KK.

GDP-0558

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

TOLL ENRICHMENT BLDG. OCT 10 12 AM '84

Producer: COGEMA
Date received in laboratory: 31-JUL-1984

Report Date: 2-SEP-1984
Sample Number: 175196
Cylinder Number: NU 792

*** PARTIAL PRINTOUT ***

	Specification Limits	Analysis	
	Minimum		
Uranium Hexafluoride	99.5	99.97	Weight percent
Uranium		67.60	Weight percent
	Maximum		
Cylinder Vapor Pressure	75	---	psia
Hydrocarbons, chlorocarbons, partially substituted halohydrocarbons	0.01	---	Mole Percent
Antimony	1	<1	uG/G U-normal
Bromine	5	<5	uG/G U-normal
Chlorine	100	<10	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	---	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	19.0	uG/G U-normal
Chromium	1500	<500.0	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	<200	uG/G U-235
Uranium-232	0.110	0.112 **	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	seed natural U
Transuranic alpha	1500	17.0	DPM alpha/G U
Technetium		0.006	uG/G U-normal
Uranium-234		.016	Weight Percent
Uranium-235		0.9411	Weight Percent
Uranium-236		.34	Weight Percent

** Exceeds Specifications
R Revised Result
The following samples have been composited:
175193, 175194, 175195, 175196

Reported by:

This report has been printed 2 times.

OR0014854

R 29 PROCESS SUPPORT DIVISION
URANIUM HEXAFLUORIDE ANALYSES

Producer: COGEMA
Date received in laboratory: 12-JUL-1984

Report Date: 11-SEP-1984
Sample Number: 175190
Cylinder Number: SAE 2595

	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	<1	uG/G U-normal
Bromine	5	<5	uG/G U-normal
Chlorine	100	13	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	---	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	5.0	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	0.031	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	0.35	aged natural U
Transuranic alpha	1500	NONE DET	DPM alpha/G U
Technetium		<0.005	uG/G U-normal
Uranium-234		.012	Weight Percent
Uranium-235		0.9597	Weight Percent
Uranium-236		0.21	Weight Percent

** Exceeds Specifications
R Revised Result

Reported by:

The following samples have been composited:
175183, 175184, 175185, 175186, 175187
175188, 175189, 175190, 175191, 175192

K-25 PROCESS SUPPORT DIVISION
URANIUM HEXAFLUORIDE ANALYSES

Producer: COGEMA
Date received in laboratory: 12-JUL-1984

Report Date: 11-SEP-1984
Sample Number: 175189
Cylinder Number: SAE 2597

	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	<1	uG/G U-normal
Bromine	5	<5	uG/G U-normal
Chlorine	100	13	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	---	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	9.0	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	<200	uG/G U-235
Uranium-232	0.110	0.036	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	0.35	aged natural U
Transuranic alpha	1500	NONE DET	DPM alpha/G U
Technetium		<0.005	uG/G U-normal
Uranium-234		.012	Weight Percent
Uranium-235		0.9586	Weight Percent
Uranium-236		0.21	Weight Percent

** Exceeds Specifications
R Revised Result
The following samples have been composited:
175183, 175184, 175185, 175186, 175187
175188, 175189, 175190, 175191, 175192

Reported by:

Recd C'ion Return

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

Producer: COGEMA
Date received in laboratory: 11-JUL-1984

Report Date: 2-AUG-1984
Sample Number: 175188
Cylinder Number: SAF 2593

Property	Specification Limits	Analysis	
	Minimum		
Uranium Hexafluoride	99.5	99.98	Weight percent
Uranium		67.61	Weight percent
	Maximum		
Cylinder Vapor Pressure	75	---	psia
Hydrocarbons, chlorocarbons, partially substituted halohydrocarbons	0.01	---	Mole Percent
Antimony	1	<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	<20	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	<520.0	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	0.023	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	0.35	aged natural U
Transuranic alpha	1500	NONE DET	DPM alpha/G U
Technetium		<0.005	uG/G U-normal
Uranium-234		.013	Weight Percent
Uranium-235		0.9592	Weight Percent
Uranium-236		.21	Weight Percent

** Exceeds Specifications
R Revised Result
The following samples have been composited:
175183, 175184, 175185, 175186, 175187
175188, 175189, 175190, 175191, 175192
This report has been printed 1 times.

Reported by:

G B Woodfin

K-25 PROCESS SUPPORT DIVISION
URANIUM HEXAFLUORIDE ANALYSES

Producer: COGEMA
Date received in laboratory: 10-JUL-1984

Report Date: 30-AUG-1984
Sample Number: 175185
Cylinder Number: SAE 2590

	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	<1	uG/G U-normal
Bromine	5	<5	uG/G U-normal
Chlorine	100	13	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	---	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	27.0	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	0.048	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	0.35	aged natural U
Transuranic alpha	1500	NONE DET	DPM alpha/G U
Technetium		<0.005	uG/G U-normal
Uranium-234		.012	Weight Percent
Uranium-235		0.9595	Weight Percent
Uranium-236		.20	Weight Percent

** Exceeds Specifications
R Revised Result

Reported by:

The following samples have been composited:
175183, 175184, 175185, 175186, 175187
175188, 175189, 175190, 175191, 175192

K-25 PROCESS SUPPORT DIVISION
URANIUM HEXAFLUORIDE ANALYSES

Producer: COGEMA
Date received in laboratory: 11-JUL-1984

Report Date: 5-SEP-1984
Sample Number: 175187
Cylinder Number: SAE 2591

	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	<1	uG/G U-normal
Bromine	5	<5	uG/G U-normal
Chlorine	100	13	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	---	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	NONE DET	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	<200	uG/G U-235
Uranium-232	0.110	0.035	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	0.35	aged natural U
Transuranic alpha	1500	NONE DET	DPM alpha/G U
Technetium		<0.005	uG/G U-normal
Uranium-234		0.012	Weight Percent
Uranium-235		0.9594	Weight Percent
Uranium-236		0.20	Weight Percent

** Exceeds Specifications
R Revised Result

Reported by:

The following samples have been composited:
175183, 175184, 175185, 175186, 175187
175188, 175189, 175190, 175191, 175192

[illegible] SUPPORT DIVISION
URANIUM HEXAFLUORIDE ANALYSES

Producer: COGEMA
Date received in laboratory: 10-JUL-1984

Report Date: 5-SEP-1984
Sample Number: 175186
Cylinder Number: SAE 2589

	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	<1	uG/G U-normal
Bromine	5	<5	uG/G U-normal
Chlorine	100	13	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	---	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	20.0	uG/G U-normal
Chromium	1500	<570.0	uG/G U-235
Molybdenum	200	60.0	uG/G U-235
Tungsten	200	<60.0	uG/G U-235
Vanadium	200	<30.0	uG/G U-235
Uranium-233	500	<200	uG/G U-235
Uranium-232	0.110	0.054	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	0.35	aged natural U
Transuranic alpha	1500	NONE DET	DPM alpha/G U
Technetium		<0.005	uG/G U-normal
Uranium-234		0.012	Weight Percent
Uranium-235		0.8832	Weight Percent
Uranium-236		0.28	Weight Percent

** Exceeds Specifications
R Revised Result

Reported by:

The following samples have been composited:
175183, 175184, 175185, 175186, 175187
175188, 175189, 175190, 175191, 175192

This report has been printed [illegible]

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

Producer: COGEMA
Date received in laboratory: 18-JUL-1984

Report Date: 24-SEP-1984
Sample Number: 175194
Cylinder Number: SAE 2587

	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	<1	uG/G U-normal
Bromine	5	<5	uG/G U-normal
Chlorine	100	<10	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	---	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	56.0	uG/G U-normal
Chromium	1500	<570.0	uG/G U-235
Molybdenum	200	70.0	uG/G U-235
Tungsten	200	<60.0	uG/G U-235
Vanadium	200	<30.0	uG/G U-235
Uranium-233	500	<200	uG/G U-235
Uranium-232	0.110	0.066	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	17.0	DPM alpha/G U
Technetium		0.006	uG/G U-normal
Uranium-234		.012	Weight Percent
Uranium-235		0.8833	Weight Percent
Uranium-236		.28	Weight Percent

** Exceeds Specifications
R Revised Result

Reported by:

The following samples have been composited:
175193, 175194, 175195, 175196 175197

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

Producer: COGEMA
Date received in laboratory: 16-JUL-1984

Report Date: 24-SEP-1984
Sample Number: 175192
Cylinder Number: SAE2585

	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	<1	uG/G U-normal
Bromine	5	<5	uG/G U-normal
Chlorine	100	13	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	---	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	6.0	uG/G U-normal
Chromium	1500	<570.0	uG/G U-235
Molybdenum	200	<60.0	uG/G U-235
Tungsten	200	<60.0	uG/G U-235
Vanadium	200	<30.0	uG/G U-235
Uranium-233	500	<200	uG/G U-235
Uranium-232	0.110	0.048	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	0.35	aged natural U
Transuranic alpha	1500	NONE DET	DPM alpha/G U
Technetium		<0.005	uG/G U-normal
Uranium-234		.012	Weight Percent
Uranium-235		0.8833	Weight Percent
Uranium-236		.28	Weight Percent

** Exceeds Specifications
R Revised Result

Reported by:

The following samples have been composited:
175193, 175194, 175195, 175196, 175197

Producer: COGEMA
Date received in laboratory: 18-JUL-1984

Report Date: 24-SEP-1984
Sample Number: 175193
Cylinder Number: SAE 2582

	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	<0.01	Mole Percent
Antimony	1	<1	uG/G U-normal
Bromine	5	<5	uG/G U-normal
Chlorine	100	<10	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	4.0	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	22.0	uG/G U-normal
Chromium	1500	<580.0	uG/G U-235
Molybdenum	200	<60.0	uG/G U-235
Tungsten	200	<60.0	uG/G U-235
Vanadium	200	<30.0	uG/G U-235
Uranium-233	500	<200	uG/G U-235
Uranium-232	0.110	0.076	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	used natural U
Transuranic alpha	1500	17.0	DPM alpha/G U
Technetium		0.006	uG/G U-normal
Uranium-234		.012	Weight Percent
Uranium-235		0.8592	Weight Percent
Uranium-236		.28	Weight Percent

** Exceeds Specifications
R Revised Result
The following samples have been composited:
175193, 175194, 175195, 175196

Reported by:

This report has been printed 3 times.