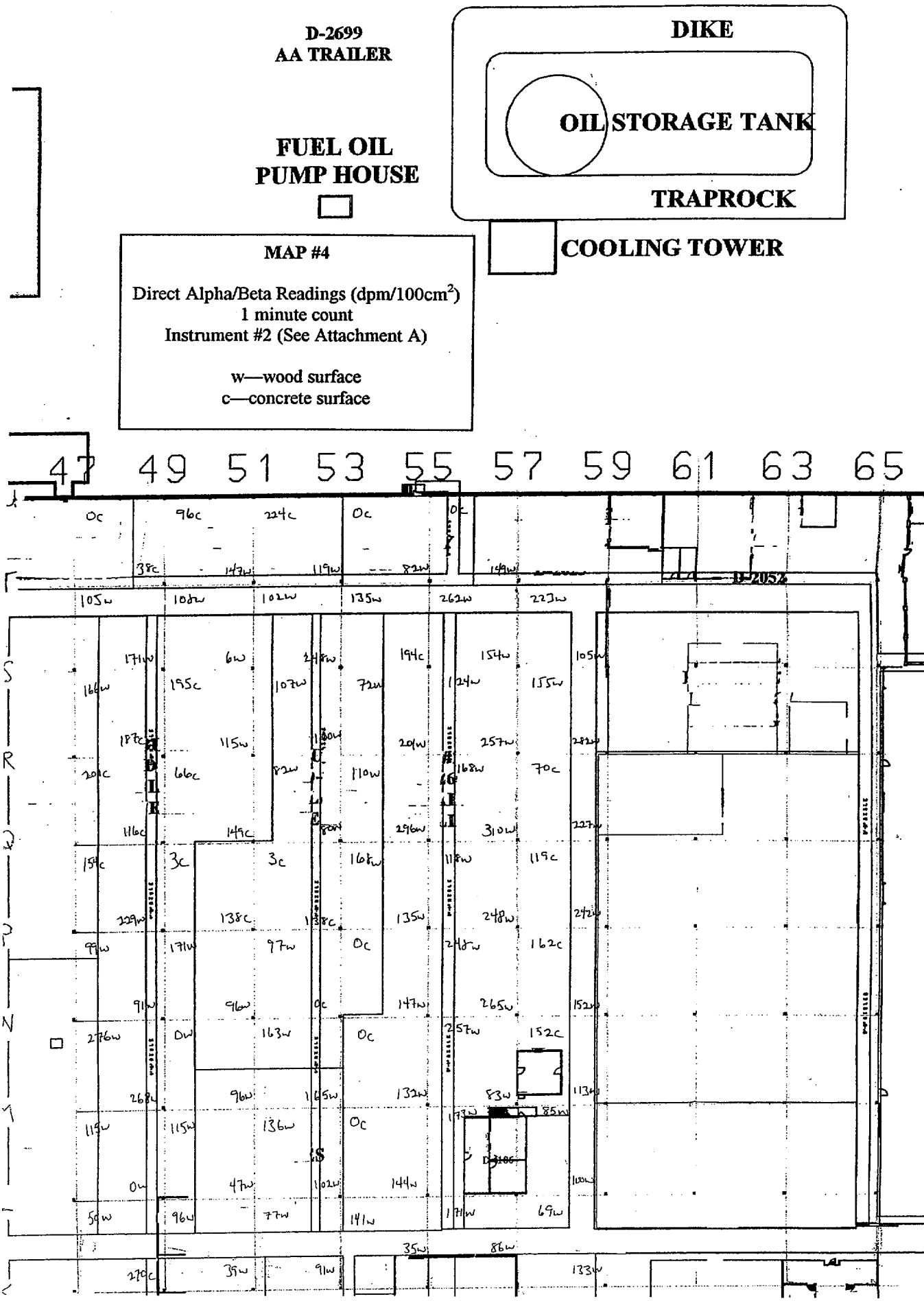
MAP #1

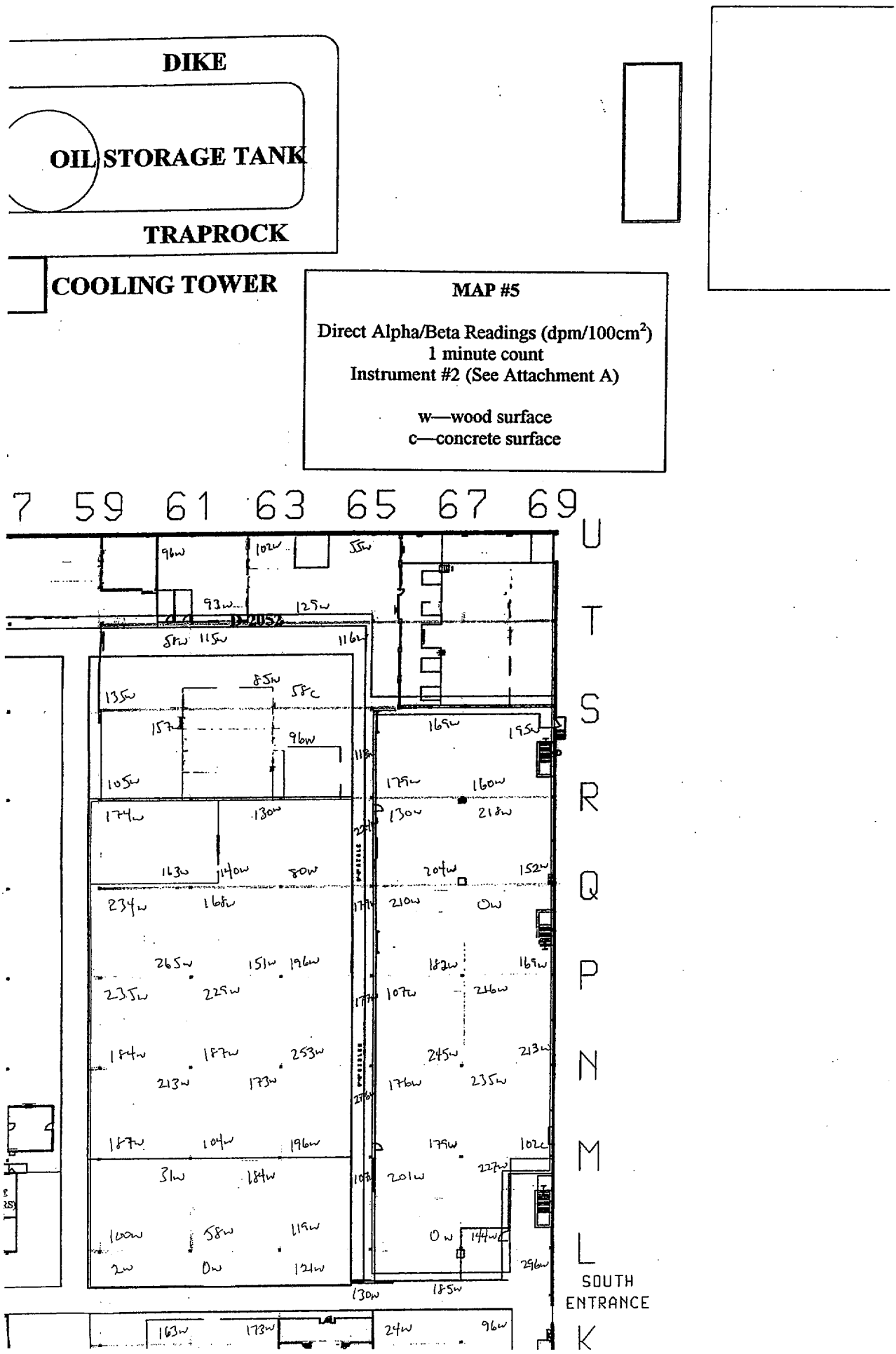
Direct Alpha/Beta Readings (dpm/100cm^2)
1 minute count
Instrument #1 (See Attachment A)

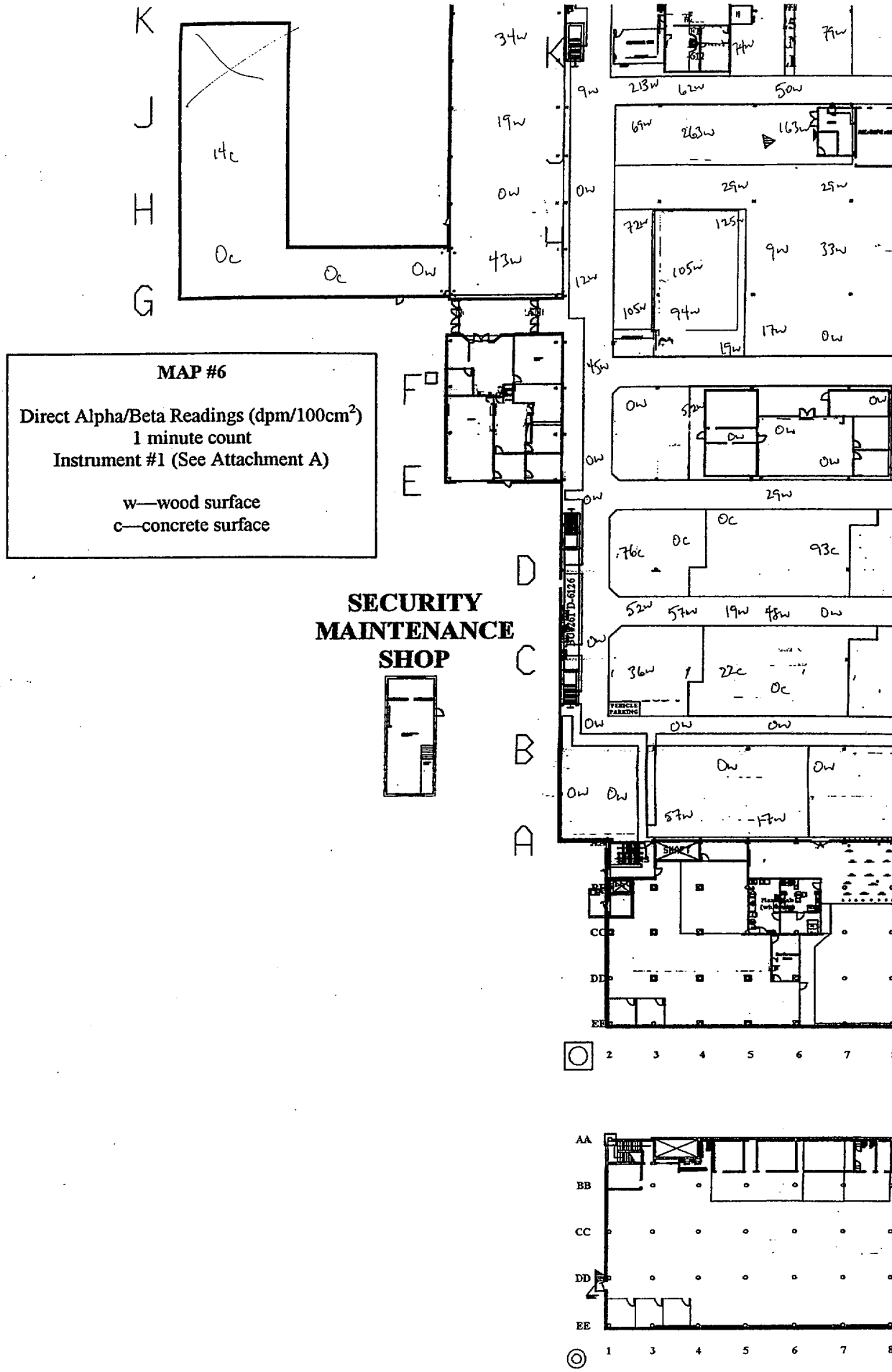
w—wood surface
c—concrete surface

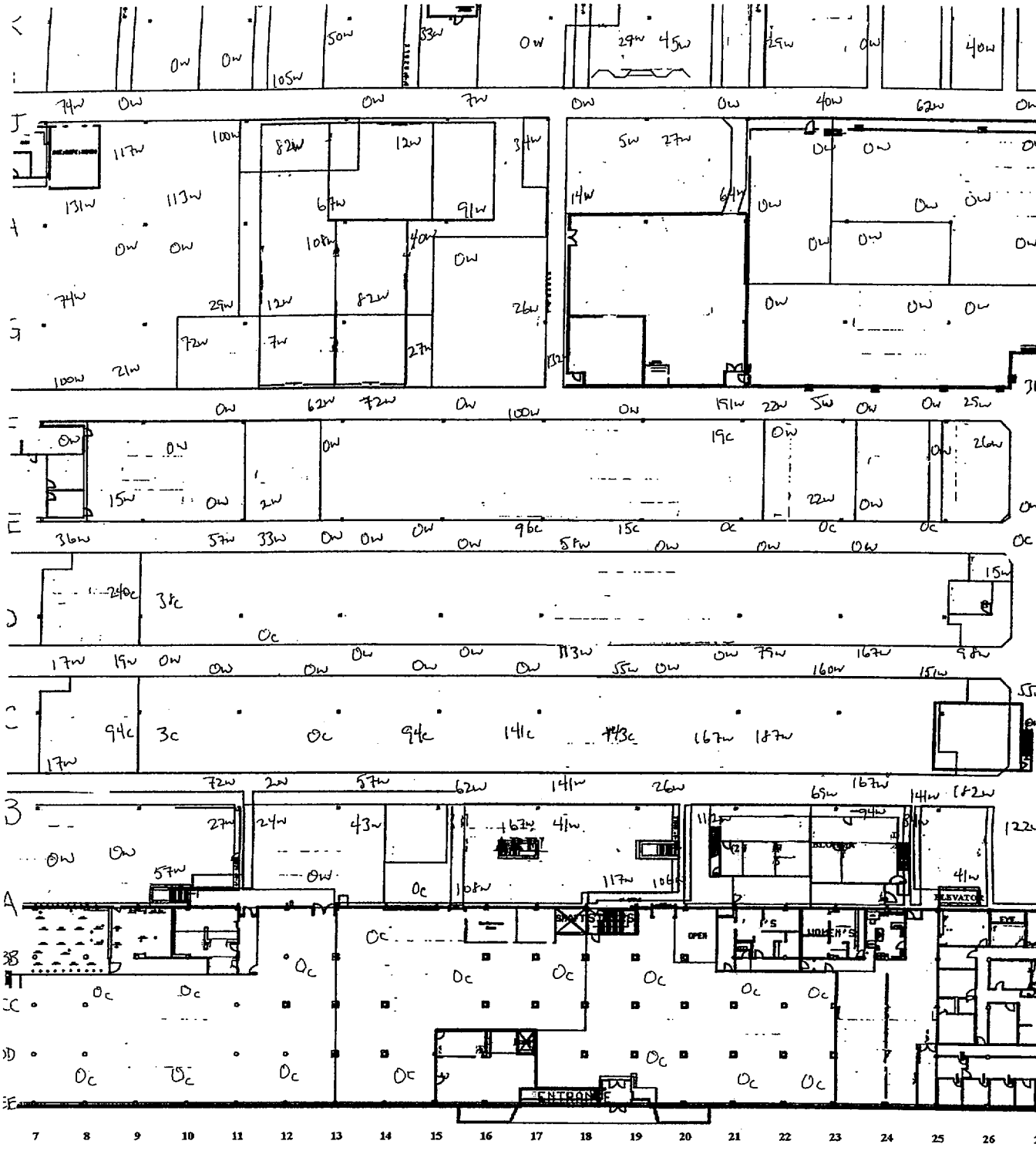

MAP #2
Direct Alpha/Beta Readings (dpm/100cm²)
1 minute count
Instrument #1 (See Attachment A)
w—wood surface
c—concrete surface
MATERIAL STORAGE BUILDING
LIQUID ARGON TANK
SUB 17
TANK
AS PRESSURE REGULATING BUILDING
PRE-TREATMENT BUILDING
D-2404
D-2446
627w ceramic powder
Office
CELLS #10
7 9 11 13 15 17 19 21 23
VUTS RQPNMLK


LED WATER
AGE TANK
FIRE WATER
PUMP HOUSE # 1
WATER TANK
FIRE WATER
PUMP HOUSE #2
MAP #3
Direct Alpha/Beta Readings (dpm/100cm²)
1 minute count
Instrument #1— upper portion
Instrument #2 — lower portion
(See Attachment A)
w—wood surface
c—concrete surface
27 29 31
33 35
37 39 41 43 45
Blast grit


D-2699
AA TRAILER
DIKE
OIL STORAGE TANK
TRAPROCK
FUEL OIL
PUMP HOUSE
COOLING TOWER
MAP #4
Direct Alpha/Beta Readings (dpm/100cm²)
1 minute count
Instrument #2 (See Attachment A)
w—wood surface
c—concrete surface
47 49 51 53 55 57 59 61 63 65
D-2052
SOUTH


DIKE
OIL STORAGE TANK
TRAPROCK
COOLING TOWER
MAP #5
Direct Alpha/Beta Readings (dpm/100cm²)
1 minute count
Instrument #2 (See Attachment A)
w—wood surface
c—concrete surface
7 59 61 63 65 67 69
U T S R Q P N M L K
SOUTH ENTRANCE

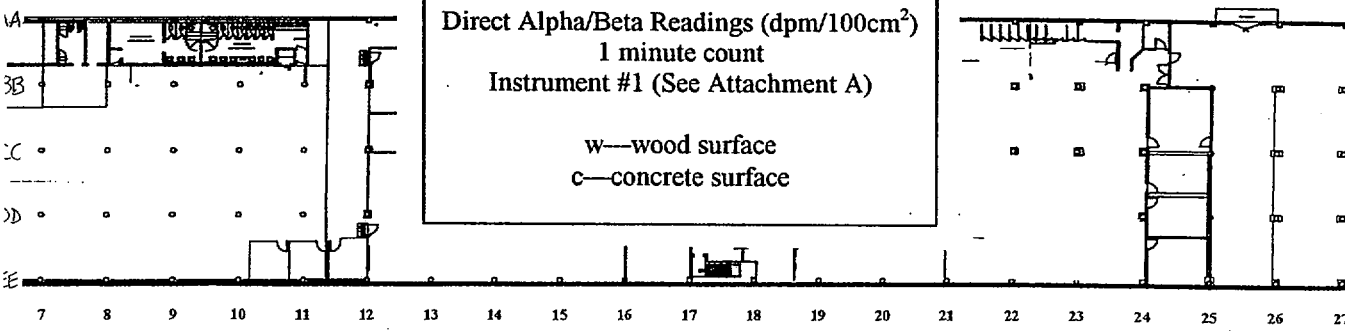

MAP #6
Direct Alpha/Beta Readings (dpm/100cm²)
1 minute count
Instrument #1 (See Attachment A)
w—wood surface
c—concrete surface
SECURITY
MAINTENANCE
SHOP
K
J
H
G
F
E
D
C
B
A
VEHICLE PARKING
CC
DD
EE
AA
BB
2
3
4
5
6
7
1

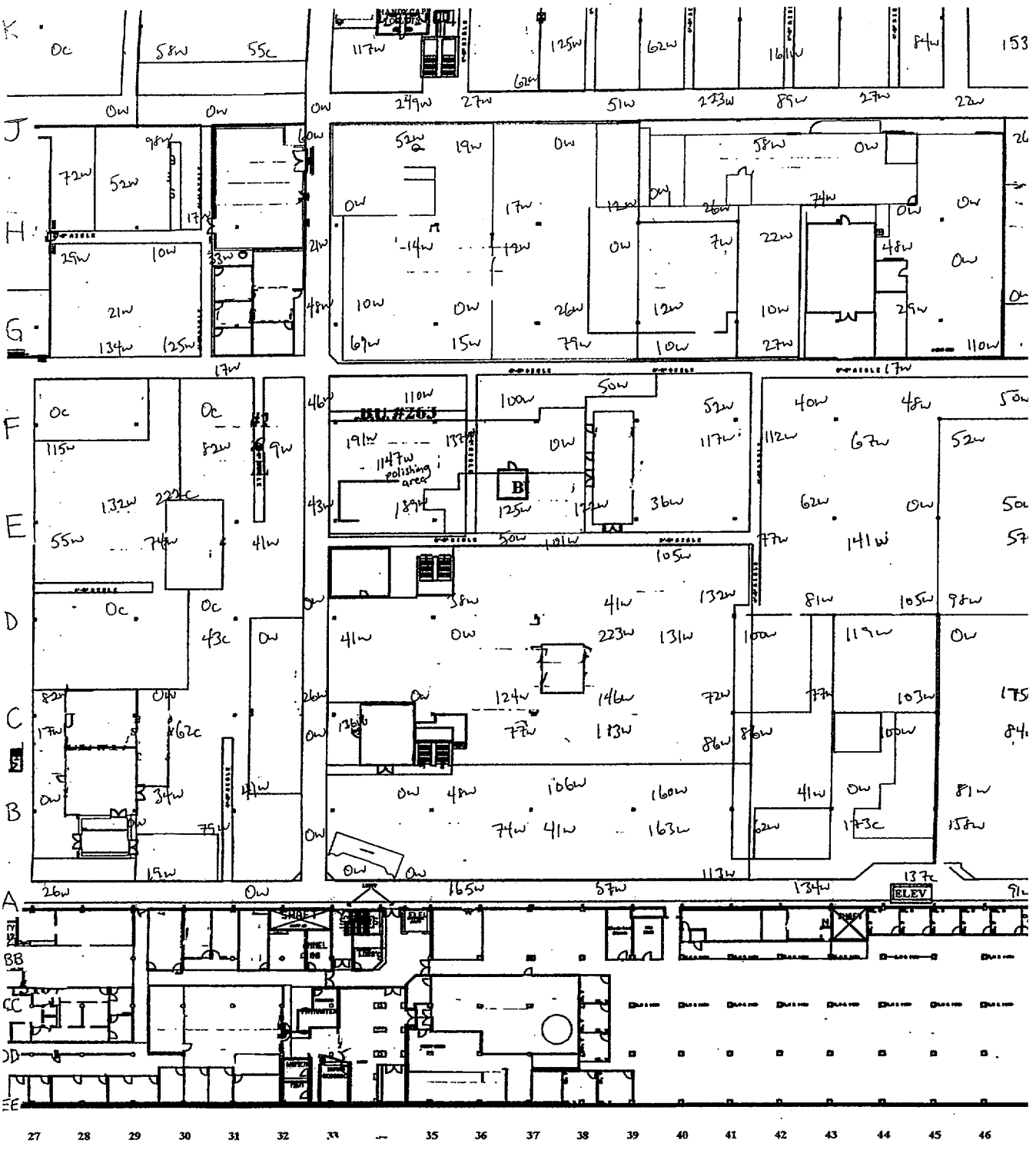


MAP #7

Direct Alpha/Beta Readings (dpm/100cm^2)
1 minute count
Instrument #1 (See Attachment A)

w---wood surface
c---concrete surface

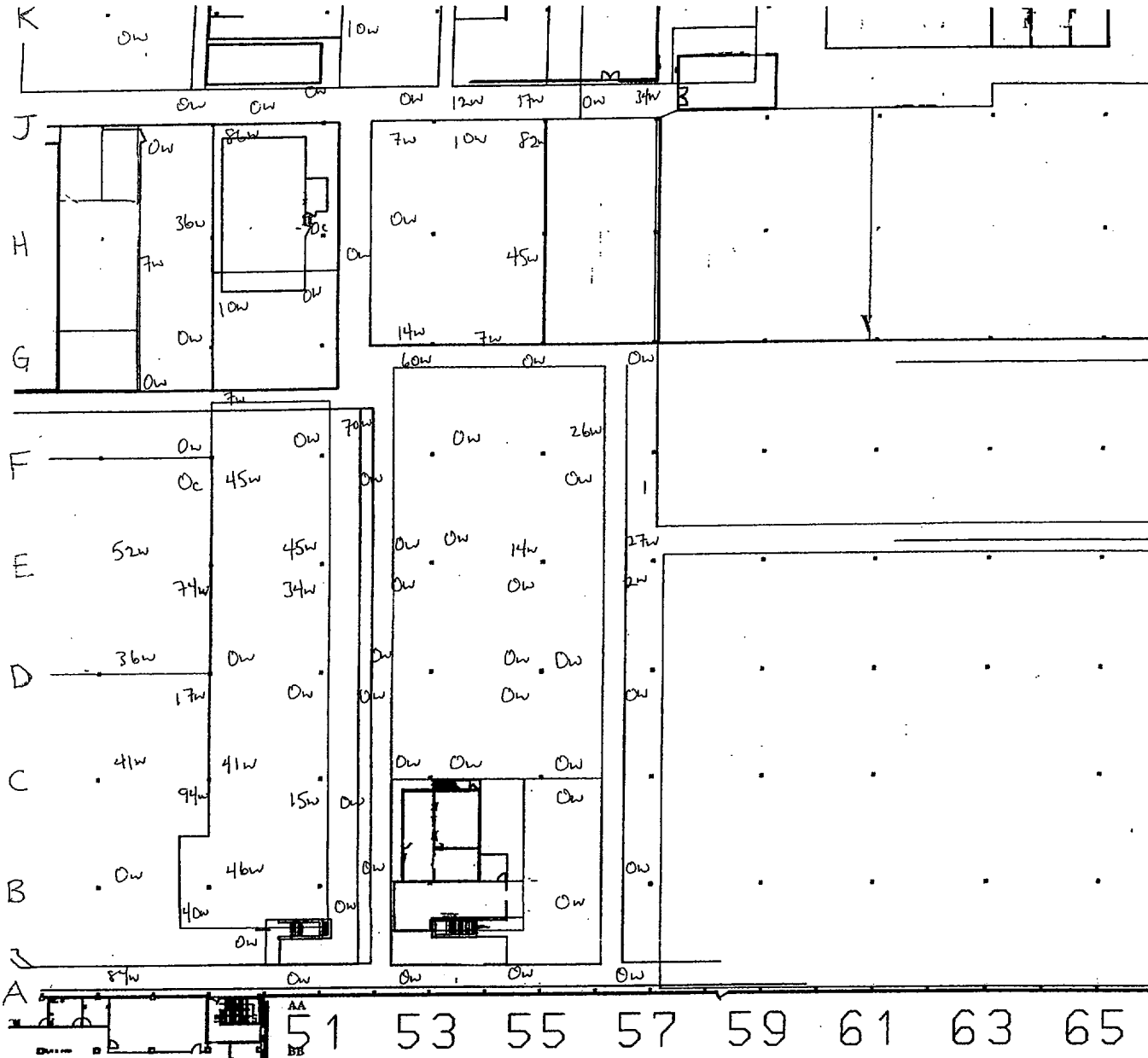


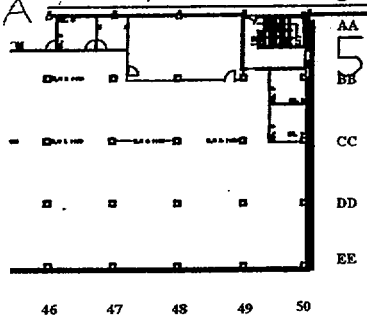


MAP #8

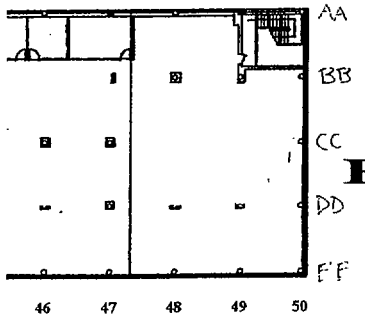
Direct Alpha/Beta Readings (dpm/100cm^2)
1 minute count
Instrument #1 (See Attachment A)

w—wood surface
c—concrete surface





FLOOR 1

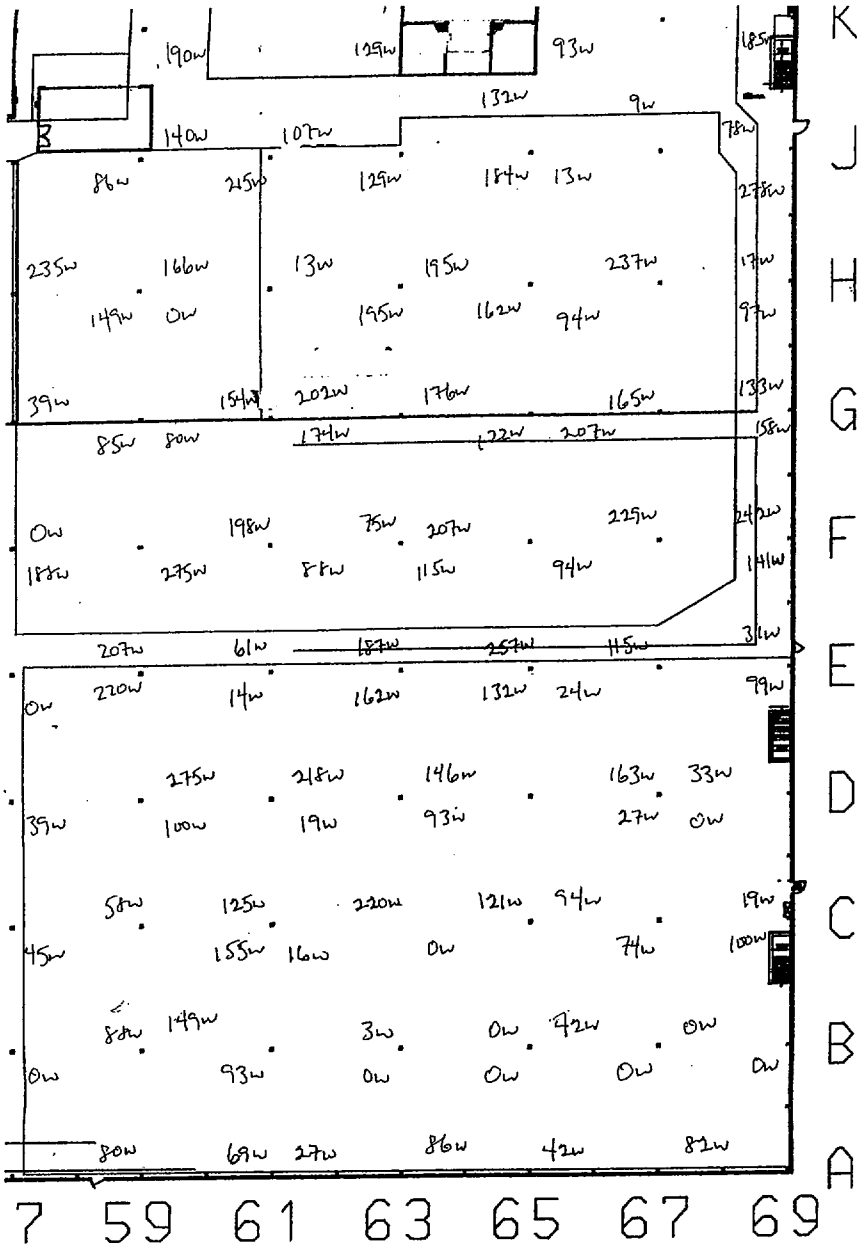


FLOOR 2

MAP #9

Direct Alpha/Beta Readings (dpm/100cm^2)
1 minute count
Instrument #1 (See Attachment A)

w—wood surface
c—concrete surface



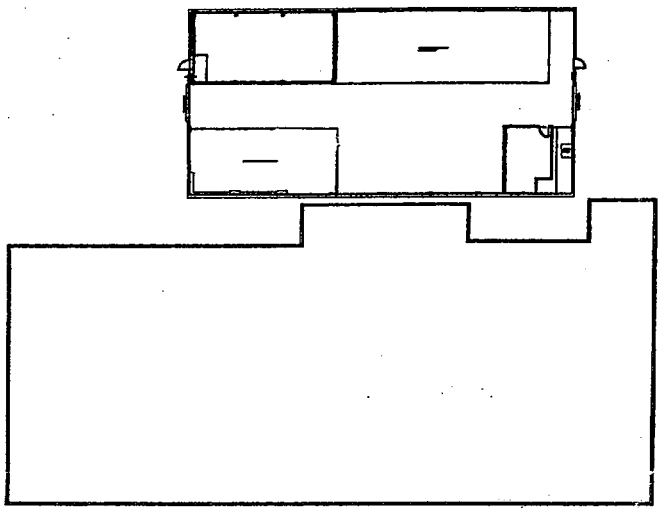
MAP #10

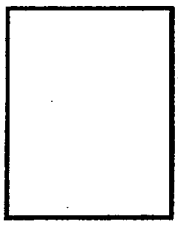
Direct Alpha/Beta Readings (dpm/100cm^2)
1 minute count
Instrument #2 (See Attachment A)

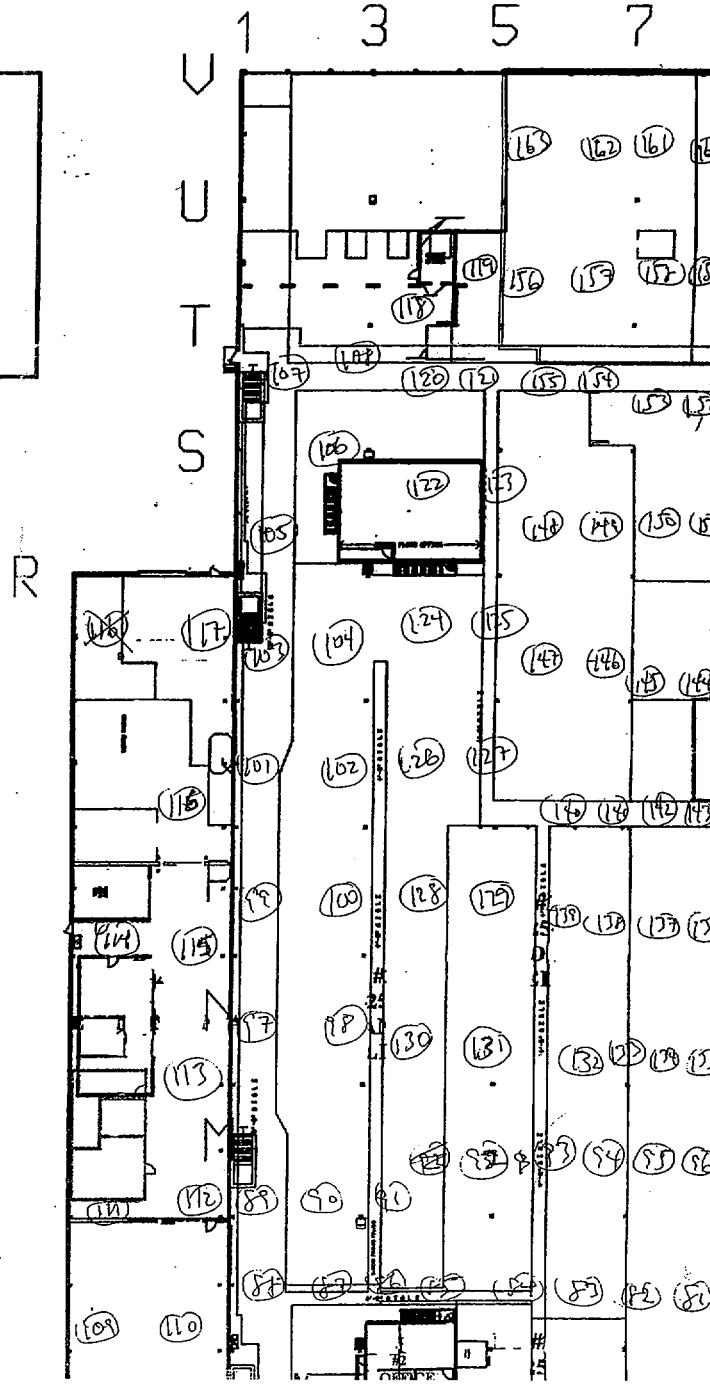
w—wood surface
c—concrete surface

ATTACHMENT B-3

Wipe Locations and Results

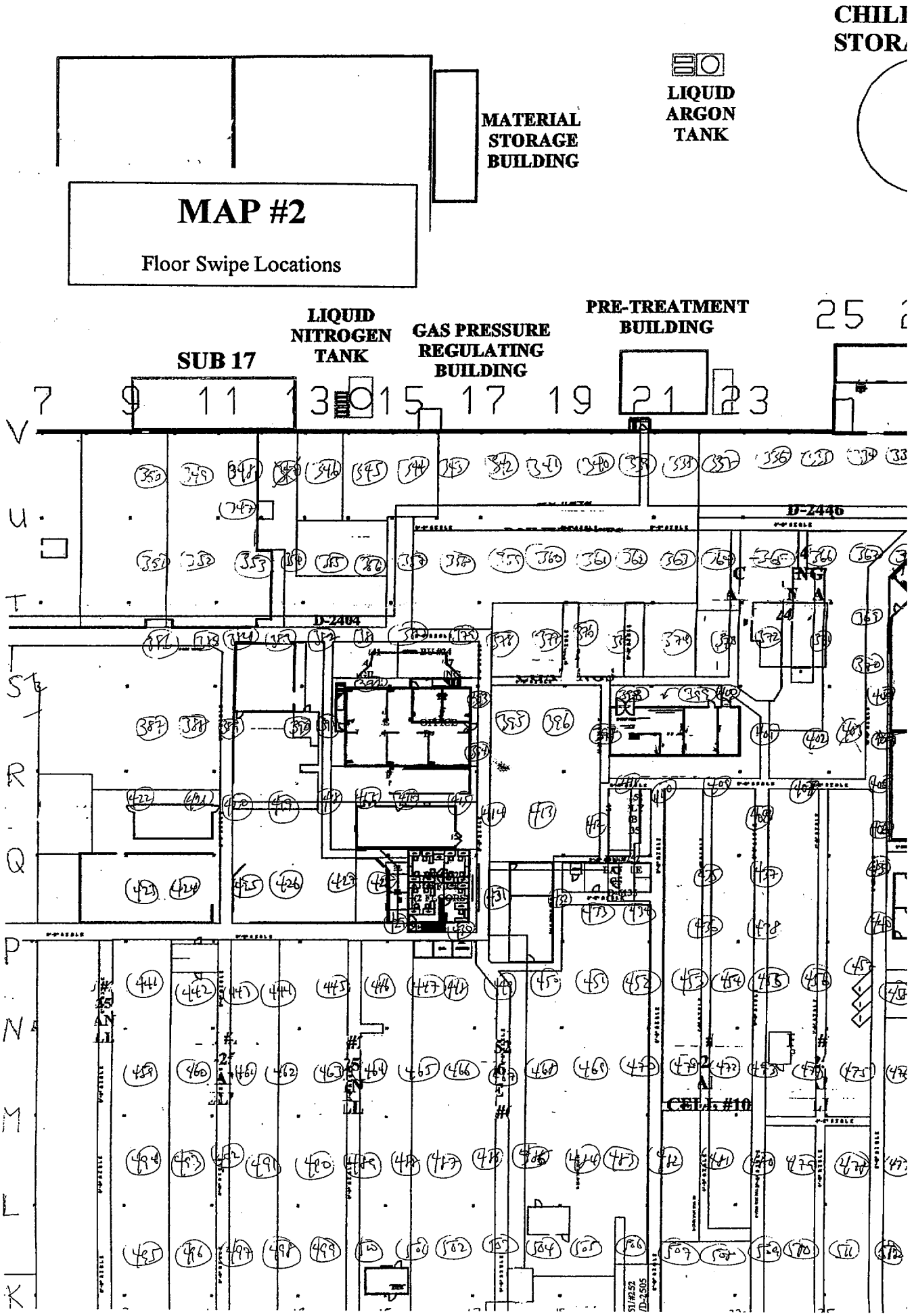


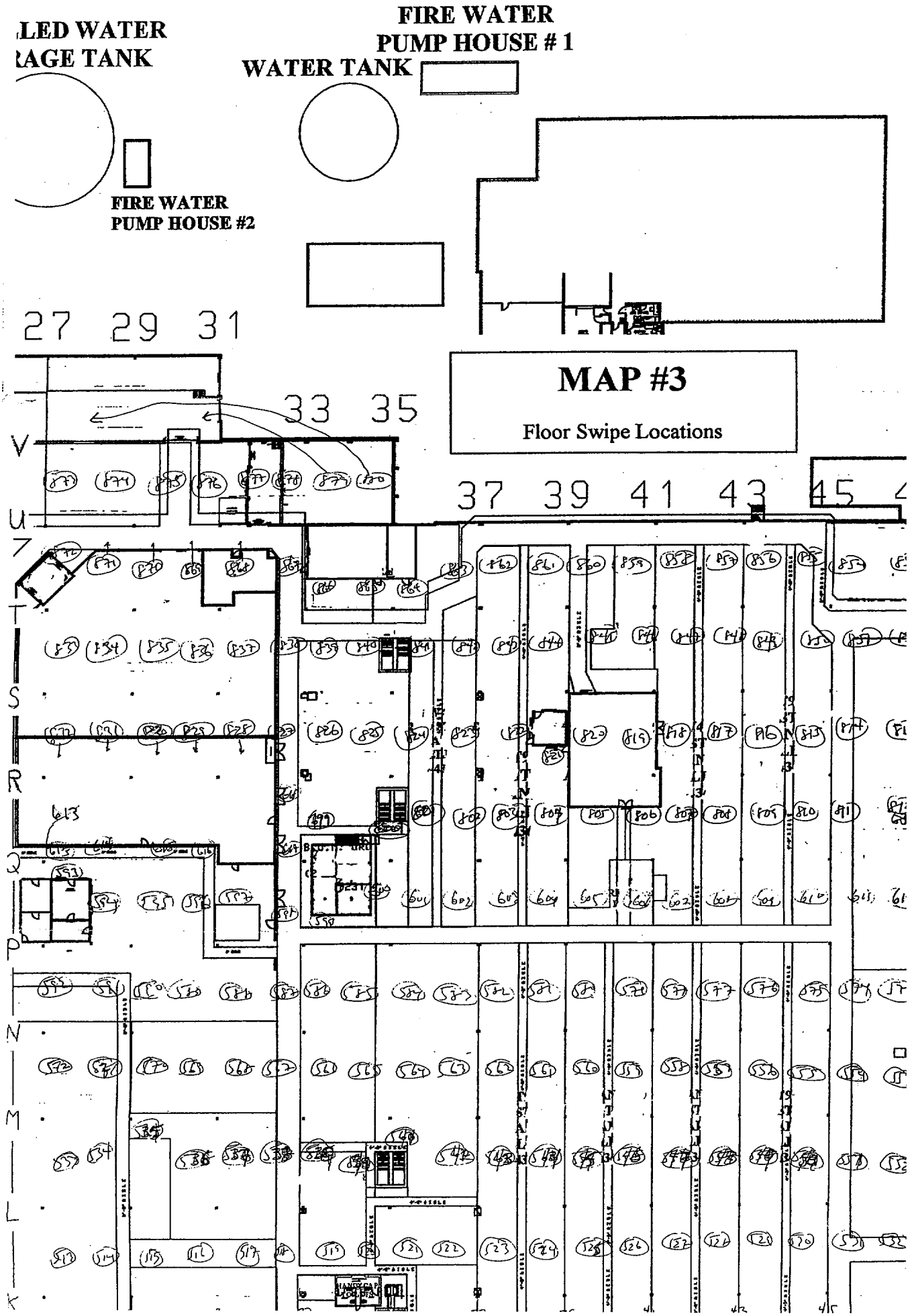




MAP #1

Floor Swipe Locations


MATERIAL STORAGE BUILDING
LIQUID ARGON TANK
MAP #2
Floor Swipe Locations
SUB 17
LIQUID NITROGEN TANK
GAS PRESSURE REGULATING BUILDING
PRE-TREATMENT BUILDING
D-2446
D-2404
CELL #10


LED WATER
AGE TANK
FIRE WATER
PUMP HOUSE # 1
WATER TANK
FIRE WATER
PUMP HOUSE #2
27 29 31
33 35
37 39 41 43 45
MAP #3
Floor Swipe Locations

D-2699
AA TRAILER

DIKE

OIL STORAGE TANK

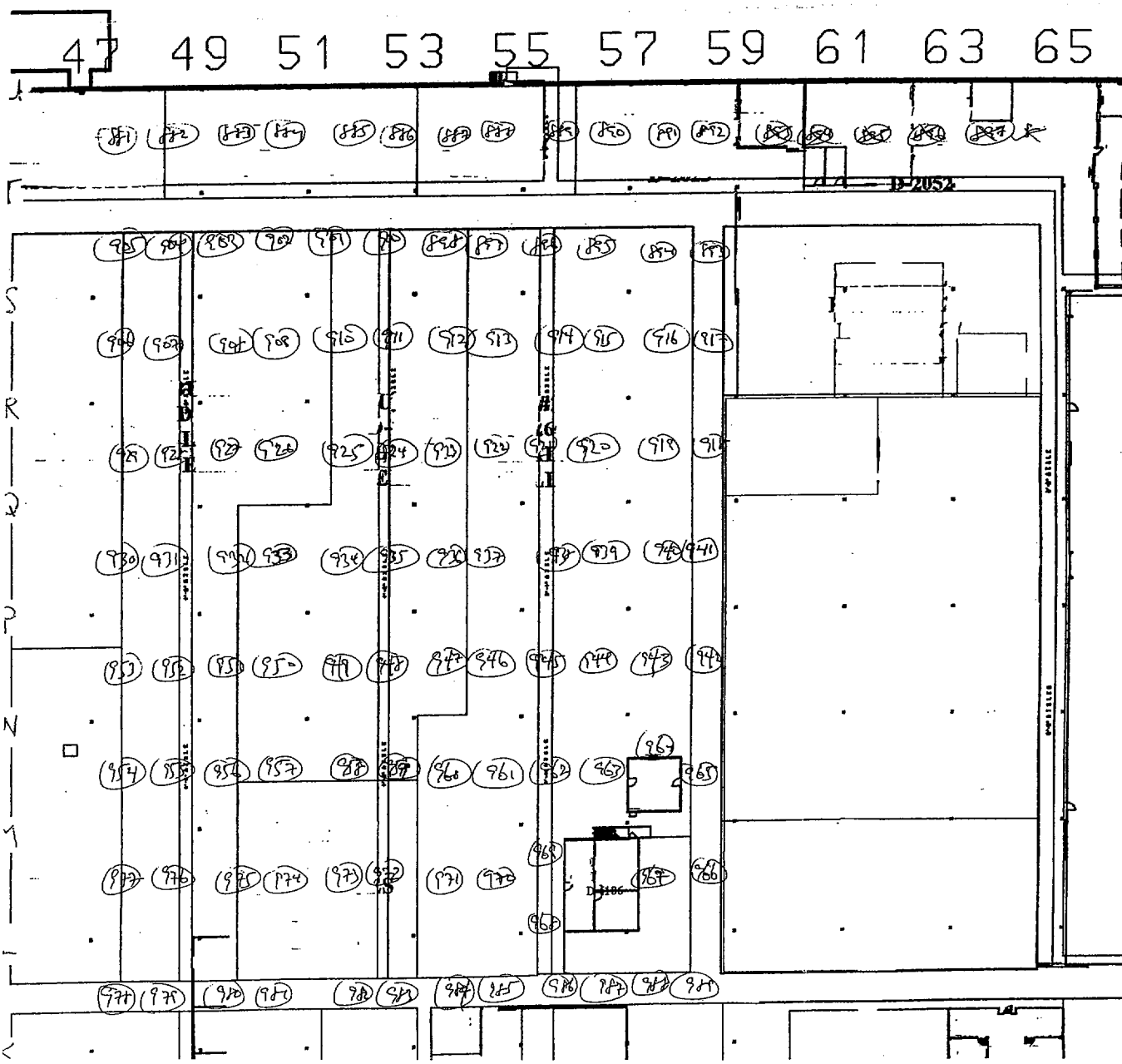
TRAPROCK

FUEL OIL
PUMP HOUSE

COOLING TOWER

MAP #4

Floor Swipe Locations



DIKE

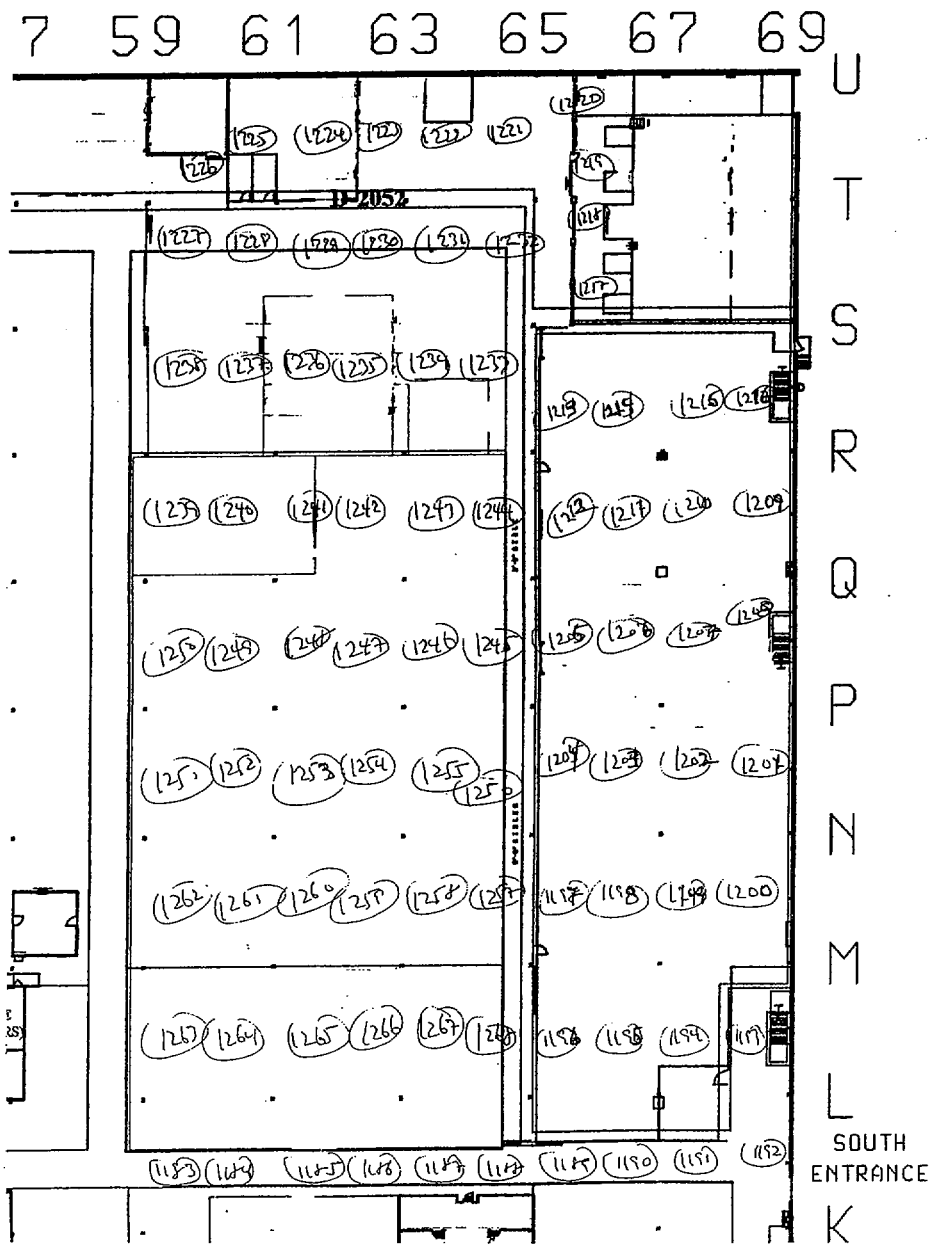
OIL STORAGE TANK

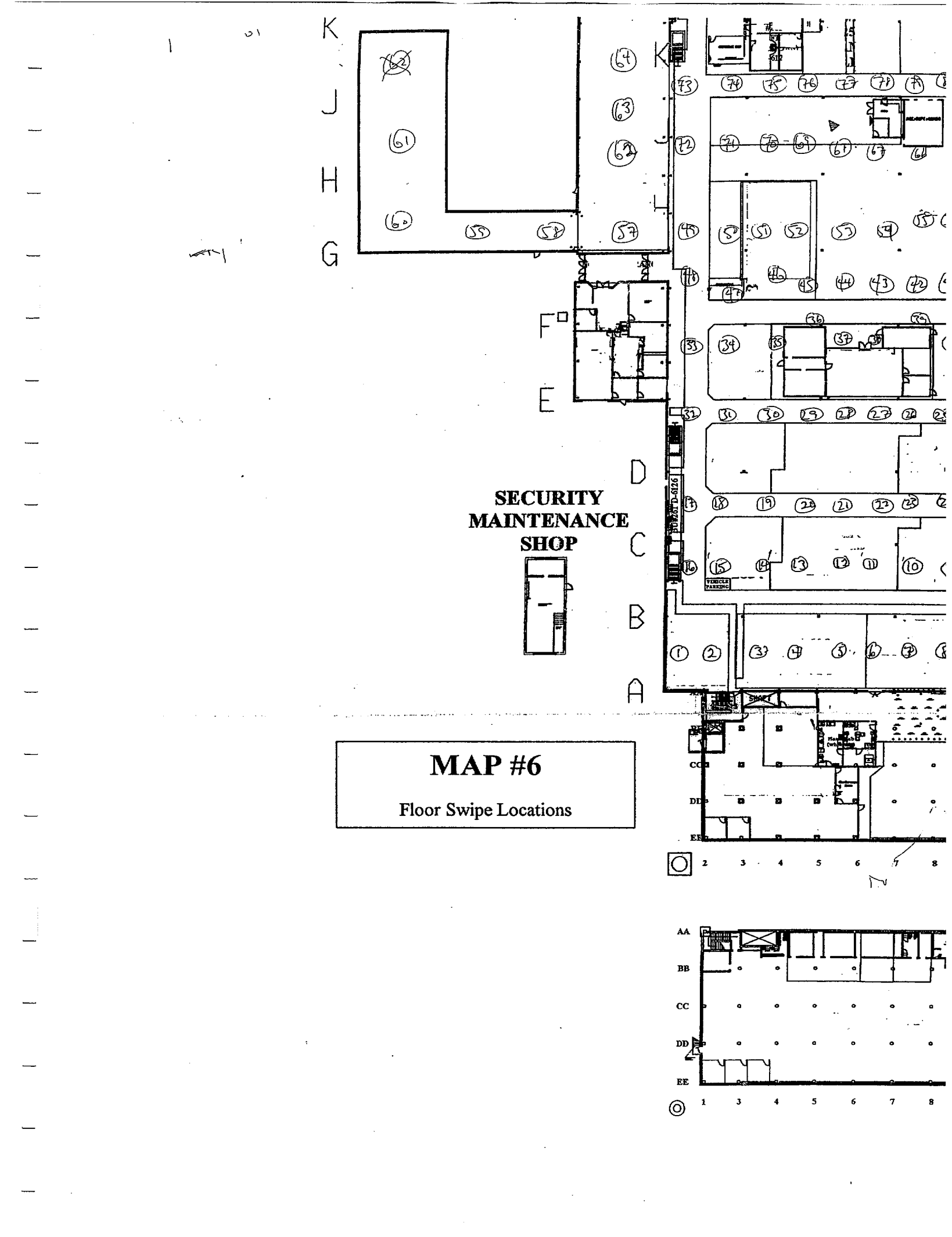
TRAPROCK

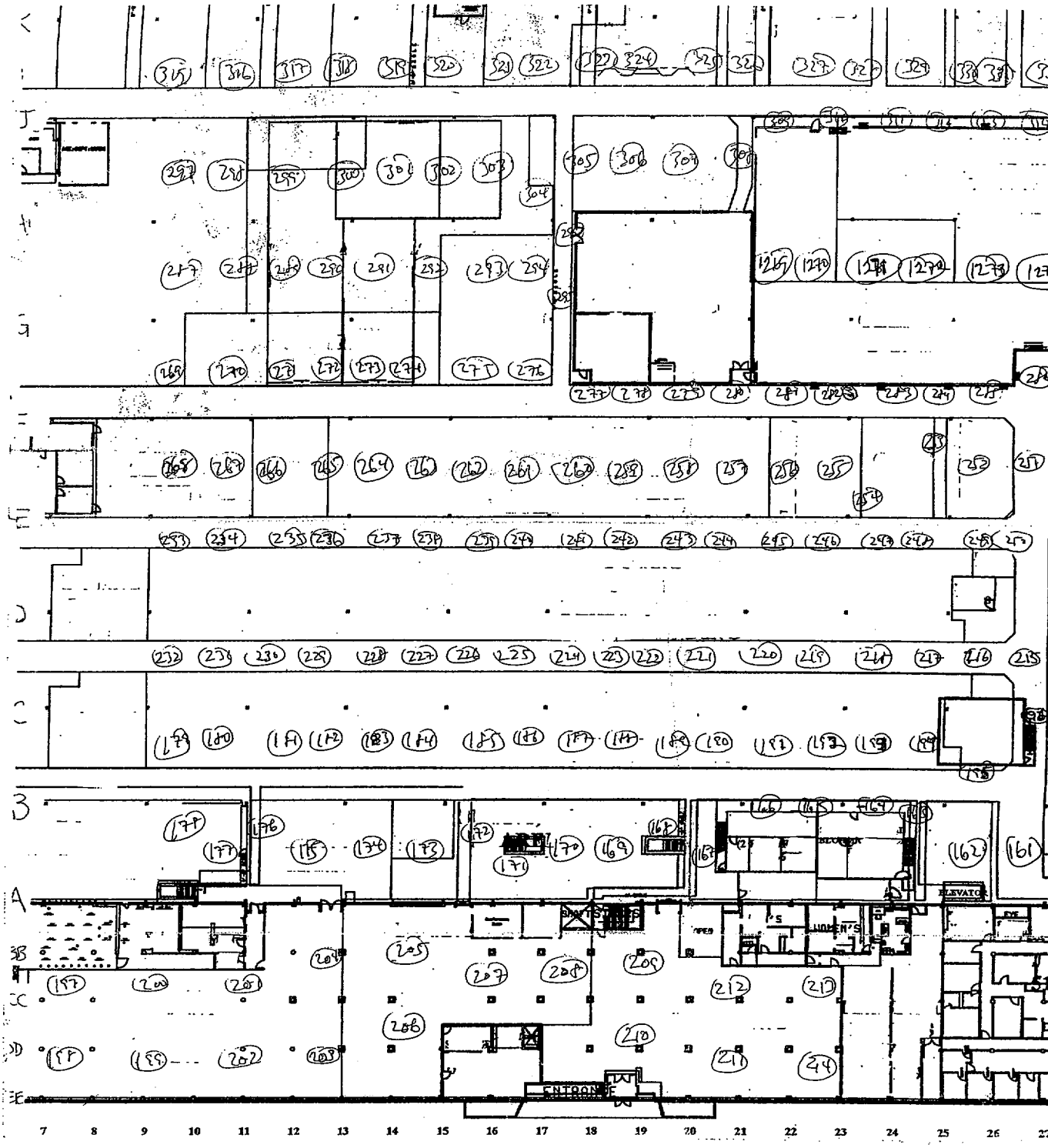
COOLING TOWER

MAP #5

Floor Swipe Locations

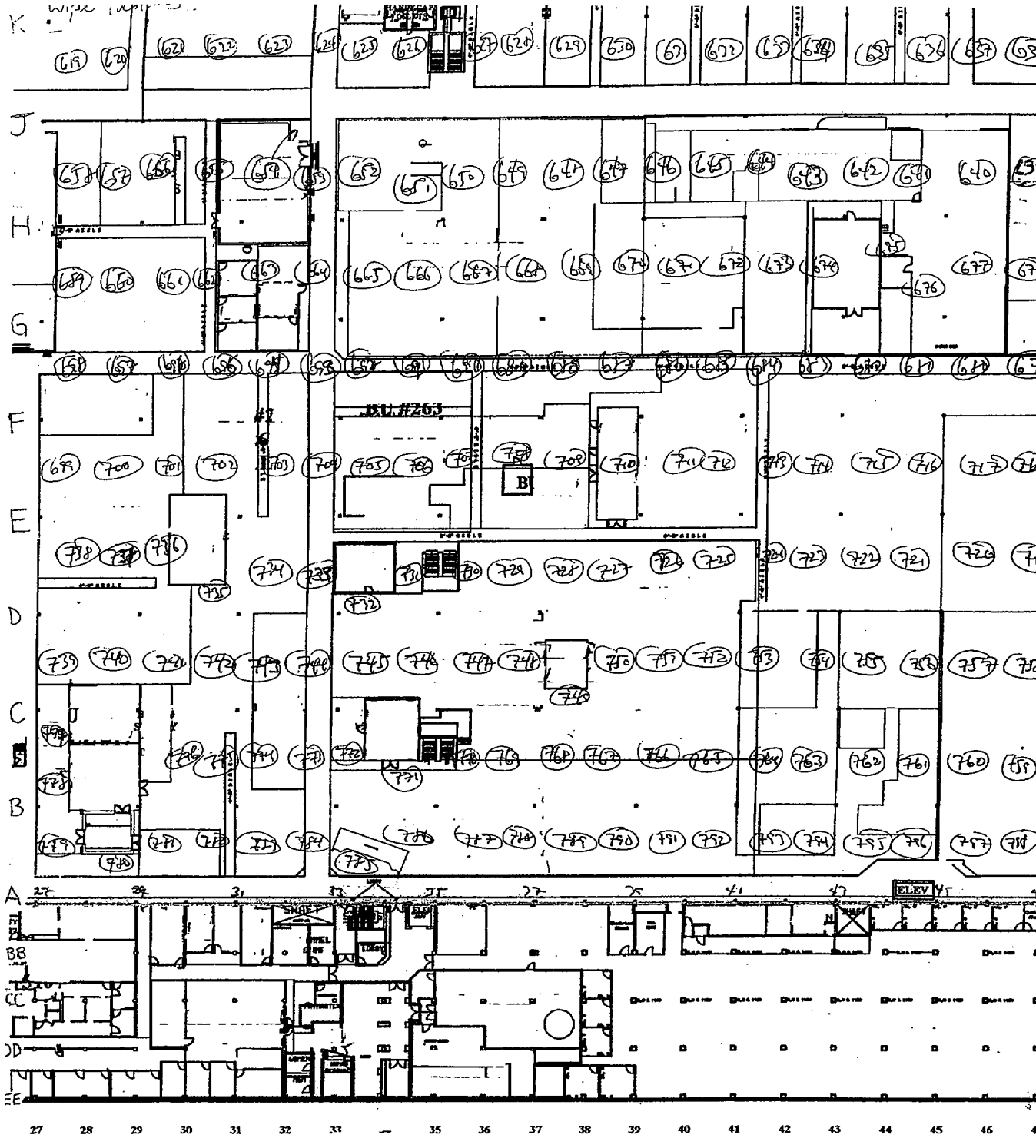



SECURITY
MAINTENANCE
SHOP
MAP #6
Floor Swipe Locations



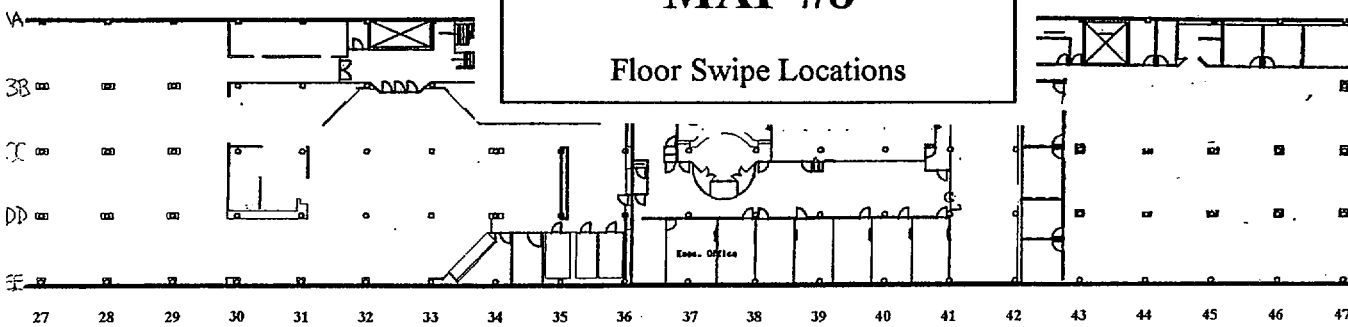
MAP #7

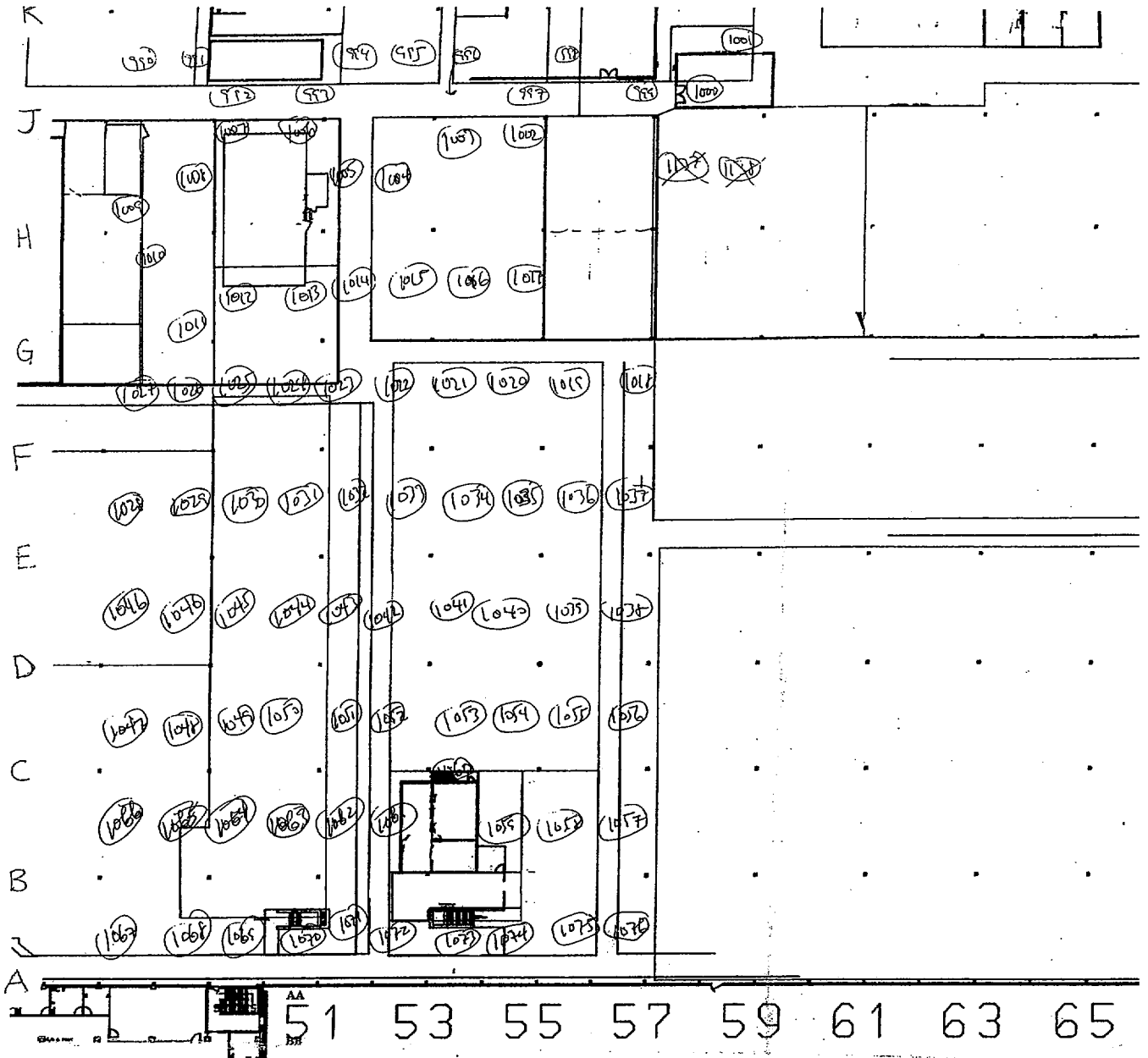
Floor Swipe Locations

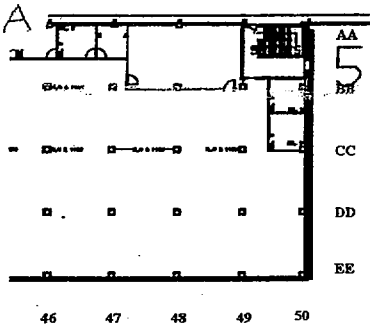


MAP #8

Floor Swipe Locations



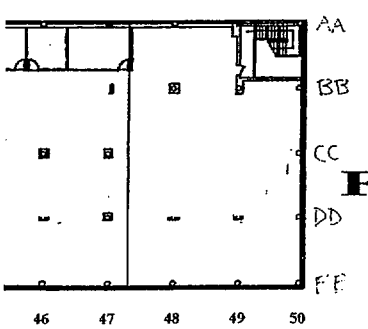




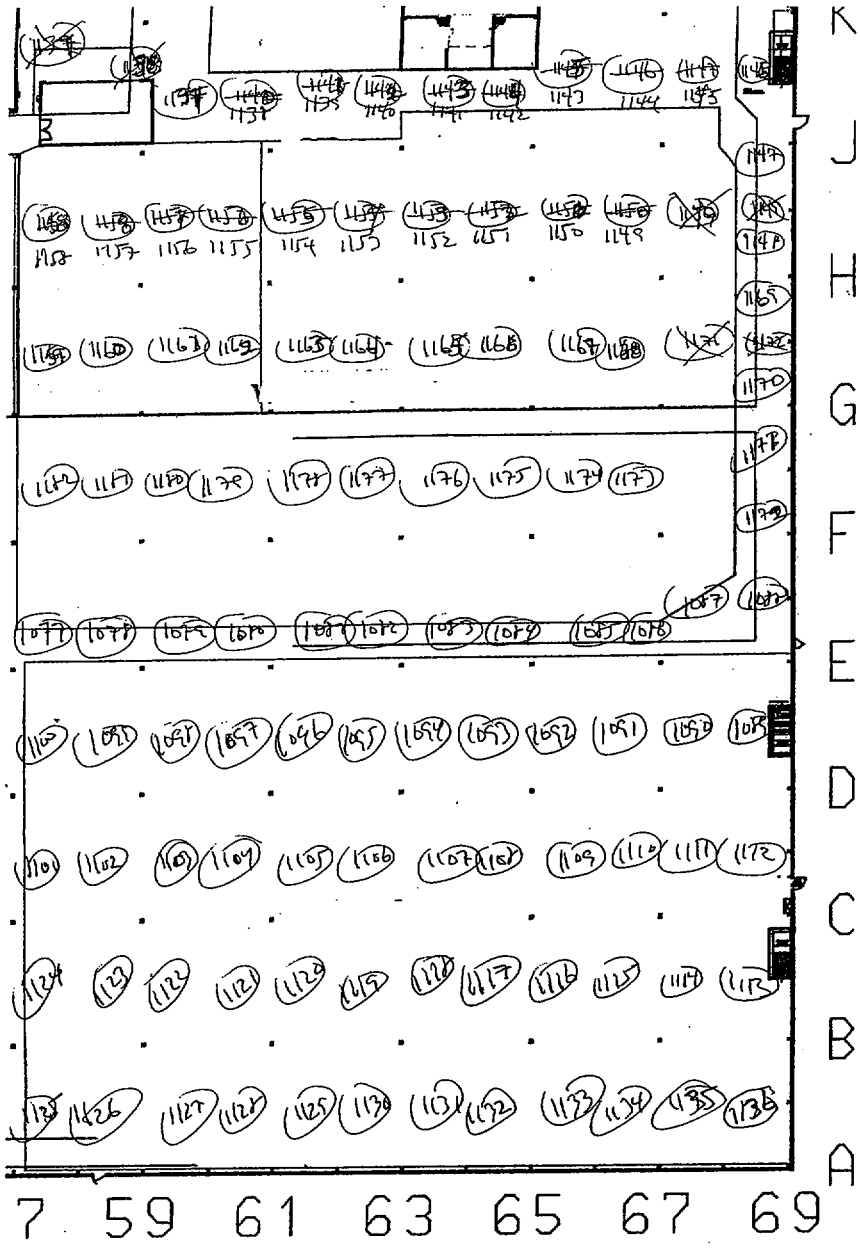
FLOOR 1

MAP #9

Floor Swipe Locations



FLOOR 2



MAP #10

Floor Swipe Locations

Radiological Survey Logsheet

Radiation Safety Associates, Inc.
19 Pendleton Drive, PO Box 61
Hebron, CT 06248

Job Location: **Pratt & Whitney, North Haven Facility**
Survey Purpose: **Final Radiological Survey**
Performed By:

Date: 1/4/02
Signature:

Inst (1) Ludlum 2224-1	Inst (2) Ludlum 2224	Inst (3) Ludlum 19	Inst (4) Protean IPC 9025
(Model/SN) 129459	(Model/SN) 119815	(Model/SN) 95494	(Model/SN) 236425
Det. 43-37	Det. 43-37	Det. Scint., NaI(Tl)	Det. Int Gas Proportional
(Model/SN) 128615	(Model/SN) 103776	(Model/SN)	(Model/SN)
Eff. 13.7 %	Eff. 15%	Eff. N/A	Eff. Alpha : 31.38% Beta : 47.97%
Type Rad. Alpha/Beta	Type Rad. Alpha/Beta	Type Rad. Gamma	Type Rad. Alpha/Beta
Bkgd. see Attachment A	Bkgd. see Attachment A	Bkgd. 4mR/h	Bkgd. Alpha cp **0.47** Beta cp **3.60**
CalDue 24-Jan-02	CalDue 27-Mar-02	CalDue 12-May-02	CalDue 28-Feb-02

Instrument #3 used to analyze wipes

Wipe #	Time	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
1	12/19/01	Map 6			-0.47	-1.49	14.72	-1.60	-3.34	15.68
2	12/19/01	Map 6			-0.47	-1.49	14.72	-3.60	-7.50	15.68
3	12/19/01	Map 6			-0.47	-1.49	14.72	-3.60	-7.50	15.68
4	12/19/01	Map 6			-0.47	-1.49	14.72	-3.60	-7.50	15.68
5	12/19/01	Map 6			0.53	1.70	14.72	0.26	0.53	15.68
6	12/19/01	Map 6			-0.47	-1.49	14.72	1.40	2.92	15.68
7	12/19/01	Map 6			0.53	1.70	14.72	-3.74	-7.81	15.68
8	12/19/01	Map 6			-0.47	-1.49	14.72	-3.60	-7.50	15.68
9	12/19/01	Map 6			-0.47	-1.49	14.72	-3.60	-7.50	15.68
10	12/19/01	Map 6			-0.47	-1.49	14.72	-2.60	-5.42	15.68
11	12/19/01	Map 6			-0.47	-1.49	14.72	-1.60	-3.34	15.68
12	12/19/01	Map 6			-0.47	-1.49	14.72	-1.60	-3.34	15.68
13	12/19/01	Map 6			-0.47	-1.49	14.72	-3.60	-7.50	15.68
14	12/19/01	Map 6			-0.47	-1.49	14.72	-2.60	-5.42	15.68
15	12/19/01	Map 6			-0.47	-1.49	14.72	-0.60	-1.25	15.68
16	12/19/01	Map 6			-0.47	-1.49	14.72	1.40	2.92	15.68
17	12/19/01	Map 6			-0.47	-1.49	14.72	-3.60	-7.50	15.68
18	12/19/01	Map 6			-0.47	-1.49	14.72	-2.60	-5.42	15.68
19	12/19/01	Map 6			-0.47	-1.49	14.72	-0.60	-1.25	15.68
20	12/19/01	Map 6			-0.47	-1.49	14.72	-2.60	-5.42	15.68

Radiological Survey Logsheet Continuation

Pratt & Whitney,North Haven, Final Radiological survey — Page 2 of 38

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
21	12/19/01	Map 6			-0.47	-1.49	14.72	-0.60	-1.25	15.68
22	12/19/01	Map 6			-0.47	-1.49	14.72	-1.60	-3.34	15.68
23	12/19/01	Map 6			-0.47	-1.49	14.72	-2.60	-5.42	15.68
24	12/19/01	Map 6			-0.47	-1.49	14.72	-0.60	-1.25	15.68
25	12/19/01	Map 6			-0.47	-1.49	14.72	0.40	0.83	15.68
26	12/19/01	Map 6			-0.47	-1.49	14.72	-3.60	-7.50	15.68
27	12/19/01	Map 6			-0.47	-1.49	14.72	1.40	2.92	15.68
28	12/19/01	Map 6			-0.47	-1.49	14.72	-0.60	-1.25	15.68
29	12/19/01	Map 6			1.53	4.89	14.72	1.98	4.14	15.68
30	12/19/01	Map 6			-0.47	-1.49	14.72	0.40	0.83	15.68
31	12/19/01	Map 6			-0.47	-1.49	14.72	-2.60	-5.42	15.68
32	12/19/01	Map 6			-0.47	-1.49	14.72	-2.60	-5.42	15.68
33	12/19/01	Map 6			-0.47	-1.49	14.72	-3.60	-7.50	15.68
34	12/19/01	Map 6			-0.47	-1.49	14.72	-0.60	-1.25	15.68
35	12/19/01	Map 6			-0.47	-1.49	14.72	-3.60	-7.50	15.68
36	12/19/01	Map 6			-0.47	-1.49	14.72	-1.60	-3.34	15.68
37	12/19/01	Map 6			0.53	1.70	14.72	0.26	0.53	15.68
38	12/19/01	Map 6			-0.47	-1.49	14.72	-3.60	-7.50	15.68
39	12/19/01	Map 6			-0.47	-1.49	14.72	-2.60	-5.42	15.68
40	12/19/01	Map 6			-0.47	-1.49	14.72	1.40	2.92	15.68
41	12/19/01	Map 6			-0.47	-1.49	14.72	-1.60	-3.34	15.68
42	12/19/01	Map 6			0.53	1.70	14.72	4.26	8.87	15.68
43	12/19/01	Map 6			-0.47	-1.49	14.72	-1.60	-3.34	15.68
44	12/19/01	Map 6			-0.47	-1.49	14.72	-2.60	-5.42	15.68
45	12/19/01	Map 6			-0.47	-1.49	14.72	-1.60	-3.34	15.68
46	12/19/01	Map 6			1.53	4.89	14.72	2.98	6.22	15.68
57	12/19/01	Map 6			1.53	4.89	14.72	1.98	4.14	15.68
48	12/19/01	Map 6			-0.47	-1.49	14.72	-2.60	-5.42	15.68
49	12/19/01	Map 6			-0.47	-1.49	14.72	2.40	5.00	15.68
50	12/19/01	Map 6			-0.47	-1.49	14.72	-0.60	-1.25	15.68
51	12/19/01	Map 6			-0.47	-1.49	14.72	-0.60	-1.25	15.68
52	12/19/01	Map 6			-0.47	-1.49	14.72	-2.60	-5.42	15.68
53	12/19/01	Map 6			1.53	4.89	14.72	0.98	2.05	15.68
54	12/19/01	Map 6			0.53	1.70	14.72	-2.74	-5.72	15.68

Radiological Survey Logsheet Continuation

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
55	12/19/01	Map 6			-0.47	-1.49	14.72	-3.60	-7.50	15.68
56	12/19/01	Map 6			-0.47	-1.49	14.72	0.40	0.83	15.68
57	12/19/01	Map 6			-0.47	-1.49	14.72	0.40	0.83	15.68
58	12/19/01	Map 6			0.53	1.70	14.72	-2.74	-5.72	15.68
59	12/19/01	Map 6			-0.47	-1.49	14.72	-2.60	-5.42	15.68
60	12/19/01	Map 6			0.53	1.70	14.72	-2.74	-5.72	15.68
61	12/19/01	Map 6			-0.47	-1.49	14.72	-1.60	-3.34	15.68
62	12/19/01	Map 6			-0.47	-1.49	14.72	1.40	2.92	15.68
63	12/19/01	Map 6			-0.47	-1.49	14.72	-2.60	-5.42	15.68
64	12/19/01	Map 6			-0.47	-1.49	14.72	-0.60	-1.25	15.68
65	12/19/01	Map 6			0.53	1.70	14.72	-1.74	-3.64	15.68
66	12/19/01	Map 6			-0.47	-1.49	14.72	-3.60	-7.50	15.68
67	12/19/01	Map 6			-0.47	-1.49	14.72	-2.60	-5.42	15.68
68	12/19/01	Map 6			-0.47	-1.49	14.72	-1.60	-3.34	15.68
69	12/19/01	Map 6			-0.47	-1.49	14.72	0.40	0.83	15.68
70	12/19/01	Map 6			0.53	1.70	14.72	-1.74	-3.64	15.68
71	12/19/01	Map 6			-0.47	-1.49	14.72	-2.60	-5.42	15.68
72	12/19/01	Map 6			0.53	1.70	14.72	-3.74	-7.81	15.68
73	12/19/01	Map 6			0.53	1.70	14.72	-2.74	-5.72	15.68
74	12/19/01	Map 6			-0.47	-1.49	14.72	-0.60	-1.25	15.68
75	12/19/01	Map 6			-0.47	-1.49	14.72	1.40	2.92	15.68
76	12/19/01	Map 6			-0.47	-1.49	14.72	3.40	7.09	15.68
77	12/19/01	Map 6			0.53	1.70	14.72	3.26	6.79	15.68
78	12/19/01	Map 6			-0.47	-1.49	14.72	0.40	0.83	15.68
79	12/19/01	Map 6			-0.47	-1.49	14.72	-1.60	-3.34	15.68
80	12/19/01	Map 6			0.53	1.70	14.72	-1.74	-3.64	15.68
81	12/19/01	Map 1			-0.47	-1.49	14.72	-0.60	-1.25	15.68
82	12/19/01	Map 1			0.53	1.70	14.72	-1.74	-3.64	15.68
83	12/19/01	Map 1			-0.47	-1.49	14.72	-3.60	-7.50	15.68
84	12/19/01	Map 1			-0.47	-1.49	14.72	-1.60	-3.34	15.68
85	12/19/01	Map 1			-0.47	-1.49	14.72	-2.60	-5.42	15.68
86	12/19/01	Map 1			-0.47	-1.49	14.72	-1.60	-3.34	15.68
87	12/19/01	Map 1			-0.47	-1.49	14.72	-0.60	-1.25	15.68
88	12/19/01	Map 1			0.53	1.70	14.72	-1.74	-3.64	15.68

Radiological Survey Logsheet Continuation

Pratt & Whitney,North Haven, Final Radiological survey

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
89	12/19/01	Map 1			-0.47	-1.49	14.72	-0.60	-1.25	15.68
90	12/19/01	Map 1			0.53	1.70	14.72	-2.74	-5.72	15.68
91	12/19/01	Map 1			0.53	1.70	14.72	-0.74	-1.55	15.68
92	12/19/01	Map 1			-0.47	-1.49	14.72	-1.60	-3.34	15.68
93	12/19/01	Map 1			2.53	8.07	14.72	-3.29	-6.85	15.68
94	12/19/01	Map 1			0.53	1.70	14.72	-0.74	-1.55	15.68
95	12/19/01	Map 1			-0.47	-1.49	14.72	-3.60	-7.50	15.68
96	12/19/01	Map 1			-0.47	-1.49	14.72	-1.60	-3.34	15.68
97	12/19/01	Map 1			-0.47	-1.49	14.72	-2.60	-5.42	15.68
98	12/19/01	Map 1			-0.47	-1.49	14.72	-3.60	-7.50	15.68
99	12/19/01	Map 1			-0.47	-1.49	14.72	0.40	0.83	15.68
100	12/19/01	Map 1			-0.27	-0.85	13.75	3.10	6.46	12.92
101	12/19/01	Map 1			-0.27	-0.85	13.75	-0.90	-1.88	12.92
102	12/19/01	Map 1			0.73	2.34	13.75	-1.10	-2.29	12.92
103	12/19/01	Map 1			-0.27	-0.85	13.75	-1.90	-3.96	12.92
104	12/19/01	Map 1			-0.27	-0.85	13.75	-0.90	-1.88	12.92
105	12/19/01	Map 1			-0.27	-0.85	13.75	-1.90	-3.96	12.92
106	12/19/01	Map 1			-0.27	-0.85	13.75	-0.90	-1.88	12.92
107	12/19/01	Map 1			-0.27	-0.85	13.75	1.10	2.29	12.92
108	12/19/01	Map 1			-0.27	-0.85	13.75	1.10	2.29	12.92
109	12/19/01	Map 1			-0.27	-0.85	13.75	0.10	-1.88	12.92
110	12/19/01	Map 1			-0.27	-0.85	13.75	0.10	0.21	12.92
111	12/19/01	Map 1			-0.27	-0.85	13.75	1.10	2.29	12.92
112	12/19/01	Map 1			0.73	2.34	13.75	-0.10	-0.21	12.92
113	12/19/01	Map 1			0.73	2.34	13.75	1.90	3.96	12.92
114	12/19/01	Map 1			-0.27	-0.85	13.75	-1.90	-3.96	12.92
115	12/19/01	Map 1			-0.27	-0.85	13.75	0.10	0.21	12.92
116	12/19/01	Map 1			1.73	5.52	13.75	1.63	3.40	12.92
117	12/19/01	Map 1			0.73	2.34	13.75	-1.10	-2.29	12.92
118	12/19/01	Map 1			-0.27	-0.85	13.75	-1.90	-3.96	12.92
119	12/19/01	Map 1			-0.27	-0.85	13.75	1.10	2.29	12.92
120	12/19/01	Map 1			-0.27	-0.85	13.75	3.10	6.46	12.92
121	12/19/01	Map 1			-0.27	-0.85	13.75	-1.90	-3.96	12.92
122	12/19/01	Map 1			-0.27	-0.85	13.75	0.10	0.21	12.92

Radiological Survey Logsheet Continuation

Pratt & Whitney,North Haven, Final Radiological survey

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
123	12/19/01	Map 1			-0.27	-0.85	13.75	-0.90	-1.88	12.92
124	12/19/01	Map 1			-0.27	-0.85	13.75	0.10	0.21	12.92
125	12/19/01	Map 1			-0.27	-0.85	13.75	-0.90	-1.88	12.92
126	12/19/01	Map 1			-0.27	-0.85	13.75	-0.90	-1.88	12.92
127	12/19/01	Map 1			-0.27	-0.85	13.75	-0.90	-1.88	12.92
128	12/19/01	Map 1			0.73	2.34	13.75	2.90	6.05	12.92
129	12/19/01	Map 1			-0.27	-0.85	13.75	0.10	0.21	12.92
130	12/19/01	Map 1			-0.27	-0.85	13.75	0.10	0.21	12.92
131	12/19/01	Map 1			-0.27	-0.85	13.75	-1.90	-3.96	12.92
132	12/19/01	Map 1			-0.27	-0.85	13.75	0.10	0.21	12.92
133	12/19/01	Map 1			-0.27	-0.85	13.75	-1.90	-3.96	12.92
134	12/19/01	Map 1			-0.27	-0.85	13.75	0.10	0.21	12.92
135	12/19/01	Map 1			-0.27	-0.85	13.75	-0.90	-1.88	12.92
136	12/19/01	Map 1			-0.27	-0.85	13.75	-1.90	-3.96	12.92
137	12/19/01	Map 1			-0.27	-0.85	13.75	-1.90	-3.96	12.92
138	12/19/01	Map 1			-0.27	-0.85	13.75	-0.90	-1.88	12.92
139	12/19/01	Map 1			-0.27	-0.85	13.75	0.10	0.21	12.92
140	12/19/01	Map 1			-0.27	-0.85	13.75	-0.90	-1.88	12.92
141	12/19/01	Map 1			-0.27	-0.85	13.75	1.10	2.29	12.92
142	12/19/01	Map 1			1.73	5.52	13.75	0.63	1.31	12.92
143	12/19/01	Map 1			-0.27	-0.85	13.75	3.10	6.46	12.92
144	12/19/01	Map 1			0.73	2.34	13.75	-0.10	-0.21	12.92
145	12/19/01	Map 1			0.73	2.34	13.75	-0.10	-0.21	12.92
146	12/19/01	Map 1			-0.27	-0.85	13.75	-0.90	-1.88	12.92
147	12/19/01	Map 1			-0.27	-0.85	13.75	0.10	0.21	12.92
148	12/19/01	Map 1			-0.27	-0.85	13.75	0.10	0.21	12.92
149	12/19/01	Map 1			-0.27	-0.85	13.75	-0.90	-1.88	12.92
150	12/19/01	Map 1			2.73	8.71	13.75	0.36	0.75	12.92
151	12/19/01	Map 1			1.73	5.52	13.75	-0.37	-0.77	12.92
152	12/19/01	Map 1			-0.27	-0.85	13.75	0.10	0.21	12.92
153	12/19/01	Map 1			-0.27	-0.85	13.75	4.10	8.55	12.92
154	12/19/01	Map 1			-0.27	-0.85	13.75	-0.90	-1.88	12.92
155	12/19/01	Map 1			-0.27	-0.85	13.75	3.10	6.46	12.92
156	12/19/01	Map 1			-0.27	-0.85	13.75	-0.90	-1.88	12.92

Radiological Survey Logsheet Continuation

Pratt & Whitney,North Haven, Final Radiological survey

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
157	12/19/01	Map 1			0.73	2.34	13.75	-1.10	-2.29	12.92
158	12/19/01	Map 1			0.73	2.34	13.75	-2.10	-4.37	12.92
159	12/19/01	Map 1			1.73	5.52	13.75	-3.70	-0.77	12.92
160	12/19/01	Map 1			0.73	2.34	13.75	2.90	6.05	12.92
161	12/19/01	Map 1			-0.27	-0.85	13.75	-0.90	-1.88	12.92
161B	12/19/01	Map 7			0.73	2.34	13.75	-1.10	-2.29	12.92
162	12/19/01	Map 1			-0.27	-0.85	13.75	-1.90	-3.96	12.92
162B	12/19/01	Map 7			-0.27	-0.85	13.75	-0.90	-1.88	12.92
163	12/19/01	Map 1			-0.27	-0.85	13.75	-0.90	-1.88	12.92
163B	12/19/01	Map 7			-0.27	-0.85	13.75	-1.90	-3.96	12.92
164	12/19/01	Map 7			-0.27	-0.85	13.75	-1.90	-3.96	12.92
165	12/19/01	Map 7			-0.27	-0.85	13.75	2.10	4.38	12.92
166	12/19/01	Map 7			-0.27	-0.85	13.75	-1.90	-3.96	12.92
167	12/19/01	Map 7			-0.27	-0.85	13.75	2.10	4.38	12.92
168	12/19/01	Map 7			0.73	2.34	13.75	1.90	3.96	12.92
169	12/19/01	Map 7			-0.27	-0.85	13.75	-0.90	-1.88	12.92
170	12/19/01	Map 7			1.73	5.52	13.75	-0.37	-0.77	12.92
171	12/19/01	Map 7			-0.27	-0.85	13.75	0.10	0.21	12.92
172	12/19/01	Map 7			-0.27	-0.85	13.75	-1.90	-1.88	12.92
173	12/19/01	Map 7			-0.27	-0.85	13.75	-0.90	1.88	12.92
174	12/19/01	Map 7			0.73	2.34	13.75	0.90	-1.88	12.92
175	12/19/01	Map 7			-0.27	-0.85	13.75	-1.90	-3.96	12.92
176	12/19/01	Map 7			-0.27	-0.85	13.75	0.10	0.21	12.92
177	12/19/01	Map 7			-0.27	-0.85	13.75	-0.90	-1.88	12.92
178	12/19/01	Map 7			-0.27	-0.85	13.75	6.10	12.72	12.92
179	12/19/01	Map 7			0.73	2.34	13.75	0.90	1.88	12.92
180	12/19/01	Map 7			1.73	5.52	13.75	2.63	5.48	12.92
181	12/19/01	Map 7			-0.27	-0.85	13.75	-0.90	-1.88	12.92
182	12/19/01	Map 7			-0.27	-0.85	13.75	-1.90	-3.96	12.92
183	12/19/01	Map 7			-0.27	-0.85	13.75	-0.90	-1.88	12.92
184	12/19/01	Map 7			-0.27	-0.85	13.75	-0.90	-1.88	12.92
185	12/19/01	Map 7			-0.27	-0.85	13.75	1.10	2.29	12.92
186	12/19/01	Map 7			-0.27	-0.85	13.75	3.10	6.46	12.92
187	12/19/01	Map 7			-0.27	-0.85	13.75	2.10	4.38	12.92

Radiological Survey Logsheet Continuation

Pratt & Whitney,North Haven, Final Radiological survey

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
188	12/19/01	Map 7			0.73	2.34	13.75	-1.10	-2.29	12.92
189	12/19/01	Map 7			-0.27	-0.85	13.75	0.10	0.21	12.92
190	12/19/01	Map 7			-0.27	-0.85	13.75	-1.90	-3.96	12.92
191	12/19/01	Map 7			-0.27	-0.85	13.75	1.90	3.96	12.92
192	12/19/01	Map 7			0.73	2.34	13.75	-0.10	-0.21	12.92
193	12/19/01	Map 7			0.73	2.34	13.75	0.90	1.88	12.92
194	12/19/01	Map 7			0.73	2.34	13.75	-2.10	-4.37	12.92
195	12/19/01	Map 7			-0.27	-0.85	13.75	0.10	0.21	12.92
196	12/20/01	Map 7		*	0.73	2.34	13.75	7.90	16.47	12.92
197	12/20/01	Map 7			1.73	5.52	13.75	0.63	1.31	12.92
198	12/20/01	Map 7			0.73	2.34	13.75	-2.10	-4.37	12.92
199	12/20/01	Map 7			2.73	8.71	13.75	-0.64	-1.34	12.92
200	12/20/01	Map 7			-0.27	-0.85	13.75	3.10	6.46	12.92
201	12/20/01	Map 7			-0.27	-0.85	13.75	-1.90	-3.96	12.92
202	12/20/01	Map 7			-0.27	-0.85	13.75	3.10	6.46	12.92
203	12/20/01	Map 7			-0.27	-0.85	13.75	-1.90	-3.96	12.92
204	12/20/01	Map 7			0.73	2.34	13.75	1.90	3.96	12.92
205	12/20/01	Map 7			1.73	5.52	13.75	-0.37	-0.77	12.92
206	12/20/01	Map 7			0.73	2.34	13.75	4.90	10.22	12.92
207	12/20/01	Map 7			0.73	2.34	13.75	-0.10	-0.21	12.92
208	12/20/01	Map 7			-0.27	-0.85	13.75	-1.90	-3.96	12.92
209	12/20/01	Map 7			-0.27	-0.85	13.75	-0.90	-1.88	12.92
210	12/20/01	Map 7			-0.27	-0.85	13.75	2.10	4.38	12.92
211	12/20/01	Map 7			-0.27	-0.85	13.75	-0.90	-1.88	12.92
212	12/20/01	Map 7			-0.27	-0.85	13.75	0.10	0.21	12.92
213	12/20/01	Map 7			-0.27	-0.85	13.75	-0.90	-1.88	12.92
214	12/20/01	Map 7			-0.27	-0.85	13.75	0.10	0.21	12.92
215	12/20/01	Map 7			-0.27	-0.85	13.75	0.10	0.21	12.92
216	12/20/01	Map 7			-0.27	-0.85	13.75	-1.90	-3.96	12.92
217	12/20/01	Map 7			-0.27	-0.85	13.75	-0.90	-1.88	12.92
218	12/20/01	Map 7			-0.27	-0.85	13.75	0.10	0.21	12.92
219	12/20/01	Map 7			-0.27	-0.85	13.75	1.10	2.29	12.92
220	12/20/01	Map 7			-0.27	-0.85	13.75	3.10	6.46	12.92
221	12/20/01	Map 7			-0.27	-0.85	13.75	-0.90	-1.88	12.92

Radiological Survey Logsheet Continuation

Pratt & Whitney,North Haven, Final Radiological survey

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
222	12/20/01	Map 7			-0.27	-0.85	13.75	-0.90	-1.88	12.92
223	12/20/01	Map 7			-0.27	-0.85	13.75	0.10	0.21	12.92
224	12/20/01	Map 7			-0.27	-0.85	13.75	-1.90	-3.96	12.92
225	12/20/01	Map 7			-0.27	-0.85	13.75	2.10	4.38	12.92
226	12/20/01	Map 7			-0.27	-0.85	13.75	-1.90	-3.96	12.92
227	12/20/01	Map 7			-0.27	-0.85	13.75	1.10	2.29	12.92
228	12/20/01	Map 7			-0.27	-0.85	13.75	0.10	0.21	12.92
229	12/20/01	Map 7			-0.27	-0.85	13.75	0.10	0.21	12.92
230	12/20/01	Map 7			-0.27	-0.85	13.75	1.10	2.29	12.92
231	12/20/01	Map 7			-0.27	-0.85	13.75	-0.90	-1.88	12.92
232	12/20/01	Map 7			-0.27	-0.85	13.75	-0.90	-1.88	12.92
233	12/20/01	Map 7			0.73	2.34	13.75	0.90	1.88	12.92
234	12/20/01	Map 7			2.73	8.71	13.75	-0.64	-1.34	12.92
235	12/20/01	Map 7			-0.27	-0.85	13.75	6.10	12.72	12.92
236	12/20/01	Map 7			-0.27	-0.85	13.75	1.10	2.29	12.92
237	12/20/01	Map 7			0.73	2.34	13.75	2.90	6.05	12.92
238	12/20/01	Map 7			-0.27	-0.85	13.75	0.10	0.21	12.92
239	12/20/01	Map 7			-0.27	-0.85	13.75	2.10	4.38	12.92
240	12/20/01	Map 7			1.73	5.52	13.75	2.63	5.48	12.92
241	12/20/01	Map 7			1.73	5.52	13.75	1.63	3.40	12.92
242	12/20/01	Map 7			0.73	2.34	13.75	-1.10	-2.29	12.92
243	12/20/01	Map 7			2.73	8.71	13.75	3.36	7.00	12.92
244	12/20/01	Map 7			0.73	2.34	13.75	2.90	6.05	12.92
245	12/20/01	Map 7			1.73	5.52	13.75	1.63	3.40	12.92
246	12/20/01	Map 7			0.73	2.34	13.75	-0.10	-0.21	12.92
247	12/20/01	Map 7			0.73	2.34	13.75	-0.10	-0.21	12.92
248	12/20/01	Map 7			-0.27	-0.85	13.75	0.10	0.21	12.92
249	12/20/01	Map 7			0.73	2.34	13.75	1.90	3.96	12.92
250	12/20/01	Map 7			3.73	11.90	13.75	2.09	4.35	12.92
251	12/20/01	Map 7			-0.27	-0.85	13.75	4.10	8.55	12.92
252	12/20/01	Map 7			1.73	5.52	13.75	4.63	9.65	12.92
253	12/20/01	Map 7			0.73	2.34	13.75	1.90	3.96	12.92
254	12/20/01	Map 7		*	1.73	5.52	13.75	6.63	13.82	12.92
255	12/20/01	Map 7			-0.27	-0.85	13.75	0.10	0.21	12.92

Radiological Survey Logsheet Continuation

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
256	12/20/01	Map 7			-0.27	-0.85	13.75	0.10	0.21	12.92
257	12/20/01	Map 7			-0.27	-0.85	13.75	-0.90	-1.88	12.92
258	12/20/01	Map 7			-0.27	-0.85	13.75	-0.90	-1.88	12.92
259	12/20/01	Map 7			-0.27	-0.85	13.75	3.10	6.46	12.92
260	12/20/01	Map 7			1.73	5.52	13.75	2.63	5.48	12.92
261	12/20/01	Map 7			-0.27	-0.85	13.75	4.10	8.55	12.92
262	12/20/01	Map 7			0.73	2.34	13.75	-1.10	-2.29	12.92
263	12/20/01	Map 7			0.73	2.34	13.75	-0.10	-0.21	12.92
264	12/20/01	Map 7			-0.27	-0.85	13.75	3.10	6.46	12.92
265	12/20/01	Map 7			2.73	8.71	13.75	1.36	2.83	12.92
266	12/20/01	Map 7			0.73	2.34	13.75	-0.10	-0.21	12.92
267	12/20/01	Map 7			0.73	2.34	13.75	0.90	1.88	12.92
268	12/20/01	Map 7			0.73	2.34	13.75	0.90	1.88	12.92
269	12/20/01	Map 7			0.73	2.34	13.75	1.90	3.96	12.92
270	12/20/01	Map 7		*	1.73	5.52	13.75	7.63	15.91	12.92
271	12/20/01	Map 7			2.73	8.71	13.75	0.36	0.75	12.92
272	12/20/01	Map 7			0.73	2.34	13.75	1.90	3.96	12.92
273	12/20/01	Map 7			0.73	2.34	13.75	1.90	3.96	12.92
274	12/20/01	Map 7			0.73	2.34	13.75	4.90	10.22	12.92
275	12/20/01	Map 7			1.73	5.52	13.75	1.63	3.40	12.92
276	12/20/01	Map 7			-0.27	-0.85	13.75	3.10	6.46	12.92
277	12/20/01	Map 7			0.73	2.34	13.75	1.90	3.96	12.92
278	12/20/01	Map 7			-0.27	-0.85	13.75	0.10	0.21	12.92
279	12/20/01	Map 7			2.73	8.71	13.75	2.36	4.92	12.92
280	12/20/01	Map 7	*	*	4.73	15.08	13.75	9.82	20.47	12.92
281	12/20/01	Map 7			1.73	5.52	13.75	-1.37	-2.86	12.92
282	12/20/01	Map 7			3.73	11.90	13.75	6.09	12.69	12.92
283	12/20/01	Map 7			1.73	5.52	13.75	2.63	5.48	12.92
284	12/20/01	Map 7			0.73	2.34	13.75	3.90	8.13	12.92
285	12/20/01	Map 7			0.73	2.34	13.75	-0.10	-0.21	12.92
286	12/20/01	Map 7			-0.27	-0.85	13.75	5.10	10.63	12.92
287	12/20/01	Map 7			0.73	2.34	13.75	-1.10	-2.29	12.92
288	12/20/01	Map 7			-0.27	-0.85	13.75	-1.90	-3.96	12.92
289	12/20/01	Map 7			-0.27	-0.85	13.75	4.10	8.55	12.92

Radiological Survey Logsheet Continuation

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
290	12/20/01	Map 7	*		4.73	15.08	13.75	3.82	7.96	12.92
291	12/20/01	Map 7			1.73	5.52	13.75	3.63	7.57	12.92
292	12/20/01	Map 7			1.73	5.52	13.75	1.63	3.40	12.92
293	12/20/01	Map 7			0.73	2.34	13.75	3.90	8.13	12.92
294	12/21/01	Map 7			-0.40	-1.27	14.41	-2.00	-4.17	13.10
295	12/21/01	Map 7			-0.40	-1.27	14.41	1.00	2.08	13.10
296	12/21/01	Map 7			0.60	1.91	14.41	-1.16	-2.42	13.10
297	12/21/01	Map 7			-0.40	-1.27	14.41	3.00	6.25	13.10
298	12/21/01	Map 7			-0.40	-1.27	14.41	-2.00	-4.17	13.10
299	12/21/01	Map 7			-0.40	-1.27	14.41	4.00	8.34	13.10
300	12/21/01	Map 7			-0.40	-1.27	14.41	-2.00	-4.17	13.10
301	12/21/01	Map 7			-0.40	-1.27	14.41	-2.00	-4.17	13.10
302	12/21/01	Map 7			0.60	1.91	14.41	2.84	5.92	13.10
303	12/21/01	Map 7			-0.40	-1.27	14.41	-2.00	-4.17	13.10
304	12/21/01	Map 7			-0.40	-1.27	14.41	-1.00	-2.08	13.10
305	12/21/01	Map 7			0.60	1.91	14.41	-0.16	-0.34	13.10
306	12/21/01	Map 7			-0.40	-1.27	14.41	0.00	0.00	13.10
307	12/21/01	Map 7			-0.40	-1.27	14.41	2.00	4.17	13.10
308	12/21/01	Map 7			-0.40	-1.27	14.41	2.00	4.17	13.10
309	12/21/01	Map 7			-0.40	-1.27	14.41	-2.00	-4.17	13.10
310	12/21/01	Map 7			0.60	1.91	14.41	-2.16	-4.51	13.10
311	12/21/01	Map 7			0.60	1.91	14.41	1.84	3.83	13.10
312	12/21/01	Map 7			-0.40	-1.27	14.41	2.00	4.17	13.10
313	12/21/01	Map 7			0.60	1.91	14.41	-0.16	-0.34	13.10
314	12/21/01	Map 7			-0.40	-1.27	14.41	0.00	0.00	13.10
315	12/21/01	Map 7			-0.40	-1.27	14.41	0.00	0.00	13.10
316	12/21/01	Map 7			-0.40	-1.27	14.41	2.00	4.17	13.10
317	12/21/01	Map 7			-0.40	-1.27	14.41	-2.00	-4.17	13.10
318	12/21/01	Map 7			0.60	1.91	14.41	-2.16	-4.51	13.10
319	12/21/01	Map 7			-0.40	-1.27	14.41	-1.00	-2.08	13.10
320	12/21/01	Map 7			-0.40	-1.27	14.41	-1.00	-2.08	13.10
321	12/21/01	Map 7			0.60	1.91	14.41	0.84	1.75	13.10
322	12/21/01	Map 7			-0.40	-1.27	14.41	0.00	0.00	13.10
323	12/21/01	Map 7			0.60	1.91	14.41	-0.16	-0.34	13.10

Radiological Survey Logsheet Continuation

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
324	12/21/01	Map 7			-0.40	-1.27	14.41	-2.00	-4.17	13.10
325	12/21/01	Map 7			0.60	1.91	14.41	0.84	1.75	13.10
326	12/21/01	Map 7			-0.40	-1.27	14.41	2.00	4.17	13.10
327	12/21/01	Map 7			0.60	1.91	14.41	-0.16	-0.34	13.10
328	12/21/01	Map 7			-0.40	-1.27	14.41	2.00	4.17	13.10
329	12/21/01	Map 7			-0.40	-1.27	14.41	0.00	0.00	13.10
330	12/21/01	Map 7			-0.40	-1.27	14.41	0.00	0.00	13.10
331	12/21/01	Map 7			0.60	1.91	14.41	-1.16	-2.42	13.10
332	12/21/01	Map 7			-0.40	-1.27	14.41	2.00	4.17	13.10
333	12/21/01	Map 2			-0.40	-1.27	14.41	-1.00	-2.08	13.10
334	12/21/01	Map 2			-0.40	-1.27	14.41	3.00	6.25	13.10
335	12/21/01	Map 2			-0.40	-1.27	14.41	-2.00	-4.17	13.10
336	12/21/01	Map 2			-0.40	-1.27	14.41	1.00	2.08	13.10
337	12/21/01	Map 2			-0.40	-1.27	14.41	-1.00	-2.08	13.10
338	12/21/01	Map 2			-0.40	-1.27	14.41	-1.00	-2.08	13.10
339	12/21/01	Map 2			-0.40	-1.27	14.41	2.00	4.17	13.10
340	12/21/01	Map 2			-0.40	-1.27	14.41	2.00	4.17	13.10
341	12/21/01	Map 2			0.60	1.91	14.41	-0.16	-0.34	13.10
342	12/21/01	Map 2			-0.40	-1.27	14.41	2.00	4.17	13.10
343	12/21/01	Map 2			0.60	1.91	14.41	3.84	8.00	13.10
344	12/21/01	Map 2			-0.40	-1.27	14.41	-2.00	-4.17	13.10
345	12/21/01	Map 2			-0.40	-1.27	14.41	-1.00	-2.08	13.10
346	12/21/01	Map 2			0.60	1.91	14.41	-2.16	-4.51	13.10
347	12/21/01	Map 2			-0.40	-1.27	14.41	3.00	6.25	13.10
348	12/21/01	Map 2			-0.40	-1.27	14.41	-1.00	-2.08	13.10
349	12/21/01	Map 2			-0.40	-1.27	14.41	3.00	6.25	13.10
350	12/21/01	Map 2			0.60	1.91	14.41	-1.16	-2.42	13.10
351	12/21/01	Map 2			-0.40	-1.27	14.41	-1.00	-2.08	13.10
352	12/21/01	Map 2			-0.40	-1.27	14.41	1.00	2.08	13.10
353	12/21/01	Map 2			-0.40	-1.27	14.41	1.00	2.08	13.10
354	12/21/01	Map 2			-0.40	-1.27	14.41	-1.00	-2.08	13.10
355	12/21/01	Map 2			0.60	1.91	14.41	1.84	3.83	13.10
356	12/21/01	Map 2			-0.40	-1.27	14.41	0.00	0.00	13.10
357	12/21/01	Map 2			0.60	1.91	14.41	-0.16	-0.34	13.10

Radiological Survey Logsheet Continuation

Pratt & Whitney,North Haven, Final Radiological survey

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
358	12/21/01	Map 2			-0.40	-1.27	14.41	0.00	0.00	13.10
359	12/21/01	Map 2			-0.40	-1.27	14.41	1.00	2.08	13.10
360	12/21/01	Map 2			-0.40	-1.27	14.41	0.00	0.00	13.10
361	12/21/01	Map 2			0.60	1.91	14.41	-2.16	-4.51	13.10
362	12/21/01	Map 2			0.60	1.91	14.41	-2.16	-4.51	13.10
363	12/21/01	Map 2			0.60	1.91	14.41	2.84	5.92	13.10
364	12/21/01	Map 2			1.60	5.10	14.41	-1.43	-2.99	13.10
365	12/21/01	Map 2			-0.40	-1.27	14.41	0.00	0.00	13.10
366	12/21/01	Map 2			0.60	1.91	14.41	1.84	3.83	13.10
367	12/21/01	Map 2			-0.40	-1.27	14.41	5.00	10.42	13.10
368	12/21/01	Map 2			-0.40	-1.27	14.41	0.00	0.00	13.10
369	12/21/01	Map 2			-0.40	-1.27	14.41	0.00	0.00	13.10
370	12/21/01	Map 2			1.60	5.10	14.41	1.57	3.27	13.10
371	12/21/01	Map 2			-0.40	-1.27	14.41	-1.00	-2.08	13.10
372	12/21/01	Map 2			-0.40	-1.27	14.41	0.00	0.00	13.10
373	12/21/01	Map 2			-0.40	-1.27	14.41	-2.00	-4.17	13.10
374	12/21/01	Map 2			-0.40	-1.27	14.41	-2.00	-4.17	13.10
375	12/21/01	Map 2			0.60	1.91	14.41	2.84	5.92	13.10
376	12/21/01	Map 2			0.60	1.91	14.41	4.84	10.08	13.10
377	12/21/01	Map 2			-0.40	-1.27	14.41	-2.00	-4.17	13.10
378	12/21/01	Map 2			-0.40	-1.27	14.41	-1.00	-2.08	13.10
379	12/21/01	Map 2			-0.40	-1.27	14.41	-1.00	-2.08	13.10
380	12/21/01	Map 2			-0.40	-1.27	14.41	-2.00	-4.17	13.10
381	12/21/01	Map 2			-0.40	-1.27	14.41	-2.00	-4.17	13.10
382	12/21/01	Map 2			0.60	1.91	14.41	-2.16	-4.51	13.10
383	12/21/01	Map 2			-0.40	-1.27	14.41	1.00	2.08	13.10
384	12/21/01	Map 2			0.60	1.91	14.41	1.84	3.83	13.10
385	12/21/01	Map 2			0.60	1.91	14.41	2.84	5.92	13.10
386	12/21/01	Map 2			0.60	1.91	14.41	2.84	5.92	13.10
387	12/21/01	Map 2			-0.40	-1.27	14.41	-2.00	-4.17	13.10
388	12/21/01	Map 2			0.60	1.91	14.41	2.84	5.92	13.10
389	12/21/01	Map 2			1.60	5.10	14.41	-0.43	-0.90	13.10
390	12/21/01	Map 2			-0.40	-1.27	14.41	-2.00	-4.17	13.10
391	12/21/01	Map 2			-0.40	-1.27	14.41	-2.00	-4.17	13.10

Radiological Survey Logsheet Continuation

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
392	12/21/01	Map 2			0.60	1.91	14.41	-2.16	-4.51	13.10
393	12/21/01	Map 2			1.53	4.89	14.72	0.15	0.32	13.87
394	12/21/01	Map 2			1.53	4.89	14.72	0.15	0.32	13.87
395	12/21/01	Map 2			0.53	1.70	14.72	-0.58	-1.20	13.87
396	12/21/01	Map 2			0.53	1.70	14.72	-0.58	-1.20	13.87
397	12/21/01	Map 2			-0.47	-1.49	14.72	-1.43	-2.99	13.87
398	12/21/01	Map 2			-0.47	-1.49	14.72	2.57	5.35	13.87
399	12/21/01	Map 2			0.53	1.70	14.72	3.42	7.13	13.87
400	12/21/01	Map 2			-0.47	-1.49	14.72	0.57	1.18	13.87
401	12/21/01	Map 2			-0.47	-1.49	14.72	-1.43	-2.99	13.87
402	12/21/01	Map 2			-0.47	-1.49	14.72	0.57	1.18	13.87
403	12/21/01	Map 2			-0.47	-1.49	14.72	-0.43	-0.90	13.87
404	12/21/01	Map 2			0.53	1.70	14.72	-0.58	-1.20	13.87
405	12/21/01	Map 2			-0.47	-1.49	14.72	-2.43	-5.07	13.87
406	12/21/01	Map 2			-0.47	-1.49	14.72	-0.43	-0.90	13.87
407	12/21/01	Map 2			-0.47	-1.49	14.72	-0.43	-0.90	13.87
408	12/21/01	Map 2			-0.47	-1.49	14.72	-0.43	-0.90	13.87
409	12/21/01	Map 2			-0.47	-1.49	14.72	-0.43	-0.90	13.87
410	12/21/01	Map 2			-0.47	-1.49	14.72	-2.43	-5.07	13.87
411	12/21/01	Map 2			-0.47	-1.49	14.72	-0.43	-0.90	13.87
412	12/21/01	Map 2			0.53	1.70	14.72	1.42	2.96	13.87
413	12/21/01	Map 2			-0.47	-1.49	14.72	-2.43	-5.07	13.87
414	12/21/01	Map 2			-0.47	-1.49	14.72	-0.43	-0.90	13.87
415	12/21/01	Map 2			-0.47	-1.49	14.72	-2.43	-5.07	13.87
416	12/21/01	Map 2			-0.47	-1.49	14.72	-2.43	-5.07	13.87
417	12/21/01	Map 2			-0.47	-1.49	14.72	0.57	1.18	13.87
418	12/21/01	Map 2			-0.47	-1.49	14.72	-0.43	-0.90	13.87
419	12/21/01	Map 2			-0.47	-1.49	14.72	-2.43	-5.07	13.87
420	12/21/01	Map 2			-0.47	-1.49	14.72	-2.43	-5.07	13.87
421	12/21/01	Map 2			-0.47	-1.49	14.72	-2.43	-5.07	13.87
422	12/21/01	Map 2			-0.47	-1.49	14.72	-2.43	-5.07	13.87
423	12/21/01	Map 2			-0.47	-1.49	14.72	2.57	5.35	13.87
424	12/21/01	Map 2			-0.47	-1.49	14.72	-1.43	-2.99	13.87
425	12/21/01	Map 2			-0.47	-1.49	14.72	-0.43	-0.90	13.87

Radiological Survey Logsheet Continuation

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
426	12/21/01	Map 2			-0.47	-1.49	14.72	-1.43	-2.99	13.87
427	12/21/01	Map 2			0.53	1.70	14.72	-0.58	-1.20	13.87
428	12/21/01	Map 2			0.53	1.70	14.72	-2.58	-5.37	13.87
429	12/21/01	Map 2			-0.47	-1.49	14.72	-2.43	-5.07	13.87
430	12/21/01	Map 2			-0.47	-1.49	14.72	-1.43	-2.99	13.87
431	12/21/01	Map 2			0.53	1.70	14.72	-0.58	-1.20	13.87
432	12/21/01	Map 2			-0.47	-1.49	14.72	-0.43	-0.90	13.87
433	12/21/01	Map 2			0.53	1.70	14.72	0.42	0.88	13.87
434	12/21/01	Map 2			-0.47	-1.49	14.72	-0.43	-0.90	13.87
435	12/21/01	Map 2			-0.47	-1.49	14.72	-1.43	-2.99	13.87
436	12/21/01	Map 2			-0.47	-1.49	14.72	-0.43	-0.90	13.87
437	12/21/01	Map 2			-0.47	-1.49	14.72	-1.43	-2.99	13.87
438	12/21/01	Map 2			0.53	1.70	14.72	-0.58	-1.20	13.87
439	12/21/01	Map 2			-0.47	-1.49	14.72	0.57	1.18	13.87
440	12/21/01	Map 2			0.53	1.70	14.72	1.42	2.96	13.87
441	12/21/01	Map 2			-0.47	-1.49	14.72	2.57	5.35	13.87
442	12/21/01	Map 2			-0.47	-1.49	14.72	-2.43	-5.07	13.87
443	12/21/01	Map 2			-0.47	-1.49	14.72	0.57	1.18	13.87
444	12/21/01	Map 2			-0.47	-1.49	14.72	-2.43	-5.07	13.87
445	12/21/01	Map 2			0.53	1.70	14.72	2.42	5.05	13.87
446	12/21/01	Map 2			-0.47	-1.49	14.72	0.57	1.18	13.87
447	12/21/01	Map 2			-0.47	-1.49	14.72	3.57	7.44	13.87
448	12/21/01	Map 2			-0.47	-1.49	14.72	-2.43	-5.07	13.87
449	12/21/01	Map 2			-0.47	-1.49	14.72	-2.43	-5.07	13.87
450	12/21/01	Map 2			0.53	1.70	14.72	-2.58	-5.37	13.87
451	12/21/01	Map 2			-0.47	-1.49	14.72	-0.43	-0.90	13.87
452	12/21/01	Map 2			0.53	1.70	14.72	-2.58	-5.37	13.87
453	12/21/01	Map 2			-0.47	-1.49	14.72	-0.43	-0.90	13.87
454	12/21/01	Map 2			-0.47	-1.49	14.72	-1.43	-2.99	13.87
455	12/21/01	Map 2			-0.47	-1.49	14.72	0.57	1.18	13.87
456	12/21/01	Map 2			-0.47	-1.49	14.72	-2.43	-5.07	13.87
457	12/21/01	Map 2			-0.47	-1.49	14.72	-2.43	-5.07	13.87
458	12/21/01	Map 2			0.53	1.70	14.72	-1.58	-3.29	13.87
459	12/21/01	Map 2			-0.47	-1.49	14.72	-2.43	-5.07	13.87

Radiological Survey Logsheet Continuation

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Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
460	12/21/01	Map 2			-0.47	-1.49	14.72	-1.43	-2.99	13.87
461	12/21/01	Map 2			-0.47	-1.49	14.72	-0.43	-0.90	13.87
462	12/21/01	Map 2			0.53	1.70	14.72	-2.58	-5.37	13.87
463	12/21/01	Map 2			-0.47	-1.49	14.72	0.57	1.18	13.87
464	12/21/01	Map 2			-0.47	-1.49	14.72	-1.43	-2.99	13.87
465	12/21/01	Map 2			0.53	1.70	14.72	1.42	2.96	13.87
466	12/21/01	Map 2			-0.47	-1.49	14.72	-1.43	-2.99	13.87
467	12/21/01	Map 2			-0.47	-1.49	14.72	0.57	1.18	13.87
468	12/21/01	Map 2			-0.47	-1.49	14.72	0.57	1.18	13.87
469	12/21/01	Map 2			-0.47	-1.49	14.72	-0.43	-0.90	13.87
470	12/21/01	Map 2			-0.47	-1.49	14.72	-1.43	-2.99	13.87
471	12/21/01	Map 2			-0.47	-1.49	14.72	4.57	9.52	13.87
472	12/21/01	Map 2			-0.47	-1.49	14.72	-1.43	-2.99	13.87
473	12/21/01	Map 2			-0.47	-1.49	14.72	-1.43	-2.99	13.87
474	12/21/01	Map 2			0.53	1.70	14.72	-0.58	-1.20	13.87
475	12/21/01	Map 2			0.53	1.70	14.72	-2.58	-5.37	13.87
476	12/21/01	Map 2			-0.47	-1.49	14.72	-2.43	-5.07	13.87
477	12/21/01	Map 2			-0.47	-1.49	14.72	-1.43	-2.99	13.87
478	12/21/01	Map 2			-0.47	-1.49	14.72	-0.43	-0.90	13.87
479	12/21/01	Map 2			-0.47	-1.49	14.72	-1.43	-2.99	13.87
480	12/21/01	Map 2			-0.47	-1.49	14.72	1.57	3.27	13.87
481	12/21/01	Map 2			-0.47	-1.49	14.72	-1.43	-2.99	13.87
482	12/21/01	Map 2			-0.47	-1.49	14.72	0.57	1.18	13.87
483	12/21/01	Map 2			0.53	1.70	14.72	0.42	0.88	13.87
484	12/21/01	Map 2			-0.47	-1.49	14.72	4.57	9.52	13.87
485	12/21/01	Map 2			-0.47	-1.49	14.72	0.57	1.18	13.87
486	12/21/01	Map 2			0.53	1.70	14.72	0.42	0.88	13.87
487	12/21/01	Map 2			-0.47	-1.49	14.72	-1.43	-2.99	13.87
488	12/21/01	Map 2			-0.47	-1.49	14.72	-2.43	-5.07	13.87
489	12/21/01	Map 2			-0.47	-1.49	14.72	0.57	1.18	13.87
490	12/21/01	Map 2			-0.47	-1.49	14.72	-1.43	-2.99	13.87
491	12/21/01	Map 2			-0.47	-1.49	14.72	4.57	9.52	13.87
492	12/26/01	Map 2			0.43	1.38	15.16	3.32	6.91	12.27
493	12/26/01	Map 2			-0.57	-1.81	15.16	-0.57	-1.18	12.27

Radiological Survey Logsheet Continuation

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
494	12/26/01	Map 2			-0.57	-1.81	15.16	2.43	5.07	12.27
495	12/26/01	Map 2			0.43	1.38	15.16	3.32	6.91	12.27
496	12/26/01	Map 2			-0.57	-1.81	15.16	4.43	9.24	12.27
497	12/26/01	Map 2			-0.57	-1.81	15.16	1.43	2.99	12.27
498	12/26/01	Map 2			0.43	1.38	15.16	1.32	2.74	12.27
499	12/26/01	Map 2			2.43	7.75	15.16	-2.23	-4.64	12.27
500	12/26/01	Map 2			-0.57	-1.81	15.16	-0.57	-1.18	12.27
501	12/26/01	Map 2			-0.57	-1.81	15.16	5.43	11.33	12.27
502	12/26/01	Map 2			-0.57	-1.81	15.16	0.43	0.90	12.27
503	12/26/01	Map 2			-0.57	-1.81	15.16	-1.57	-3.27	12.27
504	12/26/01	Map 2			3.43	10.94	15.16	-1.50	-3.12	12.27
505	12/26/01	Map 2			-0.57	-1.81	15.16	-1.57	-3.27	12.27
506	12/26/01	Map 2			-0.57	-1.81	15.16	0.43	0.90	12.27
507	12/26/01	Map 2			-0.57	-1.81	15.16	-0.57	-1.18	12.27
508	12/26/01	Map 2			0.43	1.38	15.16	-1.68	-3.51	12.27
509	12/26/01	Map 2			-0.57	-1.81	15.16	-1.57	-3.27	12.27
510	12/26/01	Map 2			-0.57	-1.81	15.16	0.43	0.90	12.27
511	12/26/01	Map 2			0.43	1.38	15.16	2.32	4.83	12.27
512	12/26/01	Map 2			-0.57	-1.81	15.16	0.43	0.90	12.27
513	12/26/01	Map 3			-0.57	-1.81	15.16	1.43	2.99	12.27
514	12/26/01	Map 3			-0.57	-1.81	15.16	1.43	2.99	12.27
515	12/26/01	Map 3			0.43	1.38	15.16	-0.68	-1.43	12.27
516	12/26/01	Map 3			-0.57	-1.81	15.16	0.43	0.90	12.27
517	12/26/01	Map 3			1.43	4.57	15.16	-1.95	-4.08	12.27
518	12/26/01	Map 3			-0.57	-1.81	15.16	-1.57	-3.27	12.27
519	12/26/01	Map 3			-0.57	-1.81	15.16	0.43	0.90	12.27
520	12/26/01	Map 3			0.43	1.38	15.16	-0.68	-1.43	12.27
521	12/26/01	Map 3			-0.57	-1.81	15.16	0.43	0.90	12.27
522	12/26/01	Map 3			-0.57	-1.81	15.16	3.43	7.16	12.27
523	12/26/01	Map 3			0.43	1.38	15.16	-1.68	-3.51	12.27
524	12/26/01	Map 3			-0.57	-1.81	15.16	2.43	5.07	12.27
525	12/26/01	Map 3			-0.57	-1.81	15.16	-0.57	-1.18	12.27
526	12/26/01	Map 3			-0.57	-1.81	15.16	1.43	2.99	12.27
527	12/26/01	Map 3			-0.57	-1.81	15.16	-1.57	-3.27	12.27

Radiological Survey Logsheet Continuation

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
528	12/26/01	Map 3			-0.57	-1.81	15.16	-1.57	-3.27	12.27
529	12/26/01	Map 3			-0.57	-1.81	15.16	1.43	2.99	12.27
530	12/26/01	Map 3			1.43	4.57	15.16	3.05	6.35	12.27
531	12/26/01	Map 3			-0.57	-1.81	15.16	-0.57	-1.18	12.27
532	12/26/01	Map 3			2.43	7.75	15.16	-0.23	-0.47	12.27
533	12/26/01	Map 3			-0.57	-1.81	15.16	0.43	0.90	12.27
534	12/26/01	Map 3			-0.57	-1.81	15.16	1.43	2.99	12.27
535	12/26/01	Map 3			-0.57	-1.81	15.16	1.43	2.99	12.27
536	12/26/01	Map 3			-0.57	-1.81	15.16	1.43	2.99	12.27
537	12/26/01	Map 3			-0.57	-1.81	15.16	0.43	0.90	12.27
538	12/26/01	Map 3			-0.57	-1.81	15.16	1.43	2.99	12.27
539	12/26/01	Map 3			-0.57	-1.81	15.16	0.43	0.90	12.27
540	12/26/01	Map 3		*	-0.57	-1.81	15.16	10.43	21.75	12.27
541	12/26/01	Map 3			1.43	4.57	15.16	0.05	0.09	12.27
542	12/26/01	Map 3			-0.57	-1.81	15.16	5.43	11.33	12.27
543	12/26/01	Map 3			0.43	1.38	15.16	-0.68	-1.43	12.27
544	12/26/01	Map 3		*	-0.57	-1.81	15.16	7.43	15.50	12.27
545	12/26/01	Map 3			0.43	1.38	15.16	1.32	2.74	12.27
546	12/26/01	Map 3			-0.57	-1.81	15.16	2.43	5.07	12.27
547	12/26/01	Map 3			0.43	1.38	15.16	3.32	6.91	12.27
548	12/26/01	Map 3			-0.57	-1.81	15.16	-0.57	-1.18	12.27
549	12/26/01	Map 3			1.43	4.57	15.16	-1.95	-4.08	12.27
550	12/26/01	Map 3			0.43	1.38	15.16	-1.68	-3.51	12.27
551	12/26/01	Map 3			-0.57	-1.81	15.16	-1.57	-3.27	12.27
552	12/26/01	Map 3			0.43	1.38	15.16	3.32	6.91	12.27
553	12/26/01	Map 3			-0.57	-1.81	15.16	0.43	0.90	12.27
554	12/26/01	Map 3			-0.57	-1.81	15.16	1.43	2.99	12.27
555	12/26/01	Map 3			-0.57	-1.81	15.16	1.43	2.99	12.27
556	12/26/01	Map 3			1.43	4.57	15.16	0.05	0.09	12.27
557	12/26/01	Map 3			-0.57	-1.81	15.16	0.43	0.90	12.27
558	12/26/01	Map 3			-0.57	-1.81	15.16	1.43	2.99	12.27
559	12/26/01	Map 3			-0.57	-1.81	15.16	-0.57	-1.18	12.27
560	12/26/01	Map 3			-0.57	-1.81	15.16	2.43	5.07	12.27
561	12/26/01	Map 3			0.43	1.38	15.16	1.32	2.74	12.27

Radiological Survey Logsheet Continuation

Pratt & Whitney,North Haven, Final Radiological survey

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
562	12/26/01	Map 3			0.43	1.38	15.16	0.32	0.66	12.27
563	12/26/01	Map 3			-0.57	-1.81	15.16	5.43	11.33	12.27
564	12/26/01	Map 3			0.43	1.38	15.16	3.32	6.91	12.27
565	12/26/01	Map 3			-0.57	-1.81	15.16	0.43	0.90	12.27
566	12/26/01	Map 3			0.43	1.38	15.16	3.32	6.91	12.27
567	12/26/01	Map 3			-0.57	-1.81	15.16	1.43	2.99	12.27
568	12/26/01	Map 3			1.43	4.57	15.16	-1.95	-4.08	12.27
569	12/26/01	Map 3			-0.57	-1.81	15.16	1.43	2.99	12.27
570	12/26/01	Map 3			0.43	1.38	15.16	-0.68	-1.43	12.27
571	12/26/01	Map 3			-0.57	-1.81	15.16	0.43	0.90	12.27
572	12/26/01	Map 3			0.43	1.38	15.16	2.32	4.83	12.27
573	12/26/01	Map 3			0.43	1.38	15.16	3.32	6.91	12.27
574	12/26/01	Map 3			-0.57	-1.81	15.16	-1.57	-3.27	12.27
575	12/26/01	Map 3			-0.57	-1.81	15.16	2.43	5.07	12.27
576	12/26/01	Map 3			1.43	4.57	15.16	-0.95	-1.99	12.27
577	12/26/01	Map 3			-0.57	-1.81	15.16	1.43	2.99	12.27
578	12/26/01	Map 3			0.43	1.38	15.16	-1.68	-3.51	12.27
579	12/26/01	Map 3		*	1.43	4.57	15.16	6.05	12.60	12.27
580	12/26/01	Map 3			1.43	4.57	15.16	3.05	6.35	12.27
581	12/26/01	Map 3			-0.57	-1.81	15.16	0.43	0.90	12.27
582	12/26/01	Map 3			-0.57	-1.81	15.16	-1.57	-3.27	12.27
583	12/26/01	Map 3			0.43	1.38	15.16	1.32	2.74	12.27
584	12/26/01	Map 3			-0.57	-1.81	15.16	0.43	0.90	12.27
585	12/26/01	Map 3			-0.57	-1.81	15.16	1.43	2.99	12.27
586	12/26/01	Map 3			0.43	1.38	15.16	0.32	0.66	12.27
587	12/26/01	Map 3			0.43	1.38	15.16	2.32	4.83	12.27
588	12/26/01	Map 3			-0.57	-1.81	15.16	1.43	2.99	12.27
589	12/26/01	Map 3			0.43	1.38	15.16	1.32	2.74	12.27
590	12/26/01	Map 3			-0.57	-1.81	15.16	2.43	5.07	12.27
591	12/26/01	Map 3			-0.13	-0.42	13.04	-1.83	-3.82	12.79
592	12/26/01	Map 3			-0.13	-0.42	13.04	4.17	8.69	12.79
593	12/26/01	Map 3			1.87	5.95	13.04	0.66	1.38	12.79
594	12/26/01	Map 3			-0.13	-0.42	13.04	1.17	2.43	12.79
595	12/26/01	Map 3			-0.13	-0.42	13.04	0.17	0.35	12.79

Radiological Survey Logsheet Continuation

Pratt & Whitney,North Haven, Final Radiological survey

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
596	12/26/01	Map 3			-0.13	-0.42	13.04	1.17	2.43	12.79
597	12/26/01	Map 3			-0.13	-0.42	13.04	-0.83	-1.74	12.79
598	12/26/01	Map 3			-0.13	-0.42	13.04	-0.83	-1.74	12.79
599	12/26/01	Map 3			-0.13	-0.42	13.04	0.17	0.35	12.79
600	12/26/01	Map 3			-0.13	-0.42	13.04	-1.83	-3.82	12.79
601	12/26/01	Map 3			-0.13	-0.42	13.04	-0.83	-1.74	12.79
602	12/26/01	Map 3			-0.13	-0.42	13.04	-0.83	-1.74	12.79
603	12/26/01	Map 3			-0.13	-0.42	13.04	-0.83	-1.74	12.79
604	12/26/01	Map 3			-0.13	-0.42	13.04	-1.83	-3.82	12.79
605	12/26/01	Map 3			-0.13	-0.42	13.04	0.17	0.35	12.79
606	12/26/01	Map 3			-0.13	-0.42	13.04	-1.83	-3.82	12.79
607	12/26/01	Map 3			0.87	2.76	13.04	0.93	1.94	12.79
608	12/26/01	Map 3			0.87	2.76	13.04	-1.07	-2.23	12.79
609	12/26/01	Map 3			-0.13	-0.42	13.04	1.17	2.43	12.79
610	12/26/01	Map 3			-0.13	-0.42	13.04	3.17	6.60	12.79
611	12/26/01	Map 3			-0.13	-0.42	13.04	0.17	0.35	12.79
612	12/26/01	Map 3			-0.13	-0.42	13.04	-1.83	-3.82	12.79
613	12/26/01	Map 3			-0.13	-0.42	13.04	-0.83	-1.74	12.79
614	12/26/01	Map 3			-0.13	-0.42	13.04	1.17	2.43	12.79
615	12/26/01	Map 3			-0.13	-0.42	13.04	-1.83	-3.82	12.79
616	12/26/01	Map 3			-0.13	-0.42	13.04	-0.83	-1.74	12.79
617	12/26/01	Map 3			-0.13	-0.42	13.04	1.17	2.43	12.79
618	12/26/01	Map 3			0.87	2.76	13.04	1.93	4.03	12.79
619	12/26/01	Map 8			1.87	5.95	13.04	-2.34	-4.88	12.79
620	12/26/01	Map 8			-0.13	-0.42	13.04	-0.83	-1.74	12.79
621	12/26/01	Map 8			0.87	2.76	13.04	-1.07	-2.23	12.79
622	12/26/01	Map 8			-0.13	-0.42	13.04	-1.83	-3.82	12.79
623	12/26/01	Map 8			0.87	2.76	13.04	-1.07	-2.23	12.79
624	12/26/01	Map 8			-0.13	-0.42	13.04	1.17	2.43	12.79
625	12/26/01	Map 8			-0.13	-0.42	13.04	-0.83	-1.74	12.79
626	12/26/01	Map 8			-0.13	-0.42	13.04	2.17	4.52	12.79
627	12/26/01	Map 8			-0.13	-0.42	13.04	0.17	0.35	12.79
628	12/26/01	Map 8			-0.13	-0.42	13.04	0.17	0.35	12.79
629	12/26/01	Map 8			-0.13	-0.42	13.04	1.17	2.43	12.79

Radiological Survey Logsheet Continuation

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
630	12/26/01	Map 8	*	*	5.87	18.70	13.04	11.58	24.13	12.79
631	12/26/01	Map 8			1.87	5.95	13.04	3.66	7.63	12.79
632	12/26/01	Map 8			1.87	5.95	13.04	-2.34	-4.88	12.79
633	12/26/01	Map 8			0.87	2.76	13.04	2.93	6.11	12.79
634	12/26/01	Map 8			0.87	2.76	13.04	2.93	6.11	12.79
635	12/26/01	Map 8			0.87	2.76	13.04	0.93	1.94	12.79
636	12/26/01	Map 8			0.87	2.76	13.04	-0.07	-0.14	12.79
637	12/26/01	Map 8			-0.13	-0.42	13.04	-0.83	-1.74	12.79
638	12/26/01	Map 8			0.87	2.76	13.04	-1.07	-2.23	12.79
639	12/26/01	Map 8			0.87	2.76	13.04	0.93	1.94	12.79
640	12/26/01	Map 8			2.87	9.14	13.04	4.39	9.15	12.79
641	12/26/01	Map 8			-0.13	-0.42	13.04	3.17	6.60	12.79
642	12/26/01	Map 8			1.87	5.95	13.04	-2.34	-4.88	12.79
643	12/26/01	Map 8			2.87	9.14	13.04	0.39	0.81	12.79
644	12/26/01	Map 8			-0.13	-0.42	13.04	3.17	6.60	12.79
645	12/26/01	Map 8			-0.13	-0.42	13.04	0.17	0.35	12.79
646	12/26/01	Map 8			0.87	2.76	13.04	3.93	8.20	12.79
647	12/26/01	Map 8			-0.13	-0.42	13.04	4.17	8.69	12.79
648	12/26/01	Map 8			-0.13	-0.42	13.04	3.17	6.60	12.79
649	12/26/01	Map 8			-0.13	-0.42	13.04	-0.83	-1.74	12.79
650	12/26/01	Map 8			-0.13	-0.42	13.04	4.17	8.69	12.79
651	12/26/01	Map 8			0.87	2.76	13.04	0.93	1.94	12.79
652	12/26/01	Map 8			1.87	5.95	13.04	0.66	1.38	12.79
653	12/26/01	Map 8			-0.13	-0.42	13.04	1.17	2.43	12.79
654	12/26/01	Map 8			0.87	2.76	13.04	1.93	4.03	12.79
655	12/26/01	Map 8			0.87	2.76	13.04	-0.07	-0.14	12.79
656	12/26/01	Map 8			-0.13	-0.42	13.04	-0.83	-1.74	12.79
657	12/26/01	Map 8			-0.13	-0.42	13.04	1.17	2.43	12.79
658	12/26/01	Map 8			1.87	5.95	13.04	0.66	1.38	12.79
659	12/26/01	Map 8			-0.13	-0.42	13.04	2.17	4.52	12.79
660	12/26/01	Map 8			1.87	5.95	13.04	1.66	3.46	12.79
661	12/26/01	Map 8			2.87	9.14	13.04	-0.61	-1.27	12.79
662	12/26/01	Map 8			1.87	5.95	13.04	-0.34	-0.71	12.79
663	12/26/01	Map 8			1.87	5.95	13.04	3.66	7.63	12.79

Radiological Survey Logsheet Continuation

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
664	12/26/01	Map 8			0.87	2.76	13.04	1.93	4.03	12.79
665	12/26/01	Map 8			0.87	2.76	13.04	-1.07	-2.23	12.79
666	12/26/01	Map 8			-0.13	-0.42	13.04	-0.83	-1.74	12.79
667	12/26/01	Map 8			-0.13	-0.42	13.04	-1.83	-3.82	12.79
668	12/26/01	Map 8			1.87	5.95	13.04	3.66	7.63	12.79
669	12/26/01	Map 8			-0.13	-0.42	13.04	3.17	6.60	12.79
670	12/26/01	Map 8			1.87	5.95	13.04	4.66	9.72	12.79
671	12/26/01	Map 8			-0.13	-0.42	13.04	4.17	8.69	12.79
672	12/26/01	Map 8			3.87	12.32	13.04	2.12	4.42	12.79
673	12/26/01	Map 8			1.87	5.95	13.04	4.66	9.72	12.79
674	12/26/01	Map 8			1.87	5.95	13.04	2.66	5.55	12.79
675	12/26/01	Map 8			0.87	2.76	13.04	-1.07	-2.23	12.79
676	12/26/01	Map 8			0.87	2.76	13.04	-2.07	-4.31	12.79
677	12/26/01	Map 8			1.87	5.95	13.04	3.66	7.63	12.79
678	12/26/01	Map 8			0.87	2.76	13.04	-1.07	-2.23	12.79
679	12/26/01	Map 8			0.87	2.76	13.04	2.93	6.11	12.79
680	12/26/01	Map 8	*		6.87	21.88	13.04	4.31	8.98	12.79
681	12/26/01	Map 8			0.87	2.76	13.04	5.93	12.37	12.79
682	12/26/01	Map 8	*		4.87	15.51	13.04	0.85	1.77	12.79
683	12/26/01	Map 8			-0.13	-0.42	13.04	5.17	10.77	12.79
684	12/26/01	Map 8			0.87	2.76	13.04	1.93	4.03	12.79
685	12/26/01	Map 8			1.87	5.95	13.04	2.66	5.55	12.79
686	12/26/01	Map 8			1.87	5.95	13.04	1.66	3.46	12.79
687	12/26/01	Map 8			2.87	9.14	13.04	3.39	7.07	12.79
688	12/26/01	Map 8			-0.13	-0.42	13.04	2.17	4.52	12.79
689	12/26/01	Map 8		*	-0.13	-0.42	13.04	6.17	12.86	12.79
690	12/26/01	Map 8			3.87	12.32	13.04	2.12	4.42	12.79
691	12/26/01	Map 8			1.87	5.95	13.04	3.66	7.63	12.79
692	12/26/01	Map 8			2.87	9.14	13.04	3.39	7.07	12.79
693	12/26/01	Map 8		*	1.87	5.95	13.04	7.66	15.97	12.79
694	12/26/01	Map 8			1.87	5.95	13.04	-0.34	-0.71	12.79
695	12/26/01	Map 8			0.87	2.76	13.04	2.93	6.11	12.79
696	12/26/01	Map 8			-0.13	-0.42	13.04	-0.83	-1.74	12.79
697	12/26/01	Map 8			-0.13	-0.42	13.04	-0.83	-1.74	12.79

Radiological Survey Logsheet Continuation

Pratt & Whitney,North Haven, Final Radiological survey

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
698	12/26/01	Map 8			0.87	2.76	13.04	1.93	4.03	12.79
699	12/26/01	Map 8			1.87	5.95	13.04	0.66	1.38	12.79
700	12/26/01	Map 8			2.87	9.14	13.04	-1.61	-3.36	12.79
701	12/26/01	Map 8			2.87	9.14	13.04	2.39	4.98	12.79
702	12/26/01	Map 8			-0.13	-0.42	13.04	-1.83	-3.82	12.79
703	12/26/01	Map 8			-0.13	-0.42	13.04	-1.83	-3.82	12.79
704	12/26/01	Map 8			0.87	2.76	13.04	-2.07	-4.31	12.79
705	12/26/01	Map 8			-0.13	-0.42	13.04	-0.83	-1.74	12.79
706	12/26/01	Map 8			0.87	2.76	13.04	-2.07	-4.31	12.79
707	12/26/01	Map 8			-0.13	-0.42	13.04	-0.83	-1.74	12.79
708	12/26/01	Map 8			1.87	5.95	13.04	0.66	1.38	12.79
709	12/26/01	Map 8			0.87	2.76	13.04	-1.07	-2.23	12.79
710	12/26/01	Map 8			3.87	12.32	13.04	5.12	10.67	12.79
711	12/26/01	Map 8			0.87	2.76	13.04	3.93	8.20	12.79
712	12/26/01	Map 8			0.87	2.76	13.04	-0.07	-0.14	12.79
713	12/26/01	Map 8			0.87	2.76	13.04	4.93	10.28	12.79
714	12/26/01	Map 8			1.87	5.95	13.04	3.66	7.63	12.79
715	12/26/01	Map 8			-0.13	-0.42	13.04	0.17	0.35	12.79
716	12/26/01	Map 8			2.87	9.14	13.04	3.39	7.07	12.79
717	12/26/01	Map 8			0.87	2.76	13.04	-1.07	-2.23	12.79
718	12/26/01	Map 8			0.87	2.76	13.04	-0.07	-0.14	12.79
719	12/26/01	Map 8			3.87	12.32	13.04	3.12	6.50	12.79
720	12/26/01	Map 8	*	*	6.87	21.88	13.04	7.31	15.23	12.79
721	12/26/01	Map 8			0.87	2.76	13.04	1.93	4.03	12.79
722	12/26/01	Map 8			-0.13	-0.42	13.04	-1.83	-3.82	12.79
723	12/26/01	Map 8			-0.13	-0.42	13.04	4.17	8.69	12.79
724	12/26/01	Map 8			1.87	5.95	13.04	-0.34	-0.71	12.79
725	12/26/01	Map 8			1.87	5.95	13.04	2.66	5.55	12.79
726	12/26/01	Map 8			-0.13	-0.42	13.04	0.17	0.35	12.79
727	12/26/01	Map 8			0.87	2.76	13.04	-0.07	-0.14	12.79
728	12/26/01	Map 8			0.87	2.76	13.04	1.93	4.03	12.79
729	12/26/01	Map 8		*	-0.13	-0.42	13.04	6.17	12.86	12.79
730	12/27/01	Map 8			0.87	2.76	13.04	-1.07	-2.23	12.79
731	12/27/01	Map 8			0.87	2.76	13.04	3.93	8.20	12.79

Radiological Survey Logsheet Continuation

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
732	12/27/01	Map 8			1.87	5.95	13.04	-0.34	-0.71	12.79
733	12/27/01	Map 8			-0.13	-0.42	13.04	2.17	4.52	12.79
734	12/27/01	Map 8			-0.13	-0.42	13.04	3.17	6.60	12.79
735	12/27/01	Map 8		*	-0.13	-0.42	13.04	9.17	19.11	12.79
736	12/27/01	Map 8			0.87	2.76	13.04	1.93	4.03	12.79
737	12/27/01	Map 8			-0.13	-0.42	13.04	0.17	0.35	12.79
738	12/27/01	Map 8			-0.13	-0.42	13.04	3.17	6.60	12.79
739	12/27/01	Map 8			0.87	2.76	13.04	0.93	1.94	12.79
740	12/27/01	Map 8			0.87	2.76	13.04	-0.07	-0.14	12.79
741	12/27/01	Map 8			-0.13	-0.42	13.04	-1.83	-3.82	12.79
742	12/27/01	Map 8			-0.13	-0.42	13.04	1.17	2.43	12.79
743	12/27/01	Map 8			-0.13	-0.42	13.04	0.17	0.35	12.79
744	12/27/01	Map 8			-0.13	-0.42	13.04	5.17	10.77	12.79
745	12/27/01	Map 8			-0.13	-0.42	13.04	4.17	8.69	12.79
746	12/27/01	Map 8			-0.13	-0.42	13.04	-1.83	-3.82	12.79
747	12/27/01	Map 8			-0.13	-0.42	13.04	-0.83	-1.74	12.79
748	12/27/01	Map 8			0.87	2.76	13.04	0.93	1.94	12.79
749	12/27/01	Map 8			0.87	2.76	13.04	-2.07	-4.31	12.79
750	12/27/01	Map 8			-0.13	-0.42	13.04	1.17	2.43	12.79
751	12/27/01	Map 8			-0.13	-0.42	13.04	-1.83	-3.82	12.79
752	12/27/01	Map 8			-0.13	-0.42	13.04	-0.83	-1.74	12.79
753	12/27/01	Map 8			-0.13	-0.42	13.04	0.17	0.35	12.79
754	12/27/01	Map 8			-0.13	-0.42	13.04	0.17	0.35	12.79
755	12/27/01	Map 8		*	-0.13	-0.42	13.04	6.17	12.86	12.79
756	12/27/01	Map 8			-0.13	-0.42	13.04	-0.83	-1.74	12.79
757	12/27/01	Map 8			-0.13	-0.42	13.04	1.17	2.43	12.79
758	12/27/01	Map 8			-0.13	-0.42	13.04	0.17	0.35	12.79
759	12/27/01	Map 8			-0.13	-0.42	13.04	-0.83	-1.74	12.79
760	12/27/01	Map 8		*	0.87	2.76	13.04	11.93	24.87	12.79
761	12/27/01	Map 8		*	-0.13	-0.42	13.04	8.17	17.02	12.79
762	12/27/01	Map 8		*	1.87	5.95	13.04	6.66	13.89	12.79
763	12/27/01	Map 8			0.87	2.76	13.04	4.93	10.28	12.79
764	12/27/01	Map 8			-0.13	-0.42	13.04	3.17	6.60	12.79
765	12/27/01	Map 8			0.87	2.76	13.04	1.93	4.03	12.79

Radiological Survey Logsheet Continuation

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
766	12/27/01	Map 8		*	0.87	2.76	13.04	7.93	16.54	12.79
767	12/27/01	Map 8			-0.13	-0.42	13.04	3.17	6.60	12.79
768	12/27/01	Map 8		*	0.87	2.76	13.04	6.93	14.45	12.79
769	12/27/01	Map 8			-0.13	-0.42	13.04	-1.83	-3.82	12.79
770	12/27/01	Map 8		*	3.87	12.32	13.04	15.12	31.52	12.79
771	12/27/01	Map 8		*	2.87	9.14	13.04	7.39	15.41	12.79
772	12/27/01	Map 8			-0.13	-0.42	13.04	5.17	10.77	12.79
773	12/27/01	Map 8			-0.13	-0.42	13.04	3.17	6.60	12.79
774	12/27/01	Map 8			0.87	2.76	13.04	2.93	6.11	12.79
775	12/27/01	Map 8			-0.13	-0.42	13.04	-0.83	-1.74	12.79
776	12/27/01	Map 8			-0.13	-0.42	13.04	5.17	10.77	12.79
777	12/27/01	Map 8			1.87	5.95	13.04	0.66	1.38	12.79
778	12/27/01	Map 8			0.87	2.76	13.04	0.93	1.94	12.79
779	12/27/01	Map 8			0.87	2.76	13.04	-0.07	-0.14	12.79
780	12/27/01	Map 8		*	-0.13	-0.42	13.04	7.17	14.94	12.79
781	12/27/01	Map 8		*	1.87	5.95	13.04	13.66	28.48	12.79
782	12/27/01	Map 8			0.87	2.76	13.04	2.93	6.11	12.79
783	12/27/01	Map 8			2.87	9.14	13.04	5.39	11.24	12.79
784	12/27/01	Map 8			0.87	2.76	13.04	3.93	8.20	12.79
785	12/27/01	Map 8			-0.13	-0.42	13.04	5.17	10.77	12.79
786	12/27/01	Map 8			-0.13	-0.42	13.04	3.17	6.60	12.79
787	12/27/01	Map 8			-0.13	-0.42	13.04	0.17	0.35	12.79
788	12/27/01	Map 8			0.87	2.76	13.04	1.93	4.03	12.79
789	12/27/01	Map 8			2.87	9.14	13.04	3.39	7.07	12.79
790	12/27/01	Map 8	*	*	6.87	21.88	13.04	22.31	46.50	12.79
791	12/27/01	Map 8	*	*	5.87	18.70	13.04	14.58	30.39	12.79
792	12/27/01	Map 8		*	3.87	12.32	13.04	11.12	23.18	12.79
793	12/27/01	Map 8			1.87	5.95	13.04	5.66	11.80	12.79
794	12/27/01	Map 8		*	2.87	9.14	13.04	6.39	13.32	12.79
795	12/27/01	Map 8			3.87	12.32	13.04	6.12	12.76	12.79
796	12/27/01	Map 8			1.87	5.95	13.04	4.66	9.72	12.79
797	12/27/01	Map 8			0.87	2.76	13.04	3.93	8.20	12.79
798	12/27/01	Map 8			2.87	9.14	13.04	4.39	9.15	12.79
799	12/27/01	Map 3			1.87	5.95	13.04	5.66	11.80	12.79

Radiological Survey Logsheet Continuation

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
800	12/27/01	Map 3			0.87	2.76	13.04	1.93	4.03	12.79
801	12/27/01	Map 3			2.87	9.14	13.04	-1.61	-3.36	12.79
802	12/27/01	Map 3			2.87	9.14	13.04	-0.61	-1.27	12.79
803	12/27/01	Map 3			1.87	5.95	13.04	-0.34	-0.71	12.79
804	12/27/01	Map 3			-0.13	-0.42	13.04	2.17	4.52	12.79
805	12/27/01	Map 3			2.87	9.14	13.04	-0.61	-1.27	12.79
806	12/27/01	Map 3			-0.13	-0.42	13.04	2.17	4.52	12.79
807	12/27/01	Map 3			-0.13	-0.42	13.04	-0.83	-1.74	12.79
808	12/27/01	Map 3			-0.13	-0.42	13.04	-0.83	-1.74	12.79
809	12/27/01	Map 3			0.87	2.76	13.04	1.93	4.03	12.79
810	12/27/01	Map 3			1.87	5.95	13.04	3.66	7.63	12.79
811	12/27/01	Map 3			-0.13	-0.42	13.04	0.17	0.35	12.79
812	12/27/01	Map 3			-0.13	-0.42	13.04	1.17	2.43	12.79
813	12/27/01	Map 3			-0.13	-0.42	13.04	1.17	2.43	12.79
814	12/27/01	Map 3			0.87	2.76	13.04	-2.07	-4.31	12.79
815	12/27/01	Map 3			-0.13	-0.42	13.04	-0.83	-1.74	12.79
816	12/27/01	Map 3			-0.13	-0.42	13.04	2.17	4.52	12.79
817	12/27/01	Map 3			-0.13	-0.42	13.04	0.17	0.35	12.79
818	12/27/01	Map 3			-0.13	-0.42	13.04	-1.83	-3.82	12.79
819	12/27/01	Map 3			-0.13	-0.42	13.04	1.17	2.43	12.79
820	12/27/01	Map 3			-0.13	-0.42	13.04	-0.83	-1.74	12.79
821	12/27/01	Map 3			0.87	2.76	13.04	-2.07	-4.31	12.79
822	12/27/01	Map 3			1.87	5.95	13.04	-2.34	-4.88	12.79
823	12/27/01	Map 3			-0.13	-0.42	13.04	0.17	0.35	12.79
824	12/27/01	Map 3			-0.13	-0.42	13.04	-0.83	-1.74	12.79
825	12/27/01	Map 3			-0.13	-0.42	13.04	2.17	4.52	12.79
826	12/27/01	Map 3			-0.13	-0.42	13.04	-1.83	-3.82	12.79
827	12/27/01	Map 3			-0.13	-0.42	13.04	0.17	0.35	12.79
828	12/27/01	Map 3			-0.13	-0.42	13.04	-0.83	-1.74	12.79
829	12/27/01	Map 3			-0.13	-0.42	13.04	0.17	0.35	12.79
830	12/27/01	Map 3			-0.13	-0.42	13.04	0.17	0.35	12.79
831	12/27/01	Map 3			-0.13	-0.42	13.04	0.17	0.35	12.79
832	12/27/01	Map 3			0.87	2.76	13.04	0.93	1.94	12.79
833	12/27/01	Map 3			-0.13	-0.42	13.04	0.17	0.35	12.79

Radiological Survey Logsheet Continuation

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
834	12/27/01	Map 3			-0.13	-0.42	13.04	0.17	0.35	12.79
835	12/27/01	Map 3			-0.13	-0.42	13.04	0.17	0.35	12.79
836	12/27/01	Map 3			-0.13	-0.42	13.04	0.17	0.35	12.79
837	12/27/01	Map 3			-0.13	-0.42	13.04	1.17	2.43	12.79
838	12/27/01	Map 3			0.87	2.76	13.04	-0.07	-0.14	12.79
839	12/27/01	Map 3			-0.13	-0.42	13.04	0.17	0.35	12.79
840	12/27/01	Map 3			1.87	5.95	13.04	1.66	3.46	12.79
841	12/27/01	Map 3			-0.13	-0.42	13.04	2.17	4.52	12.79
842	12/27/01	Map 3			-0.13	-0.42	13.04	1.17	2.43	12.79
843	12/27/01	Map 3			-0.13	-0.42	13.04	4.17	8.69	12.79
844	12/27/01	Map 3			-0.13	-0.42	13.04	-1.83	-3.82	12.79
845	12/27/01	Map 3			-0.13	-0.42	13.04	1.17	2.43	12.79
846	12/27/01	Map 3			-0.13	-0.42	13.04	1.17	2.43	12.79
847	12/27/01	Map 3			-0.13	-0.42	13.04	-1.83	-3.82	12.79
848	12/27/01	Map 3			-0.13	-0.42	13.04	0.17	0.35	12.79
849	12/27/01	Map 3			0.87	2.76	13.04	-2.07	-4.31	12.79
850	12/27/01	Map 3			2.87	9.14	13.04	5.39	11.24	12.79
851	12/27/01	Map 3			-0.13	-0.42	13.04	0.17	0.35	12.79
852	12/27/01	Map 3			1.87	5.95	13.04	0.66	1.38	12.79
853	12/27/01	Map 3			-0.13	-0.42	13.04	2.17	4.52	12.79
854	12/27/01	Map 3			-0.13	-0.42	13.04	0.17	0.35	12.79
855	12/27/01	Map 3			-0.13	-0.42	13.04	-0.83	-1.74	12.79
856	12/27/01	Map 3			-0.13	-0.42	13.04	0.17	0.35	12.79
857	12/27/01	Map 3			1.87	5.95	13.04	-1.34	-2.79	12.79
858	12/27/01	Map 3			-0.13	-0.42	13.04	-0.83	-1.74	12.79
859	12/27/01	Map 3			-0.13	-0.42	13.04	2.17	4.52	12.79
860	12/27/01	Map 3			-0.13	-0.42	13.04	4.17	8.69	12.79
861	12/27/01	Map 3			0.87	2.76	13.04	2.93	6.11	12.79
862	12/27/01	Map 3			-0.13	-0.42	13.04	-1.83	-3.82	12.79
863	12/27/01	Map 3			-0.13	-0.42	13.04	-0.83	-1.74	12.79
864	12/27/01	Map 3			-0.13	-0.42	13.04	2.17	4.52	12.79
865	12/27/01	Map 3			-0.13	-0.42	13.04	2.17	4.52	12.79
866	12/27/01	Map 3			-0.13	-0.42	13.04	-1.83	-3.82	12.79
867	12/27/01	Map 3			-0.13	-0.42	13.04	-0.83	-1.74	12.79

Radiological Survey Logsheet Continuation

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
868	12/27/01	Map 3			-0.13	-0.42	13.04	-1.83	-3.82	12.79
869	12/27/01	Map 3			1.87	5.95	13.04	-1.34	-2.79	12.79
870	12/28/01	Map 3			0.87	2.76	13.04	1.93	4.03	12.79
871	12/28/01	Map 3			-0.13	-0.42	13.04	0.17	0.35	12.79
872	12/28/01	Map 3			0.87	2.76	13.04	-0.07	-0.14	12.79
873	12/28/01	Map 3			0.87	2.76	13.04	-1.07	-2.23	12.79
874	12/28/01	Map 3			-0.13	-0.42	13.04	2.17	4.52	12.79
875	12/28/01	Map 3			-0.13	-0.42	13.04	3.17	6.60	12.79
876	12/28/01	Map 3			-0.13	-0.42	13.04	0.17	0.35	12.79
877	12/28/01	Map 3			0.87	2.76	13.04	-0.07	-0.14	12.79
878	12/28/01	Map 3			0.87	2.76	13.04	-1.07	-2.23	12.79
879	12/28/01	Map 3			0.87	2.76	13.04	-0.07	-0.14	12.79
880	12/28/01	Map 3			-0.13	-0.42	13.04	1.17	2.43	12.79
881	12/28/01	Map 4			-0.13	-0.42	13.04	2.17	4.52	12.79
882	12/28/01	Map 4			0.87	2.76	13.04	0.93	1.94	12.79
883	12/28/01	Map 4			0.87	2.76	13.04	2.93	6.11	12.79
884	12/28/01	Map 4			0.87	2.76	13.04	5.93	12.37	12.79
885	12/28/01	Map 4			-0.13	-0.42	13.04	4.17	8.69	12.79
886	12/28/01	Map 4			0.87	2.76	13.04	-0.07	-0.14	12.79
887	12/28/01	Map 4			-0.13	-0.42	13.04	0.17	0.35	12.79
888	12/28/01	Map 4			-0.13	-0.42	13.04	0.17	0.35	12.79
889	12/28/01	Map 4			1.87	5.95	13.04	0.66	1.38	12.79
890	12/28/01	Map 4	*	*	6.87	21.88	13.04	14.31	29.82	12.79
891	12/28/01	Map 4		*	3.87	12.32	13.04	22.12	46.11	12.79
892	12/28/01	Map 4	*	*	4.87	15.51	13.04	14.85	30.95	12.79
893	12/28/01	Map 4	*	*	6.87	21.88	13.04	10.31	21.49	12.79
894	12/28/01	Map 4		*	3.87	12.32	13.04	13.12	27.35	12.79
895	12/28/01	Map 4	*	*	4.87	15.51	13.04	13.85	28.87	12.79
896	12/28/01	Map 4		*	2.87	9.14	13.04	9.39	19.57	12.79
897	12/28/01	Map 4	*		6.87	21.88	13.04	5.31	11.06	12.79
898	12/28/01	Map 4	*	*	7.87	25.07	13.04	16.04	33.43	12.79
899	12/28/01	Map 4		*	2.87	9.14	13.04	12.39	25.83	12.79
900	12/28/01	Map 4			0.87	2.76	13.04	2.93	6.11	12.79
901	12/28/01	Map 4			0.87	2.76	13.04	4.93	10.28	12.79

Radiological Survey Logsheet Continuation

Pratt & Whitney,North Haven, Final Radiological survey

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
902	12/28/01	Map 4			-0.13	-0.42	13.04	-0.83	-1.74	12.79
903	12/28/01	Map 4			-0.13	-0.42	13.04	-0.83	-1.74	12.79
904	12/28/01	Map 4			0.87	2.76	13.04	0.93	1.94	12.79
905	12/28/01	Map 4			-0.13	-0.42	13.04	-1.83	-3.82	12.79
906	12/28/01	Map 4			-0.13	-0.42	13.04	-0.83	-1.74	12.79
607	12/28/01	Map 4			0.87	2.76	13.04	-1.07	-2.23	12.79
908	12/28/01	Map 4			-0.13	-0.42	13.04	-0.83	-1.74	12.79
909	12/28/01	Map 4			-0.13	-0.42	13.04	1.17	2.43	12.79
910	12/28/01	Map 4			0.87	2.76	13.04	-0.07	-0.14	12.79
911	12/28/01	Map 4			-0.13	-0.42	13.04	-0.83	-1.74	12.79
912	12/28/01	Map 4			-0.13	-0.42	13.04	-0.83	-1.74	12.79
913	12/28/01	Map 4			-0.13	-0.42	13.04	-1.83	-3.82	12.79
914	12/28/01	Map 4			-0.13	-0.42	13.04	-0.83	-1.74	12.79
915	12/28/01	Map 4			-0.13	-0.42	13.04	0.17	0.35	12.79
916	12/28/01	Map 4			-0.13	-0.42	13.04	-0.83	-1.74	12.79
917	12/28/01	Map 4			-0.13	-0.42	13.04	4.17	8.69	12.79
918	12/28/01	Map 4			-0.13	-0.42	13.04	4.17	8.69	12.79
919	12/28/01	Map 4			-0.13	-0.42	13.04	-1.83	-3.82	12.79
920	12/28/01	Map 4			-0.13	-0.42	13.04	2.17	4.52	12.79
921	12/28/01	Map 4			-0.13	-0.42	13.04	-0.83	-1.74	12.79
922	12/28/01	Map 4			-0.13	-0.42	13.04	4.17	8.69	12.79
923	12/28/01	Map 4			0.87	2.76	13.04	-1.07	-2.23	12.79
924	12/28/01	Map 4			-0.13	-0.42	13.04	2.17	4.52	12.79
925	12/28/01	Map 4			-0.13	-0.42	13.04	1.17	2.43	12.79
926	12/28/01	Map 4			0.87	2.76	13.04	-1.07	-2.23	12.79
927	12/28/01	Map 4			-0.13	-0.42	13.04	0.17	0.35	12.79
928	12/28/01	Map 4			0.87	2.76	13.04	-0.07	-0.14	12.79
929	12/28/01	Map 4			0.87	2.76	13.04	-0.07	-0.14	12.79
930	12/28/01	Map 4	*	*	8.87	28.26	13.04	19.76	41.20	12.79
931	12/28/01	Map 4	*	*	7.87	25.07	13.04	20.04	41.77	12.79
932	12/28/01	Map 4	*	*	11.87	37.82	13.04	20.95	43.68	12.79
933	12/28/01	Map 4	*	*	6.87	21.88	13.04	12.31	25.65	12.79
934	12/28/01	Map 4		*	2.87	9.14	13.04	18.39	38.34	12.79
935	12/28/01	Map 4		*	3.87	12.32	13.04	12.12	25.26	12.79

Radiological Survey Logsheet Continuation

Pratt & Whitney,North Haven, Final Radiological survey

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
936	12/28/01	Map 4		*	3.87	12.32	13.04	11.12	23.18	12.79
937	12/28/01	Map 4			3.87	12.32	13.04	4.12	8.59	12.79
938	12/28/01	Map 4			2.87	9.14	13.04	5.39	11.24	12.79
939	12/28/01	Map 4			0.87	2.76	13.04	2.93	6.11	12.79
940	12/28/01	Map 4	*	*	7.87	25.07	13.04	15.04	31.34	12.79
941	12/28/01	Map 4		*	2.87	9.14	13.04	12.39	25.83	12.79
942	12/28/01	Map 4		*	3.87	12.32	13.04	15.12	31.52	12.79
943	12/28/01	Map 4	*	*	7.87	25.07	13.04	7.04	14.67	12.79
944	12/28/01	Map 4		*	0.87	2.76	13.04	6.93	14.45	12.79
945	12/28/01	Map 4			3.87	12.32	13.04	5.12	10.67	12.79
946	12/28/01	Map 4			1.87	5.95	13.04	5.66	11.80	12.79
947	12/28/01	Map 4			-0.13	-0.42	13.04	2.17	4.52	12.79
948	12/28/01	Map 4		*	2.87	9.14	13.04	10.39	21.66	12.79
949	12/28/01	Map 4			0.87	2.76	13.04	-0.07	-0.14	12.79
950	12/28/01	Map 4	*		11.87	37.82	13.04	5.95	12.41	12.79
951	12/28/01	Map 4		*	3.87	12.32	13.04	12.12	25.26	12.79
952	12/28/01	Map 4		*	3.87	12.32	13.04	7.12	14.84	12.79
953	12/28/01	Map 4	*	*	4.87	15.51	13.04	7.85	16.36	12.79
954	12/28/01	Map 4			0.87	2.76	13.04	5.93	12.37	12.79
955	12/28/01	Map 4			1.87	5.95	13.04	2.66	5.55	12.79
956	12/28/01	Map 4			1.87	5.95	13.04	1.66	3.46	12.79
957	12/28/01	Map 4			0.87	2.76	13.04	3.93	8.20	12.79
958	12/28/01	Map 4			2.87	9.14	13.04	3.39	7.07	12.79
959	12/28/01	Map 4			-0.13	-0.42	13.04	-1.83	-3.82	12.79
960	12/28/01	Map 4		*	2.87	9.14	13.04	13.39	27.91	12.79
961	12/28/01	Map 4	*	*	4.87	15.51	13.04	7.85	16.36	12.79
962	12/28/01	Map 4	*	*	5.87	18.70	13.04	18.58	38.73	12.79
963	12/28/01	Map 4	*	*	6.87	21.88	13.04	10.31	21.49	12.79
964	12/28/01	Map 4		*	1.87	5.95	13.04	11.66	24.31	12.79
965	12/28/01	Map 4			3.87	12.32	13.04	4.12	8.59	12.79
966	12/28/01	Map 4		*	2.87	9.14	13.04	6.39	13.32	12.79
967	12/28/01	Map 4	*		8.87	28.26	13.04	5.76	12.02	12.79
968	12/28/01	Map 4			-0.13	-0.42	13.04	2.17	4.52	12.79
969	12/28/01	Map 4			0.87	2.76	13.04	0.93	1.94	12.79

Radiological Survey Logsheet Continuation

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
970	12/28/01	Map 4	*	*	12.87	41.00	13.04	25.68	53.54	12.79
971	12/28/01	Map 4	*	*	4.87	15.51	13.04	15.85	33.04	12.79
972	12/28/01	Map 4		*	2.87	9.14	13.04	7.39	15.41	12.79
973	12/28/01	Map 4		*	2.87	9.14	13.04	11.39	23.74	12.79
974	12/28/01	Map 4		*	1.87	5.95	13.04	8.66	18.06	12.79
975	12/28/01	Map 4		*	2.87	9.14	13.04	7.39	15.41	12.79
976	12/28/01	Map 4		*	1.87	5.95	13.04	10.66	22.22	12.79
977	12/28/01	Map 4			1.87	5.95	13.04	-0.34	-0.71	12.79
978	12/28/01	Map 4		*	-0.13	-0.42	13.04	7.17	14.94	12.79
979	12/28/01	Map 4	*		4.87	15.51	13.04	4.85	10.11	12.79
980	12/28/01	Map 4	*	*	12.87	41.00	13.04	31.68	66.04	12.79
981	12/28/01	Map 4	*	*	8.87	28.26	13.04	22.76	47.46	12.79
982	12/28/01	Map 4	*	*	6.87	21.88	13.04	11.31	23.57	12.79
983	12/28/01	Map 4	*	*	11.87	37.82	13.04	18.95	39.51	12.79
984	12/28/01	Map 4	*	*	6.87	21.88	13.04	20.31	42.33	12.79
985	12/28/01	Map 4	*	*	5.87	18.70	13.04	6.58	13.71	12.79
986	12/28/01	Map 4			3.87	12.32	13.04	6.12	12.76	12.79
987	12/28/01	Map 4		*	2.87	9.14	13.04	6.39	13.32	12.79
988	12/28/01	Map 4	*		8.87	28.26	13.04	3.76	7.85	12.79
989	12/28/01	Map 4	*		4.87	15.51	13.04	4.85	10.11	12.79
990	12/28/01	Map 9	*	*	15.87	50.56	13.04	19.87	41.42	12.79
991	12/28/01	Map 9	*	*	9.87	31.44	13.04	17.49	36.47	12.79
992	12/28/01	Map 9	*	*	8.87	28.26	13.04	10.76	22.44	12.79
993	12/28/01	Map 9	*	*	6.87	21.88	13.04	18.31	38.16	12.79
994	12/28/01	Map 9	*		6.87	21.88	13.04	3.31	6.89	12.79
995	12/28/01	Map 9	*	*	5.87	18.70	13.04	17.58	36.64	12.79
996	12/28/01	Map 9		*	2.87	9.14	13.04	13.39	27.91	12.79
997	12/28/01	Map 9			0.87	2.76	13.04	-0.07	-0.14	12.79
998	12/28/01	Map 9	*	*	9.87	31.44	13.04	12.49	26.05	12.79
999	12/28/01	Map 9			2.87	9.14	13.04	3.39	7.07	12.79
1000	12/28/01	Map 9			-0.13	-0.42	13.04	2.17	4.52	12.79
1001	12/28/01	Map 9			-0.13	-0.42	13.04	0.17	0.35	12.79
1002	12/28/01	Map 9			1.87	5.95	13.04	-0.34	-0.71	12.79
1003	12/28/01	Map 9			0.87	2.76	13.04	-0.07	-0.14	12.79

Radiological Survey Logsheet Continuation

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
1004	12/28/01	Map 9			0.87	2.76	13.04	-0.07	-0.14	12.79
1005	12/28/01	Map 9			-0.13	-0.42	13.04	2.17	4.52	12.79
1006	12/28/01	Map 9			-0.13	-0.42	13.04	1.17	2.43	12.79
1007	12/28/01	Map 9			0.87	2.76	13.04	0.93	1.94	12.79
1008	12/28/01	Map 9			-0.13	-0.42	13.04	-0.83	-1.74	12.79
1009	12/28/01	Map 9			0.87	2.76	13.04	-0.07	-0.14	12.79
1010	12/28/01	Map 9			0.87	2.76	13.04	-2.07	-4.31	12.79
1011	12/28/01	Map 9			-0.13	-0.42	13.04	5.17	10.77	12.79
1012	12/28/01	Map 9			-0.13	-0.42	13.04	1.17	2.43	12.79
1013	12/28/01	Map 9			-0.13	-0.42	13.04	-1.83	-3.82	12.79
1014	12/28/01	Map 9			-0.13	-0.42	13.04	1.17	2.43	12.79
1015	12/28/01	Map 9			-0.13	-0.42	13.04	-0.83	-1.74	12.79
1016	12/28/01	Map 9			-0.13	-0.42	13.04	-0.83	-1.74	12.79
1017	12/28/01	Map 9			-0.13	-0.42	13.04	-0.83	-1.74	12.79
1018	12/28/01	Map 9			-0.13	-0.42	13.04	0.17	0.35	12.79
1019	12/28/01	Map 9			0.87	2.76	13.04	-0.07	-0.14	12.79
1020	12/28/01	Map 9			1.87	5.95	13.04	-0.34	-0.71	12.79
1021	12/28/01	Map 9			-0.13	-0.42	13.04	1.17	2.43	12.79
1022	12/28/01	Map 9			-0.13	-0.42	13.04	0.17	0.35	12.79
1023	12/28/01	Map 9			-0.13	-0.42	13.04	-1.83	-3.82	12.79
1024	12/28/01	Map 9			-0.13	-0.42	13.04	0.17	0.35	12.79
1025	12/28/01	Map 9			-0.13	-0.42	13.04	-1.83	-3.82	12.79
1026	12/28/01	Map 9			-0.13	-0.42	13.04	-1.83	-3.82	12.79
1027	12/28/01	Map 9			0.87	2.76	13.04	0.93	1.94	12.79
1028	12/28/01	Map 9			-0.13	-0.42	13.04	-1.83	-3.82	12.79
1029	12/28/01	Map 9			-0.13	-0.42	13.04	1.17	2.43	12.79
1030	12/28/01	Map 9			0.87	2.76	13.04	-1.07	-2.23	12.79
1031	12/28/01	Map 9			3.87	12.32	13.04	6.12	12.76	12.79
1032	12/28/01	Map 9			-0.13	-0.42	13.04	-0.83	-1.74	12.79
1033	12/28/01	Map 9			1.87	5.95	13.04	2.66	5.55	12.79
1034	12/28/01	Map 9			-0.13	-0.42	13.04	-1.83	-3.82	12.79
1035	12/28/01	Map 9			0.87	2.76	13.04	0.93	1.94	12.79
1036	12/28/01	Map 9			2.87	9.14	13.04	-1.61	-3.36	12.79
1037	12/28/01	Map 9			-0.13	-0.42	13.04	-1.83	-3.82	12.79

Radiological Survey Logsheet Continuation

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
1038	12/28/01	Map 9			0.87	2.76	13.04	-1.07	-2.23	12.79
1039	12/28/01	Map 9			0.87	2.76	13.04	1.93	4.03	12.79
1040	12/28/01	Map 9			0.87	2.76	13.04	2.93	6.11	12.79
1041	12/28/01	Map 9		*	1.87	5.95	13.04	8.66	18.06	12.79
1042	12/28/01	Map 9			-0.13	-0.42	13.04	-0.83	-1.74	12.79
1043	12/28/01	Map 9			-0.13	-0.42	13.04	-1.83	-3.82	12.79
1044	12/28/01	Map 9			-0.13	-0.42	13.04	1.17	2.43	12.79
1045	12/28/01	Map 9			-0.13	-0.42	13.04	1.17	2.43	12.79
1046	12/28/01	Map 9			0.87	2.76	13.04	-2.07	-4.31	12.79
1047	12/28/01	Map 9			2.87	9.14	13.04	1.39	2.90	12.79
1048	12/28/01	Map 9			1.87	5.95	13.04	1.66	3.46	12.79
1049	12/28/01	Map 9			-0.13	-0.42	13.04	2.17	4.52	12.79
1050	12/28/01	Map 9			0.87	2.76	13.04	-0.07	-0.14	12.79
1051	12/28/01	Map 9			2.87	9.14	13.04	0.39	0.81	12.79
1052	12/28/01	Map 9			3.87	12.32	13.04	-1.88	-3.92	12.79
1053	12/28/01	Map 9			0.87	2.76	13.04	-0.07	-0.14	12.79
1054	12/28/01	Map 9			1.87	5.95	13.04	5.66	11.80	12.79
1055	12/28/01	Map 9			-0.13	-0.42	13.04	5.17	10.77	12.79
1056	12/28/01	Map 9			-0.13	-0.42	13.04	3.17	6.60	12.79
1057	12/28/01	Map 9			-0.13	-0.42	13.04	4.17	8.69	12.79
1058	12/28/01	Map 9			-0.13	-0.42	13.04	3.17	6.60	12.79
1059	12/28/01	Map 9			-0.13	-0.42	13.04	4.17	8.69	12.79
1060	12/28/01	Map 9		*	2.87	9.14	13.04	6.39	13.32	12.79
1061	12/28/01	Map 9			-0.13	-0.42	13.04	1.17	2.43	12.79
1062	12/28/01	Map 9			0.87	2.76	13.04	0.93	1.94	12.79
1063	12/28/01	Map 9			0.87	2.76	13.04	-1.07	-2.23	12.79
1064	12/28/01	Map 9			-0.13	-0.42	13.04	-0.83	-1.74	12.79
1065	12/28/01	Map 9			0.87	2.76	13.04	-0.07	-0.14	12.79
1066	12/28/01	Map 9			0.87	2.76	13.04	-0.07	-0.14	12.79
1067	12/28/01	Map 9			-0.13	-0.42	13.04	4.17	8.69	12.79
1068	12/28/01	Map 9			2.87	9.14	13.04	1.39	2.90	12.79
1069	12/28/01	Map 9		*	-0.13	-0.42	13.04	7.17	14.94	12.79
1070	12/28/01	Map 9		*	1.87	5.95	13.04	12.66	26.39	12.79
1071	12/28/01	Map 9			1.87	5.95	13.04	4.66	9.72	12.79

Radiological Survey Logsheet Continuation

Pratt & Whitney,North Haven, Final Radiological survey

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
1072	12/28/01	Map 9			1.87	5.95	13.04	5.66	11.80	12.79
1073	12/28/01	Map 9			NO	WIPE		NO	WIPE	
1074	12/28/01	Map 9			NO	WIPE		NO	WIPE	
1075	12/28/01	Map 9			0.87	2.76	13.04	-1.07	-2.23	12.79
1076	12/28/01	Map 9		*	3.87	12.32	13.04	7.12	14.84	12.79
1077	12/28/01	Map 10			0.87	2.76	13.04	3.93	8.20	12.79
1078	12/28/01	Map 10		*	1.87	5.95	13.04	7.66	15.97	12.79
1079	12/28/01	Map 10			1.87	5.95	13.04	1.66	3.46	12.79
1080	12/28/01	Map 10	*	*	8.87	28.26	13.04	7.76	16.19	12.79
1081	12/28/01	Map 10		*	1.87	5.95	13.04	12.66	26.39	12.79
1082	12/28/01	Map 10			0.87	2.76	13.04	1.93	4.03	12.79
1083	12/28/01	Map 10			-0.13	-0.42	13.04	4.17	8.69	12.79
1084	12/28/01	Map 10			3.87	12.32	13.04	5.12	10.67	12.79
1085	12/28/01	Map 10			0.87	2.76	13.04	1.93	4.03	12.79
1086	12/28/01	Map 10			-0.13	-0.42	13.04	1.17	2.43	12.79
1087	12/28/01	Map 10			-0.13	-0.42	13.04	2.17	4.52	12.79
1088	12/28/01	Map 10		*	0.87	2.76	13.04	6.93	14.45	12.79
1089	12/28/01	Map 10			2.87	9.14	13.04	3.39	7.07	12.79
1090	12/28/01	Map 10	*	*	5.87	18.70	13.04	9.58	19.97	12.79
1091	12/28/01	Map 10		*	3.87	12.32	13.04	11.12	23.18	12.79
1092	12/28/01	Map 10		*	1.87	5.95	13.04	6.66	13.89	12.79
1093	12/28/01	Map 10	*	*	4.87	15.51	13.04	6.85	14.28	12.79
1094	12/28/01	Map 10		*	3.87	12.32	13.04	9.12	19.01	12.79
1095	12/28/01	Map 10		*	2.87	9.14	13.04	6.39	13.32	12.79
1096	12/28/01	Map 10		*	3.87	12.32	13.04	7.12	14.84	12.79
1097	12/28/01	Map 10		*	-0.13	-0.42	13.04	8.17	17.02	12.79
1098	12/28/01	Map 10		*	2.87	9.14	13.04	6.39	13.32	12.79
1099	12/28/01	Map 10			2.87	9.14	13.04	1.39	2.90	12.79
1100	12/28/01	Map 10			3.87	12.32	13.04	-0.88	-1.84	12.79
1101	12/28/01	Map 10			0.87	2.76	13.04	-0.07	-0.14	12.79
1102	12/28/01	Map 10			-0.13	-0.42	13.04	0.17	0.35	12.79
1103	12/28/01	Map 10		*	-0.13	-0.42	13.04	7.17	14.94	12.79
1104	12/28/01	Map 10			-0.13	-0.42	13.04	2.17	4.52	12.79
1105	12/28/01	Map 10			0.87	2.76	13.04	-0.07	-0.14	12.79

Radiological Survey Logsheet Continuation

Pratt & Whitney,North Haven, Final Radiological survey

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
1106	12/28/01	Map 10			-0.13	-0.42	13.04	3.17	6.60	12.79
1107	12/28/01	Map 10			1.87	5.95	13.04	1.66	3.46	12.79
1108	12/28/01	Map 10			-0.13	-0.42	13.04	-0.83	-1.74	12.79
1109	12/28/01	Map 10			-0.13	-0.42	13.04	1.17	2.43	12.79
1110	12/28/01	Map 10			-0.13	-0.42	13.04	0.17	0.35	12.79
1111	12/28/01	Map 10			1.87	5.95	13.04	-2.34	-4.88	12.79
1112	12/28/01	Map 10			-0.13	-0.42	13.04	2.17	4.52	12.79
1113	12/28/01	Map 10			-0.13	-0.42	13.04	-0.83	-1.74	12.79
1114	12/28/01	Map 10			0.87	2.76	13.04	0.93	1.94	12.79
1115	12/28/01	Map 10			-0.13	-0.42	13.04	1.17	2.43	12.79
1116	12/28/01	Map 10			-0.13	-0.42	13.04	-1.83	-3.82	12.79
1117	12/28/01	Map 10			-0.13	-0.42	13.04	2.17	4.52	12.79
1118	12/28/01	Map 10			-0.13	-0.42	13.04	2.17	4.52	12.79
1119	12/28/01	Map 10			-0.13	-0.42	13.04	-0.83	-1.74	12.79
1120	12/28/01	Map 10			-0.13	-0.42	13.04	1.17	2.43	12.79
1121	12/28/01	Map 10			-0.13	-0.42	13.04	-0.83	-1.74	12.79
1122	12/28/01	Map 10			-0.13	-0.42	13.04	-1.83	-3.82	12.79
1123	12/28/01	Map 10			-0.13	-0.42	13.04	-0.83	-1.74	12.79
1124	12/28/01	Map 10			-0.13	-0.42	13.04	-0.83	-1.74	12.79
1125	12/28/01	Map 10			-0.13	-0.42	13.04	1.17	2.43	12.79
1126	12/28/01	Map 10			-0.13	-0.42	13.04	0.17	0.35	12.79
1127	12/28/01	Map 10			0.87	2.76	13.04	-2.07	-4.31	12.79
1128	12/28/01	Map 10			-0.13	-0.42	13.04	5.17	10.77	12.79
1129	12/28/01	Map 10			0.87	2.76	13.04	-2.07	-4.31	12.79
1130	12/29/01	Map 10			0.87	2.76	13.04	0.93	1.94	12.79
1131	12/29/01	Map 10			0.87	2.76	13.04	-1.07	-2.23	12.79
1132	12/29/01	Map 10			0.87	2.76	13.04	-1.07	-2.23	12.79
1133	12/29/01	Map 10			0.87	2.76	13.04	1.93	4.03	12.79
1134	12/29/01	Map 10			0.87	2.76	13.04	5.93	12.37	12.79
1135	12/29/01	Map 10			1.87	5.95	13.04	0.66	1.38	12.79
1136	12/29/01	Map 10			-0.13	-0.42	13.04	-0.83	-1.74	12.79
1137	12/29/01	Map 10			-0.13	-0.42	13.04	1.17	2.43	12.79
1138	12/29/01	Map 10			-0.13	-0.42	13.04	-0.83	-1.74	12.79
1139	12/29/01	Map 10			-0.13	-0.42	13.04	3.17	6.60	12.79

Radiological Survey Logsheet Continuation

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
1140	12/29/01	Map 10			-0.13	-0.42	13.04	0.17	0.35	12.79
1141	12/29/01	Map 10			-0.13	-0.42	13.04	0.17	0.35	12.79
1142	12/29/01	Map 10			-0.13	-0.42	13.04	-1.83	-3.82	12.79
1143	12/29/01	Map 10			-0.13	-0.42	13.04	0.17	0.35	12.79
1144	12/29/01	Map 10			-0.13	-0.42	13.04	-1.83	-3.82	12.79
1145	12/29/01	Map 10			-0.13	-0.42	13.04	1.17	2.43	12.79
1146	12/29/01	Map 10			-0.13	-0.42	13.04	-1.83	-3.82	12.79
1147	12/29/01	Map 10			1.87	5.95	13.04	4.66	9.72	12.79
1148	12/29/01	Map 10			-0.13	-0.42	13.04	-1.83	-3.82	12.79
1149	12/29/01	Map 10			-0.13	-0.42	13.04	-0.83	-1.74	12.79
1150	12/29/01	Map 10			-0.13	-0.42	13.04	-0.83	-1.74	12.79
1151	12/29/01	Map 10			2.87	9.14	13.04	1.39	2.90	12.79
1152	12/29/01	Map 10			-0.13	-0.42	13.04	4.17	8.69	12.79
1153	12/29/01	Map 10			0.87	2.76	13.04	-0.07	-0.14	12.79
1154	12/29/01	Map 10			-0.13	-0.42	13.04	-1.83	-3.82	12.79
1155	12/29/01	Map 10			1.87	5.95	13.04	1.66	3.46	12.79
1156	12/29/01	Map 10			-0.13	-0.42	13.04	2.17	4.52	12.79
1157	12/29/01	Map 10			-0.13	-0.42	13.04	-0.83	-1.74	12.79
1158	12/29/01	Map 10			-0.13	-0.42	13.04	-1.83	-3.82	12.79
1159	12/29/01	Map 10			0.87	2.76	13.04	1.93	4.03	12.79
1160	12/29/01	Map 10			-0.13	-0.42	13.04	2.17	4.52	12.79
1161	12/29/01	Map 10			-0.13	-0.42	13.04	-0.83	-1.74	12.79
1162	12/29/01	Map 10			0.87	2.76	13.04	-0.07	-0.14	12.79
1163	12/29/01	Map 10			-0.13	-0.42	13.04	0.17	0.35	12.79
1164	12/29/01	Map 10			-0.13	-0.42	13.04	2.17	4.52	12.79
1165	12/29/01	Map 10			-0.13	-0.42	13.04	-0.83	-1.74	12.79
1166	12/29/01	Map 10			1.87	5.95	13.04	-1.34	-2.79	12.79
1167	12/29/01	Map 10			0.87	2.76	13.04	-0.07	-0.14	12.79
1168	12/29/01	Map 10			-0.13	-0.42	13.04	-1.83	-3.82	12.79
1169	12/29/01	Map 10			-0.13	-0.42	13.04	0.17	0.35	12.79
1170	12/29/01	Map 10			-0.13	-0.42	13.04	0.17	0.35	12.79
1171	12/29/01	Map 10			0.87	2.76	13.04	-1.07	-2.23	12.79
1172	12/29/01	Map 10			-0.13	-0.42	13.04	0.17	0.35	12.79
1173	12/29/01	Map 10			0.87	2.76	13.04	-1.07	-2.23	12.79

Radiological Survey Logsheet Continuation

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
1174	12/29/01	Map 10			-0.13	-0.42	13.04	4.17	8.69	12.79
1175	12/29/01	Map 10			-0.13	-0.42	13.04	0.17	0.35	12.79
1176	12/29/01	Map 10			-0.13	-0.42	13.04	-1.83	-3.82	12.79
1177	12/29/01	Map 10			0.87	2.76	13.04	0.93	1.94	12.79
1178	12/29/01	Map 10			-0.13	-0.42	13.04	0.17	0.35	12.79
1179	12/29/01	Map 10	*	*	7.87	25.07	13.04	21.04	43.85	12.79
1180	12/29/01	Map 10			-0.13	-0.42	13.04	-1.83	-3.82	12.79
1181	12/29/01	Map 10			-0.13	-0.42	13.04	-1.83	-3.82	12.79
1182	12/29/01	Map 10			1.87	5.95	13.04	1.66	3.46	12.79
1183	12/29/01	Map 5			-0.13	-0.42	13.04	3.17	6.60	12.79
1184	12/29/01	Map 5			0.87	2.76	13.04	0.93	1.94	12.79
1185	12/29/01	Map 5			-0.13	-0.42	13.04	-1.83	-3.82	12.79
1186	12/29/01	Map 5			-0.13	-0.42	13.04	-0.83	-1.74	12.79
1187	12/29/01	Map 5			-0.13	-0.42	13.04	1.17	2.43	12.79
1188	12/29/01	Map 5			-0.13	-0.42	13.04	1.17	2.43	12.79
1189	12/29/01	Map 5	*	*	7.87	25.07	13.04	32.04	66.78	12.79
1190	12/29/01	Map 5	*	*	13.87	44.19	13.04	26.41	55.06	12.79
1191	12/29/01	Map 5	*	*	8.87	28.26	13.04	24.76	51.63	12.79
1192	12/29/01	Map 5	*	*	7.87	25.07	13.04	20.04	41.77	12.79
1193	12/29/01	Map 5	*	*	7.87	25.07	13.04	7.04	14.67	12.79
1194	12/29/01	Map 5	*	*	12.87	41.00	13.04	14.68	30.60	12.79
1195	12/29/01	Map 5		*	3.87	12.32	13.04	20.12	41.94	12.79
1196	12/29/01	Map 5	*	*	5.87	18.70	13.04	12.58	26.22	12.79
1197	12/29/01	Map 5		*	3.87	12.32	13.04	20.12	41.94	12.79
1198	12/29/01	Map 5	*		5.87	18.70	13.04	3.58	7.46	12.79
1199	12/29/01	Map 5		*	1.87	5.95	13.04	6.66	13.89	12.79
1200	12/29/01	Map 5			1.87	5.95	13.04	4.66	9.72	12.79
1201	12/29/01	Map 5			-0.13	-0.42	13.04	0.17	0.35	12.79
1202	12/29/01	Map 5			0.87	2.76	13.04	-0.07	-0.14	12.79
1203	12/29/01	Map 5			0.87	2.76	13.04	2.93	6.11	12.79
1204	12/29/01	Map 5			-0.13	-0.42	13.04	0.17	0.35	12.79
1205	12/29/01	Map 5			-0.13	-0.42	13.04	1.17	2.43	12.79
1206	12/29/01	Map 5			-0.13	-0.42	13.04	2.17	4.52	12.79
1207	12/29/01	Map 5			-0.13	-0.42	13.04	1.17	2.43	12.79

Radiological Survey Logsheet Continuation

Pratt & Whitney,North Haven, Final Radiological survey

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
1208	12/29/01	Map 5			-0.13	-0.42	13.04	0.17	0.35	12.79
1209	12/29/01	Map 5			0.87	2.76	13.04	-0.07	-0.14	12.79
1210	12/29/01	Map 5			-0.13	-0.42	13.04	1.17	2.43	12.79
1211	12/29/01	Map 5		*	-0.13	-0.42	13.04	6.17	12.86	12.79
1212	12/29/01	Map 5			-0.13	-0.42	13.04	1.17	2.43	12.79
1213	12/29/01	Map 5			-0.13	-0.42	13.04	2.17	4.52	12.79
1214	12/29/01	Map 5			-0.13	-0.42	13.04	-0.83	-1.74	12.79
1215	12/29/01	Map 5			-0.13	-0.42	13.04	2.17	4.52	12.79
1216	12/29/01	Map 5			0.87	2.76	13.04	-0.07	-0.14	12.79
1217	12/29/01	Map 5			-0.13	-0.42	13.04	1.17	2.43	12.79
1218	12/29/01	Map 5			-0.13	-0.42	13.04	0.17	0.35	12.79
1219	12/29/01	Map 5			-0.13	-0.42	13.04	-0.83	-1.74	12.79
1220	12/29/01	Map 5			-0.13	-0.42	13.04	0.17	0.35	12.79
1221	12/29/01	Map 5			1.87	5.95	13.04	-1.34	-2.79	12.79
1222	12/29/01	Map 5			0.87	2.76	13.04	-0.07	-0.14	12.79
1223	12/29/01	Map 5			2.87	9.14	13.04	2.39	4.98	12.79
1224	12/29/01	Map 5			-0.13	-0.42	13.04	-0.83	-1.74	12.79
1225	12/29/01	Map 5			-0.13	-0.42	13.04	-0.83	-1.74	12.79
1226	12/29/01	Map 5			-0.13	-0.42	13.04	3.17	6.60	12.79
1227	12/29/01	Map 5			-0.13	-0.42	13.04	3.17	6.60	12.79
1228	12/29/01	Map 5			-0.13	-0.42	13.04	0.17	0.35	12.79
1229	12/29/01	Map 5			0.87	2.76	13.04	0.93	1.94	12.79
1230	12/29/01	Map 5			-0.13	-0.42	13.04	1.17	2.43	12.79
1231	12/29/01	Map 5			0.87	2.76	13.04	3.93	8.20	12.79
1232	12/29/01	Map 5		*	3.87	12.32	13.04	7.12	14.84	12.79
1233	12/29/01	Map 5			1.87	5.95	13.04	1.66	3.46	12.79
1234	12/29/01	Map 5			2.87	9.14	13.04	-0.61	-1.27	12.79
1235	12/29/01	Map 5			-0.13	-0.42	13.04	-0.83	-1.74	12.79
1236	12/29/01	Map 5			-0.13	-0.42	13.04	0.17	0.35	12.79
1237	12/29/01	Map 5			-0.13	-0.42	13.04	-1.83	-3.82	12.79
1238	12/29/01	Map 5			-0.13	-0.42	13.04	-0.83	-1.74	12.79
1239	12/29/01	Map 5			-0.13	-0.42	13.04	5.17	10.77	12.79
1240	12/29/01	Map 5			1.87	5.95	13.04	0.66	1.38	12.79
1241	12/29/01	Map 5			0.87	2.76	13.04	-1.07	-2.23	12.79

Radiological Survey Logsheet Continuation

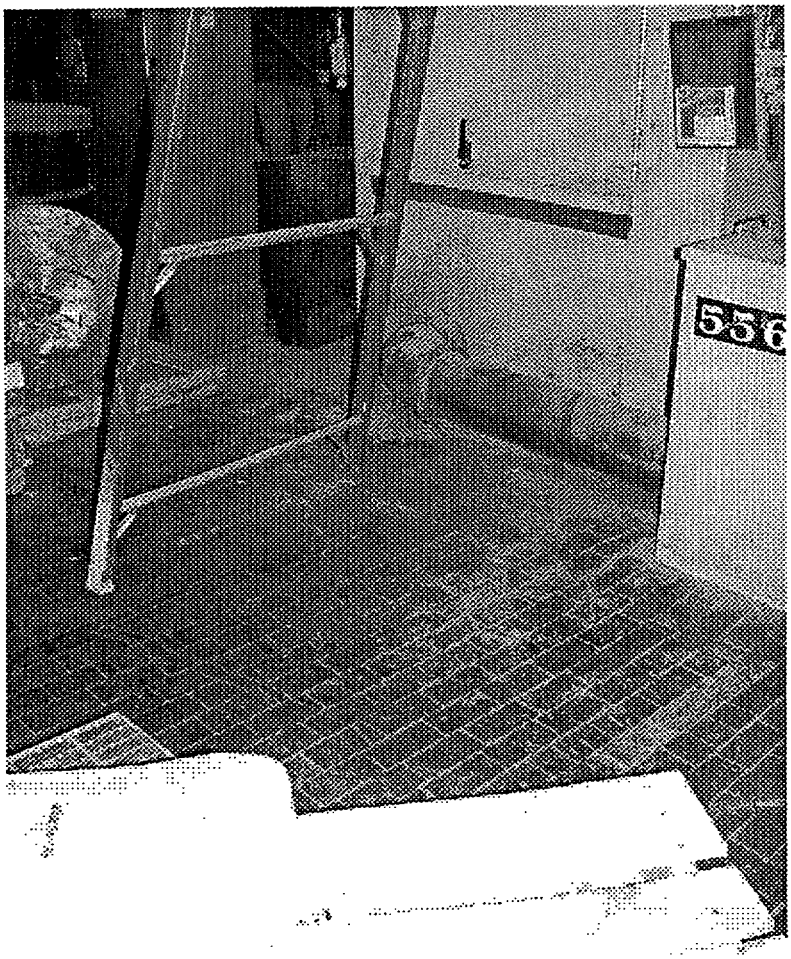
Pratt & Whitney,North Haven, Final Radiological survey

Wipe #	Count Date	Location	A Flag	B Flag	A CPM	A DPM	A LLD	B CPM	B DPM	B LLD
1242	12/29/01	Map 5			0.87	2.76	13.04	2.93	6.11	12.79
1243	12/29/01	Map 5			1.87	5.95	13.04	1.66	3.46	12.79
1244	12/29/01	Map 5			0.87	2.76	13.04	-2.07	-4.31	12.79
1245	12/29/01	Map 5			0.87	2.76	13.04	0.93	1.94	12.79
1246	12/29/01	Map 5			0.87	2.76	13.04	-0.07	-0.14	12.79
1247	12/29/01	Map 5			-0.13	-0.42	13.04	-1.83	-3.82	12.79
1248	12/29/01	Map 5			-0.13	-0.42	13.04	0.17	0.35	12.79
1249	12/29/01	Map 5			-0.13	-0.42	13.04	2.17	4.52	12.79
1250	12/29/01	Map 5		*	-0.13	-0.42	13.04	6.17	12.86	12.79
1251	12/29/01	Map 5			-0.13	-0.42	13.04	-1.83	-3.82	12.79
1252	12/29/01	Map 5			0.87	2.76	13.04	3.93	8.20	12.79
1253	12/29/01	Map 5			0.87	2.76	13.04	0.93	1.94	12.79
1254	12/29/01	Map 5			-0.13	-0.42	13.04	1.17	2.43	12.79
1255	12/29/01	Map 5			1.87	5.95	13.04	3.66	7.63	12.79
1256	12/29/01	Map 5			0.87	2.76	13.04	-1.07	-2.23	12.79
1257	12/29/01	Map 5			1.87	5.95	13.04	-0.34	-0.71	12.79
1258	12/29/01	Map 5			1.87	5.95	13.04	2.66	5.55	12.79
1259	12/29/01	Map 5			-0.13	-0.42	13.04	2.17	4.52	12.79
1260	12/29/01	Map 5			-0.13	-0.42	13.04	2.17	4.52	12.79
1261	12/29/01	Map 5			1.87	5.95	13.04	3.66	7.63	12.79
1262	12/29/01	Map 5			-0.13	-0.42	13.04	1.17	2.43	12.79
1263	12/29/01	Map 5			0.87	2.76	13.04	0.93	1.94	12.79
1264	12/29/01	Map 5		*	-0.13	-0.42	13.04	6.17	12.86	12.79
1265	12/29/01	Map 5			0.87	2.76	13.04	-0.07	-0.14	12.79
1266	12/29/01	Map 5			-0.13	-0.42	13.04	-1.83	-3.82	12.79
1267	12/29/01	Map 5			-0.13	-0.42	13.04	-0.83	-1.74	12.79
1268	12/29/01	Map 5			-0.13	-0.42	13.04	2.17	4.52	12.79
1269	12/29/01	Map 7			-0.13	-0.42	13.04	-1.83	-3.82	12.79
1270	12/29/01	Map 7	*		6.87	21.88	13.04	5.31	11.06	12.79
1271	12/29/01	Map 7			-0.13	-0.42	13.04	2.17	4.52	12.79
1272	12/29/01	Map 7			0.87	2.76	13.04	-2.07	-4.31	12.79
1273	12/29/01	Map 7			1.87	5.95	13.04	2.66	5.55	12.79
1274	12/29/01	Map 7			-0.13	-0.42	13.04	2.17	4.52	12.79

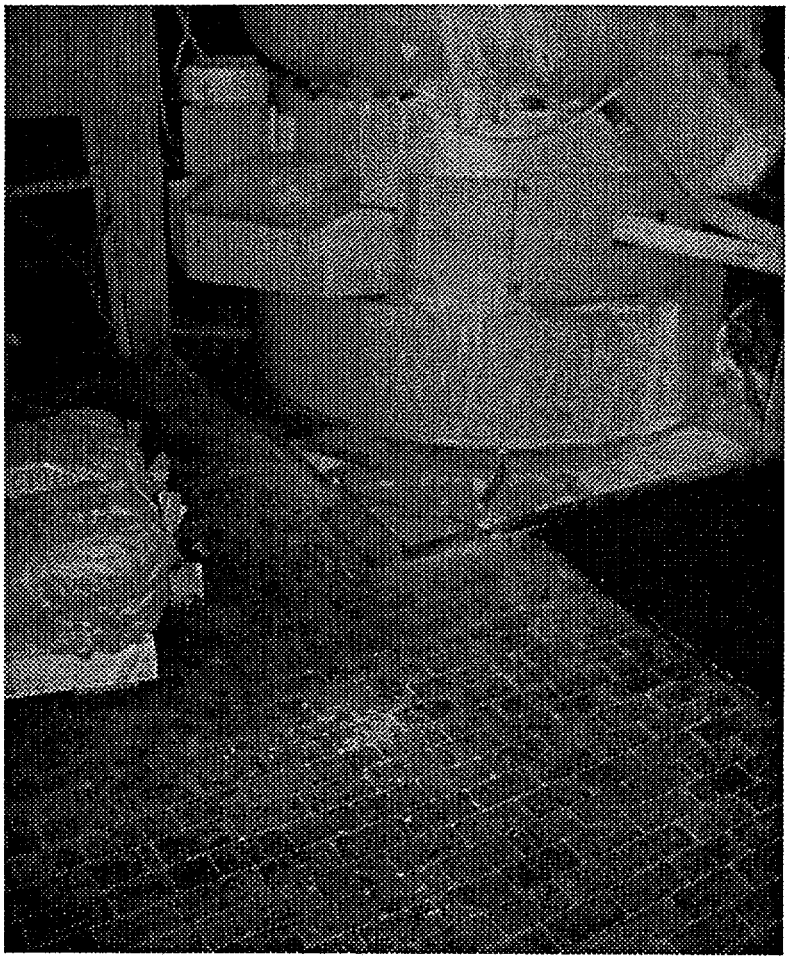
ATTACHMENT B-4

Photos of Manufacturing Area Locations Utilizing Powdered Coatings and Blast Media

Location: Map #2, S-7
Highest direct reading: 627 dpm/100 cm^2
Range of direct readings in the surrounding area: 106 dpm/100 cm^2 to 627 dpm/100 cm^2
Range of wipe test results: 0 dpm/100 cm^2 to 5.52 dpm/100 cm^2 (alpha)
0 dpm/100 cm^2 to 8.55 dpm/100 cm^2 (beta)



Location: Map #3, N-35
Highest direct reading: 381 dpm/100 cm^2
Range of readings in the surrounding area: 0 dpm/100 cm^2 to 381 dpm/100 cm^2
Range of wipe test results: 0 dpm/100 cm^2 (alpha)
0 dpm/100 cm^2 to 4.38 dpm/100 cm^2 (beta)



Location: Map #8, F-35
Highest direct reading: 1147 dpm/100 cm^2
Range of direct readings in the surrounding area: 137 dpm/100 cm^2 to 1147 dpm/100 cm^2
Range of wipe test results: 0 dpm/100 cm^2 to 2.76 dpm/100 cm^2 (alpha)
0 dpm/100 cm^2 (beta)

This is to acknowledge the receipt of your letter/application dated

2/19/2002, and to inform you that the initial processing which includes an administrative review has been performed.

AMEND. SMB-151 / 06-07522-02

☑ There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

☐ Please provide to this office within 30 days of your receipt of this card

A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 131104.
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260. 131105

NRC FORM 532 (RI)
(6-96)

Sincerely,
Licensing Assistance Team Leader

	:	(FOR LFMS USE)
	:	INFORMATION FROM LTS
BETWEEN:	:	----------
	:	
License Fee Management Branch, ARM	:	Program Code: 11300
and	:	Status Code: 0
Regional Licensing Sections	:	Fee Category: 2C
	:	Exp. Date: 20050630
	:	Fee Comments: _____
	:	Decom Fin Assur Reqd: Y
	::	

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED
   Applicant/Licensee: UNITED TECHNOLOGIES CORP.
   Received Date: 20020227
   Docket No: 4000791
   Control No.: 131104
   License No.: SMB-151
   Action Type: Amendment

2. FEE ATTACHED
   Amount: _____
   Check No.: _____

3. COMMENTS

Ref. 131105

Signed M. A. Barkine
Date 2/28/2002

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered /__/)

1. Fee Category and Amount: _____

2. Correct Fee Paid. Application may be processed for:
   Amendment _____
   Renewal _____
   License _____

3. OTHER _____
   _____

Signed _____
Date _____

	:	(FOR LFMS USE)
	:	INFORMATION FROM LTS
BETWEEN:	:	----------
	:	
License Fee Management Branch, ARM	:	Program Code: 03120
and	:	Status Code: 0
Regional Licensing Sections	:	Fee Category: 3P
	:	Exp. Date: 20050331
	:	Fee Comments: _____
	:	Decom Fin Assur Reqd: N
	::	

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED
   Applicant/Licensee: UNITED TECHNOLOGIES CORP.
   Received Date: 20020227
   Docket No: 3003796
   Control No.: 131105
   License No.: 06-07522-02
   Action Type: Amendment

2. FEE ATTACHED
   Amount: /
   Check No.: /

3. COMMENTS

REF. 131104

Signed M. A. Serbin
Date 2/28/2002

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered /__/)

1. Fee Category and Amount: _____

2. Correct Fee Paid. Application may be processed for:
   Amendment _____
   Renewal _____
   License _____

3. OTHER _____
   _____

Signed _____
Date _____