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ChemRisk/Shonka Research Associates, Inc., Document Request Form

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Jack Buddenbaum / K-25 Site Records
Requestor / Document Center (is requested to provide the following document)

Date of request 3/22/95 Expected receipt of document 4/7/95

Document number _____ Date of document 1958-1959

Title and author (if document is unnumbered)
K-1420 Air Analyses 1958-1959
(Please copy the entire folder

(This section to be completed by Document Center)

Date request received 3/27/95

Date submitted to ADC 4/3/95

Date submitted to HSA Coordinator 3/27/95

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Date received from CICO 5/9/95 7/10/95

Date submitted to ChemRisk/Shonka and DOE 2/11/95

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Sanitized Version of Folder of
K-1420 AIR ANALYSES 1958-1959

Compiled by

S. G. Thornton
Environmental Management Division
OAK RIDGE K-25 SITE
for the Health Studies Agreement

July 1995

Oak Ridge K-25 Site
Oak Ridge, Tennessee 37831-7301
managed by
LOCKHEED MARTIN ENERGY SYSTEMS, INC.
for the U.S. DEPARTMENT OF ENERGY
under Contract DE-AC05-84OR21400

This document has been approved for release
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Gary W. Hall for
Brian S. Tobin 7/10/95
Technical Information Officer Date
Oak Ridge K-25 Site

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 536
Routine X
Special
Requested by
Date 11-27-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	11-6-59	A Area Small parts disassembly booth	0850 - 0920	Uranium Hydrogen Fluoride	0.02 0.1	Two employees wore respirators as they disassembled equipment
			0920 - 0950		0.01 0.1	
			0950 - 1020		0.00 0.1	
		E Area Oxide conversion room	0850 - 0920		0.01 0.1	
			0920 - 0950		0.01 0.1	
			0950 - 1020		0.01 0.1	
		B Area West end of calciner platform	0850 - 0920		0.01 0.1	
			0920 - 0950		0.01 0.1	
			0950 - 1020		0.01 0.1	

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 536 Page 2
Routine X
Special
Requested by
Date 11-27-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	11-6-59	C Area By column G-10	0905 - 0935	Uranium Hydrogen Fluoride	<0.01 0.1	
			0935 - 1005		<0.01 <0.1	
			1005 - 1035		<0.01 0.1	
		By cutting stand	0905 - 0935		<0.01 <0.1	
			0935 - 1005		<0.01 <0.1	
3			1005 - 1035		<0.01 <0.1	Employee operated cutting machine.
		By converter disassembly-ing stand	0905 - 0935		<0.01 <0.1	Two employees disassembled convertor.
			0935 - 1005		0.01 0.1	
			1005 - 1035		0.53 1.1	
		C Area North east corner of floor pan	0905 - 0935		<0.01 <0.1	

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 536 Page 3
Routine X
Special
Requested by
Date 11-27-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	11-6-59	C Area North east corner of floor pan	0935 - 1005	Uranium	0.01 –	
				Hydrogen Fluoride	0.1	
			1005 - 1035		0.01 –	
					0.1	
			1040	Nitrogen Dioxide	1ppm	
			1048		1ppm	
		C Area Scrap saw platform, west end				Saw not in operation.
		West of scrap saw				

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INDUSTRIAL HYGIENE
AIR SAMPLING REPORT

NUMBER 536 Page 4
Routine X
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Date 11-27-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-4120	11-6-59	C Area South end of deferruling booth				Employees wore respirators as they knocked out ferrules.

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INDUSTRIAL HYGIENE
AIR SAMPLING REPORT

NUMBER 521
Routine X
Special
Requested by
Date 11-3-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	10-23-59	C Area West side of scrap saw platform				Employee wearing respirator while running saw.
		Ground floor, west of scrap saw platform				

WCX-2512 (9-55) K-25 RC Medical Department

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 614
Routine X
Special
Requested by
Date 1-11-60

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	12-28-59	C Area North-east corner of floor pan	0930 - 1000	Uranium	< 0.01mg/m3	
				Hydrogen Fluoride	< 0.1ppm	
			1000 - 1030		< 0.01	
					< 0.1	
			1030 - 1100		< 0.01	
					< 0.1	

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U - 3 + 0
HF - 3 + 0

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 604
Routine X
Special
Requested by
Date 1-11-60

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	12-28-59	A Area Small parts disassembling booth	0930 - 1000	Uranium Hydrogen Fluoride	< 0.01 < 0.1	
			1000 - 1030		< 0.01 < 0.1	
			1030 - 1100		0.01 < 0.1	
		B Area West end of calciner platform	0930 - 1000		< 0.01 < 0.1	One drum drier in operation.
			1000 - 1030		0.04 0.1	
			1030 - 1100		0.01 < 0.1	
		C Area By column	0930 - 1000		< 0.01 < 0.1	
			1000 - 1030		< 0.01 0.7	
			1030 - 1100		< 0.01 0.5	
		By cutting stand	0930 - 1000		< 0.01 < 0.1	

15+0
15+0

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INDUSTRIAL HYGIENE
AIR SAMPLING REPORT

NUMBER 604 Page 2
Routine X
Special
Requested by
Date 1-11-60

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	12-28-59	By cutting stand	1000 - 1030	Uranium	<0.01	
				Hydrogen Fluoride	<0.1	
			1030 - 1100		<0.01	
					<0.1	
		By converter disassembling platform	0930 - 1000		<0.01	
					<0.1	
			1000 - 1030		<0.01	
					<0.1	
			1030 - 1100		<0.01	
					<0.1	

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 580
Routine X
Special
Requested by
Date 12-17-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	12-3-59	A Area Small parts disassembly booth	1030 - 1100	Uranium Hydrogen Fluoride	0.06mg/m3 0.2ppm	Employee without respirator disassembled equipment.
			1100 - 1130		< 0.01mg/m3 0.1ppm	
			1130 - 1200		< 0.01mg/m3 0.1ppm	
		B Area West end of calciner platform	1030 - 1100		0.01mg/m3 < 0.1ppm	
			1100 - 1130		0.01mg/m3 0.0ppm	
			1130 - 1200		< 0.01mg/m3 < 0.1ppm	
		By centrifuge	1500	Nitrogen Dioxide	4.7ppm	
		By column G-10	1030 - 1100	Uranium Hydrogen Fluoride	< 0.01mg/m3 < 0.1ppm	
			1100 - 1130		< 0.01mg/m3 < 0.1ppm	Employees wearing respirator disassembled converter.
			1130 - 1200		< 0.01mg/m3 < 0.1ppm	

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 580 Page 2
Routine X
Special
Requested by
Date 12-17-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	12-3-59	By column G-8	1030 - 1100	Uranium Hydrogen Fluoride	<0.01mg/m3 0.1ppm	The head of converter was cut off 18 feet west of sampler. Air moves blowing from west to the cutting machine.
			1100 - 1130		<0.01mg/m3 0.1ppm	
			1130 - 1200		<0.01mg/m3 0.1ppm	
		By cutting stand	1030 - 1100		<0.01mg/m3 0.1ppm	Employee wearing respirator operated the cutting machine.
			1100 - 1130		<0.01mg/m3 0.1ppm	
			1130 - 1200		<0.01mg/m3 0.1ppm	
		C Area By converter disassembly platform	1030 - 1100		0.01mg/m3 0.1ppm	
			1100 - 1130		<0.01mg/m3 0.1ppm	
			1130 - 1200		<0.01mg/m3 0.1ppm	
		Northeast corner of floor pan	1030 - 1100		<0.01mg/m3 0.1ppm	

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INDUSTRIAL HYGIENE
AIR SAMPLING REPORT

NUMBER 580 Page 3
Routine X
Special
Requested by
Date 12-17-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	12-3-59	Northeast corner of floor pan	1100 - 1130	Uranium Hydrogen Fluoride	< 0.01 mg/m3 0.1 ppm	
			1130 - 1200		< 0.01 mg/m3 0.1 ppm	
		South side of acid spray booth	1515	Nitrogen Dioxide	0ppm	Equipment was being sprayed at this time.
	12-10-59	Mercury Recovery Room Center of room	1018	Mercury	0.02mg/m3	
		By sink	1019		0.01 mg/m3	
		Table top	1020		0.01 mg/m3	
		Cabinet under table	1022		0.02 mg/m3	One door missing.
						Droplets of Mercury on floor along east wall and on table against north wall.

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WGY 2512(9-55) K-25 PC Hygiene Department

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A. Warlan
H. J. Clouse
Safety
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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 557
Routine
Special X
Requested by H. J. Clouse
Date 12-4-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	11-14-59	B Area South end of calciner B	0030 - 0100	Uranium	<0.01	Solution going through vaporising columns. Drum driers not in operation.
		"	0100 - 0130	"	<0.01	"
		North end of calciner C	0038 - 0130	Nitrogen Dioxide	<0.1	"
		South end of calciner B	0130 - 0200	Uranium	0.02	"
		"	0200 - 0230	"	0.02	"
		"	0230 - 0300	"	<0.01	"
		"	0300 - 0330	"	<0.01	"
		"	0330 - 0400	"	<0.01	"
		North end of calciner C	0308 - 0400	Nitrogen Dioxide	<0.1	"
		South end of calciner B	0400 - 0430	Uranium	<0.01	Solution pumped from tank truck to vaporizer.
		"	0430 - 0500	"	<0.01	"
		"	0500 - 0530	"	<0.01	"
		"	0530 - 0600	"	<0.01	"
		"	0600 - 0630	"	0.01	"
		North end of calciner C	1615 - 1707	Nitrogen Dioxide	0.2ppm	Drum driers B and C in operation.

U 3 of 1
NO2 1 of 1

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R. J. Clouse
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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 557 Page 2
Routine
Special X
Requested by R. J. Clouse
Date 12-4-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	11-14-59	B Area				
		South end of calciner B	1625 - 1655	Uranium	0.01	Drum driers B and C in operation.
		"	1655 - 1785	"	< 0.01	Drum drier B in operation.
		North end of calciner C	1707 - 1759	Nitrogen Dioxide	0.2ppm	"
		"	1759 - 1851	"	0.2ppm	"
		South end of calciner B	1805 - 1835	Uranium	< 0.01	"
		"	1855 - 1925	"	< 0.01	"
		North end of calciner C	1851 - 1943	Nitrogen Dioxide	0.2ppm	Drier B in operation; 1930: Drier C started.
		South end of calciner B	1945 - 2015	Uranium	< 0.01	Drum driers B and C in operation.
		North end of calciner C	1943 - 2035	Nitrogen Dioxide	0.2ppm	"
		"	2035 - 2187	"	0.2ppm	"
		"	2127 - 2140	"	0.4ppm	"
		"	2205 - 2257	"	0.2ppm	"
		South end of calciner B	2030 - 2100	Uranium	< 0.01	"
		"	2115 - 2145	"	0.01	"
		"	2215 - 2245	"	< 0.01	"
		North end of calciner C	2140 - 2200	Nitrogen Dioxide	2.0ppm	"

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 554
Routine X
Special
Requested by
Date 12-3-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	11-19-59	B Area North end of drum drier C	2043 - 2135	Nitrogen Dioxide	1.0ppm	Drum drier A in operation.
			2135 - 2227		0.9ppm	
		South side of calciner A	2040 - 2110	Uranium	< 0.01	Drum drier A in operation.
			2110 - 2140		< 0.01	
			2140 - 2210		< 0.01	
			2210 - 2240		< 0.01	

NO_2 2 - 0
U 4 - 0

ISSUED BY: D L Stoddard

SPECIAL INDUSTRIAL EXAMINATIONS FOR SRO MATERIAL
K-1420, November 13 through 19, 1959

BADGE NO.	NAME	MOST RECENT INDUSTRIAL	SPECIAL INDUSTRIAL	SPECIAL RECALL
		9-10-59 U-0.004, A-0.4	11-13-59 U-0.015, A-0.0	11-16-59 U-0.007, A-0.5
		10-3-59 U-0.003, A-0.1	11-13-59 U-0.016, A-0.0	11-16-59 U-0.005, A-0.0
		10-30-59 U-0.006, A-0.0	11-13-59 U-0.006, A-0.0	11-16-59 U-0.005, A-0.7
		9-10-59 U-0.004, A-0.3	11-13-59 U-0.005, A-0.0	11-16-59 U-0.002, A-0.1
		9-17-59 U-0.007, A-0.6	11-13-59 U-0.003, A-0.0	11-16-59 U-0.004, A-0.3
		11-8-59 U-0.015, A-X	11-14-59 U-0.009, A-0.1	11-16-59 U-0.009, A-0.5
		11-6-59 U-0.035, A-0.2	11-14-59 U-0.019, A-0.2	11-16-59 U-0.013, A-1.0
		9-19-59 U-0.008, A-0.3	11-13-59 U-0.007, A-0.0	11-16-59 U-0.006, A-0.0
		9-25-59 U-0.005, A-0.0	11-13-59 U-0.006, A-0.0	----------
		9-22-59 U-0.002, A-0.4	11-13-59 U-0.008, A-0.0	----------
		9-22-59 U-0.008, A-0.1	11-13-59 U-0.005, A-0.3	11-16-59 U-0.005, A-0.5
		----------	11-13-59 U-0.006, A-0.2	----------
		9-14-59 U-0.007, A-0.6	11-13-59 U-0.085, A-1.4	11-16-59 U-0.009, A-0.1
		10-23-59 ----------	11-14-59 U-0.005, A-0.3	11-16-59 U-0.007, A-0.1

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 499 X
Routine
Special
Requested by
Date 10-29-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	10-21-59	A Area Small parts booth	0910 - 0940	Uranium Hydrogen Fluoride	<0.01mg/m³ 0.1ppm	Employee, wearing respirator, was dis-assembling equipment in hood.
			0940 - 1010		<0.01mg/m³ 0.1ppm	
			1010 - 1040		0.01mg/m³ 0.1ppm	
		E Area Oxide conversion room. East end	0910 - 0940		<0.01mg/m³ 0.1ppm	Sub-contractor employees were working in area.
			0940 - 1010		<0.01mg/m³ 0.1ppm	
			1010 - 1040		0.01mg/m³ 0.1ppm	
		B Area West end of calciner platform	0910 - 0940		<0.01mg/m³ 0.1ppm	One drum drier in operation.
			0940 - 1010		<0.01mg/m³ 0.1ppm	
			1010 - 1040		<0.01mg/m³ 0.1ppm	

U 24 -
HF 24 -
NO2 2

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NUMBER 499 Page 2
Routine X
Special
Requested by
Date 10-29-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	10-21-59	C Area By column C-10	0910 - 0940	Uranium Hydrogen Fluoride	0.01mg/m³ <0.1ppm	
			0940 - 1010		<0.01mg/m³ <0.1ppm	Employees, wearing respirators, were disassembling converter.
			1010 - 1040		0.02mg/m³ 0.1ppm	
		By cutting stand	0910 - 0940		0.01mg/m³ 0.1ppm	
			0940 - 1010		<0.01mg/m³ <0.1ppm	
			1010 - 1040		<0.01mg/m³ 0.1ppm	
		By converter disassembling stand	0910 - 0940		0.01mg/m³ <0.1ppm	Employees, wearing respirators, were disassembling converter.
			0940 - 1010		<0.01mg/m³ <0.1ppm	
			1010 - 1040		0.01mg/m³ <0.1ppm	
		By debladding stand	0910 - 0940		<0.01mg/m³ <0.1ppm	Employees, wearing respirators, were debladding compressor.

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NUMBER 499 Page 3
Routine X
Special
Requested by
Date 10-29-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	10-21-59	C Area By deblading stand	0940 - 1010	Uranium Hydrogen Fluoride	0.01mg/m³ 0.2ppm	Employees, wearing respirators, were deblading compressor.
			1010 - 1040		0.03mg/m³ 0.1ppm	
		Northeast corner of floor pan	0910 - 0940		<0.01mg/m³ 0.1ppm	Employee, wearing respirator, was cleaning equipment.
			0940 - 1010		<0.01mg/m³ 0.1ppm	
			1010 - 1040		0.01mg/m³ 0.1ppm	
		By door to acid spray booth	1540	Nitrogen Dioxide	0ppm	No spraying at this time.
		B Area				Recovery unit in operation.

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AIR SAMPLING REPORT

NUMBER 499 Page 4
Routine X
Special
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Date 10-29-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	10-21-59	B Area				Operator, wearing respirator, was loading hopper. Employee, wearing respirator, was in area.
		By centrifuge	1520	Nitrogen Dioxide	2.4ppm	

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 468
Routine X
Special
Requested by
Date 10-15-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	10-4-59	K Area By Oxide Conversion Line A	1115 - 1145	Uranium Hydrogen Fluoride	<0.01mg/m^3 <0.1ppm	In operation.
			1145 - 1215		<0.01mg/m^3 <0.1ppm	
			1215 - 1245		<0.01mg/m^3 <0.1ppm	
		Line B	1115 - 1145		0.01mg/m^3 <0.1ppm	In operation.
			1145 - 1215		<0.01mg/m^3 <0.1ppm	
			1215 - 1245		<0.01mg/m^3 <0.1ppm	
		Line C	1115 - 1145		<0.01mg/m^3 <0.1ppm	In operation.
			1145 - 1215		<0.01mg/m^3 <0.1ppm	
			1215 - 1245		<0.01mg/m^3 <0.1ppm	

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NUMBER 468 Page 2
Routine X
Special
Requested by
Date 11-1-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	10-7-59	A Area Small parts booth	0930 - 1000	Uranium Hydrogen Fluoride	0.09mg/m^3 0.5ppm	Employees wearing respirators disassembled small parts.
			1000 - 1030		< 0.01mg/m^3 0.3ppm	
			1030 - 1100		0.03mg/m^3 0.5ppm	
		E Area West end of oxide conversion unit line A	0930 - 1000		< 0.01mg/m^3 0.1ppm	Lines A and B in operation. Employee wearing respirator rodding out line C. Lines A and B in operation.
			1000 - 1030		< 0.01mg/m^3 0.1ppm	
			1030 - 1100		0.01mg/m^3 0.1ppm	
		B Area West end of calciner platform	0930 - 1000		0.01mg/m^3 0.1ppm	One drum dryer in operation.
			1000 - 1030		0.01mg/m^3 0.1ppm	Broken.
			1030 - 1100		0.01mg/m^3 0.1ppm	

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AIR SAMPLING REPORT

NUMBER 468 Page 3
Routine X
Special
Requested by
Date 10-15-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	10-7-59	C Area By column C-10	0930 - 1000	Uranium Hydrogen Fluoride	0.01mg/m^3 0.1ppm	Employees wearing respirators disassembling a converter.
			1000 - 1030		0.01mg/m^3 0.1ppm	
			1030 - 1100		<0.01mg/m^3 0.1ppm	
		By cutting stand	0930 - 1000		<0.01mg/m^3 <0.1ppm	Employees wearing respirators cut open a converter.
			1000 - 1030		<0.01mg/m^3 0.1ppm	
			1030 - 1100		0.01mg/m^3 0.1ppm	
		By converter disassembling platform	0930 - 1000		0.01mg/m^3 <0.1ppm	Employees wearing respirators disassembled a converter.
			1000 - 1030		<0.01mg/m^3 0.1ppm	
			1030 - 1100		<0.01mg/m^3 0.1ppm	

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Routine X
Special
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Date 10-15-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	10-7-59	C Area Northeast corner of floor pan	0930 - 1000	Uranium Hydrogen Fluoride	0.01mg/m^3 < 0.1ppm	
			1000 - 1030		0.01mg/m^3 0.1ppm	
			1030 - 1100		< 0.01mg/m^3 0.1ppm	
		South end of deferruling booth				By employees wearing respirators knocking out ferrules.
		West side of scrap saw platform				Employee wearing respirator on the platform.

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NUMBER 468 Page 5
Routine X
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BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	10-7-59	C Area West of screw saw				Saw in operation.
		B Area				Screener in operation.
						Employee wearing respirator

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NUMBER 468 Page 6
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Date 10-15-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	10-7-59	F Area Mercury recovery room By washing table	1435	Mercury	0.04mg/m3	
		Southwest corner	1437		0.10mg/m3	
		Under washing sink	1439		0.09mg/m3	
		Under right side of sink	1443		0.08mg/m3	
		By Mercury stills	1455		0.02mg/m3	Exhaust system on. 4 stills in operation.
		Storage table, North end	1500		0.02mg/m3	

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NUMBER 487
Routine X
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Date 10-21-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	9-30-59	C Area Northeast corner of deblading platform	1210 - 1240	Uranium Hydrogen Fluoride	0.03mg/m³ 0.3ppm	Employees, wearing respirators, were deblading compressor.
			1240 - 1310		0.05mg/m³ 0.3ppm	
			1310 - 1340		0.02mg/m³ 0.2ppm	
		Northeast corner of floor pan	1210 - 1240		< 0.01mg/m³ 0.1ppm	Employees, wearing respirators, were cleaning equipment.
			1240 - 1310		0.02mg/m³ < 0.1ppm	
			1310 - 1340		0.01mg/m³ < 0.1ppm	
		West end of scrap saw platform				Employee, wearing respirator, was on platform. Saw in operation.

U 6-1
HF 6-1

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NUMBER 487 Page 2
Routine X
Special
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Date 10-21-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	9-30-59	C Area West of scrap saw				
		South end of deferruling booth				Employees, wearing respirators, were removing ferrules. Ferrules were wet.

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INDUSTRIAL HYGIENE
AIR SAMPLING REPORT

NUMBER 462
Routine X
Special
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Date 10-[illegible]-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
[illegible]-142[illegible]	9-27-59	C Area Oxide Conversion Line A	2100 - 2130	Uranium Hydrogen Fluoride	<0.1mg/m^3 0.1ppm	Line not in operation.
			2130 - 2200		<0.1mg/m^3 <0.1ppm	
			2200 - 2230		0.02mg/m^3 0.1ppm	Operator wearing assault mask. 2200: Receiver off. 2203: Receiver replaced. 2215: Line charged. 2221: Line in operation.
		Line B	2100 - 2130		<0.01mg/m^3 0.1ppm	Line not in operation.
			2130 - 2200		<0.03mg/m^3 <0.1ppm	
			2200 - 2230		<0.01mg/m^3 <0.1ppm	Operator wearing assault mask. 2205: Receiver off. 2207: Receiver replaced. 2218: Line charged. 22[illegible]5: Line in operation.
		Line C	2100 - 2130		<0.01mg/m^3 0.1ppm	2100: Maintenance on line filter, line not in operation.
			2130 - 2200		<0.01mg/m^3 <0.1ppm	
			2200 - 2230		0.35mg/m^3 0.1ppm	Operator wearing assault mask. 2210: Receiver off 2212: Receiver replaced. 2220: Line charged. 2222: Line in operation.

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U 25-
HF 27-

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NUMBER 462 Page 2
Routine X
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Date 10-6-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	9-30-59	A Area Small parts disassembly booth by hood	1210 - 1240	Uranium Hydrogen Fluoride	0.01mg/m^3 0.1ppm	Employees wearing respirators disassembling equipment in hood.
			1240 - 1310		0.04mg/m^3 0.1ppm	
			1310 - 1340		0.11mg/m^3 0.6ppm	Some equipment in hot plates on table.
		B Area Oxide conversion room west end of line 4	1210 - 1240		0.01mg/m^3 0.1ppm	All units in operation. Odor of Hydrogen Fluoride.
			1240 - 1310		0.01mg/m^3 0.2ppm	
			1310 - 1340		0.04mg/m^3 0.2ppm	
		B Area West end of calciner platform.	1210 - 1240		0.01mg/m^3 0.1ppm	Two units in operation.
			1240 - 1310		0.01mg/m^3 0.1ppm	
			1310 - 1340		0.01mg/m^3 0.1ppm	

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AIR SAMPLING REPORT

NUMBER 462 Page 3
Routine X
Special
Requested by
Date 10-2-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	9-30-59	C Area By column C-10	1210 - 1240	Uranium Hydrogen Fluoride	0.02mg/m^3 2.8ppm	Employee in area with vacuum cleaner.
			1240 - 1310		0.03mg/m^3 0.6ppm	
			1310 - 1340		0.04mg/m^3 1.3ppm	
		By cutting stand	1210 - 1240		0.01mg/m^3 0.2ppm	
			1240 - 1310		0.04mg/m^3 0.2ppm	
			1310 - 1340		0.04mg/m^3 0.2ppm	
		By converter disassembly stand	1210 - 1240		0.01mg/m^3 0.3ppm	
			1240 - 1310		0.04mg/m^3 0.3ppm	
			1310 - 1340		0.02mg/m^3 0.3ppm	

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NUMBER 459
Routine X
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Date 10-[illegible]-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
[illegible]-1420	9-24-59	F Area Mercury Recovery Room Above washing table	1540 -	Mercury	0.00mg/m^3	
		Southeast corner			0.00mg/m^3	
		Under sink			0.04mg/m^3	
		Table, west of sink			0.0[illegible]mg/m^3	
		Under table west of sink			0.03mg/m^3	
		Metal waste can			0.24mg/m^3	
		By mercury stills	- 1605		0.00mg/m^3	No stills in operation

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10 4 Stills

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NUMBER 451
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Requested by
Date 9-30-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	9-20-59	Oxide Conversion A Line	1840 - 1910	Uranium Fluorine	0.02mg/m³ 0.1ppm	1840: Fluorine off, Nitrogen purge. Employee wearing assault mask
			1910 - 1940	Uranium Hydrogen Fluoride	0.31mg/m³ 0.4ppm	1920: receiver removed. 1922: receiver replaced. 1937: A Line charged.
			1940 - 2010		0.11mg/m³ 0.4ppm	1955: A Line in operation.
		B Line	1840 - 1910		0.01mg/m³ 0.2ppm	1840: Fluorine off, Nitrogen purge Employee wearing assault mask.
			1910 - 1940		1.62mg/m³ 4.4ppm	1925: receiver removed. 1928: receiver replaced. 1940: B Line charged.
			1940 - 2010		0.02mg/m³ 0.4ppm	1955: B Line in operation.
						1930: C Line receiver removed. 1933: C Line receiver replaced 1950: C Line Charged 1955: Fluorine release, C Line 2000: C Line not operating. Building exhaust in operation. Line exhaust system operating poorly.

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AIR SAMPLING REPORT

NUMBER 367
Routine X
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BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	8-12-59	Mercury Recovery Room Middle	1455	Mercury	0.02mg/m3	
		By washing sink			0.01mg/m3	Mercury being washed.
		Southeast corner			0.06mg/m3	Considerable amount of Mercury stored in bottles.
		Cabinet under sink			0.22mg/m3	
		By cabinet shelves			0.24mg/m3	
		By Mercury stills			0.09mg/m3	Stills in operation.
		Storage table			0.02mg/m3	
		At hood intake - behind still rack	1525	Air Velocity		
		Center of hood			250fpm	
		left and right end of hood			180fpm	

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Hg 5-
Misc 2

WCX-2512(9-55) K-25 RC Medical Department

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 348
Routine X
Special
Requested by
Date 8-4-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	7-22-59	A Area Small parts booth	1000 - 1030	Uranium Hydrogen Fluoride	0.02mg/m3 0.1 ppm	Employees, wearing respirators, were disassembling equipment in hood.
			1030 - 1100		<0.01mg/m3 <0.1 ppm	
			1100 - 1130		<0.01mg/m3 <0.1 ppm	
		E Area West end of conversion line B	1000 - 1030		0.03mg/m3 0.1 ppm	All units in operation.
			1030 - 1100		0.01mg/m3 0.1 ppm	" " Leak on line A.
			1100 - 1130		<0.01mg/m3 0.1 ppm	
		B Area West end of calciner platform	1000 - 1030		<0.01mg/m3 0.1 ppm	Two units in operation.
			1030 - 1100		<0.01mg/m3 0.1 ppm	" "
			1100 - 1130		<0.01mg/m3 <0.1 ppm	" "

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AIR SAMPLING REPORT

NUMBER 348 Page 2
Routine X
Special
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Date 8-2-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	7-22-59	C Area By column C-10	1000 - 1030	Uranium Hydrogen Fluoride	<0.01mg/m3 0.1 ppm	
			1030 - 1100		0.01mg/m3 0.1 ppm	
			1100 - 1130		0.01mg/m3 <0.1 ppm	
		By cutting stand	1000 - 1030		0.02mg/m3 0.1 ppm	
			1030 - 1100		0.01mg/m3 0.1 ppm	
			1100 - 1130		0.01mg/m3 <0.1 ppm	
		By converter disassembling stand	1000 - 1030		0.02mg/m3 0.1 ppm	
			1030 - 1100		<0.01mg/m3 <0.1 ppm	
			1100 - 1130		0.01mg/m3 0.1 ppm	

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NUMBER 348 Page 3
Routine X
Special
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Date 6-4-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	7-22-59	C Area Northeast corner of floor pan	1000 - 1030	Uranium Hydrogen Fluoride	0.03mg/m3 <0.1 ppm	
			1030 - 1100		0.03mg/m3 <0.1 ppm	
			1100 - 1130		0.05mg/m3 0.5 ppm	
		West end of scrap saw platform				Employee, wearing respirator, was operating saw on platform.
						" "
						" "
		West of scrap saw				

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 372
Routine X
Special
Requested by
Date 8-19-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	7-22-59	C Area northeast corner of floor pan	1015	Nitrogen dioxide	0 ppm	No cleaning at this time.
		south side of acid spray booth	1030		0 ppm	" "
	7-28-59	A Area Small parts disassembly booth	0930 - 1000	Uranium Hydrogen fluoride	0.01mg/m3 0.1 ppm	Painters in area. No disassembly operations in progress.
			1000 - 1030		0.01mg/m3 0.1 ppm	" "
			1030 - 1100		0.01mg/m3 0.1 ppm	" "
		E Area west end of oxide conversion unit, line A	0930 - 1000		0.01mg/m3 0.1 ppm	
			1000 - 1030		0.09mg/m3 0.1 ppm	
			1030 - 1100		0.02mg/m3 0.1 ppm	
		Area B west end of calciner platform	0930 - 1000		0.01mg/m3 0.0 ppm	
			1000 - 1030		0.01mg/m3 0.1 ppm	

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NUMBER 372 Page 2
Routine X
Special
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Date 8-19-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	7-28-59	B Area west end of calciner platform	1030 - 1100	Uranium Hydrogen fluoride	<0.01mg/m3 <0.1 ppm	
		C Area By Column G-10	0930 - 1000		<0.01mg/m3 <0.1 ppm	
			1000 - 1030		<0.01mg/m3 <0.1 ppm	
			1030 - 1100		<0.01mg/m3 <0.1 ppm	
		By cutting stand	0930 - 1000		<0.01mg/m3 <0.1 ppm	
			1000 - 1030		<0.01mg/m3 <0.1 ppm	
			1030 - 1100		<0.01mg/m3 <0.1 ppm	
		By converter disassembly stand	0930 - 1000		<0.01mg/m3 0.4 ppm	
			1000 - 1030		<0.01mg/m3	Employees wearing respirators removing head unit.
			1030 - 1100		0.04mg/m3 0.5 ppm	
		northeast corner of floor pan	0930 - 1000		<0.1mg/m3 <0.1 ppm	

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Date 8-19-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1.20	7-2[illegible]-59	C Area northeast corner of floor pan	1000 - 1030	Uranium	<0.1ug/m3	
				Hydrogen fluoride	<0.1 ppm	
			1030 - 1100		0.01ug/m3	
					<0.1 ppm	
		Scrap saw platform				Employee wearing respirator, cut scrap by hand, scrap saw not in operation.
		West of scrap platform				
		South end of deferraling booth				Employee wearing respirator, wet ferrules with penetrating oil before removing them out.

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Special
Requested by
Date 8-19-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	7-28-59	C Area South end of deferraling booth				Employee wearing respirator wet ferrules with penetrat ing oil before removing them out.
	8-5-59	A Area By small parts booth	0900 - 0930	Uranium Hydrogen fluoride	0.01mg/m3 0.1 ppm	
			0930 - 1000		0.01mg/m3 0.1 ppm	
			1000 - 1030		0.10mg/m3 0.2 ppm	
		E Area By oxide conversion unit A	0900 - 0930		0.01mg/m3 0.1 ppm	Two units in operation
			0930 - 1000		0.01mg/m3 0.1 ppm	" "
			1000- 1030		0.01mg/m3 0.0 ppm	" "
		B Area By calciner platform	0900 - 0930		0.01mg/m3 0.1 ppm	
			0930 - 1000		0.01 mg/m3 0.1 ppm	

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NUMBER 372 Page 5
Routine
Special
Requested by
Date 8-20-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	8-5-59	B Area By calciner platform	1000 - 1030	Uranium Hydrogen fluoride	0.01mg/m3 0.1 ppm	
		C Area By column G-10	0900 - 0930		0.01 mg/m3 <0.1 ppm	
			0930 - 1000		<0.01mg/m3 <0.1 ppm	
			1000- 1030		<0.01mg/m3 0.1 ppm	
		By cutting stand	0900 - 0930		0.01mg/m3 0.1 ppm	
			0930 - 1000		0.01mg/m3 0.1 ppm	
			1000 - 1030		<0.01mg/m3 <0.1 ppm	
		By rotary disassembly stand	0900 - 0930		<0.01mg/m3 <0.1 ppm	
			0930 - 1000		<0.01mg/m3 <0.1 ppm	
			1000 - 1030		<0.01mg/m3 <0.1 ppm	
		By floor pan	0900 - 0930		0.01mg/m3 0.1 ppm	Employees wearing respirators cleaning equipment.

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NUMBER 372 Page 6
Routine X
Special
Requested by
Date 8-20-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	8-5-59	C Area By floor pan	0930 - 1000	Uranium Hydrogen fluoride	0.01mg/m3 0.1	Employees wearing respirators cleaning equipment.
			1000 - 1030		0.01mg/m3 0.1 ppm	" "
			1010	Nitrogen dioxide	4.1 ppm	Employees wearing respirator brushing equipment with HNO3.
		South side of acid spray booth	1020		1 ppm	No cleaning at this time.
		B Area By centrifuge	0940		3.2 ppm	Odor of Nitrogen dioxide. Activated alumina fed from 2nd floor through dilute HNO3 to centrifuge on ground floor.
		By alumina feeder	0950		1 ppm	

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AIR SAMPLING REPORT

NUMBER 322
Routine X
Special
Requested by
Date 7-21-52

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	7-7-52	F Area Mercury recovery Room By washing sink	1455	Mercury	0.10mg/m3	Mercury being washed.
		Cabinet under washing sink	1457		0.12mg/m3*	Instrument reading was higher at the moment the door was opened.
		West side of washing sink	1459		0.05mg/m3	Bottle of Mercury on shelf of cabinet.
		Cabinet under storage area	1505		0.12mg/m3*	
		Southeast corner of room	1510		0.0[illegible]mg/m3	Bottles of Mercury stored on floor.
		By Mercury stills	1515		0.[illegible]mg/m3	Stills not in operation.

* Miscellaneous - Non-environmental

Hg 3-21

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 294
Routine X
Special
Requested by
Date 6-30-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	6-11-59	E Area West end of oxide conversion unit, line B	0345 - 0415	Uranium Hydrogen Fluoride	0.00mg/m3 0.1 ppm	Two units in operation. Lines A and B.
			0415 - 0445		<0.01mg/m3 <0.1 ppm	" "
			0445 - 0515		0.00mg/m3 0.0 ppm	" "
		B Area West end of calciner platform	0345 - 0415		<0.01mg/m3 0.0 ppm	Two drum driers in operation.
			0415- 0445		0.00mg/m3 0.0 ppm	" "
			0445 - 0515		0.00mg/m3 0.0 ppm	" "
	6-18-59	C Area By column G-10	0925 - 0955		<0.01mg/m3 0.0 ppm	
			0955 - 1025		<0.01mg/m3 <0.1 ppm	
			1025 - 1055		<0.01mg/m3 <0.1 ppm	

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Date 6-19-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	6-18-59	C Area By cutting stand	0925 - 0955	Uranium Hydrogen Fluoride	0.01mg/m3 <0.1 ppm	Welder in area cutting converter.
			0955 - 1025		<0.01mg/m3 <0.1 ppm	
			1025 - 1055		0.01mg/m3 0.0 ppm	
		By disassembly stand	0925 - 0955		0.01mg/m3 <0.1 ppm	Operator disassembling converter.
			0955 - 1025		<0.01mg/m3 <0.1 ppm	
			1025 - 1055		<0.01mg/m3 0.1 ppm	
		By floor pan	0925 - 0955		<0.01mg/m3 <0.1 ppm	
			0955 - 1025		<0.01mg/m3 <0.1 ppm	
			1025 - 1055		0.01mg/m3 <0.1 ppm	
		A Area Small parts booth	1315 - 1345		<0.01mg/m3 0.0 ppm	Operator in area wearing respirator.
			1345 - 1415		<0.01mg/m3 0.0 ppm	" "

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NUMBER 24 Page 3
Routine X
Special
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Date 6-19-49

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-12	6-15-49	A Area Small parts booth	1415 - 1445	Uranium Hydrogen Fluoride	<0.01mg/m3 <.1 ppm	Operator in area wearing respirator.
		B Area By oxide conversion unit	1315 - 1345		0.01mg/m3 0.2 ppm	Odor of Hydrogen Fluoride.
			1345 - 1415		<0.01mg/m3 <0.1 ppm	" "
			1415 - 1445		<0.01mg/m3 <0.1 ppm	" "
		B Area By calciner platform	1315 - 1345		<0.01mg/m3 <0.1 ppm	Three calciners in operation.
			1345 - 1415		<0.01mg/m3 <0.1 ppm	" "
			1415 - 1445		<0.01mg/m3 0.0 ppm	" "

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 270
Routine X
Special
Requested by
Date 6-10-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	6-2-59	A Area Small parts disassembly booth	1330 - 1400	Uranium Hydrogen Fluoride	<0.01mg/m3 <0.1 ppm	By hood.
			1400 - 1430		<0.01mg/m3 <0.1 ppm	
			1430 - 1500		<0.01mg/m3 <0.1 ppm	
		E Area West end of oxide conversion unit line A	1330 - 1400		<0.01mg/m3 <0.1 ppm	Line B in operation
			1400 - 1430		<0.01mg/m3 <0.1 ppm	" "
			1430 - 1500		0.01mg/m3 <0.1 ppm	" "
		B Area West end of calciner platform	1330 - 1400		<0.01mg/m3 <0.1 ppm	One drum drier in operation.
			1400 - 1430		<0.01mg/m3 <0.1 ppm	" "
			1430 - 1500		<0.01mg/m3 <0.1 ppm	" "

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INDUSTRIAL HYGIENE
AIR SAMPLING REPORT

NUMBER 270 Page 2
Routine X
Special
Requested by
Date 6-16-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	6-2-59	C Area By column C-10	1330 - 1400	Uranium Hydrogen Fluoride	0.02mg/m3 0.1 ppm	
			1400 - 1430		<0.01mg/m3 <0.1 ppm	
			1430 - 1500		0.01mg/m3 <0.1 ppm	
		By cutting stand	1330 - 1400		<0.01mg/m3 <0.1 ppm	
			1400 - 1430		<0.01mg/m3 <0.1 ppm	
			1430 - 1500		<0.01mg/m3 <0.1 ppm	
		By converter disassembly stand	1330 - 1400		<0.01mg/m3 0.1 ppm	Employees, wearing respirators, were disassembling converter.
			1400 - 1430		0.01mg/m3 1.0 ppm	" "
			1430 - 1500		<0.01mg/m3 0.1 ppm	" "
		Northwest corner of compresser pit	1330 - 1400		<0.01mg/m3 0.1 ppm	
			1400 - 1430		<0.01mg/m3 <0.1 ppm	

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AIR SAMPLING REPORT

NUMBER 270 Page 3
Routine X
Special
Requested by
Date 6-15-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	6-2-59	C Area Northwest corner of compressor pit	1430 - 1500	Uranium Hydrogen Fluoride	<0.01mg/m3 <0.1 ppm	
		Northeast corner of floor pan	1330 - 1400		<0.01mg/m3 <0.1 ppm	Employee, wearing respirator, was steam cleaning equipment.
			1400 - 1430		<0.01mg/m3 <0.1 ppm	" "
			1430 - 1500		<0.01mg/m3 <0.1 ppm	" "
		South side of acid spray booth	1410	Nitrogen Dioxide	<1 ppm	Spray booth in operation.
		Northeast corner of floor pan	1420		<1 ppm	Nitric acid in container at corner.
		West end of scrap saw platform				Saw not in operation.

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AIR SAMPLING REPORT

NUMBER 270 Page 4
Routine X
Special
Requested by
Date 6-16-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	6-2-59	C Area West of scrap saw platform				Saw not in operation.
		F Area Mercury recovery room By stills	1510	Mercury	0.02mg/m3	Three stills in operation.
		By washing sink	1515		0.00mg/m3	Mercury in bottles being washed.
		Center of room	1520		0.00mg/m3	

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INDUSTRIAL HYGIENE
AIR SAMPLING REPORT

NUMBER 255
Routine X
Special
Requested by
Date 5-3-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	5-22-59	A Area Small parts disassembly booth	0930 - 1000	Uranium Hydrogen Fluoride	C.01mg/m3 0.0 ppm	By hood.
			1000 - 1030		0.01mg/m3 0.1 ppm	
			1030 - 1100		C.01mg/m3 0.1 ppm	
		E Area West end of oxide conversion unit Line B	0930 - 1000		C.01mg/m3 0.1 ppm	All units in operation.
			1000 - 1030		C.01mg/m3 0.1 ppm	" "
			1030 - 1100		0.01mg/m3 0.1 ppm	" "
		B Area West end of calciner platform	0930 - 1000		0.01mg/m3 0.1 ppm	
			1000 - 1030		C.01mg/m3 0.1 ppm	
			1030 - 1100		0.01mg/m3 0.1 ppm	

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NUMBER 25 Page 2
Routine X
Special
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Date 6-3-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	5-22-59	C Area By column C-10	0930 - 1000	Uranium Hydrogen Fluoride	<0.01mg/m3 <0.1 ppm	
			1000 - 1030		0.01mg/m3 0.0 ppm	
			1030 - 1100		0.01mg/m3 <0.1 ppm	
		By cutting stand	0930 - 1000		<0.01mg/m3 <0.1 ppm	
			1000 - 1030		0.01mg/m3 <0.1 ppm	
			1030 - 1100		0.01mg/m3 0.1 ppm	
		By converter disassembly stand	0930 - 1000		<0.01mg/m3 <0.1 ppm	
			1000 - 1030		0.01mg/m3 0.2 ppm	
			1030 - 1100		0.01mg/m3 0.1 ppm	

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NUMBER 255 Page 3
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Routine
Special
Requested by
Date 6-3-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	5-22-59	C Area Northeast corner of floor pan	0930 - 1000	Uranium Hydrogen Fluoride	0.01mg/m3 0.0 ppm	Employee, wearing respirator, was steam drying equipment.
			1000 - 1030		0.02mg/m3 0.1 ppm	" "
			1030 - 1100		0.02mg/m3 0.1 ppm	
		West end of scrap saw				Employees, wearing respirators, were operating saw.

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F

By column 0-20

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AIR SAMPLING REPORT

NUMBER 236
Routine X
Special
Requested by
Date 5-21-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1220	5-7-59	C Area Scrap Saw Area By west end				Saw not in operation.
		By drum dumper				Employees, wearing respirators dumped scrap into hopper.
						Employees, wearing respirators, dumped scrap onto shredder feeder bed under scrap saw 20 ft. east of sampler.
	5-1-59	F Area Mercury Recovery Room	1530	Mercury	0.00mg/m3	

Hg 1-0
NO2 2-0

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NUMBER 236 Page 2
Routine X
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Date 5-25-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	5-13-59	B Area West end of calciner platform	0115 - 0145	Uranium Hydrogen Fluoride	<0.01mg/m3 0.0 ppm	All calciners in operation.
			0145 - 0215		<0.01mg/m3 0.0 ppm	" "
			0215 - 0245		<0.01mg/m3 0.0 ppm	" "
		A Area West end of oxide conversion unit Line B	0115 - 0145		0.01mg/m3 0.1 ppm	Employee, wearing respirator, charging conversion units.
			0145 - 0215		<0.01mg/m3 <0.1 ppm	0200: B line in operation.
			0215 - 0245		<0.01mg/m3 <0.1 ppm	
	5-14-59	A Area Small parts disassembly booth	1300 - 1330		0.08mg/m3 0.1 ppm	By hood. Employee, wearing respirator, was disassembling parts in hood.
			1330 - 1400		0.01mg/m3 0.1 ppm	" "
			1400 - 1430		0.01mg/m3 <0.1 ppm	" "

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AIR SAMPLING REPORT

NUMBER 236 Page 3
Routine X
Special
Requested by
Date 5-25-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	5-14-59	E Area West end of oxide conversion unit Line B	1300 - 1330	Uranium Hydrogen Fluoride	0.02mg/m3 0.1 ppm	All units in operation.
			1330 - 1400		0.08mg/m3 0.1 ppm	" "
			1400 - 1430		<0.01mg/m3 0.1 ppm	" "
		B Area West end of calciner platform	1300 - 1330		<0.01mg/m3 <0.1 ppm	Two drum driers in operation.
			1330 - 1400		<0.01mg/m3 <0.1 ppm	" "
			1400 - 1430		<0.01mg/m3 <0.1 ppm	" "
		C Area By column C-10	1300 - 1330		0.01mg/m3 <0.1 ppm	
			1330 - 1400		<0.01mg/m3 <0.1 ppm	
			1400 - 1430		<0.01mg/m3 0.6 ppm	

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AIR SAMPLING REPORT

NUMBER 236 Page 4
Routine X
Special
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Date 5-[illegible]-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	5-14-59	C Area By cutting stand	1300 - 1330	Uranium Hydrogen Fluoride	0.03mg/m3 0.1 ppm	Employee, wearing respirator, was cutting open converters.
			1330 - 1400		<0.01mg/m3 <0.1 ppm	" "
			1400 - 1430		<0.01mg/m3 0.1 ppm	" "
		By converter disassembling stand	1300 - 1330		0.02mg/m3 0.1 ppm	
			1330 - 1400		0.01mg/m3 0.1 ppm	
			1400 - 1430		<0.01mg/m3 0.1 ppm	
		Northeast corner of floor pan	1300 - 1330		0.01mg/m3 0.1 ppm	
			1330 - 1400		<0.01mg/m3 <0.1 ppm	
			1400 - 1430		<0.01mg/m3 0.2 ppm	
			1445	Nitrogen Dioxide	<1 ppm	
		South side of spray booth	1455		<1 ppm	No spraying.

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WGX 9512(9-55) K-25 PC Medical Department

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 226
Routine X
Special
Requested by
Date 5-22-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	4-29-59	A Area Small parts disassembly booth	1300 - 1330	Uranium Hydrogen Fluoride	0.01mg/m3 <0.1 ppm	By hood.
			1330 - 1400		<0.01mg/m3 <0.1 ppm	
			1400 - 1430		0.01mg/m3 0.1 ppm	
		K Area Oxide Conversion Room West end of Unit A	1300 - 1330		0.01mg/m3 <0.1 ppm	All units down.
			1330 - 1400		0.01mg/m3 0.1 ppm	" "
			1400 - 1430		0.03mg/m3 0.1 ppm	" "
		B Area West end of calciner platform	1300 - 1330		<0.01mg/m3 0.0 ppm	
			1330 - 1400		<0.01mg/m3 0.0 ppm	
			1400 - 1430		0.01mg/m3 <0.1 ppm	

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AIR SAMPLING REPORT

NUMBER 226 Page 2
Routine X
Special
Requested by
Date 5-22-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	4-29-59	C Area By column C-10	1300 - 1330	Uranium Hydrogen Fluoride	0.01mg/m3 0.1 ppm	
			1330 - 1400		0.01mg/m3 0.1 ppm	
			1400 - 1430		<0.01mg/m3 <0.1 ppm	
		By cutting stand	1300 - 1330		0.01mg/m3 0.1 ppm	Employee, wearing respirator, cut open a converter.
			1330 - 1400		<0.01mg/m3 0.1 ppm	" "
			1400 - 1430		0.01mg/m3 0.1 ppm	
		By converter disassembly platform	1300 - 1330		0.07mg/m3 0.2 ppm	Employees, wearing respirators, were disassembling converter.
			1330 - 1400		0.07mg/m3 0.2 ppm	" "
			1400 - 1430		0.07mg/m3 0.2 ppm	" "

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AIR SAMPLING REPORT

NUMBER 226 Page 3
Routine X
Special
Requested by
Date 5-22-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1400	4-29-59	C Area Northeast corner of floor pan	1300 - 1330	Uranium Hydrogen Fluoride	<0.01mg/m3 <0.1 ppm	—
			1330 - 1400		<0.01mg/m3 <0.1 ppm	—
			1400 - 1430		<0.01mg/m3 <0.1 ppm	—
		Scrap Saw Area At foot of stairway to saw				Scrap saw in operation. Employees without respirators in area.
		West end of saw platform				Saw in operation. Employee wearing respirator on platform.

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AIR SAMPLING REPORT

NUMBER 226 Page 4
Routine X
Special
Requested by
Date 5-2-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	4-29-59	Scrap Saw Area West end of saw platform				Saw in operation. Employee wearing respirator on platform.
		Northeast corner of floor pan	1145	Nitrogen Dioxide	<.1 ppm	No one in area.
		South side of acid spray booth	1150		3 ppm	Equipment being sprayed.
	5-2-59	E Area West end of oxide conversion unit Line A	2200 - 2230	Uranium Hydrogen Fluoride	<0.01mg/m3 0.2 ppm	
			2230 - 2300		<0.01mg/m3 <0.1 ppm	
			2300 - 2330		<0.01mg/m3 <0.1 ppm	

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AIR SAMPLING REPORT

NUMBER 226 Page 5
Routine X
Special
Requested by
Date 5-22-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	5-5-59	B Area West end of calciner platform	2200 - 2230	Uranium Hydrogen Fluoride	0.01mg/m3 0.1 ppm	
			2230 - 2300		0.01mg/m3 0.1 ppm	
			2300 - 2330		0.01mg/m3 0.1 ppm	
		C Area By column G-10	0905 - 0935	Uranium Hydrogen Fluoride Dust	0.01mg/m3 0.1 ppm 0.1MPPCF	
			0935 - 1005		0.01mg/m3 0.1 ppm 0.1mppcf	
			1005 - 1035		0.01mg/m3 0.1 ppm 0.1mppcf	
		By column G-8	0905 - 0935		0.01mg/m3 0.1 ppm 0.1mppcf	35 ft. east of cutting stand.
			0935 - 1005		0.01mg/m3 0.1 ppm 0.3mppcf	
			1005 - 1035		0.01mg/m3 0.1 ppm 0.1mppcf	

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AIR SAMPLING REPORT

NUMBER 226 Page 6
Routine X
Special
Requested by
Date 5-25-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	5-7-59	C Area By cutting stand	0905 - 0935	Uranium Hydrogen Fluoride Dust	<0.01mg/m3 0.0 ppm 0.1mppcf	Employee, wearing respirator, was cutting open converters.
			0935 - 1005		<0.01mg/m3 <0.1 ppm 0.5mppcf	" "
			1005 - 1035		<0.01mg/m3 <0.1 ppm 0.1mppcf	" "
40		By converter disassembly platform	0905 - 0935	Uranium Hydrogen Fluoride	<0.01mg/m3 0.1 ppm	
			0935 - 1005		0.07mg/m3 0.8 ppm	Employees, wearing respirators were disassembling converter.
			1005 - 1035		0.01mg/m3 0.1 ppm	" "
		Northeast corner of floor pan	0905 - 0935		<0.01mg/m3 0.1 ppm	Employee, wearing respirator, was steam cleaning equipment.
			0935 - 1005		0.03mg/m3 1.2 ppm	" "
			1005 - 1035		0.01mg/m3 0.1 ppm	" "
		South side of acid spray booth	1015	Nitrogen Dioxide	1 ppm	

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AIR SAMPLING REPORT

NUMBER 22[illegible] Page 7
Routine X
Special
Requested by
Date 5-25-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1h2	5-7-59	C Area Northeast corner of floor pan	1020	Nitrogen Dioxide	<1 ppm	
		A Area Small parts disassembling booth	0905 - 0935	Uranium	0.01mg/m3	By hood
				Hydrogen Fluoride	0.1 ppm	
			0935 - 1005		0.01mg/m3	Employee, wearing respirator, was disassembling equipment.
					0.1 ppm	
			1005 - 1035		0.01mg/m3	" "
					0.1 ppm	
		E Area West end of oxide conversion unit Line B	0905 - 0935		0.01mg/m3	
					0.1 ppm	
			0935 - 1005	Uranium	0.01mg/m3	Fluorine leak on line B.
				Fluorine	<0.1 ppm	
			1005 - 1035	Uranium	0.01mg/m3	
				Hydrogen Fluoride	0.1 ppm	
		B Area West end of calciner platform	0905 - 0935		0.01mg/m3	One drum drier in operation.
					0.0 ppm	
			0935 - 1005		0.01mg/m3	" "
					0.1 ppm	
			1005 - 1035		0.01mg/m3	" "
					0.1 ppm	

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INDUSTRIAL HYGIENE
AIR SAMPLING REPORT

NUMBER 190
Routine X
Special
Requested by
Date 4-23-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	4-16-59	C Area By column C-10	1010 - 1040	Uranium Hydrogen Fluoride	0.01mg/m3 <0.1 ppm	
			1040 - 1110		0.02mg/m3 0.1 ppm	
			1110 - 1140		<0.01mg/m3 0.1 ppm	
		By cutting stand	1010 - 1040		0.01mg/m3 0.1 ppm	
			1040 - 1110		<0.01mg/m3 0.1 ppm	
			1110 - 1140		<0.01mg/m3 0.1 ppm	
		By converter disassembly platform	1010 - 1040		0.01mg/m3 <0.1 ppm	
			1040 - 1110		0.01mg/m3 <0.1 ppm	
			1110 - 1140		<0.01mg/m3 <0.1 ppm	

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 197
Routine X
Special
Requested by
Date 5-5-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	4-16-59	A Area Small parts disassembly booth	1010 - 1040	Uranium Hydrogen Fluoride	0.39mg/m3 0.6 ppm	By hood.
			1040 - 1110		0.05mg/m3 0.3 ppm	
			1110 - 1140		0.01mg/m3 0.2 ppm	
		K Area West end of oxide conversion unit Line B	1010 - 1040		0.01mg/m3 0.1 ppm	
			1040 - 1110		<0.01mg/m3 <0.1 ppm	
			1110 - 1140		0.03mg/m3 0.2 ppm	
		B Area West end of calciner platform	1010 - 1040		<0.01mg/m3 <0.1 ppm	One drum drier in operation.
			1040 - 1110		0.01mg/m3 0.1 ppm	" "
			1110 - 1140		<0.01mg/m3 0.1 ppm	" "

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NUMBER 197 Page 2
Routine X
Special
Requested by
Date 5-5-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	4-16-59	C Area Northwest corner of compressor pit	1010 - 1040	Uranium Hydrogen Fluoride	<0.01mg/m3 <0.1 ppm	
			1040 - 1110		<0.01mg/m3 <0.1 ppm	
			1110 - 1140		<0.01mg/m3 <0.1 ppm	
		Northeast corner of floor pan	1010 - 1040		<0.01mg/m3 <0.1 ppm	
			1040 - 1110		<0.01mg/m3 <0.1 ppm	
			1110 - 1140		<0.01mg/m3 <0.1 ppm	
		North end of deferruling tooth				Employees, wearing respirators, were removing ferrules and parts of units.

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NUMBER 197 Page 3
Routine X
Special
Requested by
Date 5-5-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-11,20	4-16-59	C Area				Employees, wearing respirators were unloading hopper into drums. 1035: Operation stopped.

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INDUSTRIAL HYGIENE
AIR SAMPLING REPORT

NUMBER 182
Routine X
Special
Requested by
Date 4-16-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	4-9-59	A Area				
		Small parts disassembly booth, by hood	0930-1000	Uranium Hydrogen Fluoride	0.01 mg/m3 <0.1 ppm	
			1000-1030		0.07 mg/m3 1.1 ppm	Equipment to be disassembled was brought into booth
			1030-1100		0.20 mg/m3 1.1 ppm	
		E Area				
02		West end of oxide conversion unit, line E	0930-1000		<0.01 mg/m3 0.3 ppm	All units in operation
			1000-1030		<0.01 mg/m3 0.1 ppm	
			1030-1100		0.29 mg/m3 0.3 ppm	
		B Area				
L 37-3 HF 30-0 NO_2 2-0		West end of calciner platform	0930-1000		<0.01 mg/m3 <0.1 ppm	No dumdriers in operation
			1000-1030		<0.01 mg/m3 0.1 ppm	
			1030-1100		<0.01 mg/m3 0.2 ppm	

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 182 Page 2
Routine X
Special
Requested by
Date 4-16-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	4-9-59	C Area				
		By partial disassembly stand	0930-1000	Uranium Hydrogen Fluoride	0.01 mg/m3 0.1 ppm	No disassembling at this time
			1000-1030		0.01 mg/m3 0.1 ppm	Converter moved into area
			1030-1100		0.01 mg/m3 0.1 ppm	Employees wearing respirators, were disassembling converter
		By cutting stand	0930-1000		0.01 mg/m3 0.1 ppm	Converter on stand, no cutting being done
			1000-1030		0.01 mg/m3 0.1 ppm	Converter moved during this sample
			1030-1100		0.01 mg/m3 0.1 ppm	
		By converter disassembly platform	0930-1000		0.02 mg/m3 0.2 ppm	Employees, wearing respirators, were disassembling converter.
			1000-1030		0.01 mg/m3 0.1 ppm	
			1030-1100		0.01 mg/m3 0.1 ppm	

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 182 Page 3
Routine X
Special
Requested by
Date 4-16-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	4-7-59	C Area				
		Northeast corner of compressor pit	0930-1000	Uranium Hydrogen Fluoride	<0.01 mg/m3 <0.0 ppm	employees moving compressor
			1000-1030		0.01 mg/m3 0.1 ppm	
			1030-1100		<0.01 mg/m3 0.1 ppm	
		Northeast corner of deblading platform	0930-1000		0.01 mg/m3 0.1 ppm	employees, wearing respirators, were deblading compressor
			1000-1030		<0.01 mg/m3 0.1 ppm	
			1030-1100		0.01 mg/m3 0.1 ppm	
		Northeast corner of floor pan	0930-1000		<0.01 mg/m3 0.1 ppm	
			1000-1030		<0.01 mg/m3 0.1 ppm	employees, wearing respirators, were cleaning compressor
			1030-1100		<0.01 mg/m3 0.1 ppm	

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AIR SAMPLING REPORT

NUMBER 182 Page 4
Routine X
Special
Requested by
Date 4-16-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
[illegible]-1420	4-9-59	C Area Northeast corner of floor pan	1055	Nitrogen Dioxide	<1 ppm	
		South side of spray booth	1115		<1 ppm	No cleaning being done.
		By Scrap Saw	0930 - 1000	Uranium Hydrogen Fluoride	0.01mg/m3 <0.1 ppm	Scrap Saw not in operation.
			1000 - 1030		0.01mg/m3 <0.1 ppm	
			1030 - 1100		<0.01mg/m3 <0.1 ppm	

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INDUSTRIAL HYGIENE
AIR SAMPLING REPORT

NUMBER 145
Routine X
Special
Requested by
Date 4-15-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
F-1420	4/7/59	F Area Mercury recovery room	1315	Mercury	0.00 mg/m3	No stills in operation No mercury being washed

Hg

Hg 1-1

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 166
Routine X
Special
Requested by
Date 1-16-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	3/26/59	E area				
		West end of oxide conversion unit, line B	2130-2200	Uranium Hydrogen Fluoride	0.01 mg/m3 0.1 ppm	Employees cleaning room.
			2200-2230		0.01 mg/m3 0.1 ppm	
			2230-2300		0.01 mg/m3 0.2 ppm	
		B area				
		West end of calciner platform	2130-2200		0.01 mg/m3 0.1 ppm	One drum drier in operation.
			2200-2230		0.01 mg/m3 0.1 ppm	
			2230-2300		0.01 mg/m3 0.1 ppm	

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HF-6

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AIR SAMPLING REPORT

NUMBER 125
Routine 1
Special
Requested by
Date 3-31-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	3-18-59	F Area Mercury Recovery Room	1515	Mercury	0.00mg/m^3	No stills in operation.

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Hg 1-1

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AIR SAMPLING REPORT

NUMBER 114
Routine X
Special
Requested by
Date 3-24-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	3-13-59	A Area Small parts booth	0930 - 1000	Uranium Hydrogen Fluoride	0.01mg/m^3 0.1 ppm	Operator in area was wearing respirator.
			1000 - 1030		0.13mg/m^3 0.2 ppm	" "
			1030 - 1100		0.10mg/m^3 0.1 ppm	" "
		B Area West end of Oxide Conversion Unit	0930 - 1000		0.06mg/m^3 0.1 ppm	
			1000 - 1030		0.01mg/m^3 0.1 ppm	
			1030 - 1100		0.02mg/m^3 0.1 ppm	
		B Area West end of calciner platform	0930 - 1000		0.01mg/m^3 $<$0.1 ppm	Three calciners in operation
			1000 - 1030		$<$0.01mg/m^3 $<$0.1 ppm	" "
			1030 - 1100		$<$0.01mg/m^3 $<$0.1 ppm	" "
		C Area By Column G-10	0930 - 1000		0.01mg/m^3 0.1 ppm	
			1000 - 1030		0.01mg/m^3 0.1 ppm	

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HF 21-1

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AIR SAMPLING REPORT

NUMBER 114 Page 2
Routine X
Special
Requested by
Date 3-27-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-11,20	3-13-59	C Area By Column G-10	1030 - 1100	Uranium Hydrogen Fluoride	0.02mg/m3 0.1 ppm	
		By cutting stand	0930 - 1000		0.01mg/m3 0.3 ppm	Welder cutting on converter.
			1000 - 1030		0.01mg/m3 0.1 ppm	" "
			1030 - 1100		0.03mg/m3 0.3 ppm	" "
		By converter disassembly stand	0930 - 1000		0.01mg/m3 0.1 ppm	
			1000 - 1030		0.01mg/m3 0.1 ppm	
			1030 - 1100		0.02mg/m3 0.2 ppm	
		By floor pan	0930 - 1000		0.01mg/m3 0.1 ppm	
			1000 - 1030		0.01mg/m3 0.1 ppm	
			1030 - 1100		0.16mg/m3 0.1 ppm	

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 102
Routine X
Special
Requested by
Date 3-12-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	3-4-59	A Area Small parts booth by hood	1245 - 1315	Uranium Hydrogen Fluoride	0.01mg/m³ 0.0 ppm	Two employees, wearing respirators, were disassembling equipment.
			1315 - 1345		0.01mg/m³ 0.1 ppm	
			1345 - 1415		0.01mg/m³ 0.1 ppm	
		E Area Oxide conversion room	1245 - 1315		0.02mg/m³ 0.1 ppm	Employee, wearing assault mask, were changing ash receivers.
			1315 - 1345		0.10mg/m³ 0.1 ppm	" "
			1345 - 1415		0.02mg/m³ 0.0 ppm	
		B Area West end of calciner platform	1245 - 1315		0.01mg/m³ 0.0 ppm	One calciner in operation.
			1315 - 1345		0.01mg/m³ 0.1 ppm	" "
			1345 - 1415		0.01mg/m³ 0.0 ppm	

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AIR SAMPLING REPORT

NUMBER 102 Page 2
Routine X
Special
Requested by
Date 3-12-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	3-4-59	C Area By column C-10	1245 - 1315	Uranium Hydrogen Fluoride	<0.01mg/m³ 0.0 ppm	
			1315 - 1345		<0.01mg/m³ <0.1 ppm	
			1345 - 1415		<0.01mg/m³ <0.1 ppm	
		By cutting stand	1245 - 1315		<0.01mg/m³ <0.1 ppm	
			1315 - 1345		<0.01mg/m³ 0.1 ppm	
			1345 - 1415		<0.01mg/m³ 0.1 ppm	
		By disassembly stand	1245 - 1315		<0.01mg/m³ 0.0 ppm	
			1315 - 1345		<0.01mg/m³ <0.1 ppm	
			1345 - 1415		<0.01mg/m³ <0.1 ppm	

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AIR SAMPLING REPORT

NUMBER 108
Routine X
Special
Requested by
Date 3-13-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	2-16-59	A Area By maintenance office door	1225 - 1255	Dust Uranium Hydrogen Fluoride Dust	0.7MPPCF <0.01mg/m³ <0.1 ppm 2.1mg/m³	Employee, wearing respirator, most of the time, while cutting east end of converter.
			1307 - 1337		0.5MPPCF 0.01mg/m³ <0.1 ppm 2.7mg/m³	" " Cutting operation was down 11.0 minutes.
			1337 - 1407		1.1MPPCF 0.01mg/m³ 0.1 ppm 2.0mg/m³	Employee, wearing respirator, was cutting east end of converter. Down time of cutting machine was 14.5 min.
		C Area By disassembly stand	1225 - 1255		1.2MPPCF 0.01mg/m³ 0.1 ppm 1.3mg/m³	25 feet north of cutting machine.
			1307 - 1337		0.5M PCF 0.01mg/m³ 0.1 ppm 0.1mg/m³	Cutting operation was down 11.0 minutes of the 30 minutes sampling time.
			1337 - 1407		0.6MPPCF 0.01mg/m³ <0.1 ppm 0.1mg/m³	Cutting operation was down 14.5 minutes of the 30 minutes sampling time.

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AIR SAMPLING REPORT

NUMBER 108 Page 2
Routine I
Special
Requested by
Date 3-18-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	2-16-59	C Area By column G-8	1225 - 1255	Dust Uranium Hydrogen Fluoride Dust	0.7MPPCF 0.01mg/m^3 0.1 ppm 1.7mg/m^3	East of cutting machine. Air hose blowing on cutting machine from West side.
			1307 - 1337		0.3MPPCF 0.03mg/m^3 0.1 ppm 2.3mg/m^3	Cutting operation was down 11.0 minutes of the 30 minutes sampling time.
			1337 - 1407		0.6MPPCF 0.06mg/m^3 0.1 ppm 1.0mg/m^3	Cutting operation was down 14.5 minutes of the 30 minutes sampling time.
28	2-17-59	A Area By Maintenance office door	1053 - 1123		0.6MPPCF 0.01mg/m^3 0.1 ppm 5.4mg/m^3	Employee, wearing respirator, was cutting west end of converter with Arc Air torch. Air hose blowing from west side.
			1123 - 1153		0.8MPPCF 0.01mg/m^3 0.1 ppm 20.9mg/m^3	" "
			1153 - 1223		0.5MPPCF 0.01mg/m^3 0.1 ppm 3.5mg/m^3	" "

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AIR SAMPLING REPORT

NUMBER 108 Page 3
Routine X
Special
Requested by
Date 3-13-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	2-17-59	C Area By disassembly stand	1053 - 1123	Dust Uranium Hydrogen Fluoride Dust	0.9MPPCF 0.10mg/m^3 0.7 ppm 7.5mg/m^3	Employee, wearing respirator, was cutting west end of converter with Arc Air torch. Air hose blowing from west side.
			1123 - 1153		0.8MPPCF 0.06mg/m^3 0.1 ppm 7.1mg/m^3	" "
			1153 - 1223		0.9MPPCF 0.05mg/m^3 0.2 ppm 6.3mg/m^3	" "
63		By column G-8	1053 - 1123		0.7MPPCF 0.01mg/m^3 0.1 ppm 6.1mg/m^3	" "
			1123 - 1153		0.5MPPCF 0.02mg/m^3 0.1 ppm 3.1mg/m^3	" "
			1153 - 1223		0.5MPPCF 0.01mg/m^3 0.1 ppm 2.3mg/m^3	" "

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AIR SAMPLING REPORT

NUMBER 109 Page 4
Routine X
Special
Requested by
Date 3-13-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	2-20-59	A Area By Maintenance office door	1315 - 1345	Dust Uranium Hydrogen Fluoride Dust	1.2MPPCF 0.01mg/m^3 <0.1 ppm 1.5mg/m^3	Welder, wearing respirator, was cutting east end of converter using arc air and water.
			1345 - 1415		1.6MPPCF 0.02mg/m^3 0.1 ppm 2.6mg/m^3	Welder's cutting time 20 minutes, Employees using air hammer on floor 25 feet south of maintenance office door.
			1415 - 1445		0.9MPPCF 0.01mg/m^3 0.1 ppm 1.6mg/m^3	Welder's cutting time 13 minutes.
		C Area By converter disassembly stand	1315 - 1345		0.8MPPCF 0.03mg/m^3 0.1 ppm 1.6mg/m^3	Cutting open converter on cutting stand. Employees, wearing respirators, were disassembling a converter nearby.
			1345 - 1415		0.7MPPCF 0.08mg/m^3 0.2 ppm 2.1mg/m^3	
			1415 - 1445		1.1MPPCF 0.11mg/m^3 0.3 ppm 2.8mg/m^3	Employees were disassembling converter by sampler.

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AIR SAMPLING REPORT

NUMBER 108 Page 5
Routine X
Special
Requested by
Date 3-13-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	2-20-59	C Area By column C-8	1315 - 1345	Dust Uranium Hydrogen Fluoride Dust	3.0MPPCF 0.02mg/m^3 0.1 ppm 10.4mg/m^3	Shield near samplers. Samplers were 5 feet closer than previous samples covering this job.
			1345 - 1415		1.1MPPCF 0.01mg/m^3 0.1 ppm 2.1mg/m^3	
			1415 - 1445		0.9MPPCF 0.02mg/m^3 0.1 ppm 1.8mg/m^3	
85	2-25-59	A Area By Maintenance office door	0905 - 0935		4.8MPPCF 0.01mg/m^3 0.1 ppm 5.6mg/m^3	Welder, wearing respirator, was cutting open converter on west end. Air stream from hose blowing on welder. Cutting time 16 minutes.
			0952 - 1022		1.4MPPCF 0.01mg/m^3 0.1 ppm 5.8mg/m^3	Water stream on cut. Cutting time 21 minutes.

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NUMBER 108 Page 6
Routine X
Special
Requested by
Date 3-13-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	2-25-59	C Area By converter disassembly stand	0905 - 0935	Dust Uranium Hydrogen Fluoride Dust	3.3MPPCF 0.11mg/m^3 0.3 ppm 0.1mg/m^3	Cutting time 16 minutes.
			0952 - 1022		2.3MPPCF 0.11mg/m^3 0.3 ppm 0.1mg/m^3	Cutting time 21 minutes.
		By column G-8	0905 - 0935		3.2MPPCF 0.02mg/m^3 0.1 ppm 3.1mg/m^3	Cutting time 16 minutes.
			0952 - 1022		1.8MPPCF 0.02mg/m^3 0.1 ppm 3.7mg/m^3	Cutting time 21 minutes.
	3-4-59	Northeast corner of floor pan	1245 - 1315	Uranium Hydrogen Fluoride	<0.01mg/m^3 0.0 ppm	
			1315 - 1345		<0.01mg/m^3 0.0 ppm	
			1345 - 1415		0.01mg/m^3 <0.1 ppm	

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NUMBER 108 Page 7
Routine X
Special
Requested by
Date 3-13-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	3-4-59	C Area East end of detubing saw				
		Southeast corner of detubing saw pit				

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INDUSTRIAL HYGIENE
AIR SAMPLING REPORT

NUMBER 11
Routine X
Special
Requested by
Date 2-17-49

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	2-9-49	A Area Small parts disassembly booth, by hood	0930 - 1000	Uranium Hydrogen Fluoride	<0.01mg/m³ 0.2 ppm	
			1000 - 1030		1.90mg/m³ 1.0 ppm	Employee, wearing respirator, was disassembling equipment.
			1030 - 1100		0.02mg/m³ 0.1 ppm	" "
		E Area Oxide conversion Room West end of line A	0930 - 1000		<0.01mg/m³ 0.5 ppm	Line A and C in operation.
			1000 - 1030		0.01mg/m³ 0.2 ppm	" "
			1030 - 1100		0.02mg/m³ 0.2 ppm	" "
		B Area West end of calciner platform	0930 - 1000		0.01mg/m³ 0.1 ppm	Two drum driers in operation.
			1000 - 1030		0.02mg/m³ 0.1 ppm	" "
			1030 - 1100		0.01mg/m³ 0.2 ppm	" "

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NUMBER 71 Page 2
Routine X
Special
Requested by
Date 2-17-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	2-9-59	C Area By Column C-10	0930- 1000	Uranium Hydrogen Fluoride	<0.01mg/m³ 0.1 ppm	
			1000 - 1030		<0.01mg/m³ 0.1 ppm	
			1030 - 1100		<0.01mg/m³ 0.1 ppm	
		By cutting stand	0930 - 1000		<0.01mg/m³ 0.1 ppm	
			1000 - 1030		<0.01mg/m³ 0.1 ppm	
			1030 - 1100		<0.01mg/m³ 0.1 ppm	
		By converter disassembly platform	0930 - 1000		0.01mg/m³ 0.1 ppm	
			1000 - 1030		0.25mg/m³ 0.5 ppm	Employees, wearing respirators were disassembling converters.
			1030 - 1100		0.06mg/m³ 0.2 ppm	" "

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NUMBER 71 Page 3
Routine X
Special
Requested by
Date 7-17-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	7-9-59	C Area Northwest corner of compressor pit	0930 - 1000	Uranium Hydrogen Fluoride	<0.01mg/m^3 0.1 ppm	
			1000 - 1030		0.02mg/m^3 0.2 ppm	
			1030 - 1100		0.01mg/m^3 0.1 ppm	
		Northeast corner of floor pan	0930 - 1000		<0.01mg/m^3 0.1 ppm	
			1000 - 1030		0.03mg/m^3 0.2 ppm	
			1030 - 1100		0.01mg/m^3 0.1 ppm	
		On detubing platform				

WCX-2512 (9-55) K-25 RC Medical Department

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 18
Routine I
Special
Requested by
Date 2-11-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	1-23-59	A Area Small parts disassembly booth, by hood	1415 - 1445	Uranium Hydrogen Fluoride	0.03mg/m³ 0.1 ppm	Employees, wearing respirators were in booth.
			1445 - 1515		<0.01mg/m³ 0.1 ppm	" "
			1515 - 1545		0.01mg/m³ 0.1 ppm	" "
		E Area Oxide Conversion Room West end of line A	1415 - 1445		0.07mg/m³ 0.2 ppm	All units in operation.
			1445 - 1515		0.02mg/m³ 0.1 ppm	Employee, wearing assault mask, was working on open units
			1515 - 1545		0.03mg/m³ 0.2 ppm	All units in operation.
		B Area West end of calciner platform	1415 - 1445		<0.01mg/m³ <0.2 ppm	Two drum driers in operation.
			1445 - 1515		<0.01mg/m³ <0.1 ppm	" "
			1515 - 1545		<0.01mg/m³ 0.1 ppm	

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NUMBER 58 Page 2
Routine X
Special
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Date 2-11-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	1-23-59	C Area By column C-10	1415 - 1445	Uranium Hydrogen Fluoride	<0.01mg/m³ <0.1 ppm	
			1445 - 1515		<0.01mg/m³ <0.1 ppm	
			1515 - 1545		<0.01mg/m³ 0.1 ppm	
		By cutting stand	1415 - 1445		<0.01mg/m³ 0.1 ppm	Welder, wearing respirator, was cutting open converters.
			1445 - 1515		0.01mg/m³ 0.1 ppm	" "
			1515 - 1545		0.01mg/m³ 0.2 ppm	
		By converter disassembly platform	1415 - 1445		<0.01mg/m³ 0.1 ppm	
			1445 - 1515		<0.01mg/m³ 0.2 ppm	
			1515 - 1545		<0.01mg/m³ 0.1 ppm	

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NUMBER 58 Page 3
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Date 2-11-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	1-23-59	C Area Northwest corner of compressor pit	1415 - 1445	Uranium Hydrogen Fluoride	<0.01mg/m³ 0.1 ppm	Employees, wearing respirators were disassembling compressor.
			1445 - 1515		0.01mg/m³ 0.1 ppm	" "
			1515 - 1545		<0.01mg/m³ 0.1 ppm	
		Northeast corner of floor pan	1415 - 1445		0.01mg/m³ 0.1 ppm	
			1445 - 1515		0.01mg/m³ 0.1 ppm	
			1515 - 1545		0.01mg/m³ 0.1 ppm	
		On detubing platform				

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INDUSTRIAL HYGIENE
AIR SAMPLING REPORT

NUMBER 1.1
Routine
Special
Requested by
Date 1-21-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	1-21-59	F Area Mercury Recovery Room by mercury stills	1530	Mercury	0.00mg/m^3	No stills in operation.
			1535		0.00mg/m^3	All mercury droplets in sink were covered with a layer of water.

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Hyg 2-1

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 7
Routine X
Special
Requested by
Date 1-[illegible]-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1120	1-16-59	A Area Small parts booth by hood	0930 - 1000	Uranium Hydrogen Fluoride	<0.01mg/m³ <0.1 ppm	
			1000 - 1030		<0.01mg/m³ <0.1 ppm	
			1030 - 1100		<0.01mg/m³ <0.1 ppm	
		E Area Oxide Conversion Room West end of line A	0935 - 1005		0.01mg/m³ 0.1 ppm	All units in operation.
			1005 - 1035		<0.01mg/m³ <0.1 ppm	" "
			1035 - 1105		<0.01mg/m³ <0.1 ppm	" "
		B Area West end of calciner platform	0935 - 1005		0.02mg/m³ <0.1 ppm	Two drum driers in operation.
			1005 - 1035		<0.01mg/m³ <0.1 ppm	" "
			1035 - 1105		<0.01mg/m³ <0.1 ppm	" "

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 27 Page 2
Routine X
Special
Requested by
Date 1-[illegible]-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1220	1-15-59	A Area Ground Floor				Not in operation.
		Second Floor				
		C Area By column C-10	0945 - 1015	Uranium Hydrogen Fluoride	<0.01mg/m³ <0.1 ppm	
			1015 - 1045		<0.01mg/m³ <0.1 ppm	
			1045 - 1115		<0.01mg/m³ <0.1 ppm	

WCX-2512 (9-55) K-25 RC Medical Department

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NUMBER 37 Page 3
Routine X
Special
Requested by
Date 1-28-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	1-16-59	C Area By cutting stand	0945 - 1015	Uranium Hydrogen Fluoride	<0.01mg/m^3 <0.1 ppm	Employee, wearing respirator, was cutting open converter.
			1015 - 1045		0.01mg/m^3 0.1 ppm	" "
			1045 - 1115		<0.01mg/m^3 <0.1 ppm	" "
		By converter disassembly platform	0945 - 1015		<0.01mg/m^3 0.0 ppm	Two employees, wearing respirators, were disassembling converter.
			1015 - 1045		<0.01mg/m^3 0.0 ppm	" "
			1045 - 1115		<0.01mg/m^3 1.0 ppm	
		Northwest corner of compressor pit	0945 - 1015		<0.01mg/m^3 <0.1 ppm	
			1015 - 1045		<0.01mg/m^3 0.0 ppm	
			1045 - 1115		<0.01mg/m^3 <0.1 ppm	

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Routine X
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Date 1-26-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	1-16-59	C Area Northeast corner of floor pan	0945 - 1015	Uranium Hydrogen Fluoride	0.04mg/m^3 0.3 ppm	Employee, wearing respirator, was cleaning equipment.
			1015 - 1045		0.02mg/m^3 0.2 ppm	" "
			1045 - 1115		0.01mg/m^3 0.1 ppm	
		Detubing platform				Employees working on unit.

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WCX-2512(9-55) K-25 RC Medical Department

ISSUED BY: D. L. Stoddard

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 20
Routine X
Special
Requested by
Date 1-27-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	12-23-58	A Area Small parts disassembly booth	0915 - 0945	Uranium Hydrogen Fluoride	0.02mg/m³ 0.1 ppm	Employee, wearing respirator, was disassembling equipment in hood.
			0945 - 1015		0.03mg/m³ 0.2 ppm	" "
			1015 - 1045		0.09mg/m³ 0.3 ppm	
		E Area Oxide Conversion Room West end of line A	0915 - 0945	Uranium Fluorine	0.14mg/m³ 0.1 ppm	All units in operation.
			0945 - 1015		0.12mg/m³ 0.1 ppm	" "
			1015 - 1045		0.13mg/m³ 0.1 ppm	" "
		B Area West end of calciner platform	0915 - 0945	Uranium Hydrogen Fluoride	0.01mg/m³ 0.1 ppm	All calciners in operation. One drum drier in operation.
			0945 - 1015		0.01mg/m³ 0.1 ppm	" "
			1015 - 1045		0.01mg/m³ 0.1 ppm	" "

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U 44 - 1
HF 5 - 1
F2 3 - 1

WCX-2512 (9-55) K-25 RC Medical Department

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NUMBER 20 Page 2
Routine X
Special
Requested by
Date 1-22-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	12-23-58	B Area				Screener not in operation.
		Second Floor				Recovery unit not in operation.
		C Area By Column G-10	0925 - 0955	Uranium Hydrogen Fluoride	<0.01mg/m^3 <0.1 ppm	
			0955 - 1025		0.02mg/m^3 <0.1 ppm	Employees, wearing respirators, were disassembling converter.
			1025 - 1055		<0.01mg/m^3 <0.1 ppm	

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WCX-2512(9-55) K-25 RC Medical Department

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AIR SAMPLING REPORT

NUMBER 20 Page 3
Routine X
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Date 1-22-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	12-23-58	C Area By cutting stand	0925 - 0955	Uranium Hydrogen Fluoride	0.01mg/m³ <0.1 ppm	Welder, wearing respirator, was cutting open converter.
			0955 - 1025		0.01mg/m³ 0.1 ppm	" "
			1025 - 1055		0.01mg/m³ <0.1 ppm	" "
		By converter disassembling platform	0925 - 0955		0.01mg/m³ 0.1 ppm	Employees, wearing respirators, were disassembling converter.
			0955 - 1025		0.01mg/m³ 0.1 ppm	" "
			1025 - 1055		0.01mg/m³ 0.1 ppm	" "
		Northwest corner of compressor pit	0925 - 0955		0.01mg/m³ <0.1 ppm	Employees, wearing respirators, were disassembling compressor.
			0955 - 1025		0.01mg/m³ 0.1 ppm	" "
			1025 - 1055		0.01mg/m³ 0.1 ppm	

WCX-2512(9-55) K-25 RC Medical Department

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Special
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Date 1-22-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	12-23-58	C Area Northeast corner of floor pan	0925 - 0955	Uranium Hydrogen Fluoride	0.01mg/m^3 0.1 ppm	Employees, wearing respirators, were cleaning equipment.
			0955 - 1025		0.13mg/m^3 0.3 ppm	" "
			1025 - 1055		0.09mg/m3 0.2 ppm	" "
	12-24-59	E Area Oxide Conversion Room West end of Line A	0330 - 0400		0.98mg/m^3 0.6 ppm	Unit in operation. Odor of Hydrogen Fluoride.
			0400 - 0430		0.10mg/m^3 0.2 ppm	" "
			0430 - 0500		<0.01mg/m^3 0.2 ppm	" "
		C Area By Column G-23	0330 - 0400		<0.01mg/m^3 0.2 ppm	Operator removing ferrules from equipment.
			0400 - 0430		<0.01mg/m^3 0.2 ppm	" "
			0430 - 0500		0.01mg/m^3 0.1 ppm	" "

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Date 1-22-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	1-7-59	A Area Small parts disassembly booth	0930 - 1000	Uranium Hydrogen Fluoride	<0.01mg/m³ 0.1 ppm	Employee, wearing respirator, at hood.
			1000 - 1030		0.01mg/m³ <0.1 ppm	" "
			1030 - 1100		<0.01mg/m³ 0.1 ppm	" "
		E Area Oxide Conversion Room West end of Line A	0930 - 1000		1.36mg/m³ 1.8 ppm	All units in operation.
			1000 - 1030		0.05mg/m³ 0.3 ppm	" "
			1030 - 1100		0.05mg/m³ 0.2 ppm	" "
		B Area West end of calciner platform	0930 - 1000		0.05mg/m³ <0.1 ppm	Two drum driers in operation.
			1000 - 1030		<0.01mg/m³ <0.1 ppm	All drum driers in operation.
			1030 - 1100		0.03mg/m³ <0.1 ppm	" "

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Date 1-27-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	1-7-59	B Area				Screener not in operation.
		Second Floor				Unit not in operation.
		C Area By Column G-10	0940 - 1010	Uranium	0.01mg/m3	
				Hydrogen Fluoride	0.1 ppm	
			1010 - 1040		0.01mg/m3	
					0.1 ppm	
			1040 - 1110		0.01mg/m3	
					0.1 ppm	

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NUMBER 20 Page 7
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Date 1-27-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	1-7-59	C Area By cutting stand	0940 - 1010	Uranium Hydrogen Fluoride	<0.01mg/m³ 0.1 ppm	
			1010 - 1040		0.01mg/m³ <0.1 ppm	
			1040 - 1110		<0.01mg/m³ 0.1 ppm	
		By converter disassembling platform	0940 - 1010		<0.01mg/m³ <0.1 ppm	Two employees, wearing respirators, were disassembling converter.
			1010 - 1040		0.02mg/m³ 0.3 ppm	
			1040 - 1110		<0.01mg/m³ <0.1 ppm	
		Northwest corner of compressor pit	0940 - 1010		<0.01mg/m³ <0.1 ppm	Two employees, wearing respirators, were disassembling compressor.
			1010 - 1040		0.01mg/m³ <0.1 ppm	" "
			1040 - 1110		<0.01mg/m³ <0.1 ppm	" "

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Date 1-22-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	1-7-59	C Area Northeast corner of floor pan	0940 - 1010	Uranium Hydrogen Fluoride	<0.01mg/m³ 0.1 ppm	Employees, wearing respirators, were cleaning equipment.
			1010 - 1040		<0.01mg/m³ <0.1 ppm	" "
			1040 - 1110		<0.01mg/m³ 0.1 ppm	" "
		North end of deferruling booth				Employees, without respirators, were deferruling converters.

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 459
Routine X
Special
Requested by
Date 1-13-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	12-4-58	A Area Small parts booth by hood	1230 - 1300	Uranium Hydrogen Fluoride	0.03mg/m^3 0.1 ppm	
			1300 - 1330		0.08mg/m^3 0.1 ppm	
			1330 - 1400		0.01mg/m^3 0.1 ppm	
		E Area Oxide Conversion Room West end of Unit C	1230 - 1300		0.48mg/m^3 0.3 ppm	One unit in operation.
		West end of Unit B	1300 - 1330		0.03mg/m^3 0.1 ppm	" "
		West end of Unit A	1330 - 1400		0.03mg/m^3 0.1 ppm	" "
		B Area West end of calciner platform	1230 - 1300		0.88mg/m^3 <0.1 ppm	
			1300 - 1330		0.04mg/m^3 <0.1 ppm	
			1330 - 1400		0.56mg/m^3 <0.1 ppm	

WCX-2512(9-55) K-25 RC Medical Department

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AIR SAMPLING REPORT

NUMBER 469 Page 2
Routine X
Special
Requested by
Date 1-13-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	12-4-58	B Area				Screener in operation. Employee, wearing respirator, was cleaning floor around screener.
		Second floor				Employee, without respirator,
		C Area Partial disassembly area	1240 - 1310	Uranium Hydrogen Fluoride	0.04mg/m³ <0.1 ppm	Employee, wearing respirator, disassembling converter.
			1310 - 1340		0.10mg/m³ <0.1 ppm	
			1340 - 1410		0.04mg/m³ 0.1 ppm	

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Date 1-13-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	12-4-58	C Area By cutting stand	1240 - 1310	Uranium Hydrogen Fluoride	<0.01mg/m³ <0.1 ppm	Welder at cutting stand.
			1310 - 1340		0.04mg/m³ 0.2 ppm	Welder, wearing respirator, cutting open converter.
			1340 - 1410		0.03mg/m³ 0.1 ppm	" "
		By converter disassembly platform	1310 - 1340		0.33mg/m³ 0.2 ppm	
			1340 - 1410		0.04mg/m³ 0.1 ppm	
			1410 - 1440		0.08mg/m³ 0.2 ppm	Employee, wearing respirator, disassembling converter. Exhaust system on.
		Northeast corner of floor pan	1240 - 1310		0.10mg/m³ 0.1 ppm	Employees wearing respirators, were steam cleaning equipment.
			1310 - 1340		0.05mg/m³ 0.1 ppm	
			1340 - 1410		0.02mg/m³ <0.1 ppm	
		Detubing platform				Employee, wearing respirator, was detubing converter.

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WCX-2512(9-55) K-25 RC Medical Department

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AIR SAMPLING REPORT

NUMBER 469 Page 4
Routine X
Special
Requested by
Date 1-13-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	12-4-58	C Area Detubing platform				
	12-12-58	A Area Small parts disassembly booth by hood	1000 - 1030	Uranium Hydrogen Fluoride	0.05mg/m3 <0.1 ppm	Two employees, wearing respirators, in booth.
			1030 - 1100		0.01mg/m3 <0.1 ppm	" "
			1100 - 1130		<0.01mg/m3 <0.1 ppm	" "
		B Area West end of oxide conversion unit, line A	1000 - 1030		0.05mg/m3 0.2 ppm	All units being purged.
			1030 - 1100		0.02mg/m3 0.1 ppm	All units in operation.
			1100 - 1130		0.03mg/m3 0.4 ppm	" "

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NUMBER 479 Page 5
Routine X
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Date 1-13-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	12-12-58	B Area West end of calciner platform	1000 - 1030	Uranium Hydrogen fluoride	<0.01mg/m^3 <0.1 ppm	Two drum driers in operation.
			1030 - 1100		0.01mg/m^3 <0.1 ppm	" "
			1100 - 1130		<0.01mg/m^3 <0.1 ppm	All drum driers down. Screener not in operation.

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AIR SAMPLING REPORT

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Routine X
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BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	12-12-58	F Area By tank F-18	1600	Nitrogen Dioxide	3 ppm	Odor of Nitrogen Dioxide.
		C Area By partial disassembly area	1015 - 1045	Uranium Hydrogen Fluoride	<0.01mg/m^3 <0.1 ppm	
			1045 - 1115		<0.01mg/m^3 <0.1 ppm	
			1115 - 1145		<0.01mg/m^3 <0.1 ppm	
		By cutting stand	1015 - 1045		<0.01mg/m^3 <0.1 ppm	No cutting.
			1045 - 1115		0.01mg/m^3 0.1 ppm	"
			1115 - 1145		0.01mg/m^3 0.1 ppm	"
		By converter disassembly stand	1015 - 1045		0.01mg/m^3 <0.1 ppm	
			1045 - 1115		0.01mg/m^3 0.1 ppm	
			1115 - 1145		0.07mg/m^3 0.3 ppm	

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Date 1-13-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	12-12-58	C Area Northeast corner of floor pan	1015 - 1045	Uranium Hydrogen Fluoride	<0.01mg/m³ 0.0 ppm	Employees, wearing respirators, were cleaning equipment.
			1045 - 1115		0.01mg/m³ 0.1 ppm	" "
			1115 - 1145		0.01mg/m³ <0.1 ppm	
		North end of deferruling booth				By employee, wearing respirator knocking out ferrules.
	12-18-58	A Area Small parts booth by hood	0925 - 0955	Uranium Hydrogen Fluoride	0.03mg/m³ 0.1 ppm	
			0955 - 1025		0.06mg/m³ 0.1 ppm	1015: Employee, wearing respirator, began disassembling seals.
			1025 - 1055		0.86mg/m³ 0.3 ppm	" "

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WCX-2512 (9-55) K-25 RC Medical Department

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Date 1-13-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	12-19-58	E Area West end of oxide conversion unit line B	0930 - 1000	Uranium Hydrogen Fluoride	1.1mg/m3 0.2 ppm	Odor of Hydrogen Fluoride. All units in operation.
			1000 - 1030		0.06mg/m3 0.1 ppm	" "
			1030 - 1100		0.04mg/m3 0.1 ppm	" "
		B Area West end of calciner platform	0930 - 1000		0.01mg/m3 <0.1 ppm	All calciners in operation.
			1000 - 1030		0.05mg/m3 <0.1 ppm	" "
			1030 - 1100		0.02mg/m3 <0.1 ppm	" "
						Screener in operation.

Employee without respirator.

WCX-2512(9-55) K-25 RC Medical Department

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AIR SAMPLING REPORT

NUMBER 469 Page 9
Routine X
Special
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Date 1-13-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	12-18-58	B Area				
		C Area				
		By column G-10	0925 - 0955	Uranium Hydrogen Fluoride	0.02mg/m^3 <0.1 ppm	
			0955 - 1025		<0.01mg/m^3 <0.1 ppm	
			1025 - 1055		<0.01mg/m^3 <0.1 ppm	
		By cutting stand	0925 - 0955		0.01mg/m^3 0.1 ppm	
			0955 - 1025		0.01mg/m^3 0.1 ppm	
			1025 - 1055		0.01mg/m^3 <0.1 ppm	
		By converter disassembly stand	0925 - 0955		0.01mg/m^3 0.1 ppm	Two employees, wearing respirators, were disassembling converter.
			0955 - 1025		0.02mg/m^3 0.2 ppm	" "

WCX-2512(9-55) K-25 RC Medical Department

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NUMBER 469 Page 10
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Date 1-13-59

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	12-18-58	C Area Northeast corner of floor pan	0925 - 0955	Uranium Hydrogen Fluoride	0.01mg/m^3 <0.1 ppm	
			0955 - 1025		0.01mg/m^3 <0.1 ppm	
			1025 - 1055		0.02mg/m^3 0.1 ppm	

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WCX-2512(9-55) K-25 RC Medical Department

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 439
Routine X
Special
Requested by
Date 12-16-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	11-25-58	A Area Oxide Conversion Unit	1210 - 1250	Uranium Hydrogen Fluoride	0.3mg/m³ 0.2 ppm	
			1250 - 1320		0.02mg/m³ <0.1 ppm	
			1320 - 1350		<0.01mg/m³ <0.1 ppm	
		E Area Calciner Platform	1210 - 1250		<0.01mg/m³ 0.0 ppm	Two calciners in operation.
			1250 - 1320		<0.01mg/m³ 0.0 ppm	" "
			1320 - 1350		<0.01mg/m³ <0.1 ppm	" "
		B Area Small parts booth	1210 - 1250		0.85mg/m³ 2.8 ppm	
			1250 - 1320		0.08mg/m³ 0.2 ppm	
			1320 - 1350		0.13mg/m³ 0.3 ppm	

U 24 - 1
HF 33 - 0
Hg 3 - 0

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NUMBER 439 Page 2
Routine X
Special
Requested by
Date 12-18-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	11-25-58	C Area By Floor Fan	1215 - 1245	Uranium Hydrogen Fluoride	0.03mg/m3 <0.1 ppm	
			1245 - 1315		0.05mg/m3 <0.1 ppm	
			1315 - 1345		0.08mg/m3 0.1 ppm	
	11-30-58	A Area Oxide Conversion Room West end of Line B	1720 - 1750		0.01mg/m3 0.2 ppm	In operation.
			1750 - 1820		0.11mg/m3 0.2 ppm	"
			1820 - 1850		0.21mg/m3 0.3 ppm	"
		B Area West end of calciner platform	1720 - 1750		0.02mg/m3 0.1 ppm	Down.
			1750 - 1820		0.02mg/m3 <0.1 ppm	"
			1820 - 1850		0.01mg/m3 <0.1 ppm	"

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AIR SAMPLING REPORT

NUMBER 439 Page 3
Routine X
Special
Requested by
Date 12-10-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1126	11-30-58	B Area Small parts booth By hood	1720 - 1750	Uranium Hydrogen Fluoride	0.01mg/m^3 <0.1 ppm	
			1750 - 1820		0.01mg/m^3 <0.1 ppm	
			1820 - 1850		0.01mg/m^3 0.1 ppm	
		C Area By column G-10	2100 - 2130		<0.01mg/m^3 <0.1 ppm	
			2130 - 2200		<0.01mg/m^3 <0.1 ppm	
			2200 - 2230		<0.01mg/m^3 <0.1 ppm	
		By cutting stand	2100 - 2130		0.01mg/m^3 <0.1 ppm	
			2130 - 2200		<0.01mg/m^3 <0.1 ppm	
			2200 - 2230		<0.01mg/m^3 <0.1 ppm	

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WCX-2512 (9-55) K-25 RC Medical Department

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AIR SAMPLING REPORT

NUMBER 439 Page 4
Routine X
Special
Requested by
Date 12-10-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1120	11-30-58	C Area				
		Southeast corner of converter disassembly platform	2100 - 2130	Uranium Hydrogen Fluoride	0.01mg/m3 <0.1 ppm	
			2130 - 2200		0.10mg/m3 0.3 ppm	
			2200 - 2230		0.03mg/m3 0.1 ppm	
		Northeast corner of floor pan	2100 - 2130		0.01mg/m3 <0.1 ppm	
			2130 - 2200		0.03mg/m3 <0.1 ppm	Employee, without respirator, was cleaning equipment.
			2200 - 2230		0.04mg/m3 <0.1 ppm	
	12-9-58	F Area				
		Mercury Recovery Room West end	1530	Mercury	0.00mg/m3	Exhaust system on. Four mercury stills in operation.
		East end	1535		0.00mg/m3	
		By washing table	1540		0.00mg/m3	

WCX-2512 (9-55) K-25 RC Medical Department

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 4 146
Routine X
Special
Requested by
Date 12-12-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	11-25-58	By column C-10	1215 - 1245	Uranium Hydrogen Fluoride	<0.01mg/m³ <0.1 ppm	
			1245 - 1315		<0.01mg/m³ <0.1 ppm	
			1315 - 1345		<0.01mg/m³ <0.1 ppm	
		By cutting stand	1215 - 1245		0.02mg/m³ <0.1 ppm	Welder, wearing respirator, was cutting open converters with arc-air rig.
			1245 - 1315		0.01mg/m³ 0.0 ppm	" "
			1315 - 1345		<0.01mg/m³ <0.1 ppm	" "
		Rotor disassembly stand	1215 - 1245		0.07mg/m³ 0.1 ppm	
			1245 - 1315		2.20mg/m³ 2.8 ppm	Suspected "horse play". These results will not be included in area summary.
			1315 - 1345		0.05mg/m³ 0.2 ppm	

NT

U 6-3
HF 9-0

WCX-2512(9-55) K-25 RC Medical Department

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INDUSTRIAL HYGIENE
AIR SAMPLING REPORT

NUMBER 399
Routine X
Special
Requested by
Date 11-13-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	11-6-58	South side of building 150 feet from west end	1320 - 1346	Nitrogen Dioxide	0.3ppm	Wind from Northwest. Nitrogen Dioxide fumes from top of building were being forced down below roof level by down-drafts and were moving east along side of building.

NO2 1-0

WCX-2512(9-55) K-25 RC Medical Department

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 380
Routine X
Special
Requested by
Date 11-17-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	10-17-58	A Area Small parts booth	1320 - 1350	Uranium Hydrogen Fluoride	$<0.01 mg/m^3$ <0.1 ppm	
			1350 - 1420		$<0.01 mg/m^3$ 0.1 ppm	
			1420 - 1450		$<0.01 mg/m^3$ 0.1 ppm	
		B Area West end of calciner platform				
						Operator, without respirator, was cleaning out calciner.

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Hg 3-
NO_2 0-1

F_2 3-0

WCX-2512 (9-55) K-25 RC Medical Department

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AIR SAMPLING REPORT

NUMBER 50 [illegible] 2
Routine X
Special
Requested by
Date [illegible] -58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	10-17-58	B Area By screener				Operator without respirator.
		Second Floor by hopper				
		E Area Oxide conversion room West end of conversion unit A	1350 - 1420	Uranium Fluorine	0.01mg/m3 0.1 ppm	Unit A and B in operation. Slight odor of Fluorine.
			1420 - 1450		0.19mg/m3 0.2 ppm	" "
			1450 - 1520		0.01mg/m3 0.2 ppm	Units A and B down, Unit C in operation.

WCX-2512(9-55) K-25 RC Medical Department

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INDUSTRIAL HYGIENE
AIR SAMPLING REPORT

NUMBER 380 Page 3
Routine X
Special
Requested by
Date 11-14-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	10-17-58	C Area By converter disassembly platform	1340 - 1410	Uranium Hydrogen Fluoride	<0.01mg/m³ <0.1 ppm	Operator, wearing respirator, was disassembling converter, Exhaust system on.
			1410 - 1440		<0.01mg/m³ 0.1 ppm	" "
			1440 - 1510		<0.01mg/m³ <0.1 ppm	
		By cutting stand	1340 - 1410		<0.01mg/m³ <0.1 ppm	
			1410 - 1440		0.00mg/m³ <0.1 ppm	
			1440 - 1510		0.00mg/m³ 0.0 ppm	
		Partial disassembly area	1340 - 1410		0.00mg/m³ 0.1 ppm	Operator disassembling converter.
			1410 - 1440		<0.01mg/m³ <0.1 ppm	
			1440 - 1510		0.00mg/m³ 0.1 ppm	
		By South door of spray booth	1415	Nitrogen Dioxide	5.6ppm	Equipment in booth had just been sprayed. Door on South side was opened.

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WCX-2512(9-55) K-25 RC Medical Department

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AIR SAMPLING REPORT

NUMBER 360 Page 4
Routine X
Special
Requested by
Date 11-17-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1120	10-17-58	F Area Mercury recovery room				
		By washing sink	1550	Mercury	0.00mg/m³	Mercury being washed in sink.
		By storage table	1552		0.00mg/m³	
		By stills	1555		0.00mg/m³	Layer of water over Mercury in trough under stills. Stills not in operation. Exhaust system off.*
		*The exhaust system should be interconnected with the light system in order to prevent entry into this area when the ventilation is not operating.				
	10-22-58	B Area By calciner platform	0900 - 0930	Uranium Hydrogen Fluoride	<0.01mg/m³ <0.1 ppm	Three calciners in operation.
			0930 - 1000		<0.01mg/m³ <0.1 ppm	" "
			1000 - 1030		0.01mg/m³ 0.1 ppm	" "

WCX-2512 (9-55) K-25 RC Medical Department

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NUMBER 390 Page 5
Routine X
Special
Requested by
Date 11-17-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	10-22-58	B Area Oxide Conversion Room	0900 - 0930	Uranium Hydrogen Fluoride	<0.01mg/m^3 0.1 ppm	Odor of Hydrogen Fluoride.
			0930 - 1000		0.01mg/m^3 0.1 ppm	" "
			1000 - 1030		<0.01mg/m^3 0.1 ppm	" "
		A Area Small parts booth	0900 - 0930		0.01mg/m^3 0.1 ppm	Operator wearing respirator.
			0930 - 1000		<0.01mg/m^3 0.1 ppm	
			1000 - 1030		0.01mg/m^3 0.1 ppm	
	10-23-58	C Area Partial disassembly area	0915 - 0945		<0.01mg/m^3 0.1 ppm	
			0945 - 1015		<0.01mg/m^3 0.1 ppm	
			1015 - 1045		<0.01mg/m^3 <0.1 ppm	

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NUMBER 20 Page 6
Routine X
Special
Requested by
Date 12-27-53

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-11,20	10-23-53	C Area				
		By cutting stand	0915 - 0945	Uranium Hydrogen Fluoride	<0.01mg/m³ <0.1 ppm	Welder not wearing respirator.
			0945 - 1015		<0.01mg/m³ <0.1 ppm	" "
			1015 - 1045		<0.01mg/m³ <0.1 ppm	
		By Rotor Stand	0915 - 0945		0.01mg/m³ 0.1 ppm	
			0945 - 1015		0.03mg/m³ 0.1 ppm	
			1015 - 1045		<0.01mg/m³ <0.1 ppm	
		By floor pan	0915 - 0945		0.03mg/m³ 0.1 ppm	Operator washing equipment.
			0945 - 1015		0.01mg/m³ 0.1 ppm	
			1015 - 1045		<0.01mg/m³ <0.1 ppm	

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WCX-2512 (9-55) K-25 RC Medical Department

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 347
Routine
Special X
Requested by R. J. Clouse
Date 10-1-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
Vehicle No. E-7273	9-23-58	Inside truck cab	1430	Mercury	0.30mg/m^3	Outside E-1420. Windows had been closed on truck.
			1450		0.10mg/m^3	Windows had been opened and truck aired out before second sample was taken.
			1455		0.20mg/m^3	Sample taken after windows had been closed just after sample No. 2 was completed.

Misc 3

WCX-2512 (9-55) K-25 RC Medical Department

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INDUSTRIAL HYGIENE
AIR SAMPLING REPORT

NUMBER 3.2
Routine X
Special
Requested by
Date 10-26-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	9-12-58	X Area West of oxide conversion unit B	0905 - 0935	Uranium Hydrogen Fluoride	0.06mg/m³ 0.2 ppm	All units in operation.
			0935 - 1005		0.01mg/m³ 0.1 ppm	" "
			1005 - 1035		0.01mg/m³ 0.2 ppm	
		A Area Small parts booth	0905 - 0935		0.11mg/m³ 0.1 ppm	Two employees wearing respirators in booth
			0935 - 1005		0.02mg/m³ 0.1 ppm	" "
			1005 - 1035		0.01mg/m³ 0.3 ppm	

130

U 4-
HF 6-C

WCX-2512 (9-55) K-25 RC Medical Department

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 297
Routine X
Special
Requested by
Date 9-11-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	8-26-58	**Area A** Small parts disassembly booth	1355 - 1425	Uranium Hydrogen Fluoride	0.00mg/m^3 <0.1 ppm	By hood. No one in booth.
			1425 - 1455		0.00mg/m^3 <0.1 ppm	" "
			1455 - 1525		<0.01mg/m^3 0.1 ppm	" "
		Area E West end of oxide conversion units	1355 - 1425		<0.01mg/m^3 0.1 ppm	Two units in operation.
			1425 - 1455		<0.01mg/m^3 0.1 ppm	" "
			1455 - 1525		0.03mg/m^3 <0.1 ppm	" "
		Area B West end of calciner platform	1355 - 1425		0.01mg/m^3 <0.1 ppm	
			1425 - 1455		0.01mg/m^3 <0.1 ppm	
			1455 - 1525		0.05mg/m^3 0.1 ppm	

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4-16-
HF 24-C

WCX-2512 (9-55) K-25 RC Medical Department

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AIR SAMPLING REPORT

NUMBER 297 Page 2
Routine X
Special
Requested by
Date 9-11-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	8-26-58	Area C Partial disassembly area	1400 - 1430	Uranium Hydrogen Fluoride	1.79mg/m3 0.9 ppm	Employees wearing respirators in area.
			1430 - 1500		0.15mg/m3 0.3 ppm	
			1500 - 1530		0.01mg/m3 0.2 ppm	
		By cutting stand	1400 - 1430		0.10mg/m3 0.2 ppm	No one at stand.
			1430 - 1500		0.52mg/m3 0.4 ppm	Employee, without respirator, was cutting open converter.
			1500 - 1530		0.02mg/m3 0.4 ppm	
		By converter disassembly platform	1400 - 1430		0.31mg/m3 0.3 ppm	No one at platform.
			1430 - 1500		0.07mg/m3 1.0 ppm	
			1500 - 1530		0.65mg/m3 0.7 ppm	

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NUMBER 297 Page 3
Routine X
Special
Requested by
Date 9-11-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	8-26-58	Area C By column D-10	1400 - 1430	Uranium Hydrogen Fluoride	<0.01mg/m³ <0.1 ppm	Employee, without respirator, was disassembling compressor.
			1430 - 1500		<0.01mg/m³ 0.1 ppm	
			1500 - 1530		<0.01mg/m³ 0.1 ppm	
		Northeast corner of floor pan	1400 - 1430		0.03mg/m³ <0.1 ppm	No one at floor pan.
			1430 - 1500		<0.01mg/m³ 0.1 ppm	
			1500 - 1530		0.01mg/m³ 0.1 ppm	

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WCX-2512(9-55) K-25 RC Medical Department

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 282
Routine X
Special
Requested by
Date 8-[illegible]-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	7-29-58	F Area West end of Oxide Conversion Unit A	1730 - 1800	Uranium Fluorine	<0.01mg/m³ 0.1 ppm	Unit in operation.
			1800 - 1830		<0.01mg/m³ <0.1 ppm	" "
			1830 - 1900		0.00mg/m³ <0.1 ppm	" "
		B Area West end of calciner platform	1730 - 1800	Uranium Hydrogen Fluoride	<0.01mg/m³ <0.1 ppm	Three calciners in operation.
			1800 - 1830		0.00mg/m³ <0.1 ppm	" "
			1830 - 1900		0.00mg/m³ <0.1 ppm	" "
		Small parts booth	1730 - 1800		<0.01mg/m³ 0.1 ppm	No one in booth.
			1800 - 1830		<0.01mg/m³ 0.1 ppm	"
			1830 - 1900		0.00mg/m³ 0.1 ppm	"

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U 18-0
F 3-0
HF 15-0

WCX-2512 (9-55) K-25 RC Medical Department

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AIR SAMPLING REPORT

NUMBER 302 Page 2
Routine X
Special
Requested by
Date 8-25-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	7-29-58	C Area Partial disassembly area	1730 - 1800	Uranium Hydrogen Fluoride	<0.01mg/m³ 0.1 ppm	By column C-10. No one in area.
			1800 - 1830		<0.01mg/m³ 0.1 ppm	" "
			1830 - 1900		<0.01mg/m³ 0.1 ppm	" "
		By cutting stand	1730 - 1800		<0.01mg/m³ 0.1 ppm	" "
			1800 - 1830		0.03mg/m³ 0.3 ppm	" "
			1830 - 1900		<0.01mg/m³ <0.1 ppm	" "
		Northeast corner of floor pan	1730 - 1800		<0.01mg/m³ 0.1 ppm	" "
			1800 - 1830		0.01mg/m³ 0.1 ppm	" "
			1830 - 1900		<0.01mg/m³ <0.1 ppm	" "

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WCX-2512(9-55) K-25 RC Medical Department

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 271
Routine X
Special
Requested by
Date 8-[illegible]-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	7-18-58	E Area Oxide conversion room West end of Unit B	0430 - 0500	Uranium Hydrogen Fluoride	<0.01mg/m³ <0.1 ppm	All units in operation.
			0500 - 0530		<0.01mg/m³ 0.1 ppm	" "
			0530 - 0600		<0.01mg/m³ <0.1 ppm	" "
		B Area West end of calciner platform	0430 - 0500		0.00mg/m³ <0.1 ppm	One drum drier in operation.
			0500 - 0530		<0.01mg/m³ <0.1 ppm	" "
			0530 - 0600		0.00mg/m³ <0.1 ppm	" "
		A Area East side of floor pan	0430 - 0500		<0.01mg/m³ <0.1 ppm	Two employees, cleaning equipment, were not wearing respirators.
			0500 - 0530		<0.01mg/m³ 0.0 ppm	" "
			0530 - 0600		<0.01mg/m³ 0.0 ppm	" "

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U 12-0
HF 12-0

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NUMBER 271 Page 2
Routine X
Special
Requested by
Date 8-[illegible]-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	7-18-58	A Area By South vapor blaster	0430 - 0500	Uranium Hydrogen Fluoride	<0.01mg/m3 0.0 ppm	Employee blasting equipment under hood.
			0500 - 0530		<0.01mg/m3 0.0 ppm	" "
			0530 - 0600		<0.01mg/m3 0.0 ppm	" "

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WCX-2512 (8-55) K-25 RC Medical Department

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 259
Routine X
Special
Requested by
Date 7-25-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-2420	7-16-58	A Area Small parts disassembly booth	0930 - 1000	Uranium Hydrogen Fluoride	0.02mg/m³ 0.1 ppm	By hood, two employees wearing respirators in area.
			1000 - 1030		0.02mg/m³ 0.1 ppm	" "
			1030 - 1100		0.31mg/m³ 0.5 ppm	" "
		E Area Oxide Conversion Room West end of Unit A	0932 - 1002	Uranium Fluorine	0.01mg/m³ 0.1 ppm	Odor of Fluorine. Three units in operation.
			1002 - 1032		<0.01mg/m³ 0.1 ppm	" "
			1032 - 1102		0.01mg/m³ 0.1 ppm	" "
		B Area West end of calciner platform	0935 - 1005	Uranium Hydrogen Fluoride	<0.01mg/m³ <0.1 ppm	No calciners in operation.
			1005 - 1035		<0.01mg/m³ <0.1 ppm	" "
			1035 - 1105		0.01mg/m³ <0.1 ppm	" "

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U 19-2
HF 18-0
F 3-0

WCX-2512(9-55) K-25 RC Medical Department

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AIR SAMPLING REPORT

NUMBER 259 Page 2
Routine X
Special
Requested by
Date 7-25-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	7-16-58	C Area By column C-10	0940 - 1010	Uranium Hydrogen Fluoride	<0.01mg/m³ 0.1 ppm	Employees, wearing respirators, were disassembling converters.
			1010 - 1040		<0.01mg/m³ 0.1 ppm	" "
			1040 - 1110		<0.01mg/m³ 0.1 ppm	" "
		By cutting stand	0940 - 1010		<0.01mg/m³ 0.1 ppm	Employee, wearing respirator, was cutting open converters.
			1010 - 1040		<0.01mg/m³ <0.1 ppm	" "
			1040 - 1110		<0.01mg/m³ 0.1 ppm	
		By converter disassembly platform	0940 - 1010		<0.01mg/m³ 0.2 ppm	Two employees in area.
			1010 - 1040		<0.01mg/m³ 0.1 ppm	No one at platform. Exhaust system on.
			1040 - 1110		<0.01mg/m³ 0.1 ppm	" "

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WCX-2512 (9-55) K-25 RC Medical Department

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AIR SAMPLING REPORT

NUMBER 259 Page 3
Routine X
Special
Requested by
Date 7-25-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
[illegible]-1420	7-16-58	C Area Northeast corner of floor pan	0940 - 1010	Uranium Hydrogen Fluoride	0.01mg/m^3 0.1 ppm	Two employees, wearing respirators, were cleaning equipment.
			1010 - 1040		0.08mg/m^3 0.2 ppm	" "
			1040 - 1110		0.02mg/m^3 0.2 ppm	" "

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 25
Routine X
Special
Requested by
Date 6-23-55

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	6-22-55	A Area By hood in small parts booth	1730 - 1800	Uranium Hydrogen Fluoride	0.01mg/m³ 0.1 ppm	Not in operation.
			1800 - 1830		0.01mg/m³ 0.1 ppm	"
			1830 - 1900		0.01mg/m³ 0.1 ppm	"
		Oxide Conversion Room Unit B	1730 - 1800		0.01mg/m³ 0.1 ppm	"
			1800 - 1830		0.01mg/m³ 0.1 ppm	"
			1830 - 1900		0.00mg/m³ 0.1 ppm	"
		By hood in North blending room	1730 - 1800		0.01mg/m³ 0.1 ppm	"
			1800 - 1830		0.01mg/m³ 0.1 ppm	"
			1830 - 1900		0.00mg/m³ 0.1 ppm	"

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12-7
HF 12-8

WCX-2512 (9-55) K-25 RC Medical Department

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INDUSTRIAL HYGIENE
AIR SAMPLING REPORT

NUMBER 245 Page 2
Routine X
Special
Requested by
Date 7-1-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	6-22-58	West end of calciner	1730 - 1800	Uranium Hydrogen Fluoride	0.01mg/m^3 0.1 ppm	Not in operation.
			1800 - 1830		0.00mg/m^3 0.1 ppm	"
			1830 - 1900		0.01mg/m^3 0.1 ppm	"

WCX-2512(9-55) K-25 RC Medical Department

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INDUSTRIAL HYGIENE
AIR SAMPLING REPORT

NUMBER 237
Routine X
Special
Requested by
Date 6-30-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1.20	6-13-58	A Area Small parts booth, by hood	1325 - 1355	Uranium Hydrogen Fluoride	0.01mg/m³ 0.1 ppm	No one in booth.
			1355 - 1425		0.01mg/m³ 0.0 ppm	"
			1425 - 1455		0.01mg/m³ 0.1 ppm	"
		F Area Oxide conversion room West end of conversion unit A	1327 - 1357		0.01mg/m³ 0.1 ppm	All units in operation.
			1357 - 1427		0.01mg/m³ 0.1 ppm	" "
			1427 - 1457		0.01mg/m³ 0.1 ppm	" "
		B Area West end of calciner platform	1330 - 1400		0.01mg/m³ 0.1 ppm	Two drum driers and two calciners in operation.
			1400 - 1430		0.01mg/m³ 0.1 ppm	" "
			1430 - 1500		0.01mg/m³ 0.1 ppm	" "

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HF 24-1

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NUMBER 237 Page 2
Routine X
Special
Requested by
Date 6-3-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	6-13-58	C Area Partial converter disassembly platform	1335 -1405	Uranium Hydrogen Fluoride	0.32mg/m³ 0.2 ppm	
			1405 - 1435		0.11mg/m³ 0.1 ppm	
			1435 - 1505		0.01mg/m³ 0.1 ppm	
		By cutting platform	1335 - 1405		0.01mg/m³ 0.1 ppm	No one at cutting platform.
			1405 - 1435		0.01mg/m³ 0.1 ppm	
			1435 - 1505		0.01mg/m³ 0.1 ppm	
		By converter disassembly platform	1335 - 1405		0.01mg/m³ 0.1 ppm	
			1405 - 1435		0.01mg/m³ 0.1 ppm	
			1435 - 1505		0.01mg/m³ 0.1 ppm	

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NUMBER 237 Page 3
Routine X
Special
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Date 6-30-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	6-13-58	C Area Northwest corner of compressor pit	1340 - 1410	Uranium Hydrogen Fluoride	0.01mg/m^3 0.0 ppm	Men, without respirators, were removing compressor from pit.
			1410 - 1440		0.01mg/m^3 0.1 ppm	
			1440 - 1510		0.01mg/m^3 0.1 ppm	
		Northeast corner of floor pan	1340 - 1410		0.01mg/m^3 0.1 ppm	
			1410 - 1440		0.02mg/m^3 0.2 ppm	
			1440 - 1510		0.01mg/m^3 0.1 ppm	

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NUMBER ~~128~~
Routine X
Special
Requested by
Date ~~6-23-58~~

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	6-7-58	A Area By hood in small parts booth	1900 - 1930	Uranium Hydrogen Fluoride	0.00mg/m³ 0.1 ppm	No one in booth.
			1930 - 2000		0.00mg/m³ 0.1 ppm	"
			200 - 2030		0.01mg/m³ 0.1 ppm	"
		B Area Oxide conversion room West end of conversion Unit B	1905 - 1935		0.00mg/m³ 0.1 ppm	Units not in operation.
			1935 - 2005		0.00mg/m³ 0.1 ppm	" "
			2005 - 2035		0.01mg/m³ 0.1 ppm	" "
		By hood, north blending room	1905 - 1935		0.01mg/m³ 0.1 ppm	Cylinder on blender.
			1935 - 2005		0.00mg/m³ 0.1 ppm	" "
			2005 - 2035		0.01mg/m³ 0.1 ppm	" "

CX-2512 (9-55) K-25 RC Medical Department

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NUMBER 223 Page 2
Routine X
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Date 6-23-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1220	6-2-58	B Area West end of calciner platform	1907 - 1937	Uranium Hydrogen Fluoride	0.01mg/m³ 0.0 ppm	One drum drier in operation.
			1937 - 2007		0.00mg/m³ 0.0 ppm	" "
			2007 - 2037		0.00mg/m³ 0.0 ppm	" "
		C Area Partial disassembling area	1915 - 1945		0.01mg/m³ 0.1 ppm	
			1945 - 2045		0.04mg/m³ 0.1 ppm	Operators, 20 ft. west of sampler, were disassembling compressor with air driven wrenches.
			2045 - 2115		0.02mg/m³ 0.1 ppm	" "
		By cutting stand	1915 - 1945		0.01mg/m³ 0.1 ppm	No one at cutting stand.
			1945 - 2015		0.01mg/m³ 0.1 ppm	" "
			2015 - 2045		0.01mg/m³ 0.1 ppm	" "

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AIR SAMPLING REPORT

NUMBER 228 Page 3
Routine X
Special
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Date 6-23-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	6-2-58	C Area By converter disassembly platform	1915 - 1945	Uranium Hydrogen Fluoride	0.01mg/m3 0.0 ppm	Operators were working on turnover fixture in compressor pit. No compressor in pit.
			1945 - 2015		0.01mg/m3 0.1 ppm	" "
			2015 - 2045		0.00mg/m3 0.0 ppm	" "
		Northeast corner of floor pan	1915 - 1945		0.00mg/m3 0.0 ppm	
			1945 - 2015		0.01mg/m3 0.1 ppm	Operator, wearing respirator, was cleaning equipment.
			2015 - 2045		0.01mg/m3 0.1 ppm	" "
		On detubing platform				No detubing during sampling.

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Routine X
Special
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Date [illegible]

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	5-10-[illegible]	[illegible] Area By column G-10	2000 - 2030	Uranium Hydrogen Fluoride	0.01mg/m³ 0.1 ppm	No one in partial disassembly area.
			2030 - 2100		0.01mg/m³ 0.1 ppm	" "
			2100 - 2130		0.01mg/m³ 0.1 ppm	" "
		By cutting stand	2000 - 2030		0.01mg/m³ 0.1 ppm	No one at cutting stand.
			2030 - 2100		0.01mg/m³ 0.1 ppm	" "
			2100 - 2130		0.01mg/m³ 0.1 ppm	" "
		Northeast corner of floor pan	2000 - 2030		0.01mg/m³ 0.1 ppm	No one at floor pan.
			2030 - 2100		0.01mg/m³ 0.1 ppm	" "
			2100 - 2130		0.01mg/m³ 0.1 ppm	" "

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NUMBER 181, Page 2
Routine X
Special
Requested by
Date 1-[illegible]-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1220	1-10-58	A Area By South vapor blaster	2000 - 2030	Uranium Hydrogen Fluoride	0.01mg/m3 0.1 ppm	By operator.
			2030 - 2100		0.01mg/m3 0.1 ppm	"
			2100 - 2130		0.01mg/m3 0.1 ppm	"
		E Area West end of oxide conversion unit A	2000 - 2030	Uranium Fluorine	0.01mg/m3 0.1 ppm	All units in operation.
			2030 - 2100		0.02mg/m3 0.1 ppm	" "
			2100 - 2130		0.02mg/m3 0.1 ppm	" "
		B Area West end of calciner platform	2000 - 2030	Uranium Hydrogen Fluoride	0.01mg/m3 0.1 ppm	One drum drier in operation.
			2030 - 2100		0.02mg/m3 0.1 ppm	" "
			2100 - 2130		0.01mg/m3 0.1 ppm	" "

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AIR SAMPLING REPORT

NUMBER 114 Page 3
Routine X
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Date 5-22-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	5-10-58	C Area By scrap hopper				erators sweeping up dust nd scrap around hopper.

WCX-2512 (9-55) K-25 RC Medical Department

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 178
Routine X
Special
Requested by
Date 5-11-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	4-29-58	A Area Small parts disassembly booth	1000 - 1030	Uranium Hydrogen Fluoride	0.29mg/m³ 0.3 ppm	Two operators, wearing respirators, were in booth.
			1030 - 1100		0.06mg/m³ 0.1 ppm	" "
			1100 - 1130		0.0lmg/m³ 0.1 ppm	" "
		K Area Oxide Conversion Room West end of unit 3	1000 - 1030		0.01mg/m³ 0.1 ppm	No units in operation.
			1030 - 1100		0.01mg/m³ 0.1 ppm	" "
			1100 - 1130		0.01mg/m³ 0.1 ppm	" "
		B Area West end of calciner platform	1000 - 1030		0.01mg/m³ 0.1 ppm	No drums in operation.
			1030 - 1100		0.01mg/m³ 0.1 ppm	" "
			1100 - 1130		0.01mg/m³ 0.1 ppm	" "

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W 22-2
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Routine X
Special
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Date [illegible]-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1133	6-27-58	C Area Partial disassembly area	1000 - 1030	Uranium Hydrogen Fluoride	0.01mg/m3 0.1 ppm	No one in area.
			1030 - 1100		0.01mg/m3 0.1 ppm	"
			1100 - 1130		0.01mg/m3 0.1 ppm	"
		At cutting stand	1000 - 1030		0.01mg/m3 0.1 ppm	By welder, wearing respirator, cutting open converters.
			1030 - 1100		0.01mg/m3 0.1 ppm	" "
			1100 - 1130		0.01mg/m3 0.1 ppm	" "
		By converter disassembly platform	1000 - 1030		0.02mg/m3 0.1 ppm	Converter on platform. Exhaust system attached to converter.
			1030 - 1100		0.01mg/m3 0.1 ppm	" "
			1100 - 1130		0.01mg/m3 0.2 ppm	" "

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AIR SAMPLING REPORT

NUMBER 1[illegible]8 Page 3
Routine X
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Date [illegible]-1[illegible]-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1[illegible]20	4-29-58	C Area Northwest corner of compressor pit	1000 - 1030	Uranium Hydrogen Fluoride	0.01mg/m3 0.2 ppm	No one in pit.
			1030 - 1100		0.01mg/m3 0.2 ppm	"
			1100 - 1130		0.01mg/m3 0.2 ppm	"
		Northeast corner of floor pan	1000 - 1030		0.01mg/m3 0.2 ppm	
			1030 - 1100		0.01mg/m3 0.1 ppm	
			1100 - 1130		0.01mg/m3 0.1 ppm	

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 159
Routine X
Special
Requested by
Date 5-2-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	4-24-58	A Area Small parts booth	1240 - 1310	Uranium Hydrogen Fluoride	0.16mg/m^3 0.2 ppm	No one in booth. Leak from compressor pit around booth.
			1310 - 1340		0.02mg/m^3 0.1 ppm	" "
			1340 - 1410		0.01mg/m^3 0.1 ppm	" "
		E Area Oxide conversion room West end of Line B	1240 - 1310		0.02mg/m^3 0.1 ppm	No oxide conversion units in operation.
			1310 - 1340		0.02mg/m^3 0.1 ppm	" "
			1340 - 1410		0.01mg/m^3 0.1 ppm	" "
		B Area West end of calciner platform	1240 - 1310		0.02mg/m^3 0.1 ppm	
			1310 - 1340		0.01mg/m^3 0.1 ppm	
			1340 - 1410		0.01mg/m^3 0.1 ppm	

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11F 21-0
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AIR SAMPLING REPORT

NUMBER 159 Page 2
Routine 1
Special
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Date 5-2-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	4-24-58	C Area By column C-10	1240 - 1310	Uranium Hydrogen Fluoride	0.18mg/m³ 0.2 ppm	Uranium Hexafluoride leak from compressor pit, 1249 fog moved to the Southeast part of the building.
			1310 - 1340		0.02mg/m³ 0.1 ppm	
			1340 - 1410		0.02mg/m³ 0.1 ppm	
		By cutting stand	1240 - 1310		0.03mg/m³ 0.1 ppm	No one at cutting stand.
			1310 - 1340		0.01mg/m³ 0.1 ppm	" "
			1340 - 1410		0.01mg/m³ 0.1 ppm	" "
		By converter disassembly platform	1240 - 1310		0.16mg/m³ 0.3 ppm	Leak from compressor pit. No one at converter stand.
			1310 - 1340		0.01mg/m³ 0.1 ppm	" "
			1340 - 1410		0.01mg/m³ 0.1 ppm	" "

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NUMBER 159 Page 3
Routine X
Special
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Date 5-2-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	4-24-58	C Area Northwest corner of compressor pit	1240 - 1310	Uranium Hydrogen Fluoride	0.14mg/m³ 0.4 ppm	Two operators, wearing respirators, were disassembling compressor. 1258 Uranium Hexafluoride leak. Fog drifted Southeast through building.
			1310 - 1340		0.01mg/m³ 0.1 ppm	
			1340 - 1410		0.03mg/m³ 0.2 ppm	Operators, wearing respirators were disassembling compressors.
		South side of column C-11	1240 - 1310		0.38mg/m³ 0.3 ppm	Leak from compressor pit. Operators, wearing respirators, were disassembling compressors.
			1310 - 1340		0.02mg/m³ 0.1 ppm	
			1340 - 1410		0.07mg/m³ 0.2 ppm	" "
		Northeast corner of floor pan	1240 - 1310		0.19mg/m³ 0.2 ppm	Leak from compressor pit. Operators, wearing respirators, were cleaning equipment at floor pan.
			1310 - 1340		0.01mg/m³ 0.1 ppm	
			1340 - 1410		0.01mg/m³ 0.1 ppm	" "
		By South door of acid booth	1420	Nitrogen Dioxide	4.7 ppm	
			1440		4.1 ppm	

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 144
Routine X
Special
Requested by
Date 4-25-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	4-9-58	C Area By partial disassembly stand	0920 - 0950	Uranium Hydrogen Fluoride	0.01mg/m^3 0.1 ppm	
			0950 - 1020		0.01mg/m^3 0.1 ppm	Two operators, wearing respirators, were disassembling converter.
			1020 - 1050		0.12mg/m^3 0.3 ppm	" "
		By welder at cutting stand	0920 - 0950		0.01mg/m^3 0.1 ppm	Welder, wearing respirator, was cutting heads from converters.
			0950 - 1020		0.01mg/m^3 0.1 ppm	
			1020 - 1050		0.52mg/m^3 1.6 ppm	Uranium Hexafluoride release from compressor pit at 1037. Uranium Hexafluoride fog in area.
		Converter disassembly stand	0920 - 0950		0.02mg/m^3 0.1 ppm	Operators, wearing respirators were disassembling converter.
			0950 - 1020		0.05mg/m^3 0.3 ppm	
			1020 - 1050		0.22mg/m^3 0.6 ppm	

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U 7-4
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WGX 2512(9-55) K-25 PG Medical Department

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AIR SAMPLING REPORT

NUMBER 14 page 2
Routine 1
Special
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Date 4-28-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	4-9-58	C Area Northeast corner of floor pan	0930 - 0950	Uranium Hydrogen Fluoride	0.01mg/m³ 0.1 ppm	
			0950 - 1020		0.02mg/m³ 0.2 ppm	
			1020 - 1050		0.01mg/m³ 0.1 ppm	

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 127
Routine X
Special
Requested by
Date 4-18-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	4-3-58	Area A Small parts booth	2100 - 2130	Uranium Hydrogen Fluoride	<0.01mg/m³ <0.1 ppm	
			2130 - 2200		<0.01mg/m³ <0.1 ppm	
			2200 - 2230		<0.01mg/m³ <0.1 ppm	
		Area E West end of oxide conversion Line A	2100 - 2130		<0.01mg/m³ <0.1 ppm	
			2130 - 2200		<0.01mg/m³ <0.1 ppm	
			2200 - 2230		<0.01mg/m³ <0.1 ppm	
		Area B West end of calciner platform	2100 - 2130		<0.01mg/m³ 0.0 ppm	
			2130 - 2200		<0.01mg/m³ <0.1 ppm	
			2200 - 2230		<0.01mg/m³ <0.1 ppm	

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NUMBER 127 Page 2
Routine X
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Date 4-18-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	4-3-58	Area C Partial disassembly area	2100 - 2130	Uranium Hydrogen Fluoride	<0.01mg/m³ <0.1 ppm	
			2130 - 2200		<0.01mg/m³ <0.1 ppm	
			2200 - 2230		<0.01mg/m³ <0.1 ppm	
		By welding stand	2100 - 2130		<0.01mg/m³ <0.1 ppm	
			2130 - 2200		<0.01mg/m³ <0.1 ppm	
			2200 - 2230		<0.01mg/m³ <0.1 ppm	
		By converter disassembly stand	2230 - 2300		<0.01mg/m³ <0.1 ppm	
			2300 - 2330		<0.01mg/m³ <0.1 ppm	
			2330 - 0000		<0.01mg/m³ <0.1 ppm	

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NUMBER 127 Page 3
Routine X
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Date 4-13-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	4-3-58	Area C South side of column D-11	2230 - 2300	Uranium Hydrogen Fluoride	<0.01mg/m3 <0.1 ppm	Operators were disassembling compressor rotors.
			2300 - 2330		<0.01mg/m3 0.1 ppm	
			2330 - 0000		<0.01mg/m3 <0.1 ppm	
		Northeast corner of floor pan	2230 - 2300		<0.01mg/m3 <0.1 ppm	
			2300 - 2330		<0.01mg/m3 <0.1 ppm	
			2330 - 0000		<0.01mg/m3 <0.1 ppm	
		Northeast corner of compressor pit	2230 - 2300		<0.01mg/m3 <0.1 ppm	
			2300 - 2330		<0.01mg/m3 <0.1 ppm	
			2330 - 0000		<0.01mg/m3 <0.1 ppm	
	4-9-58	Area A By South Vapor Blaster	0920 - 0950		<0.01mg/m3 0.0 ppm	
			0950 - 1020		<0.01mg/m3 0.0 ppm	

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NUMBER 127 Page 4
Routine X
Special
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Date 4-16-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	4-9-58	Area A By South Vapor Blaster	1020 - 1050	Uranium Hydrogen Fluoride	<0.01mg/m³ 0.0 ppm	
		Small parts disassembly booth	0920 - 0950		0.02mg/m³ 0.1 ppm	
			0950 - 1020		0.01mg/m³ <0.1 ppm	
			1020 - 1050		0.02mg/m³ <0.1 ppm	
		Area B West end of oxide conversion Line A	0920 - 0950		<0.01mg/m³ <0.1 ppm	
			0950 - 1020		<0.01mg/m³ <0.1 ppm	
			1020 - 1050		0.02mg/m³ <0.1 ppm	
		Area B West end of calciner platform	0920 - 0950		<0.01mg/m³ <0.1 ppm	
			0950 - 1020		<0.01mg/m³ <0.1 ppm	
			1020 - 1050		<0.01mg/m³ <0.1 ppm	

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NUMBER 127 Page 5
Routine X
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Date 4-10-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	4-9-58	Area E West end of oxide conversion unit Line A	1100 - 1130	Uranium Fluorine	<0.01mg/m³ <0.1 ppm	Slight odor of Fluorine. Door on Northwest corner of room was open.

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WCX-2512 (9-55) K-25 RC Medical Department

ISSUED BY: D. L. Stoddard

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A. L. Allen
J. Dykstra
Safety
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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 110
Routine X
Special
Requested by
Date 4-15-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	3-20-58	A Area Small parts booth	0945 - 1015	Uranium Hydrogen Fluoride	0.01mg/m3 0.1 ppm	No one in area.
			1015 - 1045		0.01mg/m3 0.1 ppm	" "
			1045 - 1115		0.01mg/m3 0.1 ppm	" "
		E Area West end of oxide conversion unit Line A	0945 - 1015	Uranium Fluorine	0.01mg/m3 0.1 ppm	
			1015 - 1045		0.01mg/m3 0.1 ppm	
			1045 - 1115		0.02mg/m3 0.1 ppm	
		B Area Calciner platform	0945 - 1015	Uranium Hydrogen Fluoride	0.04mg/m3 0.1 ppm	Three calciners in operation.
			1015 - 1045		0.01mg/m3 0.1 ppm	" "
			1045 - 1115		0.02mg/m3 0.1 ppm	" "

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U 1-1
HF 21-0
F2 3-0
NO2 0-1

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AIR SAMPLING REPORT

NUMBER 110 Page 2
Routine X
Special
Requested by
Date 4-15-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	3-28-58	C Area By partial disassembling platform	0945 - 1015	Uranium Hydrogen Fluoride	0.01mg/m³ 0.1 ppm	Two operators, wearing respirators, were working in area.
			1015 - 1045		0.02mg/m³ 0.1 ppm	" "
			1045 - 1115		0.04mg/m³ 0.1 ppm	" "
		By cutting stand	0945 - 1015		0.01mg/m³ 0.1 ppm	Welder, wearing respirator, was cutting converter.
			1015 - 1045		0.01mg/m³ 0.1 ppm	" "
			1045 - 1115		0.15mg/m³ 0.2ppm	" "
		By converter disassembly platform	0945 - 1015		0.01mg/m³ 0.1 ppm	Two operators, wearing respirators, were disassembling converter.
			1015 - 1045		0.02mg/m³ 0.1 ppm	" "
			1045 - 1115		0.01mg/m³ 0.1 ppm	

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WCX-2512(9-55) K-25 RC Medical Department

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AIR SAMPLING REPORT

NUMBER 110 Page 3
Routine X
Special
Requested by
Date 4-15-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	3-20-58	C Area Northeast corner of flour pan	0945 - 1015	Uranium Hydrogen Fluoride	0.01mg/m³ 0.1 ppm	Operator, wearing respirator, was cleaning equipment.
			1015 - 1045		0.02mg/m³ 0.1 ppm	" "
			1045 - 1115		0.01mg/m³ 0.1 ppm	" "
		Northwest corner of compressor pit	1130 - 1200		0.01mg/m³ 0.1 ppm	
			1200 - 1230		0.01mg/m³ 0.1 ppm	
			1230 - 1300		0.01mg/m³ 0.1 ppm	
		Compressor "A" Stator removal stand	1130 - 1200		0.01mg/m³ 0.1 ppm	Operator, wearing respirator, was disassembling stator.
			1200 - 1230		0.01mg/m³ 0.1 ppm	" "
			1230 - 1300		0.01mg/m³ 0.1 ppm	" "

WCX-2512(9-55) K-25 RC Medical Department

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AIR SAMPLING REPORT

NUMBER 110 Page 4
Routine X
Special
Requested by
Date 4-1-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	3-20-58	C Area Retubing platform	1130 - 1200	Uranium Hydrogen Fluoride	0.01mg/m^3 0.1 ppm	Operator, wearing respirator, was removing tubes.
			1200 - 1230		0.01mg/m^3 0.1 ppm	
			1230 - 1300		0.01mg/m^3 0.1 ppm	
		By South door of acid spray booth	1235	Nitrogen Dioxide	3.7 ppm	

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WCX-2512 (9-55) K-25 RC Medical Department

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 103
Routine X
Special
Requested by
Date 4-14-53

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	3-12-53	Area A Small parts booth	1220 - 1250	Uranium Hydrogen Fluoride	0.01mg/m3 0.2 ppm	No one in area.
			1250 - 1320		0.01mg/m3 0.2 ppm	" "
			1320 - 1350		0.03mg/m3 0.2 ppm	
		Area F Oxide Conversion room West of Line A	1220 - 1250	Fluorine	1.3 ppm	Odor of Fluorine.
			1250 - 1320	Uranium Fluorine	0.19mg/m3 0.1 ppm	" "
			1320 - 1350		0.24mg/m3 1.2 ppm	" "
		Area B West end of calciner platform	1220 - 1250	Uranium Hydrogen Fluoride	0.06mg/m3 0.1 ppm	One calciner in operation.
			1250 - 1320		0.01mg/m3 0.1 ppm	" "
			1320 - 1350		0.07mg/m3 0.1 ppm	" "

WCX-2512(8-55) K-25 RC Medical Department

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NUMBER 103 Page 2
Routine X
Special
Requested by
Date 4-14-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	3-12-58	Area C Partial Disassembly stand	1230 - 1300	Uranium Hydrogen Fluoride	0.01mg/m³ 0.1 ppm	Operator, wearing respirator, was disassembling converter.
			1300 - 1330		0.09mg/m³ 2.4 ppm	" "
			1330 - 1400		0.01mg/m³ 0.1 ppm	No one in area.
		Southwest corner of cutting platform	1230 - 1300		0.01mg/m³ 0.1 ppm	Welder, wearing respirator, was cutting open converters.
			1300 - 1330		0.01mg/m³ 0.1 ppm	" "
			1330 - 1400		0.01mg/m³ 0.1 ppm	" "
		By partial disassembly platform	1230 - 1300		0.01mg/m³ 0.1 ppm	Two operators, wearing respirators, were disassembling converter.
			1300 - 1330		0.01mg/m³ 0.1 ppm	Exhaust system in use.
			1330 - 1400		0.01mg/m³ 0.1 ppm	" "

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AIR SAMPLING REPORT

NUMBER 113 Page 1
Routine X
Special
Requested by
Date 1-17-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	1-12-58	Area C Northwest corner of compressor pit	1230 - 1300	Uranium Hydrogen Fluoride	0.01mg/m3 0.1 ppm	Operator, without respirator, was disassembling compressor in pit.
			1300 - 1330		0.01mg/m3 0.1 ppm	" "
			1330 - 1400		0.02mg/m3 0.1 ppm	" "
		10 ft. South of Column D-11	1230 - 1300		0.03mg/m3 0.2 ppm	Operators, wearing respirators, were removing rotor and end plate from compressor.
			1300 - 1330		0.02mg/m3 0.1 ppm	
			1330 - 1400		0.01mg/m3 0.1 ppm	No one in area.
		Northeast corner of floor pan	1230 - 1300		0.09mg/m3 0.1 ppm	Operators, wearing respirators, were cleaning equipment.
			1300 - 1330		0.01mg/m3 0.1 ppm	" "
			1330 - 1400		0.02mg/m3 0.1 ppm	" "

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AIR SAMPLING REPORT

NUMBER 103 Page 1
Routine X
Special
Requested by
Date 1-1-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	1-12-58	By South door to acid spray booth	1450	Nitrogen Dioxide	7.0ppm	Intermittent odor of nitrogen dioxide. Door on spray booth was open. Curtains on both sides of acid spray booth was closed.

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WCX-2512 (9-55) K-25 RC Medical Department

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 84
Routine X
Special
Requested by
Date 7-17-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	7-[illegible]-58	A Area Small parts booth by hood	1345 - 1415	Uranium Hydrogen Fluorides	0.01mg/m3 0.1 ppm	No one in booth.
			1415 - 1445		<0.01mg/m3 <0.1 ppm	" "
			1445 - 1515		<0.01mg/m3 <0.1 ppm	" "
		E Area West end of oxide conversion units	1345 - 1415		<0.01mg/m3 <0.1 ppm	No oxide conversion units in operation.
			1415 - 1445		<0.01mg/m3 <0.1 ppm	" "
			1445 - 1515		<0.01mg/m3 <0.1 ppm	" "
		B Area West end of calciner platform	1345 - 1415		<0.01mg/m3 <0.1 ppm	Calciners not in operation. Maintenance men working on calciner platform.
			1415 - 1445		<0.01mg/m3 <0.1 ppm	
			1445 - 1515		<0.01mg/m3 <0.1 ppm	

WCX-2512 (9-55) K-25 RC Medical Department

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AIR SAMPLING REPORT

NUMBER 14 Page 2
Routine X
Special
Requested by
Date 3-17-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	2-28-58	C Area By partial disassembly platform	1345 - 1415	Uranium Hydrogen Fluoride	0.01mg/m3 <0.1 ppm	No activity in area.
			1415 - 1445		<0.01mg/m3 <0.1 ppm	" "
			1445 - 1515		<0.01mg/m3 <0.1 ppm	" "
		By welder at cutting stand	1345 - 1415		0.02mg/m3 <0.1 ppm	Welder, wearing respirator, cutting open converters.
			1415 - 1445		0.01mg/m3 <0.1 ppm	Exhaust system in use.
			1445 - 1515		<0.01mg/m3 0.2 ppm	Slight intermittent odor of Hydrogen Fluoride.
		By operator at converter disassembly stand	1345 - 1415		0.02mg/m3 0.1 ppm	No activity in area.
			1415 - 1445		<0.01mg/m3 0.1 ppm	
			1445 - 1515		0.01mg/m3 0.2 ppm	Converter placed on stand.

WCX-2512 (9-55) K-25 RC Medical Department

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INDUSTRIAL HYGIENE
AIR SAMPLING REPORT

NUMBER 61 Page 3
Routine X
Special
Requested by
Date 3-17-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	2-28-58	C Area Northeast corner of floor pan	1345 - 1415	Uranium Hydrogen Fluoride	0.01mg/m3 <0.1 ppm	Operators, wearing respirators straining and breaking equipment.
			1415 - 1445		0.01mg/m3 <0.1 ppm	" "
			1445 - 1515		<0.01mg/m3 <0.1 ppm	No activity in area.

WCX-2512(9-55) K-25 RC Medical Department

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 74
Routine X
Special
Requested by
Date 3-14-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	2-19-58	A Area By hood in small parts booth	1300 - 1330	Uranium Hydrogen Fluoride	0.04mg/m³ 0.1 ppm	
			1330 - 1400		<0.01mg/m³ 0.1 ppm	
			1400 - 1430		0.04mg/m³ 0.1 ppm	
		E Area Oxide conversion room West end of line B	1300 - 1330	Uranium Fluorine	0.01mg/m³ 0.1 ppm	Visible Uranium Hexafluoride leak from one of the conversion units. Operator was wearing respirator. Draft from sampler toward leak.
			1330 - 1400		0.02mg/m³ 0.1 ppm	
			1400 - 1430		0.01mg/m³ <0.1 ppm	
		B Area West end of calciner platform	1300 - 1330	Uranium Hydrogen Fluoride	0.01mg/m³ <0.1 ppm	Two drum driers in operation.
			1330 - 1400		<0.01mg/m³ 0.1 ppm	" "
			1400 - 1430		0.01mg/m³ <0.1 ppm	" "

U 17 - 2
HF 18 - 0
F2 - 0

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AIR SAMPLING REPORT

NUMBER 74 Page 2
Routine X
Special
Requested by
Date 3-14-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	2-19-58	C Area By partial disassembly platform	1300 - 1330	Uranium Hydrogen Fluoride	<0.01mg/m³ 0.1 ppm	Two operators, wearing respirators, were working in area.
			1330 - 1400		0.01mg/m³ 0.1 ppm	" "
			1400 - 1430		<0.01mg/m³ <0.1 ppm	" "
		By cutting stand	1300 - 1330		0.01mg/m³ 0.1ppm	By welder, without respirator, cutting open converter.
			1330 - 1400		<0.01mg/m³ <0.1 ppm	
			1400 - 1430		<0.01mg/m³ 0.1 ppm	
		By partial disassembly platform	1300 - 1330		<0.01mg/m³ 0.1 ppm	Operators, wearing respirator, were disassembling converter.
			1330 - 1400		0.03mg/m³ 0.1 ppm	" "
			1400 - 1430		0.03mg/m³ 0.1 ppm	" "

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AIR SAMPLING REPORT

NUMBER 24 Page 3
Routine X
Special
Requested by
Date 3-24-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	2-19-58	C Area Northeast corner of floor pan	1300 - 1330	Uranium Hydrogen Fluoride	0.02mg/m3 0.2 ppm	Two operators, wearing respirators, were steam cleaning and brushing equipment in floor pan.
			1330 - 1400		0.09mg/m3 0.3 ppm	" "
			1400 - 1430		0.05mg/m3 0.3 ppm	" "

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WCX-2512 (9-55) K-25 RC Medical Department

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 62
Routine X
Special
Requested by
Date 1-30-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	1-29-58	A Area Small parts disassembly booth by hood	0925 - 0955	Uranium Hydrogen Fluoride	0.01mg/m³ 0.1 ppm	No one in booth.
			0955 - 1025		0.02mg/m³ 0.1 ppm	" "
			1025 - 1055		0.03mg/m³ 0.1 ppm	" "
		E Area West end of oxide conversion unit A	0925 - 0955		0.01mg/m³ 0.1 ppm	Oxide conversion units not in operation.
			0955 - 1025		<0.01mg/m³ <0.1 ppm	" "
			1025 - 1055		<0.01mg/m³ <0.1 ppm	" "
		B Area West end of calciner platform	0925 - 0955		0.01mg/m³ 0.2 ppm	Calciners not in operation.
			0955 - 1025		0.01mg/m³ <0.1 ppm	" "
			1025 - 1055		0.01mg/m³ 0.1 ppm	" "

WCX-2512(9-55) K-25 RC Medical Department

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NUMBER 52 Page 2
Routine X
Special
Requested by
Date 3-4-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	2-27-58	C Area By Partial Disassembling platform	0930 - 1000	Uranium Hydrogen Fluoride	0.1mg/m³ 0.2 ppm	Two operators, wearing respirators, were disassembling converter.
			1000 - 1030		0.03mg/m³ 0.2 ppm	" "
			1030 - 1100		0.01mg/m³ 0.1 ppm	
		By cutting stand	0930 - 1000		0.01mg/m³ 0.1 ppm	By welder, wearing respirator, cutting open converters.
			1000 - 1030		0.01mg/m³ 0.1 ppm	" "
			1030 - 1100		0.01mg/m³ 0.2 ppm	" "
		Southeast corner of converter disassembly stand	0930 - 1000		0.01mg/m³ 0.1 ppm	No one at stand.
			1000 - 1030		0.01mg/m³ 0.1 ppm	" "
			1030 - 1100		0.01mg/m³ 0.1 ppm	" "

Q81

WCX-2512 (9-55) K-25 RC Medical Department

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AIR SAMPLING REPORT

NUMBER 62 Page 3
Routine X
Special
Requested by
Date 3-4-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	1-29-58	C Area Northeast corner of floor pan	0930 - 1000	Uranium Hydrogen Fluoride	<0.01mg/m3 <0.1 ppm	
			1000 - 1030		<0.01mg/m3 <0.1 ppm	Operator, wearing respirator, was cleaning equipment.
			1030 - 1100		<0.01mg/m3 <0.1 ppm	

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WCX-2512 (9-55) K-25 RC Medical Department

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 16
Routine X
Special
Requested by
Date 2-14-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	1-22-58	A Area Small parts disassembly booth	1340 - 1410	Uranium Hydrogen Fluoride	0.8mg/m³ 0.6 ppm	By hood. Operator was wearing respirator.
			1410 - 1440		0.37mg/m³ 0.3 ppm	" "
			1440 - 1510		1.32mg/m³ 0.6 ppm	" "
		K Area Oxide conversion room, West end of line B	1340 - 1410		0.01mg/m³ 0.1 ppm	
			1410 - 1440		0.01mg/m³ 0.1 ppm	
			1440 - 1510		<0.01mg/m³ <0.1 ppm	
		B Area West end of calciner platform	1340 - 1410		<0.01mg/m³ <0.1 ppm	No drum driers operating.
			1410 - 1440		<0.01mg/m³ <0.1 ppm	" "
			1440 - 1510		<0.01mg/m³ <0.1 ppm	" "

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11/14-17
11-21-0

WCK-2512 (8-55) K-25 RC Medical Department

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AIR SAMPLING REPORT

NUMBER 46 Page 2
Routine X
Special
Requested by
Date 2-14-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	1-22-58	C Area Partial disassembly stand	1400 - 1430	Uranium Hydrogen Fluoride	<0.01mg/m³ 0.1 ppm	
			1430 - 1500		0.01mg/m³ 0.1 ppm	Operator wearing respirator.
			1500 - 1530	Hydrogen Fluoride	0.2 ppm	3, 4, and 5 Uranium samples were lost.
		By cutting stand	1400 - 1430		0.1 ppm	Welder, without respirator, was cutting heads from converters.
			1430 -1500		0.2 ppm	" "
			1500 - 1530	Uranium Hydrogen Fluoride	<0.01mg/m³ 0.2 ppm	
		Southeast corner of converter disassembly platform	1400 - 1430		0.01mg/m³ 0.1 ppm	Exhaust system in use on converter.
			1430 - 1500		0.01mg/m³ 0.2 ppm	
			1500 - 1530		0.54mg/m³ 0.9 ppm	Two operators, wearing respirators, were disassembling converter.

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AIR SAMPLING REPORT

NUMBER 46 Page 3
Routine X
Special
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Date 2-14-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	1-28-58	C Area Northeast corner of floor pan	1400 - 1430	Uranium Hydrogen Fluoride	0.01mg/m3 0.1 ppm	
			1430 - 1500		0.01mg/m3 0.1 ppm	Two operators, wearing respirators, were steam cleaning equipment.
			1500 - 1530		0.0[illegible]mg/m3 0.2 ppm	" "

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WCX-2512 (9-55) K-25 RC Medical Department

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INDUSTRIAL HYGIENE AIR SAMPLING REPORT

NUMBER 16
Routine X
Special
Requested by
Date 1-23-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	1-7-58	C Area Partial disassembly platform area	1330 - 1400	Uranium Hydrogen Fluoride	0.01mg/m3 0.1 ppm	
			1400 - 1430		0.01mg/m3 0.1 ppm	
			1430 - 1500		0.01mg/m3 0.1 ppm	
		By cutting stand	1330 - 1400		0.01mg/m3 0.1 ppm	By welder wearing respirator. Cutting stand has a new exhaust system.
			1400 - 1430		0.01mg/m3 0.1 ppm	
			1430 - 1500		0.01mg/m3 0.1 ppm	
		By converter disassembly platform	1330 - 1400		0.01mg/m3 0.3 ppm	Exhaust system being used on converter.
			1400 - 1430		0.02mg/m3 0.8 ppm	" "
			1430 - 1500		0.01mg/m3 0.4 ppm	" "

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AIR SAMPLING REPORT

NUMBER 16 Page 2
Routine X
Special
Requested by
Date 1-23-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	1-13-58	C Area Partial disassembly platform	0900 - 0930	Uranium Hydrogen Fluoride	0.04mg/m3 0.1 ppm	
			0930 - 1000		<0.01mg/m3 <0.1 ppm	
			1000 - 1030		<0.01mg/m3 <0.1 ppm	
		By cutting stand	0900 - 0930		<0.01mg/m3 0.1 ppm	By welder.
			0930 - 1000		0.01mg/m3 0.1 ppm	"
			1000 - 1030		<0.01mg/m3 <0.1 ppm	"
		By converter disassembly stand	0900 - 0930		<0.01mg/m3 <0.1 ppm	By operator.
			0930 - 1000		<0.01mg/m3 <0.1 ppm	
			1000 - 1030		0.02mg/m3 <0.1 ppm	

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WCX-2512 (8-55) K-25 RC Medical Department

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NUMBER 16 Page 3
Routine X
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Requested by
Date 1-23-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	1-13-58	C Area Northeast corner of floor pan	0900 - 0930	Uranium Hydrogen Fluoride	0.02mg/m3 <0.1 ppm	
			0930 - 1000		0.01mg/m3 <0.1 ppm	
			1000 - 1030		<0.01mg/m3 <0.1 ppm	
		A Area Small parts booth	0910 - 0940		0.09mg/m3 0.3 ppm	Operator in area, wearing respiratory protective equipment.
			0940 - 1010		0.02mg/m3 0.1 ppm	" "
			1010 - 1040		0.03mg/m3 0.1 ppm	" "
		B. Area West end of calciner platform	0910 - 0940		0.01mg/m3 <0.1 ppm	
			0940 - 1010		<0.01mg/m3 0.1 ppm	
			1010 - 1040		0.01mg/m3 0.1 ppm	

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AIR SAMPLING REPORT

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Routine X
Special
Requested by
Date 1-23-58

BUILDING OR AREA	DATE	SAMPLING LOCATION	SAMPLING TIME	CONTAMINANT	RESULT	OBSERVATIONS AND REMARKS
K-1420	1-13-58	H Area West end of oxide conversion unit	0910 - 0940	Uranium Hydrogen Fluoride	0.01mg/m3 <0.1 ppm	Units not in operation.
			0940 - 1010		0.02mg/m3 0.1 ppm	" "
			1010 - 1040		<0.01mg/m3 <0.1 ppm	" "
		South of Oxide Blender Room	0910 - 0940		<0.01mg/m3 <0.1 ppm	Blender not in operation.
			0940 - 1010		<0.01mg/m3 <0.1 ppm	" "
			1010 - 1040		<0.01mg/m3 0.1 ppm	" "

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WCX-2512 (9-55) K-25 RC Medical Department

ISSUED BY: D. L. Stoddard

DISTRIBUTION

1. K-25 Site Records (RC)
2. ChemRisk/Shonka Research Associates
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