K-25 PROCESS SUPPORT DIVISION
URANIUM HEXAFLUORIDE ANALYSES

GDP-0566

Producer: COGEMA
Date received in laboratory: 19-SEP-1984

Report Date: 9-NOV-1984
Sample Number: 175204
Cylinder Number: COG282

	Specification Limits	Analysis	
	Minimum		
Uranium Hexafluoride	99.5	100.00	Weight percent
Uranium		67.63	Weight percent
	Maximum		
Cylinder Vapor Pressure	75	---	psia
Hydrocarbons, chlorocarbons, partially substituted halohydrocarbons	0.01	---	Mole Percent
Antimony	1	---	uG/G U-normal
Bromine	5	---	uG/G U-normal
Chlorine	100	---	uG/G U-normal
Niobium	1	---	uG/G U-normal
Phosphorus	50	---	uG/G U-normal
Ruthenium	1	---	uG/G U-normal
Silicon	100	---	uG/G U-normal
Tantalum	1	---	uG/G U-normal
Titanium	1	---	uG/G U-normal
Elements forming non-volatile fluorides	300	9.0	uG/G U-normal
Chromium	1500	≤5	uG/G U-235
Molybdenum	200	<50.0	uG/G U-235
Tungsten	200	---	uG/G U-235
Vanadium	200	---	uG/G U-235
Uranium-233	500	<100	uG/G U-235
Uranium-232	0.110	0.02	uG/G U-235
Boron equivalent cross section	8	NONE DET	uG/G U-normal
Fission product gamma	20	.21	Percent of
Fission product beta	10	≤5	aged natural U
Transuranic alpha	1500	NONE DET	DPM alpha/G U
Technetium		--- <.005	uG/G U-normal
Uranium-234		0.015	Weight Percent
Uranium-235		1.030	Weight Percent
Uranium-236		0.30	Weight Percent

** Exceeds Specifications
R Revised Result

Reported by:

OR0014240

The following samples have been composited:
175202, 175203, 175204, 175205, 175206
175207, 175208, 175209, 175210, 175211

K-25 PROCESS SUPPORT DIVISION
URANIUM HEXAFLUORIDE ANALYSES

Producer: COGEMA
Date received in laboratory: 20-SEP-1984

Report Date: 9-NOV-1984
Sample Number: 175206
Cylinder Number: COG314

	Specification Limits	Analysis	
	Minimum		
Uranium Hexafluoride	99.5	99.96	Weight percent
Uranium		67.59	Weight percent
	Maximum		
Cylinder Vapor Pressure	75	---	psia
Hydrocarbons, chlorocarbons, partially substituted halohydrocarbons	0.01	---	Mole Percent
Antimony	1	---	uG/G U-normal
Bromine	5	---	uG/G U-normal
Chlorine	100	---	uG/G U-normal
Niobium	1	---	uG/G U-normal
Phosphorus	50	---	uG/G U-normal
Ruthenium	1	---	uG/G U-normal
Silicon	100	---	uG/G U-normal
Tantalum	1	---	uG/G U-normal
Titanium	1	---	uG/G U-normal
Elements forming non-volatile fluorides	300	8.0	uG/G U-normal
Chromium	1500	---	uG/G U-235
Molybdenum	200	<50.0	uG/G U-235
Tungsten	200	---	uG/G U-235
Vanadium	200	---	uG/G U-235
Uranium-233	500	<100	uG/G U-235
Uranium-232	0.110	0.02	uG/G U-235
Boron equivalent cross section	8	NONE DET	uG/G U-normal
Fission product gamma	20	---	Percent of
Fission product beta	10	---	aged natural U
Transuranic alpha	1500	NONE DET	DPM alpha/G U
Technetium		---	uG/G U-normal
Uranium-234		.015	Weight Percent
Uranium-235		1.031	Weight Percent
Uranium-236		.30	Weight Percent

** Exceeds Specifications
R Revised Result
The following samples have been composited:
175202, 175203, 175204, 175205, 175206
175207, 175208, 175209, 175210, 175211
[illegible] 2 times

Reported by:

K-25 PROCESS SUPPORT DIVISION
URANIUM HEXAFLUORIDE ANALYSES

Producer: COGEMA
Date received in laboratory: 24-SEP-1984

Report Date: 9-NOV-1984
Sample Number: 175210
Cylinder Number: COG.-326

	Specification Limits	Analysis	
	Minimum		
Uranium Hexafluoride	99.5	100.00	Weight percent
Uranium		67.63	Weight percent
	Maximum		
Cylinder Vapor Pressure	75	---	psia
Hydrocarbons, chlorocarbons, partially substituted halohydrocarbons	0.01	---	Mole Percent
Antimony	1	---	uG/G U-normal
Bromine	5	---	uG/G U-normal
Chlorine	100	---	uG/G U-normal
Niobium	1	---	uG/G U-normal
Phosphorus	50	---	uG/G U-normal
Ruthenium	1	---	uG/G U-normal
Silicon	100	---	uG/G U-normal
Tantalum	1	---	uG/G U-normal
Titanium	1	---	uG/G U-normal
Elements forming non-volatile fluorides	300	27.0	uG/G U-normal
Chromium	1500	---	uG/G U-235
Molybdenum	200	<50.0	uG/G U-235
Tungsten	200	---	uG/G U-235
Vanadium	200	---	uG/G U-235
Uranium-233	500	<200	uG/G U-235
Uranium-232	0.110	0.01	uG/G U-235
Boron equivalent cross section	8	NONE DET	uG/G U-normal
Fission product gamma	20	---	Percent of
Fission product beta	10	---	aged natural U
Transuranic alpha	1500	NONE DET	DPM alpha/G U
Technetium		---	uG/G U-normal
Uranium-234		0.015	Weight Percent
Uranium-235		1.030	Weight Percent
Uranium-236		0.31	Weight Percent

** Exceeds Specifications
R Revised Result
The following samples have been composited:
175202, 175203, 175204, 175205, 175206
175207, 175208, 175209, 175210, 175211

Reported by:

K-25 PROCESS SUPPORT DIVISION
URANIUM HEXAFLUORIDE ANALYSES

Producer: COGEMA
Date received in laboratory: 20-SEP-1984

Report Date: 9-NOV-1984
Sample Number: 175207
Cylinder Number: COG329

	Specification Limits	Analysis	
	Minimum		
Uranium Hexafluoride	99.5	100.00	Weight percent
Uranium		67.61	Weight percent
	Maximum		
Cylinder Vapor Pressure	75	---	psia
Hydrocarbons, chlorocarbons, partially substituted halohydrocarbons	0.01	---	Mole Percent
Antimony	1	---	uG/G U-normal
Bromine	5	---	uG/G U-normal
Chlorine	100	---	uG/G U-normal
Niobium	1	---	uG/G U-normal
Phosphorus	50	---	uG/G U-normal
Ruthenium	1	---	uG/G U-normal
Silicon	100	---	uG/G U-normal
Tantalum	1	---	uG/G U-normal
Titanium	1	---	uG/G U-normal
Elements forming non-volatile fluorides	300	15.0	uG/G U-normal
Chromium	1500	---	uG/G U-235
Molybdenum	200	<50.0	uG/G U-235
Tungsten	200	---	uG/G U-235
Vanadium	200	---	uG/G U-235
Uranium-233	500	<200	uG/G U-235
Uranium-232	0.110	0.02	uG/G U-235
Boron equivalent cross section	8	NONE DET	uG/G U-normal
Fission product gamma	20	---	Percent of
Fission product beta	10	---	aged natural U
Transuranic alpha	1500	NONE DET	DPM alpha/G U
Technetium		---	uG/G U-normal
Uranium-234		.015	Weight Percent
Uranium-235		1.030	Weight Percent
Uranium-236		.30	Weight Percent

** Exceeds Specifications
R Revised Result
The following samples have been composited:
175202, 175203, 175204, 175205, 175206
175207, 175208, 175209, 175210, 175211

Reported by:

K-25 PROCESS SUPPORT DIVISION
URANIUM HEXAFLUORIDE ANALYSES

Producer: COGEMA
Date received in laboratory: 20-SEP-1984

Report Date: 9-NOV-1984
Sample Number: 175208
Cylinder Number: COG-346

	Specification Limits	Analysis	
	Minimum		
Uranium Hexafluoride	99.5	99.99	Weight percent
Uranium		67.61	Weight percent
	Maximum		
Cylinder Vapor Pressure	75	---	psia
Hydrocarbons, chlorocarbons, partially substituted halohydrocarbons	0.01	---	Mole Percent
Antimony	1	---	uG/G U-normal
Bromine	5	---	uG/G U-normal
Chlorine	100	---	uG/G U-normal
Niobium	1	---	uG/G U-normal
Phosphorus	50	---	uG/G U-normal
Ruthenium	1	---	uG/G U-normal
Silicon	100	---	uG/G U-normal
Tantalum	1	---	uG/G U-normal
Titanium	1	---	uG/G U-normal
Elements forming non-volatile fluorides	300	42.0	uG/G U-normal
Chromium	1500	---	uG/G U-235
Molybdenum	200	<50.0	uG/G U-235
Tungsten	200	---	uG/G U-235
Vanadium	200	---	uG/G U-235
Uranium-233	500	<300	uG/G U-235
Uranium-232	0.110	0.02	uG/G U-235
Boron equivalent cross section	8	NONE DET	uG/G U-normal
Fission product gamma	20	---	Percent of
Fission product beta	10	---	used natural U
Transuranic alpha	1500	NONE DET	DPM alpha/G U
Technetium		---	uG/G U-normal
Uranium-234		.015	Weight Percent
Uranium-235		1.030	Weight Percent
Uranium-236		.30	Weight Percent

** Exceeds Specifications
R Revised Result
The following samples have been composited:
175202, 175203, 175204, 175205, 175206
175207, 175208, 175209, 175210, 175211

Reported by:

K-25 PROCESS SUPPORT DIVISION
URANIUM HEXAFLUORIDE ANALYSES

Producer: COGEMA
Date received in laboratory: 24-SEP-1984

Report Date: 9-NOV-1984
Sample Number: 175209
Cylinder Number: COG-354

	Specification Limits	Analysis	
	Minimum		
Uranium Hexafluoride	99.5	100.00	Weight percent
Uranium		67.62	Weight percent
	Maximum		
Cylinder Vapor Pressure	75	---	psia
Hydrocarbons, chlorocarbons, partially substituted halohydrocarbons	0.01	---	Mole Percent
Antimony	1	---	uG/G U-normal
Bromine	5	---	uG/G U-normal
Chlorine	100	---	uG/G U-normal
Niobium	1	---	uG/G U-normal
Phosphorus	50	---	uG/G U-normal
Ruthenium	1	---	uG/G U-normal
Silicon	100	---	uG/G U-normal
Tantalum	1	---	uG/G U-normal
Titanium	1	---	uG/G U-normal
Elements forming non-volatile fluorides	300	63.0	uG/G U-normal
Chromium	1500	---	uG/G U-235
Molybdenum	200	<50.0	uG/G U-235
Tungsten	200	---	uG/G U-235
Vanadium	200	---	uG/G U-235
Uranium-233	500	<200	uG/G U-235
Uranium-232	0.110	0.02	uG/G U-235
Boron equivalent cross section	8	NONE DET	uG/G U-normal
Fission product gamma	20	---	Percent of
Fission product beta	10	---	aged natural U
Transuranic alpha	1500	NONE DET	DPM alpha/G U
Technetium		---	uG/G U-normal
Uranium-234		0.015	Weight Percent
Uranium-235		1.030	Weight Percent
Uranium-236		0.31	Weight Percent

** Exceeds Specifications
R Revised Result
The following samples have been composited:
175202, 175203, 175204, 175205, 175206
175207, 175208, 175209, 175210, 175211

Reported by:

K-25 PROCESS SUPPORT DIVISION
URANIUM HEXAFLUORIDE ANALYSES

Producer: COGEMA
Date received in laboratory: 19-SEP-1984

Report Date: 9-NOV-1984
Sample Number: 175205
Cylinder Number: COG400

	Specification Limits	Analysis	
	Minimum		
Uranium Hexafluoride	99.5	100.00	Weight percent
Uranium		67.62	Weight percent
	Maximum		
Cylinder Vapor Pressure	75	---	psia
Hydrocarbons, chlorocarbons, partially substituted halohydrocarbons	0.01	---	Mole Percent
Antimony	1	---	uG/G U-normal
Bromine	5	---	uG/G U-normal
Chlorine	100	---	uG/G U-normal
Niobium	1	---	uG/G U-normal
Phosphorus	50	---	uG/G U-normal
Ruthenium	1	---	uG/G U-normal
Silicon	100	---	uG/G U-normal
Tantalum	1	---	uG/G U-normal
Titanium	1	---	uG/G U-normal
Elements forming non-volatile fluorides	300	45.0	uG/G U-normal
Chromium	1500	---	uG/G U-235
Molybdenum	200	<50.0	uG/G U-235
Tungsten	200	---	uG/G U-235
Vanadium	200	---	uG/G U-235
Uranium-233	500	<200	uG/G U-235
Uranium-232	0.110	0.06	uG/G U-235
Boron equivalent cross section	8	NONE DET	uG/G U-normal
Fission product gamma	20	---	Percent of
Fission product beta	10	---	aged natural U
Transuranic alpha	1500	NONE DET	DPM alpha/G U
Technetium		---	uG/G U-normal
Uranium-234		0.015	Weight Percent
Uranium-235		1.030	Weight Percent
Uranium-236		0.30	Weight Percent

** Exceeds Specifications
R Revised Result

Reported by:

The following samples have been composited:
175202, 175203, 175204, 175205, 175206
175207, 175208, 175209, 175210, 175211

K-25 PROCESS SUPPORT DIVISION
URANIUM HEXAFLUORIDE ANALYSES

Producer: COGEMA
Date received in laboratory: 25-SEP-1984

Report Date: 9-NOV-1984
Sample Number: 175211
Cylinder Number: COG376

	Specification Limits	Analysis	
	Minimum		
Uranium Hexafluoride	99.5	99.96	Weight percent
Uranium		67.59	Weight percent
	Maximum		
Cylinder Vapor Pressure	75	---	psia
Hydrocarbons, chlorocarbons, partially substituted halohydrocarbons	0.01	---	Mole Percent
Antimony	1	---	uG/G U-normal
Bromine	5	---	uG/G U-normal
Chlorine	100	---	uG/G U-normal
Niobium	1	---	uG/G U-normal
Phosphorus	50	---	uG/G U-normal
Ruthenium	1	---	uG/G U-normal
Silicon	100	---	uG/G U-normal
Tantalum	1	---	uG/G U-normal
Titanium	1	---	uG/G U-normal
Elements forming non-volatile fluorides	300	30.0	uG/G U-normal
Chromium	1500	---	uG/G U-235
Molybdenum	200	<50.0	uG/G U-235
Tungsten	200	---	uG/G U-235
Vanadium	200	---	uG/G U-235
Uranium-233	500	<100	uG/G U-235
Uranium-232	0.110	0.02	uG/G U-235
Boron equivalent cross section	8	NONE DET	uG/G U-normal
Fission product gamma	20	---	Percent of
Fission product beta	10	---	aged natural U
Transuranic alpha	1500	NONE DET	DPM alpha/G U
Technetium		---	uG/G U-normal
Uranium-234		.015	Weight Percent
Uranium-235		1.030	Weight Percent
Uranium-236		.30	Weight Percent

** Exceeds Specifications
R Revised Result

Reported by:

The following samples have been composited:
175202, 175203, 175204, 175205, 175206
175207, 175208, 175209, 175210, 175211

OAK RIDGE GASEOUS DIFFUSION PLANT
K-25 PROCESS SUPPORT DIVISION
URANIUM HEXAFLUORIDE ANALYSES

Producer: NETHERLANDS
Date received in laboratory: 02-SEP-1983

Report Date: 19-OCT-1983
Sample Number: 179532
Cylinder Number: R-31821

	Specification Limits	Analysis	
	Minimum		
Uranium Hexafluoride	99.5	99.94	Weight percent
Uranium		67.57	Weight percent
	Maximum		
Cylinder Vapor Pressure	75	---	psia
Hydrocarbons, chlorocarbons, partially substituted halohydrocarbons	0.01	<0.01	Mole Percent
Antimony	1	<1	uG/G U-normal
Bromine	5	<5	uG/G U-normal
Chlorine	100	42	uG/G U-normal
Niobium	1	<0.2	uG/G U-normal
Phosphorus	50	<20	uG/G U-normal
Ruthenium	1	<1	uG/G U-normal
Silicon	100	<2	uG/G U-normal
Tantalum	1	<0.3	uG/G U-normal
Titanium	1	<0.3	uG/G U-normal
Elements forming non-volatile fluorides	300	69.0	uG/G U-normal
Chromium	1500	<520.0	uG/G U-235
Molybdenum	200	<50.0	uG/G U-235
Tungsten	200	<50.0	uG/G U-235
Vanadium	200	<30.0	uG/G U-235
Uranium-233	500	<100	uG/G U-235
Uranium-232	0.110	<0.005 R	uG/G U-235
Boron equivalent cross section	8	NONE DET	uG/G U-normal
Fission product gamma	20	<5	Percent of
Fission product beta	10	<0.1	aged natural U
Transuranic alpha	1500	NONE DET	DPM alpha/G U
Technetium		0.008	uG/G U-normal
Uranium-234		0.006	Weight Percent
Uranium-235		0.9670	Weight Percent
Uranium-236		0.006	Weight Percent

** Exceeds Specifications
R Revised Result

Reported by:

This report has been printed 12 times.