

ROYAL OAK MINES INC.
NWT DIVISION - GIANT MINE

ANNUAL AIR SAMPLING REPORT: 1996

STATION		JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	AVERAGE
Roaster Filter Floor	Total Resp													
	Dust - mg/m ³			0.32			0.54			0.60			0.48	0.49
	As - ug/m ³			18.47			18.36			19.80			21.00	19.41
Roaster Control Room	Total Resp													
	Dust - mg/m ³			0.16			0.12			0.14			0.18	0.15
	As - ug/m ³			7.30			6.00			9.50			9.20	8.00
Roaster Top Floor	Total Resp													
	Dust - mg/m ³			0.29			0.36			0.31			0.48	0.36
	As - ug/m ³			30.90			28.00			26.20			27.50	28.15
Cottrell Top Floor	Total Resp													
	Dust - mg/m ³			0.53			0.47			0.44			0.46	0.48
	As - ug/m ³			27.16			28.11			24.50			22.10	25.47
Cottrell Bottom Floor	Total Resp													
	Dust - mg/m ³			0.56			0.40			0.52			0.36	0.46
	As - ug/m ³			28.80			18.35			20.00			19.26	21.60
Cottrell Control Room	Total Resp													
	Dust - mg/m ³			0.21			0.14			0.10			0.12	0.14
	As - ug/m ³			5.56			6.18			5.80			5.35	5.72
Baghouse Bottom Floor	Total Resp													
	Dust - mg/m ³			0.55			0.48			0.36			0.38	0.44
	As - ug/m ³			19.70			16.36			15.00			17.00	17.02
Baghouse Top Floor	Total Resp													
	Dust - mg/m ³			0.25			0.17			0.19			0.29	0.23
	As - ug/m ³			24.04			19.45			17.40			18.90	19.95
Refinery Furnace	Total Resp													
	Dust - mg/m ³	1.00	0.89	1.09	1.14	1.26	1.10	1.32	1.20	1.80	1.40	1.84	1.20	1.27
	As - ug/m ³	34.65	31.88	35.58	37.3	38.12	37.45	38.00	37.24	39.44	35.86	31.88	36.00	36.12
Refinery Control Room	Total Resp													
	Dust - mg/m ³	0.11	0.26	0.15	0.20	0.26	0.23	0.34	0.18	0.14	0.12	0.4	0.10	0.21
	As - ug/m ³	7.25	8.00	6.01	6.50	7.10	6.90	7.15	6.00	5.40	5.00	8.4	5.30	6.58
Carbon Plant	Total Resp													
	Dust - mg/m ³			0.25			0.20			0.30			0.22	0.24
	As - ug/m ³			21.44			18.01			21.00			17.05	19.38

Threshold Limit Values:

Total Arsenic - 50 micrograms per cubic meter
Respirable Dust - 5.0 milligrams per cubic meter

AIR SAMPLING REPORT CONT'D.

STATION		JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	AVERAGE
Jaw Crusher	Total Resp													
	Dust - mg/m ³		0.99			1.20			1.09			1.23		1.15
	Silica - ug/m ³													
Cone Crusher	Total Resp													
	Dust - mg/m ³		1.18			1.26			1.30			1.25		1.25
	Silica - ug/m ³													
Screen Floor	Total Resp													
	Dust - mg/m ³		0.84			0.94			1.00			1.11		1.00
	Silica - ug/m ³													
Top of Ore Bins	Total Resp													
	Dust - mg/m ³		0.52			0.99			1.44			0.97		0.96
	Silica - ug/m ³													
Crusher Setting Room	Total Resp													
	Dust - mg/m ³		0.15			0.12			0.18			0.14		0.15
	Silica - ug/m ³													
Crusher Control Room	Total Resp													
	Dust - mg/m ³		0.13			0.18			0.20			0.15		0.16
	Silica - ug/m ³													
Under Ore Bins	Total Resp													
	Dust - mg/m ³	0.41			0.35			0.39			0.18			0.33
#2 Ball Mill	Total Resp													
	Dust - mg/m ³	0.25			0.29			0.22			0.15			0.23
Flotation Bench	Total Resp													
	Dust - mg/m ³	0.23			0.18			0.14			0.10			0.16
Solutions Desk	Total Resp													
	Dust - mg/m ³	0.26			0.15			0.12			0.10			0.16
Cyanide Mix Area	Total Resp													
	Dust - mg/m ³	0.38			0.60			0.54			0.42			0.49

Threshold Limit Values: Respirable Dust - 5.0 milligrams per cubic meter

ROYAL OAK MINES INC.
NWT Division - Giant Mine

AIR SAMPLING REPORT, 1996

Station		January	February	March	April	May	June	July	August	September	October	November	December	Average
Roaster Filter Floor	Total/Resp			Resp			Resp			Resp			Resp	
	Dust - mg/m ³			0.71			0.78			0.64			0.50	
	As - mg/m ³			16.90			15.85			17.10			14.00	
Roaster Ctrl Rm	Total/Resp			Resp			Resp			Resp			Resp	
	Dust - mg/m ³			0.18			0.23			0.15			0.20	
	As - mg/m ³			6.50			7.00			7.15			6.40	
Roaster Top Floor	Total/Resp			Resp			Resp			Resp			Resp	
	Dust - mg/m ³			1.50			1.38			1.45			1.25	
	As - mg/m ³			22.0			18.45			20.5			19.00	
Cottrell Top Floor	Total/Resp			Resp			Resp			Resp			Resp	
	Dust - mg/m ³			1.30			1.55			1.26			1.05	
	As - mg/m ³			27.0			25.00			24.90			22.00	
Cottrell Bottom Flr	Total/Resp			Resp			Resp			Resp			Resp	
	Dust - mg/m ³			0.96			1.16			1.23			1.30	
	As - mg/m ³			23.0			21.9			24.50			25.0	
Cottrell Ctrl Rm	Total/Resp			Resp			Resp			Resp			Resp	
	Dust - mg/m ³			0.10			0.18			0.22			0.15	
	As - mg/m ³			4.0			4.85			5.45			4.90	
Baghouse Bottom Flr	Total/Resp			Resp			Resp			Resp			Resp	
	Dust - mg/m ³			1.60			1.38			1.28			1.30	
	As - mg/m ³			20.95			21.0			19.95			22.0	
Baghouse Top Floor	Total/Resp			Resp			Resp			Resp			Resp	
	Dust - mg/m ³			1.70			1.78			1.58			1.44	
	As - mg/m ³			21.45			22.0			20.85			20.0	
Refinery Furnace	Total/Resp	Resp	Resp	Resp	Resp	Resp	Resp	Resp	Resp	Resp	Resp	Resp	Resp	
	Dust - mg/m ³	2.65	2.72	2.50	2.46	2.20	2.30	2.45	2.18	2.26	2.49	2.85	2.12	
	As - mg/m ³	38.40	39.05	37.60	37.80	36.90	37.15	38.00	37.40	37.90	38.18	41.88	36.40	
Refinery Ctrl Rm	Total/Resp	Resp	Resp	Resp	Resp	Resp	Resp	Resp	Resp	Resp	Resp	Resp	Resp	
	Dust - mg/m ³	0.70	0.63	0.55	0.72	0.53	0.75	0.35	0.49	0.70	0.41	0.80	0.38	
	As - mg/m ³	7.05	6.90	6.65	6.88	5.90	6.75	5.50	6.95	6.45	7.11	8.40	7.00	
Carbon Plant	Total/Resp			Resp			Resp			Resp			Resp	
	Dust - mg/m ³			0.60			0.48			0.71			0.50	
	As - mg/m ³			18.50			17.12			16.90			12.30	

Threshold Limit Values: Total Arsenic = 50 micrograms per cubic meter.
Respirable Dust = 5.0 milligrams per cubic meter.

AIR SAMPLING REPORT - 1996

Station		January	February	March	April	May	June	July	August	September	October	November	December	Average
Jaw Crusher	Total/Resp		Resp			Resp			Resp			Resp		2.70
	Dust - mg/m ³		2.98			3.15			2.80			2.10		
	Silica - ug/m ³													
Cone Crusher	Total/Resp		Resp			Resp			Resp			Resp		
	Dust - mg/m ³		3.12			3.00			3.22			2.65		3.0
	Silica - ug/m ³													
Green Floor	Total/Resp		Resp			Resp			Resp			Resp		3.19
	Dust - mg/m ³		3.50			3.12			3.25			2.90		
	Silica - ug/m ³													
Top of Ore Bins	Total/Resp		Resp			Resp			Resp			Resp		2.43
	Dust - mg/m ³		2.55			2.12			2.80			2.24		
	Silica - ug/m ³													
Crusher Setting Rm	Total/Resp		Resp			Resp			Resp			Resp		.5
	Dust - mg/m ³		0.48			0.60			0.52			0.40		
	Silica - ug/m ³													
Crusher Ctrl Rm	Total/Resp		Resp			Resp			Resp			Resp		.98
	Dust - mg/m ³		0.52			0.58			0.46			0.35		
	Silica - ug/m ³													
Under Ore Bins	Total/Resp	Resp			Resp			Resp			Resp			2.33
	Dust - mg/m ³	1.05			0.98			1.13			1.23			
#2 Ball Mill	Total/Resp	Resp			Resp			Resp			Resp			1.12
	Dust - mg/m ³	0.86			0.90			0.70			0.95			
Rotation Bench	Total/Resp	Resp			Resp			Resp			Resp			.78
	Dust - mg/m ³	0.28			0.20			0.18			0.13			
Solutions Desk	Total/Resp	Resp			Resp			Resp			Resp			.15
	Dust - mg/m ³	0.34			0.24			0.26			0.15			
Cyanide Mix Area	Total/Resp	Resp			Resp			Resp			Resp			1.46
	Dust - mg/m ³	1.38			1.42			1.55			1.48			

Threshold Limit Values: Respirable Dust = 5.0 milligrams per cubic meter.

ROYAL OAK MINES INC.
NWT DIVISION - GIANT MINE

ANNUAL AIR SAMPLING REPORT: 1T: 1996

STATION		JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	AVERAGE
Roaster Filter Floor	Total Resp													
	Dust - mg/m ³			0.32			0.54			0.60			0.48	0.49
	As - ug/m ³			18.47			18.36			19.80			21.00	19.41
Roaster Control Room	Total Resp													
	Dust - mg/m ³			0.16			0.12			0.14			0.18	0.15
	As - ug/m ³			7.30			6.00			9.50			9.20	8.00
Roaster Top Floor	Total Resp													
	Dust - mg/m ³			0.29			0.36			0.31			0.48	0.36
	As - ug/m ³			30.90			28.00			26.20			27.50	28.15
Cottrell Top Floor	Total Resp													
	Dust - mg/m ³			0.53			0.47			0.44			0.46	0.48
	As - ug/m ³			27.16			28.11			24.50			22.10	25.47
Cottrell Bottom Floor	Total Resp													
	Dust - mg/m ³			0.56			0.40			0.52			0.36	0.46
	As - ug/m ³			28.80			18.35			20.00			19.26	21.60
Cottrell Control Room	Total Resp													
	Dust - mg/m ³			0.21			0.14			0.10			0.12	0.14
	As - ug/m ³			5.56			6.18			5.80			5.35	5.72
Baghouse Bottom Floor	Total Resp													
	Dust - mg/m ³			0.55			0.48			0.36			0.38	0.44
	As - ug/m ³			19.70			16.36			15.00			17.00	17.02
Baghouse Top Floor	Total Resp													
	Dust - mg/m ³			0.25			0.17			0.19			0.29	0.23
	As - ug/m ³			24.04			19.45			17.40			18.90	19.95
Refinery Furnace	Total Resp													
	Dust - mg/m ³	1.00	0.89	1.09	1.14	1.26	1.10	1.32	1.20	1.80	1.40		1.20	1.22
	As - ug/m ³	34.65	31.88	35.58	37.3	38.12	37.45	38.00	37.24	39.44	35.86		36.00	36.50
Refinery Control Room	Total Resp													
	Dust - mg/m ³	0.11	0.26	0.15	0.20	0.26	0.23	0.34	0.18	0.14	0.12		0.10	0.19
	As - ug/m ³	7.25	8.00	6.01	6.50	7.10	6.90	7.15	6.00	5.40	5.00		5.30	6.42
Carbon Plant	Total Resp													
	Dust - mg/m ³			0.25			0.20			0.30			0.22	0.24
	As - ug/m ³			21.44			18.01			21.00			17.05	19.38

Threshold Limit Values: Total Arsenic - 50 micrograms per cubic meter
Respirable Dust - 5.0 milligrams per cubic meter

ROYAL OAK MINES INC.
NWT DIVISION - GIANT MINE

ANNUAL AIR SAMPLING REPORT: 1ST: 1996

STATION		JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	AVERAGE
Roaster Filter Floor	Total Resp													
	Dust - mg/m ³			0.32			0.54			0.60			0.48	0.49
	As - ug/m ³			18.47			18.36			19.80			21.00	19.41
Roaster Control Room	Total Resp													
	Dust - mg/m ³			0.16			0.12			0.14			0.18	0.15
	As - ug/m ³			7.30			6.00			9.50			9.20	8.00
Roaster Top Floor	Total Resp													
	Dust - mg/m ³			0.29			0.36			0.31			0.48	0.36
	As - ug/m ³			30.90			28.00			26.20			27.50	28.15
Cottrell Top Floor	Total Resp													
	Dust - mg/m ³			0.53			0.47			0.44			0.46	0.48
	As - ug/m ³			27.16			28.11			24.50			22.10	25.47
Cottrell Bottom Floor	Total Resp													
	Dust - mg/m ³			0.56			0.40			0.52			0.36	0.46
	As - ug/m ³			28.80			18.35			20.00			19.26	21.60
Cottrell Control Room	Total Resp													
	Dust - mg/m ³			0.21			0.14			0.10			0.12	0.14
	As - ug/m ³			5.56			6.18			5.80			5.35	5.72
Baghouse Bottom Floor	Total Resp													
	Dust - mg/m ³			0.55			0.48			0.36			0.38	0.44
	As - ug/m ³			19.70			16.36			15.00			17.00	17.02
Baghouse Top Floor	Total Resp													
	Dust - mg/m ³			0.25			0.17			0.19			0.29	0.23
	As - ug/m ³			24.04			19.45			17.40			18.90	19.95
Refinery Furnace	Total Resp													
	Dust - mg/m ³	1.00	0.89	1.09	1.14	1.26	1.10	1.32	1.20	1.80	1.40		1.20	1.22
	As - ug/m ³	34.65	31.88	35.58	37.3	38.12	37.45	38.00	37.24	39.44	35.86		36.00	36.50
Refinery Control Room	Total Resp													
	Dust - mg/m ³	0.11	0.26	0.15	0.20	0.26	0.23	0.34	0.18	0.14	0.12		0.10	0.19
	As - ug/m ³	7.25	8.00	6.01	6.50	7.10	6.90	7.15	6.00	5.40	5.00		5.30	6.42
Carbon Plant	Total Resp													
	Dust - mg/m ³			0.25			0.20			0.30			0.22	0.24
	As - ug/m ³			21.44			18.01			21.00			17.05	19.38

Threshold Limit Values:

Total Arsenic - 50 micrograms per cubic meter
Respirable Dust - 5.0 milligrams per cubic meter

**ROYAL OAK MINES INC.
NWT DIVISION - GIANT MINE**

ANNUAL AIR SAMPLING REPORT: 1: 1996

STATION		JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	AVERAGE
Roaster Filter Floor	Total Resp													
	Dust - mg/m ³			0.32			0.54			0.60			0.48	0.49
	As - ug/m ³			18.47			18.36			19.80			21.00	19.41
Roaster Control Room	Total Resp													
	Dust - mg/m ³			0.16			0.12			0.14			0.18	0.15
	As - ug/m ³			7.30			6.00			9.50			9.20	8.00
Roaster Top Floor	Total Resp													
	Dust - mg/m ³			0.29			0.36			0.31			0.48	0.36
	As - ug/m ³			30.90			28.00			26.20			27.50	28.15
Cottrell Top Floor	Total Resp													
	Dust - mg/m ³			0.53			0.47			0.44			0.46	0.48
	As - ug/m ³			27.16			28.11			24.50			22.10	25.47
Cottrell Bottom Floor	Total Resp													
	Dust - mg/m ³			0.56			0.40			0.52			0.36	0.46
	As - ug/m ³			28.80			18.35			20.00			19.26	21.60
Cottrell Control Room	Total Resp													
	Dust - mg/m ³			0.21			0.14			0.10			0.12	0.14
	As - ug/m ³			5.56			6.18			5.80			5.35	5.72
Baghouse Bottom Floor	Total Resp													
	Dust - mg/m ³			0.55			0.48			0.36			0.38	0.44
	As - ug/m ³			19.70			16.36			15.00			17.00	17.02
Baghouse Top Floor	Total Resp													
	Dust - mg/m ³			0.25			0.17			0.19			0.29	0.23
	As - ug/m ³			24.04			19.45			17.40			18.90	19.95
Refinery Furnace	Total Resp													
	Dust - mg/m ³	1.00	0.89	1.09	1.14	1.26	1.10	1.32	1.20	1.80	1.40		1.20	1.22
	As - ug/m ³	34.65	31.88	35.58	37.3	38.12	37.45	38.00	37.24	39.44	35.86		36.00	36.50
Refinery Control Room	Total Resp													
	Dust - mg/m ³	0.11	0.26	0.15	0.20	0.26	0.23	0.34	0.18	0.14	0.12		0.10	0.19
	As - ug/m ³	7.25	8.00	6.01	6.50	7.10	6.90	7.15	6.00	5.40	5.00		5.30	6.42
Carbon Plant	Total Resp													
	Dust - mg/m ³			0.25			0.20			0.30			0.22	0.24
	As - ug/m ³			21.44			18.01			21.00			17.05	19.38

Threshold Limit Values:

Total Arsenic - 50 micrograms per cubic meter
Respirable Dust - 5.0 milligrams per cubic meter

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NWT DIVISION - GIANT MINE

ANNUAL AIR SAMPLING REPORT: 1: 1996

STATION		JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	AVERAGE
Roaster Filter Floor	Total Resp													
	Dust - mg/m ³			0.32			0.54			0.60			0.48	0.49
	As - ug/m ³			18.47			18.36			19.80			21.00	19.41
Roaster Control Room	Total Resp													
	Dust - mg/m ³			0.16			0.12			0.14			0.18	0.15
	As - ug/m ³			7.30			6.00			9.50			9.20	8.00
Roaster Top Floor	Total Resp													
	Dust - mg/m ³			0.29			0.36			0.31			0.48	0.36
	As - ug/m ³			30.90			28.00			26.20			27.50	28.15
Cottrell Top Floor	Total Resp													
	Dust - mg/m ³			0.53			0.47			0.44			0.46	0.48
	As - ug/m ³			27.16			28.11			24.50			22.10	25.47
Cottrell Bottom Floor	Total Resp													
	Dust - mg/m ³			0.56			0.40			0.52			0.36	0.46
	As - ug/m ³			28.80			18.35			20.00			19.26	21.60
Cottrell Control Room	Total Resp													
	Dust - mg/m ³			0.21			0.14			0.10			0.12	0.14
	As - ug/m ³			5.56			6.18			5.80			5.35	5.72
Baghouse Bottom Floor	Total Resp													
	Dust - mg/m ³			0.55			0.48			0.36			0.38	0.44
	As - ug/m ³			19.70			16.36			15.00			17.00	17.02
Baghouse Top Floor	Total Resp													
	Dust - mg/m ³			0.25			0.17			0.19			0.29	0.23
	As - ug/m ³			24.04			19.45			17.40			18.90	19.95
Refinery Furnace	Total Resp													
	Dust - mg/m ³	1.00	0.89	1.09	1.14	1.26	1.10	1.32	1.20	1.80	1.40		1.20	1.22
	As - ug/m ³	34.65	31.88	35.58	37.3	38.12	37.45	38.00	37.24	39.44	35.86		36.00	36.50
Refinery Control Room	Total Resp													
	Dust - mg/m ³	0.11	0.26	0.15	0.20	0.26	0.23	0.34	0.18	0.14	0.12		0.10	0.19
	As - ug/m ³	7.25	8.00	6.01	6.50	7.10	6.90	7.15	6.00	5.40	5.00		5.30	6.42
Carbon Plant	Total Resp													
	Dust - mg/m ³			0.25			0.20			0.30			0.22	0.24
	As - ug/m ³			21.44			18.01			21.00			17.05	19.38

Threshold Limit Values:

Total Arsenic - 50 micrograms per cubic meter
Respirable Dust - 5.0 milligrams per cubic meter

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NWT DIVISION - GIANT MINE

ANNUAL AIR SAMPLING REPORT: 1996

STATION		JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	AVERAGE
Roaster Filter Floor	Total Resp													
	Dust - mg/m			0.32			0.64			0.60			0.48	0.49
	As - ug/m			18.47			18.36			19.80			21.00	19.61
Roaster Control Room	Total Resp													
	Dust - mg/m			0.16			0.12			0.14			0.18	0.15
	As - ug/m			7.30			6.00			9.50			9.20	8.00
Roaster Top Floor	Total Resp													
	Dust - mg/m			0.29			0.36			0.31			0.48	0.36
	As - ug/m			30.90			28.00			26.20			27.50	28.15
Cottrell Top Floor	Total Resp													
	Dust - mg/m			0.63			0.47			0.44			0.46	0.48
	As - ug/m			27.16			28.11			24.50			22.10	25.47
Cottrell Bottom Floor	Total Resp													
	Dust - mg/m			0.66			0.40			0.62			0.36	0.46
	As - ug/m			28.80			18.35			20.00			19.26	21.60
Cottrell Control Room	Total Resp													
	Dust - mg/m			0.21			0.14			0.10			0.12	0.14
	As - ug/m			5.68			6.18			5.80			6.36	5.72
Baghouse Bottom Floor	Total Resp													
	Dust - mg/m			0.65			0.46			0.36			0.38	0.44
	As - ug/m			19.70			16.36			15.00			17.00	17.02
Baghouse Top Floor	Total Resp													
	Dust - mg/m			0.26			0.17			0.19			0.29	0.28
	As - ug/m			24.04			19.46			17.40			18.90	19.95
Refinery Furnace	Total Resp													
	Dust - mg/m	1.00	0.89	1.09	1.14	1.28	1.10	1.32	1.20	1.80	1.40		1.20	1.22
	As - ug/m	34.65	31.88	35.63	37.9	38.12	37.45	38.00	37.24	55.44	35.48		35.00	36.50
Refinery Control Room	Total Resp													
	Dust - mg/m	0.11	0.28	0.15	0.20	0.26	0.23	0.34	0.18	0.14	0.12		0.10	0.19
	As - ug/m	7.25	8.00	6.01	6.50	7.10	6.90	7.15	6.00	6.40	6.00		6.30	6.46
Carbon Plant	Total Resp													
	Dust - mg/m			0.25			0.20			0.30			0.22	0.23
	As - ug/m			21.44			18.01			21.00			17.05	18.85

Threshold Limit Values: Total Arsenic - 50 micrograms per cubic meter
Respirable Dust - 5.0 milligrams per cubic meter

AIR SAMPLING REPORT CONTD.

STATION		JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	AVERAGE
Wood Pile	Total Resp													
	Dust - mg/m		0.82			1.11			1.20				1.01	1.08
	Silica - ug/m													
Jaw Crusher	Total Resp													
	Dust - mg/m		0.99			1.20			1.09				1.23	1.10
	Silica - ug/m													
Cone Crusher	Total Resp													
	Dust - mg/m		1.18			1.28			1.30				1.25	1.27
	Silica - ug/m													
Screen Floor	Total Resp													
	Dust - mg/m		0.84			0.94			1.00				1.11	0.97
	Silica - ug/m													
Top of Ore Bin	Total Resp													
	Dust - mg/m		0.62			0.99			1.44				0.89	0.96
	Silica - ug/m													
Crusher Setting Room	Total Resp													
	Dust - mg/m		0.15			0.12			0.18				0.14	0.15
	Silica - ug/m													
Crusher Control Room	Total Resp													
	Dust - mg/m		0.19			0.16			0.11				0.16	0.15
	Silica - ug/m													
Under Ore Bin	Total Resp													
	Dust - mg/m	0.41			0.35			0.39			0.18			0.30
	Silica - ug/m													
#2 Ball Mill	Total Resp													
	Dust - mg/m	0.25			0.29			0.22			0.15			0.23
	Silica - ug/m													
Flotation Bench	Total Resp													
	Dust - mg/m	0.23			0.18			0.14			0.10			0.16
	Silica - ug/m													
Sulfuric Acid	Total Resp													
	Dust - mg/m	0.25			0.15			0.12			0.10			0.15
	Silica - ug/m													
Cyanide Mix Area	Total Resp													
	Dust - mg/m	0.38			0.60			0.64			0.42			0.51
	Silica - ug/m													

Threshold Limit Values: Respirable Dust - 5.0 milligrams per cubic meter

AIR SAMPLING REPORT CONT'D.

STATION		JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Wood Picker	Total Resp												
	Dust - mg/m ³		0.92			1.11			1.20				1.01
	Silica - ug/m ³												
Jaw Crusher	Total Resp												
	Dust - mg/m ³		0.99			1.20			1.09				1.23
	Silica - ug/m ³												
Cone Crusher	Total Resp												
	Dust - mg/m ³		1.18			1.26			1.30				1.25
	Silica - ug/m ³												
Screen Floor	Total Resp												
	Dust - mg/m ³		0.84			0.94			1.00				1.11
	Silica - ug/m ³												
Top of Ore Bins	Total Resp												
	Dust - mg/m ³		0.52			0.99			1.44				0.89
	Silica - ug/m ³												
Crusher Setting Room	Total Resp												
	Dust - mg/m ³		0.15			0.12			0.18				0.14
	Silica - ug/m ³												
Crusher Control Room	Total Resp												
	Dust - mg/m ³		0.13			0.18			0.11				0.16
	Silica - ug/m ³												
Under Ore Bins	Total Resp												
	Dust - mg/m ³	0.41			0.35			0.39			0.18		
#2 Ball Mill	Total Resp												
	Dust - mg/m ³	0.25			0.29			0.22			0.15		
Flotation Bench	Total Resp												
	Dust - mg/m ³	0.23			0.18			0.14			0.10		
Solutions Desk	Total Resp												
	Dust - mg/m ³	0.26			0.15			0.12			0.10		
Cyanide Mix Area	Total Resp												
	Dust - mg/m ³	0.38			0.60			0.54			0.42		

Threshold Limit Values: Respirable Dust - 5.0 milligrams per cubic meter

2 Ave

AIR SAMPLING REPORT CONT'D.

STATION		JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	AVERAGE
Wood Picker	Total Resp													
	Dust - mg/m ³		0.92			1.11			1.20				1.01	1.06
	Silica - ug/m ³													
Jaw Crusher	Total Resp													
	Dust - mg/m ³		0.99			1.20			1.09				1.23	1.13
	Silica - ug/m ³													
Cone Crusher	Total Resp													
	Dust - mg/m ³		1.18			1.26			1.30				1.25	1.25
	Silica - ug/m ³													
Screen Floor	Total Resp													
	Dust - mg/m ³		0.84			0.94			1.00				1.11	0.97
	Silica - ug/m ³													
Top of Ore Bins	Total Resp													
	Dust - mg/m ³		0.52			0.99			1.44				0.89	0.96
	Silica - ug/m ³													
Crusher Setting Room	Total Resp													
	Dust - mg/m ³		0.15			0.12			0.18				0.14	0.15
	Silica - ug/m ³													
Crusher Control Room	Total Resp													
	Dust - mg/m ³		0.13			0.18			0.11				0.16	0.15
	Silica - ug/m ³													
Under Ore Bins	Total Resp													
	Dust - mg/m ³	0.41			0.35			0.39			0.18			0.33
#2 Ball Mill	Total Resp													
	Dust - mg/m ³	0.25			0.29			0.22			0.15			0.23
Flotation Bench	Total Resp													
	Dust - mg/m ³	0.23			0.18			0.14			0.10			0.16
Solutions Desk	Total Resp													
	Dust - mg/m ³	0.26			0.15			0.12			0.10			0.16
Cyanide Mix Area	Total Resp													
	Dust - mg/m ³	0.38			0.60			0.54			0.42			0.49

Threshold Limit Values: Respirable Dust - 5.0 milligrams per cubic meter

AIR SAMPLING REPORT CONT'D.

STATION		JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Wood Picker	Total Resp												
	Dust - mg/m ³		0.92			1.11			1.20				1.01
	Silica - ug/m ³												
Jaw Crusher	Total Resp												
	Dust - mg/m ³		0.99			1.20			1.09			1.23	1.23
	Silica - ug/m ³												
Cone Crusher	Total Resp												
	Dust - mg/m ³		1.18			1.26			1.30			1.25	1.25
	Silica - ug/m ³												
Screen Floor	Total Resp												
	Dust - mg/m ³		0.84			0.94			1.00			1.11	1.11
	Silica - ug/m ³												
Top of Ore Bins	Total Resp												
	Dust - mg/m ³		0.52			0.99			1.44			0.92	0.89
	Silica - ug/m ³												
Crusher Setting Room	Total Resp												
	Dust - mg/m ³		0.15			0.12			0.18			0.14	0.14
	Silica - ug/m ³												
Crusher Control Room	Total Resp												
	Dust - mg/m ³		0.13			0.18			0.20 0.21			0.15	0.16
	Silica - ug/m ³												
Under Ore Bins	Total Resp												
	Dust - mg/m ³	0.41			0.35			0.39			0.18		
#2 Ball Mill	Total Resp												
	Dust - mg/m ³	0.25			0.29			0.22			0.15		
Flotation Bench	Total Resp												
	Dust - mg/m ³	0.23			0.18			0.14			0.10		
Solutions Desk	Total Resp												
	Dust - mg/m ³	0.26			0.15			0.12			0.10		
Cyanide Mix Area	Total Resp												
	Dust - mg/m ³	0.38			0.60			0.54			0.42		

Threshold Limit Values: Respirable Dust - 5.0 milligrams per cubic meter

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ROYAL OAK MINES INC.
NWT DIVISION - GIANT MINE

ANNUAL AIR SAMPLING REPORT: 1996

STATION		JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	AVERAGE
Roaster Filter Floor	Total Resp													
	Dust - mg/m ³			0.32			0.54			0.60			0.48	0.49
	As - ug/m ³			18.47			18.36			19.80			21.00	19.41
Roaster Control Room	Total Resp													
	Dust - mg/m ³			0.16			0.12			0.14			0.18	0.15
	As - ug/m ³			7.30			6.00			9.50			9.20	8.00
Roaster Top Floor	Total Resp													
	Dust - mg/m ³			0.29			0.36			0.31			0.48	0.36
	As - ug/m ³			30.90			28.00			26.20			27.50	28.15
Cottrell Top Floor	Total Resp													
	Dust - mg/m ³			0.53			0.47			0.44			0.46	0.48
	As - ug/m ³			27.16			28.11			24.50			22.10	25.47
Cottrell Bottom Floor	Total Resp													
	Dust - mg/m ³			0.56			0.40			0.52			0.36	0.46
	As - ug/m ³			28.80			18.35			20.00			19.26	21.60
Cottrell Control Room	Total Resp													
	Dust - mg/m ³			0.21			0.14			0.10			0.12	0.14
	As - ug/m ³			5.56			6.18			5.80			5.35	5.72
Baghouse Bottom Floor	Total Resp													
	Dust - mg/m ³			0.55			0.48			0.36			0.38	0.44
	As - ug/m ³			19.70			16.36			15.00			17.00	17.02
Baghouse Top Floor	Total Resp													
	Dust - mg/m ³			0.25			0.17			0.19			0.29	0.23
	As - ug/m ³			24.04			19.45			17.40			18.90	19.95
Refinery Furnace	Total Resp													
	Dust - mg/m ³	1.00	0.89	1.09	1.14	1.26	1.10	1.32	1.20	1.80	1.40	1.84	1.20	1.27
	As - ug/m ³	34.65	31.88	35.58	37.3	38.12	37.45	38.00	37.24	39.44	35.86	31.88	36.00	36.12
Refinery Control Room	Total Resp													
	Dust - mg/m ³	0.11	0.26	0.15	0.20	0.26	0.23	0.34	0.18	0.14	0.12	0.4	0.10	0.21
	As - ug/m ³	7.25	8.00	6.01	6.50	7.10	6.90	7.15	6.00	5.40	5.00	8.4	5.30	6.58
Carbon Plant	Total Resp													
	Dust - mg/m ³			0.25			0.20			0.30			0.22	0.24
	As - ug/m ³			21.44			18.01			21.00			17.05	19.38

Threshold Limit Values: Total Arsenic - 50 micrograms per cubic meter
Respirable Dust - 5.0 milligrams per cubic meter

AIR SAMPLING REPORT CONT'D.

STATION		JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	AVERAGE
Jaw Crusher	Total Resp													
	Dust - mg/m ³		0.99			1.20			1.09			1.23		1.15
	Silica - ug/m ³													
Cone Crusher	Total Resp													
	Dust - mg/m ³		1.18			1.26			1.30			1.25		1.25
	Silica - ug/m ³													
Screen Floor	Total Resp													
	Dust - mg/m ³		0.84			0.94			1.00			1.11		1.00
	Silica - ug/m ³													
Top of Ore Bins	Total Resp													
	Dust - mg/m ³		0.52			0.99			1.44			0.97		0.96
	Silica - ug/m ³													
Crusher Setting Room	Total Resp													
	Dust - mg/m ³		0.15			0.12			0.18			0.14		0.15
	Silica - ug/m ³													
Crusher Control Room	Total Resp													
	Dust - mg/m ³		0.13			0.18			0.20			0.15		0.16
	Silica - ug/m ³													
Under Ore Bins	Total Resp													
	Dust - mg/m ³	0.41			0.35			0.39			0.18			0.33
#2 Ball Mill	Total Resp													
	Dust - mg/m ³	0.25			0.29			0.22			0.15			0.23
Flotation Bench	Total Resp													
	Dust - mg/m ³	0.23			0.18			0.14			0.10			0.16
Solutions Desk	Total Resp													
	Dust - mg/m ³	0.26			0.15			0.12			0.10			0.16
Cyanide Mix Area	Total Resp													
	Dust - mg/m ³	0.38			0.60			0.54			0.42			0.49

Threshold Limit Values: Respirable Dust - 5.0 milligrams per cubic meter

AIR SAMPLING REPORT CONT'D.

STATION		JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	AVERAGE
Jaw Crusher	Total Resp													
	Dust - mg/m ³		0.99			1.20			1.09			1.23	1.23	1.15
	Silica - ug/m ³													
Cone Crusher	Total Resp													
	Dust - mg/m ³		1.18			1.26			1.30			1.25	1.25	1.25
	Silica - ug/m ³													
Screen Floor	Total Resp													
	Dust - mg/m ³		0.84			0.94			1.00			1.11	1.11	1.00
	Silica - ug/m ³													
Top of Ore Bins	Total Resp													
	Dust - mg/m ³		0.52			0.99			1.44			0.97	0.89	0.96
	Silica - ug/m ³													
Crusher Setting Room	Total Resp													
	Dust - mg/m ³		0.15			0.12			0.18			0.14	0.14	0.15
	Silica - ug/m ³													
Crusher Control Room	Total Resp													
	Dust - mg/m ³		0.13			0.18			0.20			0.15	0.16	0.16
	Silica - ug/m ³													
Under Ore Bins	Total Resp													
	Dust - mg/m ³	0.41			0.35			0.39			0.18			0.33
#2 Ball Mill	Total Resp													
	Dust - mg/m ³	0.25			0.29			0.22			0.15			0.23
Flotation Bench	Total Resp													
	Dust - mg/m ³	0.23			0.18			0.14			0.10			0.16
Solutions Desk	Total Resp													
	Dust - mg/m ³	0.26			0.15			0.12			0.10			0.16
Cyanide Mix Area	Total Resp													
	Dust - mg/m ³	0.38			0.60			0.54			0.42			0.49

Threshold Limit Values: Respirable Dust - 5.0 milligrams per cubic meter

ROYAL OAK MINES INC.
NWT DIVISION - GIANT MINE

ANNUAL AIR SAMPLING REPORT: 1996

STATION		JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	AVERAGE
Roaster Filter Floor	Total Resp													
	Dust - mg/m ³			0.32			0.54			0.60			0.48	0.49
	As - ug/m ³			18.47			18.36			19.80			21.00	19.41
Roaster Control Room	Total Resp													
	Dust - mg/m ³			0.16			0.12			0.14			0.18	0.15
	As - ug/m ³			7.30			6.00			9.50			9.20	8.00
Roaster Top Floor	Total Resp													
	Dust - mg/m ³			0.29			0.36			0.31			0.48	0.36
	As - ug/m ³			30.90			28.00			26.20			27.50	28.15
Cottrell Top Floor	Total Resp													
	Dust - mg/m ³			0.53			0.47			0.44			0.46	0.48
	As - ug/m ³			27.16			28.11			24.50			22.10	25.47
Cottrell Bottom Floor	Total Resp													
	Dust - mg/m ³			0.56			0.40			0.52			0.36	0.46
	As - ug/m ³			28.80			18.35			20.00			19.26	21.60
Cottrell Control Room	Total Resp													
	Dust - mg/m ³			0.21			0.14			0.10			0.12	0.14
	As - ug/m ³			5.56			6.18			5.80			5.35	5.72
Baghouse Bottom Floor	Total Resp													
	Dust - mg/m ³			0.55			0.48			0.36			0.38	0.44
	As - ug/m ³			19.70			16.36			15.00			17.00	17.02
Baghouse Top Floor	Total Resp													
	Dust - mg/m ³			0.25			0.17			0.19			0.29	0.23
	As - ug/m ³			24.04			19.45			17.40			18.90	19.95
Refinery Furnace	Total Resp													
	Dust - mg/m ³	1.00	0.89	1.09	1.14	1.26	1.10	1.32	1.20	1.80	1.40	1.84	1.20	1.27
	As - ug/m ³	34.65	31.88	35.58	37.3	38.12	37.45	38.00	37.24	39.44	35.86	31.88	36.00	36.12
Refinery Control Room	Total Resp													
	Dust - mg/m ³	0.11	0.26	0.15	0.20	0.26	0.23	0.34	0.18	0.14	0.12	0.4	0.10	0.21
	As - ug/m ³	7.25	8.00	6.01	6.50	7.10	6.90	7.15	6.00	5.40	5.00	wtc	5.30	5.88
Carbon Plant	Total Resp													
	Dust - mg/m ³			0.25			0.20			0.30			0.22	0.24
	As - ug/m ³			21.44			18.01			21.00			17.05	19.38

Threshold Limit Values:

Total Arsenic - 50 micrograms per cubic meter
Respirable Dust - 5.0 milligrams per cubic meter