Reading Room Copy

GDP-0559

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

TOLL ENRICHMENT BLDG. K-1423

Oct 23 9 26 AM '84

Producer: COGEMA
Date received in laboratory: 21-AUG-1984

Report Date: 3-OCT-1984
Sample Number: 175197
Cylinder Number: N-157

	Specification Limits	Analysis	
	Minimum		
Uranium Hexafluoride	99.5	99.95	Weight percent
Uranium		67.58	Weight percent
	Maximum		
Cylinder Vapor Pressure	75	---	psig
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	14	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	5	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	24.0	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	<300	uG/G U-235
Uranium-232	0.110	0.029	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	0.17	seed natural U
Transuranic alpha	1500	NONE DET	DPM alpha/G U
Technetium		0.008	uG/G U-normal
Uranium-234		.013	Weight Percent
Uranium-235		0.9585	Weight Percent
Uranium-236		.23	Weight Percent

** Exceeds Specifications
R Revised Result

Reported by:

The following samples have been composited:
175197, 175198, 175199, 175200, 175201

This report has been printed 4 times.

OR0014853

TOLL ENRICHMENT
BLDG. K-1423

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

OCT 23 9 26 AM '84

Producer: COGEMA
Date received in laboratory: 30-AUG-1984

Report Date: 3-OCT-1984
Sample Number: 175201
Cylinder Number: COG 294

	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	14	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	<490.0	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	0.065	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	0.17	aged natural U
Transuranic alpha	1500	NONE DET	DPM alpha/G U
Technetium		0.008	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:
175197, 175198, 175199, 175200, 175201

Reported by:

This report has been printed 3 times.

10-3-84

GDP-0565

OR0014239

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

TOLL ENRICHMENT BLDG. K-1423

OCT 23 9 25 AM '84

Producer: COGEMA
Date received in laboratory: 27-AUG-1984

Report Date: 2-OCT-1984
Sample Number: 175199
Cylinder Number: COG 478

	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	14	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	<490.0	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	0.068	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	0.17	used natural U
Transuranic alpha	1500	NONE DET	DPM alpha/G U
Technetium		0.008	uG/G U-normal
Uranium-234		.015	Weight Percent
Uranium-235		1.030	Weight Percent
Uranium-236		0.30	Weight Percent

** Exceeds Specifications
R Revised Result
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Mike

Here is a list of 14t reactor return cylinders that we will be feeding over the next few weeks/months. The cylinders at the top of the list will be fed first. The list does not include anything received in April or May.

Report?					
✓	CX	554	.97	175195	840731-103
✓	DV	680	.96	202	840917-092
✓	DV	801	.96	203	840917-093
✓	DV	737	.98	212	841023-161
✓	DV	628	1.00	227	841228-070
✓	DV	514	.96		
✓	CX	2971	.88	229	841228-072
✓	DV	038	1.00	228	841228-071
✓	DV	100	.84		
✓	CX	161	.84	230	841228-073
✓	DV	682			
✓	SA	9100			
✓	SA	9101			
✓	DV	543			
✓	DV	565			
✓	DV	566			
✓	DV	627			
✓	DV	693			
	DV	631			

Don T.

RHL

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

TOLL ENRICHMENT
BLDG. K-1423

OCT 23 9 25 AM '84

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

Report Date: 3-OCT-1984
Sample Number: 175198
Cylinder Number: COG 424

	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	14	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	<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	0.059	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	0.17	aged natural U
Transuranic alpha	1500	NONE DET	DPM alpha/G U
Technetium		0.008	uG/G U-normal
Uranium-234		.015	Weight Percent
Uranium-235		1.034	Weight Percent
Uranium-236		0.30	Weight Percent

** Exceeds Specifications
R Revised Result
The following samples have been composited:
175197, 175198, 175199, 175200, 175201

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RL

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

TOLL ENRICHMENT
BLDG. K-1423

OCT 23 9 26 AM '84

Producer: COGEMA
Date received in laboratory: 28-AUG-1984

Report Date: 3-OCT-1984
Sample Number: 175200
Cylinder Number: COG 359

	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	14	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	17.0	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	0.058	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	0.17	aged natural U
Transuranic alpha	1500	NONE DET	DPM alpha/G U
Technetium		0.008	uG/G U-normal
Uranium-234		.015	Weight Percent
Uranium-235		1.035	Weight Percent
Uranium-236		.30	Weight Percent

** Exceeds Specifications
R Revised Result
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Reported by:

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