Test Type: 14-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

NTP Study Number: C60311

Lock Date: 11/29/2005

Cage Range: ALL

Date Range: ALL

Reasons For Removal: ALL

Removal Date Range: ALL

Treatment Groups: Include ALL

Study Gender: Both

TDMSE Version: 3.0.2.3_002

PWG Approval Date: NONE

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Cobalt

CAS Number: 7440-48-4

Date Report Requested: 09/13/2016 Time Report Requested: 11:25:32 First Dose M/F: 08/02/04 / 08/02/04

Lab: BNW

Test Type: 14-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Cobalt

CAS Number: 7440-48-4

Date Report Requested: 09/13/2016 Time Report Requested: 11:25:32 First Dose M/F: 08/02/04 / 08/02/04

Lab: BNW

			_	1	1	
DAY ON TEST	0	0	0	0	0	
FISCHER 344 RATS MALE	1 6	1 6	1 6	1 6	1 6	
CONTROL	0	0	0	0	0	
ANIMAL ID	0 0	0 0	0	0 0	0	
	1	2	3	4	5	* TOTALS
ALIMENTARY SYSTEM						
Liver	+	+	+	+	+	5
CARDIOVASCULAR SYSTEM	•					
NONE						
ENDOCRINE SYSTEM						
Thyroid Gland	+	+	+	+	+	5
GENERAL BODY SYSTEM						
NONE						
GENITAL SYSTEM	•					
NONE						
HEMATOPOIETIC SYSTEM						
Lymph Node, Mediastinal			+	+		2
INTEGUMENTARY SYSTEM					-	
NONE						
MUSCULOSKELETAL SYSTEM						
NONE						

^{* ..} Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

Test Type: 14-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Cobalt

CAS Number: 7440-48-4

Date Report Requested: 09/13/2016 Time Report Requested: 11:25:32 First Dose M/F: 08/02/04 / 08/02/04

Lab: BNW

DAY ON TEST	0 0 1 6	0 0 1 6	0 0 1 6	0 0 1 6	0 0 1 6		
CONTROL ANIMAL ID	0 0 0 0 1	0 0 0 0 2	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	* TOTALS			
NERVOUS SYSTEM							
Brain	+	+	+	+	+		5
RESPIRATORY SYSTEM							
Lung	+	+	+	+	+		5
Nose	+	+	+	+	+		5
SPECIAL SENSES SYSTEM							
NONE							
URINARY SYSTEM							
Kidney	+	+	+	+	+		5
Urinary Bladder	+	+	+	+	+		5
SYSTEMIC LESIONS							
Multiple Organ	+	+	+	+	+		5

^{* ..} Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

Test Type: 14-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Cobalt

CAS Number: 7440-48-4

Date Report Requested: 09/13/2016 Time Report Requested: 11:25:32 First Dose M/F: 08/02/04 / 08/02/04

Lab: BNW

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

- * .. Total animals with tissue examined microscopically; Total animals with tumor
- + .. Tissue examined microscopically
- X .. Lesion present
- I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

Test Type: 14-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Cobalt

CAS Number: 7440-48-4

Date Report Requested: 09/13/2016 Time Report Requested: 11:25:32 First Dose M/F: 08/02/04 / 08/02/04

Lab: BNW

FISCHER 344 RATS MALE 2.5 MG/M3		1 6	0 0 1 6	0 0 1 6	0 0 1 6	0 0 1 6	
Al	NIMAL ID	0 2 0 1	0 2 0 2	0 2 0 3	0 2 0 4	0 2 0 5	* TOTALS
NERVOUS SYSTEM				-			
NONE							
RESPIRATORY SYSTEM	_						
Lung		+	+	+	+	+	5
Nose		+	+	+	+	+	5
SPECIAL SENSES SYSTEM							
NONE							
URINARY SYSTEM							
NONE							
SYSTEMIC LESIONS							
Multiple Organ		+	+	+	+	+	5

M .. Missing tissue

A .. Autolysis precludes evaluation

^{* ..} Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

Test Type: 14-DAY

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Cobalt

CAS Number: 7440-48-4

Date Report Requested: 09/13/2016 Time Report Requested: 11:25:32 First Dose M/F: 08/02/04 / 08/02/04

Lab: BNW

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

- * .. Total animals with tissue examined microscopically; Total animals with tumor
- + .. Tissue examined microscopically
- X .. Lesion present
- I .. Insufficient tissue

- M .. Missing tissue
- A .. Autolysis precludes evaluation
- BLANK .. Not examined microscopically

Test Type: 14-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Cobalt

CAS Number: 7440-48-4

Date Report Requested: 09/13/2016 Time Report Requested: 11:25:32 First Dose M/F: 08/02/04 / 08/02/04

Lab: BNW

DAY ON TEST	ST	
5 MG/M3 ANIMAL II	ID	* TOTALS
NERVOUS SYSTEM		
NONE		
RESPIRATORY SYSTEM		
Lung	+ + + + +	5
Nose	+ + + + +	5
SPECIAL SENSES SYSTEM		
NONE		
URINARY SYSTEM		
NONE		
SYSTEMIC LESIONS		
Multiple Organ	+ + + + +	5

^{* ..} Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Test Type: 14-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Cobalt

CAS Number: 7440-48-4

Date Report Requested: 09/13/2016 Time Report Requested: 11:25:32 First Dose M/F: 08/02/04 / 08/02/04

Lab: BNW

DAY ON TEST FISCHER 344 RATS MALE	0 0 1 6	0 0 1 6	0 0 1 6	0 0 1 6	0 0 1 6			
10 MG/M3 ANIMAL ID	0 0 6 0 1	0 0 6 0 2	0 0 6 0 3	0 0 6 0 4	0 0 6 0 5			* TOTALS
ALIMENTARY SYSTEM								
NONE								
CARDIOVASCULAR SYSTEM	•	•						
NONE								
ENDOCRINE SYSTEM								
NONE								
GENERAL BODY SYSTEM								
NONE								
GENITAL SYSTEM								
NONE								
HEMATOPOIETIC SYSTEM								
Lymph Node, Mediastinal		+			+			2
INTEGUMENTARY SYSTEM							 	
NONE								
MUSCULOSKELETAL SYSTEM								

- * .. Total animals with tissue examined microscopically; Total animals with tumor
- + .. Tissue examined microscopically
- X .. Lesion present

NONE

I .. Insufficient tissue

- M .. Missing tissue
- A .. Autolysis precludes evaluation
- BLANK .. Not examined microscopically

Test Type: 14-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Cobalt

CAS Number: 7440-48-4

Date Report Requested: 09/13/2016 Time Report Requested: 11:25:32 First Dose M/F: 08/02/04 / 08/02/04

Lab: BNW

	0	0	0	0	0	
DAY ON TEST	0 0 1	0 0 1	0 0 1	0	0	
FISCHER 344 RATS MALE	6	6	6	6	6	_
10 MG/M3 ANIMAL ID	0 0 6 0	0 0 6 0 2	0 0 6 0 3	0 0 6 0 4	0 0 6 0 5	* TOTAL 6
NEDVOUS OVOTEM						* TOTALS
NERVOUS SYSTEM						
Brain	+	+	+	+	+	5
RESPIRATORY SYSTEM						
Lung	+	+	+	+	+	5
Nose	+	+	+	+	+	5
SPECIAL SENSES SYSTEM						
NONE						
URINARY SYSTEM						
Urinary Bladder	+	+	+	+	+	5
SYSTEMIC LESIONS						
Multiple Organ	+	+	+	+	+	5

^{* ..} Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Test Type: 14-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Cobalt

CAS Number: 7440-48-4

Date Report Requested: 09/13/2016 Time Report Requested: 11:25:32 First Dose M/F: 08/02/04 / 08/02/04

Lab: BNW

DAY ON TEST FISCHER 344 RATS MALE	0 0 0 5	0 0 0 5	0 0 0 9	0 0 0 5	0 0 1 3	
20 MG/M3 ANIMAL ID	0 0 8 0 1	0 0 8 0 2	0 0 8 0 3	0 0 8 0 4	0 0 8 0 5	* TOTALS
ALIMENTARY SYSTEM			1		ı	
Liver	+	+	+	+	+	5
CARDIOVASCULAR SYSTEM						
NONE						
ENDOCRINE SYSTEM						
Thyroid Gland	+	+	+	+	+	5
GENERAL BODY SYSTEM						
NONE						
GENITAL SYSTEM						
NONE			_	_	-	
HEMATOPOIETIC SYSTEM						
NONE						
INTEGUMENTARY SYSTEM						
NONE						
MUSCULOSKELETAL SYSTEM						
NONE						

^{* ..} Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

Test Type: 14-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Cobalt

CAS Number: 7440-48-4

Date Report Requested: 09/13/2016 Time Report Requested: 11:25:32 First Dose M/F: 08/02/04 / 08/02/04

Lab: BNW

DAY ON TEST FISCHER 344 RATS MALE	0 0 0 5	0 0 0 5	0 0 0 9	1 0	0 0 1 3	
20 MG/M3 ANIMAL ID	0 0 8 0 1	0 0 8 0 2	0 0 8 0 3	0	0 0 8 0 5	* TOTALS
NERVOUS SYSTEM			•			
Brain	+	+	+	+	+	5
RESPIRATORY SYSTEM						
Lung	+	+	+	+	+	5
Nose	+	+	+	+	+	5
SPECIAL SENSES SYSTEM						
NONE						
URINARY SYSTEM						
Kidney	+	+	+	+	+	5
Urinary Bladder	+	+	+	+	+	5
SYSTEMIC LESIONS						
Multiple Organ	+	+	+	+	+	5

^{* ..} Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

Test Type: 14-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Cobalt

CAS Number: 7440-48-4

Date Report Requested: 09/13/2016 Time Report Requested: 11:25:32 First Dose M/F: 08/02/04 / 08/02/04

Lab: BNW

		1	1	1	1		
DAY ON TEST	0	0	0	0	0		
FISCHER 344 RATS MALE	0 5	7	0	0 6	0 7		
40 MG/M3	0	0	0	0	0		
ANIMAL ID	0 0	0 0	0 0	0 0	0		
	Ĭ	2	3	4	5	* ТОТ	ALS
ALIMENTARY SYSTEM							
Liver	+	+	+	+	+	5	
CARDIOVASCULAR SYSTEM							
NONE	<u> </u>						
ENDOCRINE SYSTEM							
Thyroid Gland	+	+	+	+	+	5	
GENERAL BODY SYSTEM							
NONE							
GENITAL SYSTEM							
Testes					+	1	
HEMATOPOIETIC SYSTEM							
Lymph Node				+		1	
Lymph Node, Bronchial	+					1	
INTEGUMENTARY SYSTEM		-	-				
NONE							

- * .. Total animals with tissue examined microscopically; Total animals with tumor
- + .. Tissue examined microscopically
- X .. Lesion present

MUSCULOSKELETAL SYSTEM

I .. Insufficient tissue

- M .. Missing tissue
- A .. Autolysis precludes evaluation
- BLANK .. Not examined microscopically

Test Type: 14-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Cobalt

CAS Number: 7440-48-4

Date Report Requested: 09/13/2016 Time Report Requested: 11:25:32 First Dose M/F: 08/02/04 / 08/02/04

Lab: BNW

DAY ON TEST	0 0	0 0 0	0 0 0 6	0 0 0	0 0 0	
	0 5	0 7	6	6	7	
40 MG/M3 ANIMAL ID	0 1 0 0 1	0 1 0 0 2	0 1 0 0 3	0 1 0 0 4	0 1 0 0 5	* TOTALS
NONE						
NERVOUS SYSTEM						
Brain	+	+	+	+	+	5
RESPIRATORY SYSTEM						
Lung	+	+	+	+	+	5
Nose	+	+	+	+	+	5
SPECIAL SENSES SYSTEM						
NONE						
URINARY SYSTEM						
Kidney	+	+	+	+	+	5
Urinary Bladder	+	+	+	+	+	5
SYSTEMIC LESIONS						
Multiple Organ	+	+	+	+	+	5

*** END OF MALE DATA ***

^{* ..} Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

Test Type: 14-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Cobalt

CAS Number: 7440-48-4

Date Report Requested: 09/13/2016 Time Report Requested: 11:25:32 First Dose M/F: 08/02/04 / 08/02/04

Lab: BNW

DAY ON TEST	0 0 1	0 0 1	0 0 1	0 0 1	0 0 1	
FISCHER 344 RATS FEMALE	6	6	6	6	6	
CONTROL ANIMAL ID	0 0 1 0 1	0 0 1 0 2	0 0 1 0 3	0 0 1 0 4	0 0 1 0 5	* TOTA
ALIMENTARY SYSTEM						
Liver	+	+	+	+	+	5
CARDIOVASCULAR SYSTEM						
NONE						
ENDOCRINE SYSTEM						
Thyroid Gland	+	+	+	+	+	5
GENERAL BODY SYSTEM						
NONE						
GENITAL SYSTEM						
NONE						
HEMATOPOIETIC SYSTEM						
NONE						
INTEGUMENTARY SYSTEM	-					
NONE						
MUSCULOSKELETAL SYSTEM						
NONE						

^{* ..} Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

Test Type: 14-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Cobalt

CAS Number: 7440-48-4

Date Report Requested: 09/13/2016 Time Report Requested: 11:25:32 First Dose M/F: 08/02/04 / 08/02/04

Lab: BNW

DAY ON TES	l ĭ	0 0 1	0 0 1	0 0 1	0 0 1	
	6	6	6	6	6	
CONTROL ANIMAL	ID 0 0 1	0	0	0	0	
	0	0	0	0	0	
	1	2	3	4	5	* TOTALS
NERVOUS SYSTEM						
Brain	+	+	+	+	+	5
RESPIRATORY SYSTEM						
Lung	+	+	+	+	+	5
Nose	+	+	+	+	+	5
SPECIAL SENSES SYSTEM						
NONE						
URINARY SYSTEM						
Kidney	+	+	+	+	+	5
SYSTEMIC LESIONS						
Multiple Organ	+	+	+	+	+	5

^{* ..} Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

Test Type: 14-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Cobalt

CAS Number: 7440-48-4

Date Report Requested: 09/13/2016 Time Report Requested: 11:25:32 First Dose M/F: 08/02/04 / 08/02/04

Lab: BNW

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

- * .. Total animals with tissue examined microscopically; Total animals with tumor
- + .. Tissue examined microscopically
- X .. Lesion present
- I .. Insufficient tissue

- M .. Missing tissue
- A .. Autolysis precludes evaluation
- BLANK .. Not examined microscopically

Test Type: 14-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Cobalt

CAS Number: 7440-48-4

Date Report Requested: 09/13/2016 Time Report Requested: 11:25:32 First Dose M/F: 08/02/04 / 08/02/04

Lab: BNW

DAY ON TES	T 0 0 1 6	1	0 0 1 6	0 0 1 6	0 0 1 6	
2.5 MG/M3 ANIMAL II	D 0 0 3 0 1	0 0 3 0 2	0 0 3 0 3	0 0 3 0 4	0 0 3 0 5	* TOTALS
NERVOUS SYSTEM		,				
NONE						
RESPIRATORY SYSTEM			•	•		
Lung	+	+	+	+	+	5
Nose	+	+	+	+	+	5
SPECIAL SENSES SYSTEM						
NONE						
URINARY SYSTEM			-		-	
NONE						
SYSTEMIC LESIONS						
Multiple Organ	+	+	+	+	+	5

^{* ..} Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

Species/Strain: RATS/F 344/N

Route: RESPIRATORY EXPOSURE WHOLE BODY

Test Type: 14-DAY

0 0

5

0

Õ 0 0

3

0 0 0 0 0

5 0 5 0 5 5 5

ANIMAL ID

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

CAS Number: 7440-48-4

Cobalt

Date Report Requested: 09/13/2016 Time Report Requested: 11:25:32

First Dose M/F: 08/02/04 / 08/02/04

Lab: BNW

0 0 0 0 DAY ON TEST Õ Õ 0 0 1 1 **FISCHER 344 RATS FEMALE** 6 6 6 6 6

* TOTALS

ALIMENTARY SYSTEM

NONE

5 MG/M3

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

Lymph Node

1

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

- * .. Total animals with tissue examined microscopically; Total animals with tumor
- + .. Tissue examined microscopically
- X .. Lesion present
- I .. Insufficient tissue

- M .. Missing tissue
- A .. Autolysis precludes evaluation
- BLANK .. Not examined microscopically

Test Type: 14-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Cobalt

CAS Number: 7440-48-4

Date Report Requested: 09/13/2016 Time Report Requested: 11:25:32 First Dose M/F: 08/02/04 / 08/02/04

Lab: BNW

DAY OF		0 0 1 6	0 0 1 6	0 0 1 6	0 0 1 6	0 0 1 6	
5 MG/M3	IMAL ID	0 0 5 0 1	0 0 5 0 2	0 0 5 0 3	0 0 5 0 4	0 0 5 0 5	* TOTALS
NERVOUS SYSTEM					-	-	
NONE							
RESPIRATORY SYSTEM	,						
Lung		+	+	+	+	+	5
Nose		+	+	+	+	+	5
SPECIAL SENSES SYSTEM	·	·					
NONE							
URINARY SYSTEM							
NONE							
SYSTEMIC LESIONS					_		
Multiple Organ		+	+	+	+	+	5

^{* ..} Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

Test Type: 14-DAY

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Cobalt

CAS Number: 7440-48-4

Date Report Requested: 09/13/2016 Time Report Requested: 11:25:32 First Dose M/F: 08/02/04 / 08/02/04

Lab: BNW

0 0 0 0 0	ANIMAL ID 0 0 0 0 0 0 7 7 7 7 7 7 7 7
	ANIMAL ID $\begin{pmatrix} 0 & 0 & 0 & 0 & 0 \\ 7 & 7 & 7 & 7 & 7 \end{pmatrix}$

ALIMENTARY SYSTEM

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

- * .. Total animals with tissue examined microscopically; Total animals with tumor
- + .. Tissue examined microscopically
- X .. Lesion present
- I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

Test Type: 14-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Cobalt

CAS Number: 7440-48-4

Date Report Requested: 09/13/2016 Time Report Requested: 11:25:32 First Dose M/F: 08/02/04 / 08/02/04

Lab: BNW

DAY ON TEST FISCHER 344 RATS FEMALE	0 0 1 6	0 0 1 6	0 0 1 6	0 0 1 6	0 0 1 6		
10 MG/M3 ANIMAL ID	0 0 7 0 1	0 0 7 0 2	0 0 7 0 3	0 0 7 0 4	0 0 7 0 5	* TO	ΓALS
NERVOUS SYSTEM							
Brain	+	+	+	+	+	5	5
RESPIRATORY SYSTEM							
Lung	+	+	+	+	+	5	5
Nose	+	+	+	+	+	5	5
SPECIAL SENSES SYSTEM							
NONE							
URINARY SYSTEM							
NONE							
SYSTEMIC LESIONS							
Multiple Organ	+	+	+	+	+	5	5

^{* ..} Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

Test Type: 14-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Cobalt

CAS Number: 7440-48-4

Date Report Requested: 09/13/2016 Time Report Requested: 11:25:32 First Dose M/F: 08/02/04 / 08/02/04

Lab: BNW

DAY ON TEST FISCHER 344 RATS FEMALE	0 0 0 5	0 0 1 6	0 0 1 6	0 0 0 7	0 0 1 3	
20 MG/M3 ANIMAL ID	0	0 0 9 0 2	0 0 9 0 3	0 0 9 0 4	0 0 9 0 5	* TOTALS
ALIMENTARY SYSTEM			1		1	
Liver	+	+	+	+	+	5
CARDIOVASCULAR SYSTEM		•		•		
NONE						
ENDOCRINE SYSTEM		•		•		
Thyroid Gland	+	+	+	+	+	5
GENERAL BODY SYSTEM						
NONE						
GENITAL SYSTEM						
NONE			_		_	
HEMATOPOIETIC SYSTEM						
NONE						
INTEGUMENTARY SYSTEM						
NONE						
MUSCULOSKELETAL SYSTEM						
NONE						

^{* ..} Total animals with tissue examined microscopically; Total animals with tumor

M .. Missing tissue

A .. Autolysis precludes evaluation

^{+ ..} Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

Test Type: 14-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Cobalt

CAS Number: 7440-48-4

Date Report Requested: 09/13/2016 Time Report Requested: 11:25:32 First Dose M/F: 08/02/04 / 08/02/04

Lab: BNW

	_					
DAY ON TEST FISCHER 344 RATS FEMALE	0 0 0 5	0 0 1 6	0 0 1 6	0 0 0 7	0 0 1 3	
20 MG/M3 ANIMAL ID	0 0 9 0 1	0 0 9 0 2	0 0 9 0 3	0 0 9 0 4	0 0 9 0 5	* TOTALS
NERVOUS SYSTEM			-	-		
Brain	+	+	+	+	+	5
RESPIRATORY SYSTEM						
Lung	+	+	+	+	+	5
Nose	+	+	+	+	+	5
SPECIAL SENSES SYSTEM						
NONE						
URINARY SYSTEM						
Kidney	+	+	+	+	+	5
SYSTEMIC LESIONS						
Multiple Organ	+	+	+	+	+	5

^{* ..} Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

Test Type: 14-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Cobalt

CAS Number: 7440-48-4

Date Report Requested: 09/13/2016 Time Report Requested: 11:25:32 First Dose M/F: 08/02/04 / 08/02/04

Lab: BNW

DAY ON TEST	0 0 0 6	0	0 0 0 6	0	0 0 0 7	
40 MG/M3 ANIMAL ID	0 1 1 0	0 1 1 0 2	0 1 1 0 3	0 1 1 0 4	0 1 1 0 5	* TOTALS
ALIMENTARY SYSTEM		<u> </u>			ı	
Liver	+	+	+	+	+	5
CARDIOVASCULAR SYSTEM						
NONE						
ENDOCRINE SYSTEM						
Thyroid Gland	+	+	+	М	+	4
GENERAL BODY SYSTEM	·					
NONE						
GENITAL SYSTEM						
NONE						
HEMATOPOIETIC SYSTEM						
NONE						
INTEGUMENTARY SYSTEM						
NONE						
MUSCULOSKELETAL SYSTEM						
NONE						

^{* ..} Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation

Test Type: 14-DAY

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344/N

P04: NEOPLASMS BY INDIVIDUAL ANIMAL

Cobalt

CAS Number: 7440-48-4

Date Report Requested: 09/13/2016 Time Report Requested: 11:25:32 First Dose M/F: 08/02/04 / 08/02/04

Lab: BNW

DAY ON TEST FISCHER 344 RATS FEMALE	0 0 0 6	0 0 0 5	0 0 0 6	0 0 0 6	0 0 0 7	
40 MG/M3 ANIMAL ID	0 1 1 0 1	0 1 1 0 2	0 1 1 0 3	0 1 1 0 4	0 1 1 0 5	* TOTALS
NERVOUS SYSTEM		-				
Brain	+	+	+	+	+	5
RESPIRATORY SYSTEM						
Lung	+	+	+	+	+	5
Nose	+	+	+	+	+	5
Trachea			+		+	2
SPECIAL SENSES SYSTEM						
NONE						
URINARY SYSTEM						
Kidney	+	+	+	+	+	5
Urinary Bladder			+	+		2
SYSTEMIC LESIONS						
Multiple Organ	+	+	+	+	+	5

*** END OF REPORT ***

^{* ..} Total animals with tissue examined microscopically; Total animals with tumor

^{+ ..} Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

M .. Missing tissue

A .. Autolysis precludes evaluation