OR0010903

GDP-0581

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

Producer: COGEMA
Date received in laboratory: 25-Aug-83

Report Date: 2-NOV-83
Sample Number: 175126
Cylinder Number: COG-648

Property	Specification Limits	Analysis	
	Minimum		
Uranium Hexafluoride	99.5	99.98	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	25	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	30.0	uG/G U-normal
Chromium	1500	<480.0	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	<400	uG/G U-235
Uranium-232	0.110	0.104	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	0.14	aged natural U
Transuranic alpha	1500	NONE DET	DPM alpha/G U
Technetium		<0.005	uG/G U-normal
Uranium-234		.016	Weight Percent
Uranium-235		1.035	Weight Percent
Uranium-236		0.32	Weight Percent

** Exceeds Specifications
R Revised Result
The following samples have been composited:
175123, 175124, 175125, 175126, 175127
175128, 175129, 175130, 175131, 175132
This report has been printed 5 times.

Reported by:

Reading Room Copy

UF6 SUPPLEMENTAL ANALYSIS REPORT

Sample Number: 175126 Customer: COGEMA

Cylinder Numbers	Chemical and Isotopic Analyses (Wt. %)	
	UF6	99.98
	U-234	.016
	U-235	1.035
	U-236	0.32
	U (Total)	67.60

Spectrographic Analyses (Micrograms element per gram Uranium)

Element	us/gU	Element	us/gU
Al	<2	Mg	<2
B	<0.1	Mn	<2
Ba	<1	Mo	<2
Be	<0.1	Na	<2
Bi	<1	Ni	20
Ca	<2	P	<40
Cd	<0.1	Pb	<2
Co	<1	Sb	<5
Cr	<2	Si	<2
Cu	10	Sn	<2
Fe	<5	V	<2
Li	<2	Zn	<20

R Revised Result

Reported by: SBWadlin

Date: 11-2-93

Analyses contained hereon are furnished as a courtesy and should not be construed as a certification or warranty that the material will so conform.

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

Producer: COGEMA
Date received in laboratory: 26-Aug-83

Report Date: 2-NOV-83
Sample Number: 175134
Cylinder Number: COG-455

Property	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	25	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	40.0	uG/G U-normal
Chromium	1500	<480.0	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	0.090	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	0.10	aged natural U
Transuranic alpha	1500	1.3	DPM alpha/G U
Technetium		<0.005	uG/G U-normal
Uranium-234		.016	Weight Percent
Uranium-235		1.036	Weight Percent
Uranium-236		0.33	Weight Percent

** Exceeds Specifications
R Revised Result
The following samples have been composited:
175133, 175134, 175135, 175136, 175137

Reported by:

This report has been printed 5 times.

UF6 SUPPLEMENTAL ANALYSIS REPORT

Sample Number: 175134 Customer: CORFMA

Cylinder Numbers	Chemical and Isotopic Analyses (Wt. %)	
	UF6	99.96
	U-234	.016
	U-235	1.036
	U-236	0.33
	U (Total)	67.59

Spectrographic Analyses (Micrograms element per gram Uranium)

Element	µg/gU	Element	µg/gU
Al	<2	Mg	2
B	<0.1	Mn	<2
Ba	<1	Mo	<2
Be	<0.1	Na	<2
Bi	<1	Ni	20
Ca	2	P	<40
Cd	<0.1	Pb	<2
Co	<1	Sb	<5
Cr	<2	Si	<2
Cu	10	Sn	<2
Fe	6	V	<2
Li	<2	Zn	<20

R Revised Result

Reported by: SB Woodfin

Date: 11-2-83

Analyses contained hereon are furnished as a courtesy and should not be construed as a certification or warranty that the material will so conform.

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

Producer: COGEMA
Date received in laboratory: 25-Aug-83

Report Date: 2-NOV-83
Sample Number: 175125
Cylinder Number: COG-672

Property	Specification Limits	Analysis	
	Minimum		
Uranium Hexafluoride	99.5	99.98	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	25	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	18.0	uG/G U-normal
Chromium	1500	<480.0	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	<300	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	0.14	aged natural U
Transuranic alpha	1500	NONE DET	DPM alpha/G U
Technetium		<0.005	uG/G U-normal
Uranium-234		.016	Weight Percent
Uranium-235		1.036	Weight Percent
Uranium-236		0.33	Weight Percent

** Exceeds Specifications
R Revised Result
The following samples have been composited:
175123, 175124, 175125, 175126, 175127
175128, 175129, 175130, 175131, 175132
This report has been printed 5 times.

Reported by:

S B Woodfin

UF6 SUPPLEMENTAL ANALYSIS REPORT

Sample Number: 175125 Customer: COGEMA

Cylinder Numbers	Chemical and Isotopic Analyses (Wt. %)	
	UF6	99.98
	U-234	.016
	U-235	1.036
	U-236	0.33
	U (Total)	67.60

Spectrographic Analyses (Micrograms element per gram Uranium)

Element	ug/gU	Element	ug/gU
Al	<2	Mg	<2
B	<0.1	Mn	<2
Ba	<1	Mo	<2
Be	<0.1	Na	<2
Bi	<1	Ni	8
Ca	<2	P	<40
Cd	<0.1	Pb	<2
Co	<1	Sb	<5
Cr	<2	Si	<2
Cu	10	Sn	<2
Fe	<5	V	<2
Li	<2	Zn	<20

R Revised Result

Reported by: SB Woodfin

Date: 11-2-83

Analyses contained hereon are furnished as a courtesy and should not be construed as a certification or warranty that the material will so conform.

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

Producer: COGEMA
Date received in laboratory: 24-Aug-83

Report Date: 2-NOV-83
Sample Number: 175129
Cylinder Number: COG-707

Property	Specification Limits	Analysis	
	Minimum		
Uranium Hexafluoride	99.5	99.93	Weight percent
Uranium		67.57	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	25	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	40.0	uG/G U-normal
Chromium	1500	<480.0	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	0.098	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	0.14	aged natural U
Transuranic alpha	1500	NONE DET	DPM alpha/G U
Technetium		<0.005	uG/G U-normal
Uranium-234		.015	Weight Percent
Uranium-235		1.035	Weight Percent
Uranium-236		0.32	Weight Percent

** Exceeds Specifications
R Revised Result
The following samples have been composited:
175123, 175124, 175125, 175126, 175127
175128, 175129, 175130, 175131, 175132
This report has been printed 6 times.

Reported by:

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

Producer: COGEMA
Date received in laboratory: 24-Aug-83

Report Date: 2-NOV-83
Sample Number: 175124
Cylinder Number: COG-721

Property	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	25	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	55.0	uG/G U-normal
Chromium	1500	<480.0	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	<300	uG/G U-235
Uranium-232	0.110	0.085	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	0.14	aged natural U
Transuranic alpha	1500	NONE DET	DPM alpha/G U
Technetium		<0.005	uG/G U-normal
Uranium-234		.016	Weight Percent
Uranium-235		1.036	Weight Percent
Uranium-236		0.33	Weight Percent

** Exceeds Specifications
R Revised Result
The following samples have been composited:
175123, 175124, 175125, 175126, 175127
175128, 175129, 175130, 175131, 175132
This report has been printed 5 times.

Reported by:

S B Woodfin

UF6 SUPPLEMENTAL ANALYSIS REPORT

Sample Number: 175124 Customer: COGEMA

Cylinder Numbers	Chemical and Isotopic Analyses (Wt. %)	
	UF6	99.99
	U-234	.016
	U-235	1.036
	U-236	0.33
	U (Total)	67.61

Spectrographic Analyses (Micrograms element per gram Uranium)

Element	ug/gU	Element	ug/gU
Al	<2	Mg	<2
B	<0.1	Mn	<2
Ba	<1	Mo	<2
Be	<0.1	Na	<2
Bi	<1	Ni	30
Ca	<2	P	<40
Cd	<0.1	Pb	<2
Co	<1	Sb	<5
Cr	<2	Si	<2
Cu	25	Sn	<2
Fe	<5	V	<2
Li	<2	Zn	<20

R Revised Result

Reported by:

Date: 11-2-83

Analyses contained hereon are furnished as a courtesy and should not be construed as a certification or warranty that the material will so conform.

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

Producer: COGEMA
Date received in laboratory: 30-Aug-83

Report Date: 2-NOV-83
Sample Number: 175135
Cylinder Number: COG-788

Property	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	25	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	28.0	uG/G U-normal
Chromium	1500	<480.0	uG/G U-235
Molybdenum	200	60.0	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	0.079	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	0.10	aged natural U
Transuranic alpha	1500	1.3	DPM alpha/G U
Technetium		<0.005	uG/G U-normal
Uranium-234		.016	Weight Percent
Uranium-235		1.036	Weight Percent
Uranium-236		0.32	Weight Percent

** Exceeds Specifications
R Revised Result
The following samples have been composited:
175133, 175134, 175135, 175136, 175137

Reported by:

This report has been printed 5 times.

UF6 SUPPLEMENTAL ANALYSIS REPORT

Sample Number: 175135 Customer: COGEMA

Cylinder Numbers	Chemical and Isotopic Analyses (Wt. %)	
	UF6	99.99
	U-234	.014
	U-235	1.034
	U-236	0.32
	U (Total)	67.61

Spectrographic Analyses (Micrograms element per gram Uranium)

Element	µg/gU	Element	µg/gU
Al	<2	Mg	<2
B	<0.1	Mn	<2
Ba	<1	Mo	<2
Be	<0.1	Na	<2
Bi	<1	Ni	8
Ca	<2	P	<40
Cd	<0.1	Pb	<2
Co	<1	Sb	<5
Cr	<2	Si	6
Cu	8	Sn	<2
Fe	6	V	<2
Li	<2	Zn	<20

R Revised Result

Reported by: SPMcdfin

Date: 11-2-93

Analyses contained hereon are furnished as a courtesy and should not be construed as a certification or warranty that the material will so conform.

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

Producer: COGEMA
Date received in laboratory: 26-Aug-83

Report Date: 2-NOV-83
Sample Number: 175128
Cylinder Number: COG-794

Property	Specification Limits	Analysis	
	Minimum		
Uranium Hexafluoride	99.5	99.97	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	25	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	89.0	uG/G U-normal
Chromium	1500	<480.0	uG/G U-235
Molybdenum	200	60.0	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	0.094	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	0.14	aged natural U
Transuranic alpha	1500	NONE DET	DPM alpha/G U
Technetium		<0.005	uG/G U-normal
Uranium-234		.016	Weight Percent
Uranium-235		1.035	Weight Percent
Uranium-236		0.32	Weight Percent

** Exceeds Specifications
R Revised Result
The following samples have been composited:
175123, 175124, 175125, 175126, 175127
175128, 175129, 175130, 175131, 175132
This report has been printed 5 times.

Reported by:

UF6 SUPPLEMENTAL ANALYSIS REPORT

Sample Number: 175128 Customer: COGEMA

Cylinder Numbers	Chemical and Isotopic Analyses (Wt. %)	
	UF6	99.97
	U-234	.014
	U-235	1.035
	U-236	0.32
	U (Total)	67.59

Spectrographic Analyses (Micrograms element per gram Uranium)

Element	ug/gU	Element	ug/gU
Al	<2	Mg	2
B	<0.1	Mn	<2
Ba	<1	Mo	<2
Be	<0.1	Na	<2
Bi	<1	Ni	50
Ca	7	P	<40
Cd	<0.1	Pb	<2
Co	<1	Sb	<5
Cr	<2	Si	<2
Cu	30	Sn	<2
Fe	<5	V	<2
Li	<2	Zn	<20

R Revised Result

Reported by: S B Woodfin

Date: 11-2-83

Analyses contained hereon are furnished as a courtesy and should not be construed as a certification or warranty that the material will so conform.

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

Producer: COGEMA
Date received in laboratory: 26-Aug-83

Report Date: 2-NOV-83
Sample Number: 175133
Cylinder Number: COG-800

Property	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	<0.01	Mole Percent
Antimony	1	<1	uG/G U-normal
Bromine	5	<5	uG/G U-normal
Chlorine	100	25	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	3	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	95.0	uG/G U-normal
Chromium	1500	<480.0	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	0.098	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	0.10	aged natural U
Transuranic alpha	1500	1.3	DPM alpha/G U
Technetium		<0.005	uG/G U-normal
Uranium-234		.016	Weight Percent
Uranium-235		1.036	Weight Percent
Uranium-236		0.32	Weight Percent

** Exceeds Specifications
R Revised Result
The following samples have been composited:
175133, 175134, 175135, 175136, 175137

Reported by:

This report has been printed 5 times.

UF6 SUPPLEMENTAL ANALYSIS REPORT

Sample Number: 175133 Customer: CORENA

Cylinder Numbers	Chemical and Isotopic Analyses (Wt. %)	
	UF6	99.97
	U-234	.016
	U-235	1.036
	U-236	0.32
	U (Total)	67.60

Spectrographic Analyses (Micrograms element per gram Uranium)

Element	µg/gU	Element	µg/gU
Al	<2	Mg	2
B	<0.1	Mn	<2
Ba	<1	Mo	<2
Be	<0.1	Na	<2
Bi	<1	Ni	25
Ca	10	P	<40
Cd	<0.1	Pb	<2
Co	<1	Sb	<5
Cr	<2	Si	3
Cu	40	Sn	<2
Fe	15	V	<2
Li	<2	Zn	<20

R Revised Result

Reported by: S B Woodfin

Date: 11-2-83

Analyses contained hereon are furnished as a courtesy and should not be construed as a certification or warranty that the material will so conform.

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

Producer: COGEMA
Date received in laboratory: 30-Aug-83

Report Date: 2-NOV-83
Sample Number: 175137
Cylinder Number: COG-803

Property	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	25	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	40.0	uG/G U-normal
Chromium	1500	<480.0	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	<300	uG/G U-235
Uranium-232	0.110	0.125 **	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	0.10	aged natural U
Transuranic alpha	1500	1.3	DPM alpha/G U
Technetium		<0.005	uG/G U-normal
Uranium-234		.017	Weight Percent
Uranium-235		1.036	Weight Percent
Uranium-236		0.341	Weight Percent

** Exceeds Specifications
R Revised Result
The following samples have been composited:
175133, 175134, 175135, 175136, 175137

Reported by:

This report has been printed 4 times.

UF6 SUPPLEMENTAL ANALYSIS REPORT

Sample Number: 175137 Customer: COGEMA

Cylinder Numbers	Chemical and Isotopic Analyses (Wt. %)	
	UF6	100.00
	U-234	.017
	U-235	1.036
	U-236	0.34
	U (Total)	67.62

Spectrographic Analyses (Micrograms element per gram Uranium)

Element	ug/gU	Element	ug/gU
Al	<2	Mg	<2
B	<0.1	Mn	<2
Ba	<1	Mo	<2
Be	<0.1	Na	<2
Bi	<1	Ni	20
Ca	<2	P	<40
Cd	<0.1	Pb	<2
Co	<1	Sb	<5
Cr	<2	Si	<2
Cu	20	Sn	<2
Fe	<5	V	<2
Li	<2	Zn	<20

R Revised Result

Reported by: [signature]

Date: 11-2-83

Analyses contained hereon are furnished as a courtesy and should not be construed as a certification or warranty that the material will so conform.

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

Producer: COGEMA
Date received in laboratory: 26-Aug-83

Report Date: 2-NOV-83
Sample Number: 175132
Cylinder Number: COG-815

Property	Specification Limits	Analysis	
	Minimum		
Uranium Hexafluoride	99.5	99.94	Weight percent
Uranium		67.58	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	25	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	144.0	uG/G U-normal
Chromium	1500	<480.0	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	0.089	uG/G U-235
Boron equivalent cross section	8	0.1	uG/G U-normal
Fission product gamma	20	<5	Percent of
Fission product beta	10	0.14	aged natural U
Transuranic alpha	1500	NONE DET	DPM alpha/G U
Technetium		<0.005	uG/G U-normal
Uranium-234		.016	Weight Percent
Uranium-235		1.035	Weight Percent
Uranium-236		0.32	Weight Percent

** Exceeds Specifications
R Revised Result
The following samples have been composited:
175123, 175124, 175125, 175126, 175127
175128, 175129, 175130, 175131, 175132
This report has been printed 5 times.

Reported by:

SB Woodfin

UF6 SUPPLEMENTAL ANALYSIS REPORT

Sample Number: 175132 Customer: COGEMA

Cylinder Numbers	Chemical and Isotopic Analyses (Wt. %)	
	UF6	99.94
	U-234	.016
	U-235	1.035
	U-236	0.32
	U (Total)	67.58

Spectrographic Analyses (Micrograms element per gram Uranium)

Element	µg/gU	Element	µg/gU
Al	<2	Mg	4
B	<0.1	Mn	<2
Ba	<1	Mo	<2
Be	<0.1	Na	<2
Bi	<1	Ni	50
Ca	10	P	<40
Cd	<0.1	Pb	<2
Co	<1	Sb	<5
Cr	<2	Si	<2
Cu	80	Sn	<2
Fe	<5	V	<2
Li	<2	Zn	<20

R Revised Result

Reported by:

Date:

Analyses contained hereon are furnished as a courtesy and should not be construed as a certification or warranty that the material will so conform.

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

Producer: COGEMA
Date received in laboratory: 26-Aug-83

Report Date: 2-NOV-83
Sample Number: 175130
Cylinder Number: COG-816

Property	Specification Limits	Analysis	
	Minimum		
Uranium Hexafluoride	99.5	99.98	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	25	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	73.0	uG/G U-normal
Chromium	1500	<480.0	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	<400PPM	uG/G U-235
Uranium-232	0.110	0.095	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	0.14	added natural U
Transuranic alpha	1500	NONE DET	DPM alpha/G U
Technetium		<0.005	uG/G U-normal
Uranium-234		0.016	Weight Percent
Uranium-235		1.036	Weight Percent
Uranium-236		0.32	Weight Percent

** Exceeds Specifications
R Revised Result
The following samples have been composited:
175123, 175124, 175125, 175126, 175127
175128, 175129, 175130, 175131, 175132
This report has been printed 5 times.

Reported by:

S. B. Woodfin

UF6 SUPPLEMENTAL ANALYSIS REPORT

Sample Number: 175130 Customer: COGEMA

Cylinder Numbers	Chemical and Isotopic Analyses (Wt. %)	
	UF6	99.98
	U-234	0.016
	U-235	1.036
	U-236	0.32
	U (Total)	67.60

Spectrographic Analyses (Micrograms element per gram Uranium)

Element	µg/gU	Element	µg/gU
Al	<2	Mg	2
B	<0.1	Mn	<2
Ba	<1	Mo	<2
Be	<0.1	Na	10
Bi	<1	Ni	30
Ca	6	P	<40
Cd	<0.1	Pb	<2
Co	<1	Sb	<5
Cr	<2	Si	<2
Cu	25	Sn	<2
Fe	<5	V	<2
Li	<2	Zn	<20

R Revised Result

Reported by:

Date: 11-2-83

Analyses contained hereon are furnished as a courtesy and should not be construed as a certification or warranty that the material will so conform.

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

Producer: COGEMA
Date received in laboratory: 26-Aug-83

Report Date: 2-NOV-83
Sample Number: 175131
Cylinder Number: TNP-2100

Property	Specification Limits	Analysis	
	Minimum		
Uranium Hexafluoride	99.5	99.97	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	25	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	84.0	uG/G U-normal
Chromium	1500	<480.0	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	<400	uG/G U-235
Uranium-232	0.110	0.096	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	0.14	aged natural U
Transuranic alpha	1500	NONE DET	DPM alpha/G U
Technetium		<0.005	uG/G U-normal
Uranium-234		.015	Weight Percent
Uranium-235		1.036	Weight Percent
Uranium-236		0.32	Weight Percent

** Exceeds Specifications
R Revised Result
The following samples have been composited:
175123, 175124, 175125, 175126, 175127
175128, 175129, 175130, 175131, 175132
This report has been printed 5 times.

Reported by:

UF6 SUPPLEMENTAL ANALYSIS REPORT

Sample Number: 175131 Customer: COGEMA

Cylinder Numbers	Chemical and Isotopic Analyses (Wt. %)	
	UF6	99.97
	U-234	.015
	U-235	1.036
	U-236	0.32
	U (Total)	67.59

Spectrographic Analyses (Micrograms element per gram Uranium)

Element	µg/gU	Element	µg/gU
Al	<2	Mg	6
B	<0.1	Mn	<2
Ba	<1	Mo	<2
Be	<0.1	Na	<2
Bi	<1	Ni	3
Ca	15	P	<40
Cd	<0.1	Pb	<2
Co	<1	Sb	<5
Cr	<2	Si	<2
Cu	30	Sn	<2
Fe	30	V	<2
Li	<2	Zn	<20

R Revised Result

Reported by: S B Wadfin

Date: 11-2-83

Analyses contained hereon are furnished as a courtesy and should not be construed as a certification or warranty that the material will so conform.

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

Producer: COGEMA
Date received in laboratory: 30-Aug-83

Report Date: 2-NOV-83
Sample Number: 175136
Cylinder Number: TNP-2162

Property	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	25	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	108.0	uG/G U-normal
Chromium	1500	<480.0	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	0.099	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	0.10	aged natural U
Transuranic alpha	1500	1.3	DPM alpha/G U
Technetium		<0.005	uG/G U-normal
Uranium-234		0.016	Weight Percent
Uranium-235		1.036	Weight Percent
Uranium-236		0.31	Weight Percent

** Exceeds Specifications
R Revised Result
The following samples have been composited:
175133, 175134, 175135, 175136, 175137

Reported by:

This report has been printed 4 times.

UF6 SUPPLEMENTAL ANALYSIS REPORT

Sample Number: 175136 Customer: COGEMA

Cylinder Numbers	Chemical and Isotopic Analyses (Wt. %)	
	UF6	99.99
	U-234	0.016
	U-235	1.036
	U-236	0.31
	U (Total)	67.61

Spectrographic Analyses (Micrograms element per gram Uranium)

Element	µg/gU	Element	µg/gU
Al	<2	Mg	<2
B	<0.1	Mn	<2
Ba	<1	Mo	<2
Be	<0.1	Na	<2
Bi	<1	Ni	45
Ca	2	P	<40
Cd	<0.1	Pb	<2
Co	<1	Sb	<5
Cr	<2	Si	15
Cu	40	Sn	<2
Fe	6	V	<2
Li	<2	Zn	<20

R Revised Result

Reported by: S B Woodfin

Date: 11-2-83

Analyses contained hereon are furnished as a courtesy and should not be construed as a certification or warranty that the material will so conform.

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

Producer: COGEMA
Date received in laboratory: 15-Aug-83

Report Date: 1-NOV-83
Sample Number: 175123
Cylinder Number: NV-695

850815-152

Property	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	<0.01	Mole Percent
Antimony	1	<1	uG/G U-normal
Bromine	5	<5	uG/G U-normal
Chlorine	100	25	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	6	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	90.0	uG/G U-normal
Chromium	1500	<690.0	uG/G U-235
Molybdenum	200	80.0	uG/G U-235
Tungsten	200	<70.0	uG/G U-235
Vanadium	200	<40.0	uG/G U-235
Uranium-233	500	<200	uG/G U-235
Uranium-232	0.110	0.151 **	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	0.14	aged natural U
Transuranic alpha	1500	NONE DET	DPM alpha/G U
Technetium		<0.005	uG/G U-normal
Uranium-234		0.014	Weight Percent
Uranium-235		0.7281 R	Weight Percent
Uranium-236		.30	Weight Percent

** Exceeds Specifications
R Revised Result
The following samples have been composited:
175123, 175124, 175125, 175126, 175127
175128, 175129, 175130, 175131, 175132
This report has been printed 10 times.

Reported by: 3 swk loss for mixing 27000 lb with normal @ 100 lb/h

S. M. Woodfin

UF6 SUPPLEMENTAL ANALYSIS REPORT

Sample Number: 175123 Customer: COGEMA

Cylinder Numbers	Chemical and Isotopic Analyses (Wt. %)	
	UF6	99.97
	U-234	0.014
	U-235	0.7281 R
	U-236	.30
	U (Total)	67.60

Spectrographic Analyses (Micrograms element per gram Uranium)

Element	us/gU	Element	us/gU
Al	<2	Mg	<2
B	<0.1	Mn	<2
Ba	<1	Mo	<2
Be	<0.1	Na	<2
Bi	<1	Ni	30
Ca	<2	P	<40
Cd	<0.1	Pb	<2
Co	<1	Sb	<5
Cr	<2	Si	<2
Cu	60	Sn	<2
Fe	<5	V	<2
Li	<2	Zn	<20

R Revised Result

Reported by: SBWoodfin

Date: 11-2-83

Analyses contained hereon are furnished as a courtesy and should not be construed as a certification or warranty that the material will so conform.

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

Producer: COGEMA
Date received in laboratory: 26-Aug-83

Report Date: 2-NOV-83
Sample Number: 175127
Cylinder Number: N-27

Property	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	25	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	77.0	uG/G U-normal
Chromium	1500	<690.0	uG/G U-235
Molybdenum	200	<70.0	uG/G U-235
Tungsten	200	<70.0	uG/G U-235
Vanadium	200	<40.0	uG/G U-235
Uranium-233	500	<200	uG/G U-235
Uranium-232	0.110	0.184 **	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	0.14	aged natural U
Transuranic alpha	1500	NONE DET	DPM alpha/G U
Technetium		<0.005	uG/G U-normal
Uranium-234		0.014	Weight Percent
Uranium-235		0.7254	Weight Percent
Uranium-236		0.33	Weight Percent

** Exceeds Specifications
R Revised Result
The following samples have been composited:
175123, 175124, 175125, 175126, 175127
175128, 175129, 175130, 175131, 175132
This report has been printed 5 times.

Reported by:

UF6 SUPPLEMENTAL ANALYSIS REPORT

Sample Number: 175127 Customer: COGEMA

Cylinder Numbers	Chemical and Isotopic Analyses (Wt. %)	
	UF6	99.99
	U-234	0.014
	U-235	0.7254
	U-236	0.33
	U (Total)	67.61

Spectrographic Analyses (Micrograms element per gram Uranium)

Element	ug/gU	Element	ug/gU
Al	<2	Mg	4
B	<0.1	Mn	<2
Ba	<1	Mo	<2
Be	<0.1	Na	<2
Bi	<1	Ni	35
Ca	8	P	<40
Cd	<0.1	Pb	<2
Co	<1	Sb	<5
Cr	<2	Si	<2
Cu	30	Sn	<2
Fe	<5	V	<2
Li	<2	Zn	<20

R Revised Result

Reported by: SBWoodfin

Date: 11-2-83

Analyses contained hereon are furnished as a courtesy and should not be construed as a certification or warranty that the material will so conform.