Experiment Number: 60311 - 01
Test Type: 14-DAY
Route: RESPIRATORY EXPOSURE WHOLE BODY
Species/Strain: RATS/F 344/N

P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)

Cobalt CAS Number: 7440-48-4 Date Report Requested: 09/13/2016 Time Report Requested: 11:25:33 First Dose M/F: 08/02/04 / 08/02/04 Lab: BNW

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

Note: Animals arranged according to days on test.

Experiment Number: 60311 - 01		P17	: NE	OPL	ASM	S BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)	Date Report Requested: 09/13/2016		
Test Type: 14-DAY Route: RESPIRATORY EXPOSURE WHOLE BODY Species/Strain: RATS/F 344/N						Cobalt CAS Number: 7440-48-4	Time Report Requested: 11:25:33 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				
CONTROL ANIMAL ID	0 0 0 1	0 0 0 0 2	0 0 0 0 3	0 0 0 0 4	0 0 0 0 5			* TOTALS	
ALIMENTARY SYSTEM		•							
Liver	+	+	+	+	+			5	
CARDIOVASCULAR SYSTEM									
NONE									
ENDOCRINE SYSTEM									
Thyroid Gland	+	+	+	+	+			5	
GENERAL BODY SYSTEM									
GENITAL SYSTEM						· · · · · · · · · · · · · · · · · · ·			
NONE									
HEMATOPOIETIC SYSTEM									
Lymph Node, Mediastinal			+	+				2	
INTEGUMENTARY SYSTEM									
NONE									
MUSCULOSKELETAL SYSTEM	_	_	_						
NONE									
NERVOUS SYSTEM									
* Total animals with tissue examined mic	crosco	pically	y; Tot	tal ani	mals	with tumor M Missing	issue		

+ .. Tissue examined microscopically

X .. Lesion present

Experiment Number: 60311 - 01 Test Type: 14-DAY Route: RESPIRATORY EXPOSURE WHOLE BODY Species/Strain: RATS/F 344/N	P17: NE	EOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED) Cobalt CAS Number: 7440-48-4	Date Report Requested: 09/13/2016 Time Report Requested: 11:25:33 First Dose M/F: 08/02/04 / 08/02/04 Lab: BNW	
DAY ON TEST FISCHER 344 RATS MALE	$\begin{array}{c cccc} 0 & 0 & 0 \\ 0 & 0 & 0 \\ 1 & 1 & 1 \\ 6 & 6 & 6 \end{array}$			
CONTROL ANIMAL ID	$\begin{array}{c cccc} 0 & 0 & 0 \\ 0 & 0 & 0 \\ 0 & 0 & 0 \\ 0 & 0 &$		* TOTALS	
Brain	+ + +	+ +	5	
RESPIRATORY SYSTEM				
Lung	+ + +	+ +	5	
Nose	+ + +	+ +	5	
SPECIAL SENSES SYSTEM				
URINARY SYSTEM				
Kidney	+ + +	+ +	5	
Urinary Bladder	+ + +	+ +	5	
SYSTEMIC LESIONS				
Multiple Organ	+ + +	+ +	5	

Experiment Number: 60311 - 01	P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)	Date Report Requested: 09/13/2016
Test Type: 14-DAY	Cobalt	Time Report Requested: 11:25:33
Route: RESPIRATORY EXPOSURE WHOLE BODY	CAS Number: 7440-48-4	First Dose M/F: 08/02/04 / 08/02/04
Species/Strain: RATS/F 344/N		Lab: BNW

DAY ON TEST FISCHER 344 RATS MALE		
2.5 MG/M3 ANIMAL ID	ANIMAL ID 0 0 0 0 0 0 0 2 2 2 2 2 2 2 0 0 0 0 0 0 1 2 3 4 5	* TOTA

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

Experiment Number: 60311 - 01 Test Type: 14-DAY Route: RESPIRATORY EXPOSURE WHOLE BODY Species/Strain: RATS/F 344/N		P17:	NE(OPL/	SM	S BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED) Cobalt CAS Number: 7440-48-4	Date Report Requested: 09/13/2016 Time Report Requested: 11:25:33 First Dose M/F: 08/02/04 / 08/02/04 Lab: BNW		
	0	0	0	0	0				
DAY ON TEST FISCHER 344 RATS MALE	0 0 1 6	0 1 6	0 0 1 6	0 1 6	0 1 6				
2.5 MG/M3 ANIMAL ID	0 0 2 0	0 0 2 0	0 0 2 0	0 0 2 0	0 0 2 0				
	1	2	3	4	5		· · · · · · · · · · · · · · · · · · ·	* TOTALS	
NONE		_	_		_				
RESPIRATORY SYSTEM									
Lung	+	+	+	+	+			5	
Nose	+	+	+	+	+			5	
SPECIAL SENSES SYSTEM									
NONE									
URINARY SYSTEM									
NONE									
SYSTEMIC LESIONS									
Multiple Organ	+	+	+	+	+			5	

Experiment Number: 60311 - 01	P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)	Date Report Requested: 09/13/2016
Test Type: 14-DAY	Cobalt	Time Report Requested: 11:25:33
Route: RESPIRATORY EXPOSURE WHOLE BODY	CAS Number: 7440-48-4	First Dose M/F: 08/02/04 / 08/02/04
Species/Strain: RATS/F 344/N		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	
5 MG/M3 ANIMAL ID	0 0 4 0 1	0 0 4 0 2	0 0 4 0 3	0 0 4 0 4	0 0 4 0 5	* TOTALS

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

 * .. Total animals with tissue examined microscopically; Total animals with tumor

+ $\hfill .$ Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

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

Experiment Number: 60311 - 01 Test Type: 14-DAY Route: RESPIRATORY EXPOSURE WHOLE BODY Species/Strain: RATS/F 344/N	I	P17:	NEC	OPL#	Date Report Requested: Time Report Requested: First Dose M/F: 08/02/04 Lab: BNW	11:25:33	
DAY ON TEST	0 0 1 6	0 0 1 6	0 0 1 6	0 0 1 6			
5 MG/M3 ANIMAL ID	0 0 4 0 1	0 0 4 0 2	0 0 4 0 3	0 0 4 0 4		*	TOTALS
NONE		1		1			
RESPIRATORY SYSTEM							
Lung	+	+	+	+			5
Nose	+	+	+	+			5
SPECIAL SENSES SYSTEM NONE							
URINARY SYSTEM				-			
NONE							
SYSTEMIC LESIONS							
Multiple Organ	+	+	+	+			5

Experiment Number: 60311 - 01	P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)	Date Report Requested: 09/13/2016
Test Type: 14-DAY	Cobalt	Time Report Requested: 11:25:33
Route: RESPIRATORY EXPOSURE WHOLE BODY	CAS Number: 7440-48-4	First Dose M/F: 08/02/04 / 08/02/04
Species/Strain: RATS/F 344/N		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	3	* TOTALS

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

Lymph Node, Mediastinal

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor

+

+

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

2

Experiment Number: 60311 - 01 Test Type: 14-DAY Route: RESPIRATORY EXPOSURE WHOLE BODY Species/Strain: RATS/F 344/N		P17:	: NE(OPL	SMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED) Cobalt CAS Number: 7440-48-4	Date Report Requested: 09/13/2016 Time Report Requested: 11:25:33 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		
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	
Brain	+	+	+	+	+	5	
RESPIRATORY SYSTEM							
Lung	+	+	+	+	+	5	
Nose	+	+	+	+	+	5	
SPECIAL SENSES SYSTEM							
NONE							
URINARY SYSTEM							
Urinary Bladder	+	+	+	+	+	5	
SYSTEMIC LESIONS							
Multiple Organ	+	+	+	+	+	5	

Experiment Number: 60311 - 01		P17	: NE	OPL	ASM			
Test Type: 14-DAY Route: RESPIRATORY EXPOSURE WHOLE BODY Species/Strain: RATS/F 344/N						Cobalt CAS Number: 7440-48-4	Time Report Requested: 11:25:33 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 5	0 0 0 9	0 0 1 3			
20 MG/M3 ANIMAL ID	0 0 8 0 1	0 0 8 0 2	0 0 8 0 4	0 0 8 0 3	0 0 8 0 5			* TOTALS
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								
NERVOUS SYSTEM								
* Total animals with tissue examined mice	roscoj	pically	y; Tot	tal ani	mals	with tumor M Missing	issue	

I .. Insufficient tissue

A .. Autolysis precludes evaluation BLANK .. Not examined microscopically

Experiment Number: 60311 - 01 Test Type: 14-DAY Route: RESPIRATORY EXPOSURE WHOLE BODY Species/Strain: RATS/F 344/N		P17:	NE	OPL/	SMS BY IND	Time Report Requ	Date Report Requested: 09/13/2016 Time Report Requested: 11:25:33 First Dose M/F: 08/02/04 / 08/02/04 Lab: BNW	
DAY ON TEST	0 0 0 5	0 0 0 5	0 0 0 5	0 0 0 9	0 0 1 3			
20 MG/M3 ANIMAL ID	0 0 8 0 1	0 0 8 0 2	0 0 8 0 4	0 0 8 0 3	0 0 8 0 5			* TOTALS
Brain	+	+	+	+	+			5
RESPIRATORY SYSTEM								
Lung	+	+	+	+	+			5
Nose	+	+	+	+	+		,	5
SPECIAL SENSES SYSTEM								
NONE			_	_				
URINARY SYSTEM								
Kidney	+	+	+	+	+			5
Urinary Bladder	+	+	+	+	+			5
SYSTEMIC LESIONS								
Multiple Organ	+	+	+	+	+			5

Experiment Number: 60311 - 01 Test Type: 14-DAY Route: RESPIRATORY EXPOSURE WHOLE BODY Species/Strain: RATS/F 344/N	Cobalt Time CAS Number: 7440-48-4 First	Date Report Requested: 09/13/2016 Time Report Requested: 11:25:33 First Dose M/F: 08/02/04 / 08/02/04 Lab: BNW	
DAY ON TEST FISCHER 344 RATS MALE	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 5 6 6 7 7		
40 MG/M3 ANIMAL ID	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	* TOTALS	
ALIMENTARY SYSTEM			
Liver	+ + + + +	5	
CARDIOVASCULAR SYSTEM			
NONE			
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			
MUSCULOSKELETAL SYSTEM			

NONE

 * .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

Experiment Number: 60311 - 01 Test Type: 14-DAY Route: RESPIRATORY EXPOSURE WHOLE BODY Species/Strain: RATS/F 344/N	P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED) Cobalt CAS Number: 7440-48-4	Date Report Requested: 09/13/2016 Time Report Requested: 11:25:33 First Dose M/F: 08/02/04 / 08/02/04 Lab: BNW	
DAY ON TEST	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 5 6 6 7 7		
40 MG/M3 ANIMAL ID	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	* 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	

*** END OF MALE DATA ***

- X .. Lesion present
- I .. Insufficient tissue

Experiment Number: 60311 - 01		P17	: NE	OPL	ASM				
Test Type: 14-DAY Route: RESPIRATORY EXPOSURE WHOLE BODY Species/Strain: RATS/F 344/N						Cobalt CAS Number: 7440-48-4	Time Report Requested: 11:25:33 First Dose M/F: 08/02/04 / 08/02/04 Lab: BNW		
DAY ON TEST	0011	001	001	001	001				
CONTROL	6 0 1 0	6 0 1 0 2	6 0 1 0 3	6 0 1 0 4	6 0 1 0 5			* TOTALS	
ALIMENTARY SYSTEM	<u> </u>			<u> </u>		I		TUTALS	
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									
NERVOUS SYSTEM									
* Total animals with tissue examined micr + Tissue examined microscopically X Lesion present	rosco	pically	y; Tot	tal ani	mals	A Autolysis	issue precludes evaluation nined microscopically		

ł	 Tissue	examined	microscopically	

X .. Lesion present

Experiment Number: 60311 - 01 Test Type: 14-DAY Route: RESPIRATORY EXPOSURE WHOLE BODY Species/Strain: RATS/F 344/N	Ρ	17:	NE	OPL/	ASM	S BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED) Cobalt CAS Number: 7440-48-4	Date Report Requested: 09/13/2016 Time Report Requested: 11:25:33 First Dose M/F: 08/02/04 / 08/02/04 Lab: BNW	
DAY ON TEST FISCHER 344 RATS FEMALE	1	0 0 1	0 0 1	0 0 1	0 0 1			
CONTROL	6 0 1 0 1	6 0 1 0 2	6 0 1 0 3	6 0 1 0 4	6 0 1 0 5			* TOTALS
Brain	+	+	+	+	+			5
RESPIRATORY SYSTEM								
Lung	+	+	+	+	+			5
Nose	+	+	+	+	+			5
SPECIAL SENSES SYSTEM								
URINARY SYSTEM					-			
Kidney	+	+	+	+	+			5
SYSTEMIC LESIONS								
Multiple Organ	+	+	+	+	+			5

Experiment Number: 60311 - 01	P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)	Date Report Requested: 09/13/2016
Test Type: 14-DAY	Cobalt	Time Report Requested: 11:25:33
Route: RESPIRATORY EXPOSURE WHOLE BODY	CAS Number: 7440-48-4	First Dose M/F: 08/02/04 / 08/02/04
Species/Strain: RATS/F 344/N		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	
2.5 MG/M3 ANIMAL ID	0 0 3 0 1	0 0 3 0 2	0 0 3 0 3	0 0 3 0 4	* TOTALS

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

Experiment Number: 60311 - 01 Test Type: 14-DAY Route: RESPIRATORY EXPOSURE WHOLE BODY Species/Strain: RATS/F 344/N	P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED) Cobalt CAS Number: 7440-48-4	Date Report Requested: 09/13/2016 Time Report Requested: 11:25:33 First Dose M/F: 08/02/04 / 08/02/04 Lab: BNW	
DAY ON TEST FISCHER 344 RATS FEMALE	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		
2.5 MG/M3 ANIMAL ID	0 0 0 0 0 0 0 0 0 0 3 3 3 3 3 0 0 0 0 0 1 2 3 4 5	* TOTALS	
NONE			
RESPIRATORY SYSTEM			
Lung	+ + + + +	5	
Nose	+ + + + +	5	
SPECIAL SENSES SYSTEM			
URINARY SYSTEM			
NONE			
SYSTEMIC LESIONS			
Multiple Organ	+ + + + +	5	

Experiment Number: 60311 - 01	P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)	Date Report Requested: 09/13/2016
Test Type: 14-DAY	Cobalt	Time Report Requested: 11:25:33
Route: RESPIRATORY EXPOSURE WHOLE BODY	CAS Number: 7440-48-4	First Dose M/F: 08/02/04 / 08/02/04
Species/Strain: RATS/F 344/N		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	
5 MG/M3 ANIMAL 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

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

Lymph Node

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor

+

+ .. Tissue examined microscopically

X .. Lesion present

I .. Insufficient tissue

1

Experiment Number: 60311 - 01 Test Type: 14-DAY Route: RESPIRATORY EXPOSURE WHOLE BODY Species/Strain: RATS/F 344/N	217: NEOPLASMS BY INDIVIDUA CAS I	Date Report Requested: 09/13/2016 Time Report Requested: 11:25:33 First Dose M/F: 08/02/04 / 08/02/04 Lab: BNW	
DAY ON TEST FISCHER 344 RATS FEMALE	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		
5 MG/M3 ANIMAL ID	0 0 0 0 0 0 0 0 0 5 5 5 5 0 0 0 0 2 3 4 5		* TOTALS
NONE			TOTALO
RESPIRATORY SYSTEM			
Lung	+ + + +		5
Nose	+ + + +		5
SPECIAL SENSES SYSTEM			
NONE			
URINARY SYSTEM			
NONE			
SYSTEMIC LESIONS			
Multiple Organ	+ + + +		5

Experiment Number: 60311 - 01	P17: NEOPLASMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)	Date Report Requested: 09/13/2016
Test Type: 14-DAY	Cobalt	Time Report Requested: 11:25:33
Route: RESPIRATORY EXPOSURE WHOLE BODY	CAS Number: 7440-48-4	First Dose M/F: 08/02/04 / 08/02/04
Species/Strain: RATS/F 344/N		Lab: BNW

DAY ON TEST FISCHER 344 RATS FEMALE	0 0 0 0 1 1 6 6	
10 MG/M3 ANIMAL ID	0 0 0 0 7 7 0 0 4 5	

NONE

CARDIOVASCULAR SYSTEM

NONE

ENDOCRINE SYSTEM

NONE

GENERAL BODY SYSTEM

NONE

GENITAL SYSTEM

NONE

HEMATOPOIETIC SYSTEM

NONE

INTEGUMENTARY SYSTEM

NONE

MUSCULOSKELETAL SYSTEM

NONE

NERVOUS SYSTEM

* .. Total animals with tissue examined microscopically; Total animals with tumor

+ .. Tissue examined microscopically

X .. Lesion present

Experiment Number: 60311 - 01 Test Type: 14-DAY Route: RESPIRATORY EXPOSURE WHOLE BODY Species/Strain: RATS/F 344/N		P17:	NE	OPL	ASM:	S BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED) Cobalt CAS Number: 7440-48-4	Date Report Requested: 09/13/2016 Time Report Requested: 11:25:33 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			
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			* TOTALS
Brain	+	+	+	+	+			5
RESPIRATORY SYSTEM					-			
Lung	+	+	+	+	+			5
Nose	+	+	+	+	+			5
SPECIAL SENSES SYSTEM								
NONE							······	
URINARY SYSTEM								
NONE								
SYSTEMIC LESIONS								
Multiple Organ	+	+	+	+	+			5

Experiment Number: 60311 - 01		P17	: NE	OPL	ASM	S BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED)	Date Report Requested: 09/13/2016	
Test Type: 14-DAY Route: RESPIRATORY EXPOSURE WHOLE BODY Species/Strain: RATS/F 344/N						Cobalt CAS Number: 7440-48-4	Time Report Requested: 11:25:33 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 0 7	0 0 1 3	0 0 1 6	0 0 1 6			
20 MG/M3 ANIMAL ID	0 0 9 0 1	0 0 9 0 4	0 0 9 0 5	0 0 9 0 2	0 0 9 0 3			* TOTALS
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					<u>.</u>			
NERVOUS SYSTEM								
* Total animals with tissue examined mice + Tissue examined microscopically	rosco	picall	y; Tot	tal ani	imals		tissue s precludes evaluation	

+ Tissue	examined	microso	copically
X Lesion	present		

BLANK .. Not examined microscopically

Experiment Number: 60311 - 01 Test Type: 14-DAY Route: RESPIRATORY EXPOSURE WHOLE BODY Species/Strain: RATS/F 344/N		P17:	NE	OPL	ASM	S BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED) Cobalt CAS Number: 7440-48-4	Date Report Requested: 09/13/2016 Time Report Requested: 11:25:33 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 0 7	0 0 1 3	0 0 1 6	0 0 1 6			
20 MG/M3 ANIMAL ID	0 0 9 0 1	0 0 9 0 4	0 0 9 0 5	0 0 9 0 2	0 0 9 0 3		*	TOTALS
Brain	+	+	+	+	+			5
RESPIRATORY SYSTEM								
Lung	+	+	+	+	+			5
Nose	+	+	+	+	+			5
SPECIAL SENSES SYSTEM								
NONE			-		-			
URINARY SYSTEM								
Kidney	+	+	+	+	+			5
SYSTEMIC LESIONS								
Multiple Organ	+	+	+	+	+			5

Experiment Number: 60311 - 01		P17	: NE	OPL	ASM		Date Report Requested: 09/13/2016		
Test Type: 14-DAY Route: RESPIRATORY EXPOSURE WHOLE BODY Species/Strain: RATS/F 344/N						Cobalt CAS Number: 7440-48-4		Time Report Requested: 11:25:33 First Dose M/F: 08/02/04 / 08/02/04 Lab: BNW	
DAY ON TES	ST 0 0 0 5	0	0 0 0 6	0 0 0 6	0 0 0 7				
40 MG/M3 ANIMAL	ID 0 1 1 0 2	0 1 1 0 1	0 1 1 0 3	0 1 1 0 4	0 1 1 0 5			* TOTALS	
ALIMENTARY SYSTEM									
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									
NERVOUS SYSTEM									
* Total animals with tissue examined + Tissue examined microscopically	microscc	picall	y; Tot	tal ani	mals	with tumor M Missing A Autolysis	tissue s precludes evaluation		

+ Tissue examined microscopically

X .. Lesion present

A .. Autolysis precludes evaluation BLANK .. Not examined microscopically

Experiment Number: 60311 - 01 Test Type: 14-DAY Route: RESPIRATORY EXPOSURE WHOLE BODY Species/Strain: RATS/F 344/N		P17:	NE(OPL#	SMS BY INDIVIDUAL ANIMAL (SYSTEMIC LESIONS ABRIDGED) Cobalt CAS Number: 7440-48-4	Date Report Requested: 09/13/2016 Time Report Requested: 11:25:33 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 0 6	0 0 0 6	0 0 0 6	0 0 0 7		
40 MG/M3 ANIMAL ID	0 1 1 0 2	0 1 1 0 1	0 1 1 0 3	0 1 1 0 4	0 1 1 0 5	* TOTALS	
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 ***

X .. Lesion present