EMS Laboratories Inc.
117 West Bellevue Drive, Pasadena, CA 91105
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Email: akolk@emslabs.com

Attn: Derrick Wills
Tronox-LLC-Henderson
PO Box 55
Henderson, NV 89009

Phone: (947) 375-7004

Project: Tronox LLX Henderson, 560 W. Lake Mead Dr., Henderson, NV/2027.001

Customer ID: TRNX26
Customer PO: 2027.001
Received: 5/20/2010 9:50AM
EMS LAB No: 137866
Date Prepared: 8/12/2010 0:00
Analysis Date: 8/17/2010 12:00PM

Report Date: August 23, 2010

Date Sampled: 5/17/2010 9:45AM

NIOSH 7402/ISO

DRAFT, MODIFIED ELUTRIATOR METHOD FOR THE DETERMINATION OF ASBESTOS IN SOILS AND BULK MATERIAL METHOD

EMS Laboratory Number:	137866		Mass of Respirable Dust on Filter:	155	µg
Customer Sample Number:	SSAN5-03-0.33BPC		Area of collection filter:	385	mm^2
Minimum Level of Analysis (chrysotile):	CD		Grid openings area:	0.0094	mm^2
Minimum Level of Analysis (amphibole):	ADX		Grid Openings Analyzed:	37	
Magnification used for fiber counting:	9,200	x	Min. Str. Length/Max Str. Diameter:	>5/<0.4	microns
Aspect ratio for fiber definition:	3:1				
			Analyst(s):	Radha Singh	

Dust Generator - Total Dried Sample Weight		Soil % Moisture	7.8	%
		Air Flow Rate Through ME Opening of Dust Generator:	1370	
Not Used		Air Flow Rate Through IST Opening of Dust Generator:	130	
Used in Tumbler		Estimate Total Air Flow Through Elutriator:	1500	

Analytical Sensitivity: 7.14E+06 Structure /g PM 10 Limit of Detection: 2.14E+07 Structure /g PM 10

Test For Uniformity (Chi-Square results)

		Counts			Poisson 95% Confidence Interval		
Structure Class	**Min ID Level Required**	**Primary Str.**	**Total Str.**	**Density** St/mm²	**Conc.** Str/g PM10	**Lower Limit** Str/g PM10	**Upper Limit** Str/g PM10
Asbestos Structures>5um, ≤10um	ADX/CD	70	70	201	5.00E+08	3.90E+08	6.31E+08
Asbestos Structures>5um, ≤10um (Chrys)	CD	58	58	167	4.14E+08	3.14E+08	5.35E+08
Asbestos Structures>5um, ≤10um (Amph)	ADX	12	12	35	8.57E+07	4.43E+07	1.50E+08
Asbestos Structure >10um (Long)	ADX/CD	32	34	98	2.43E+08	1.68E+08	3.39E+08
Asbestos Structure >10um (Chrys)	CD	22	24	69	1.71E+08	1.10E+08	1.71E+08
Asbestos Structure >10um (Amph)	ADX	10	10	29	7.14E+07	3.42E+07	1.31E+08
Total Protocol Asbestos Structures	ADX/CD	102	104	299	7.42E+08	6.07E+08	9.00E+08
Protocol Asbestos Structures (Chrys)	CD	80	82	236	5.85E+08	4.66E+08	7.27E+08
Protocol Asbestos Structures (Amph)	ADX	22	22	63	1.57E+08	9.85E+07	2.38E+08
Total Protocol Non Asbestos Structures	**NAM**	3	3	8.6	2.1E+07	4.41E+06	6.26E+07

Approved by Technical Director

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NIOSH 7402/ISO

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Client:	Derrick Willis, Tronox LLC-Henderson	**Filter Type:**	MCE 385 mm²
Report number :	137866	**Magnification:**	9200
Sample number:	SSAN5-03-0.33BPC	**Grid Opening Dimension: mm^2**	0.0094
Project:	2027.001/Tronox LLC Henderson, 560 W. Lake Mead Dr.,	**Grid Loading:**	Moderate

Elutriation Date: 8/12/2010 by Joel Paruli
Preparation Date: 8/13/2010 by Joel Paruli
Analysis Date: 8/17/2010 by Radha Singh

Asbestos Structures>5um, ≤10um (Chrys)	58
Asbestos Structures>5um, ≤10um (Amph)	12
Asbestos Structure >10um (Chrys)	24
Asbestos Structure >10um (Amph)	10
Protocol Asbestos Structures (Chrys)	70
Protocol Asbestos Structures (Amph)	34

Grid Openings	37
Mass - ug	155
Anlytical sensitivity	[illegible]

Grid ID	Grid Opening	Structure Type	Structure Number Primary	Structure Number Total	Dimensions - mm Width	Dimensions - mm Length	Dimensions (µm) Width	Dimensions (µm) Length	Level of ID	Mineral Type	Image Number	Structure Comments
1A	E26	MD11	1		12	65	1.30	7.07				
		MF		1	1	65	0.11	7.07	CD	CHRYSOTILE		
1A	F23	F	2	2	0.5	55	0.05	5.98	CD	CHRYSOTILE		
		MD11	3		20	100	2.17	10.87				
		MF		3	1	60	0.11	6.52	CD	CHRYSOTILE		
1A	F26	F			12.5	110	1.36	11.96				Non Asbestos
		F			7.5	220	0.82	23.91		AMOSITE		Double
1A	F31	F	4	4	1	50	0.11	5.43	CD	CHRYSOTILE		
		MD11	5		30	90	3.26	9.78				
		MF		5	1.5	60	0.16	6.52		AMOSITE		
		MD11	6		50	100	5.43	10.87				
		MF		6	0.2	75	0.02	8.15	CD	CHRYSOTILE		
		F	7	7	1	78	0.11	8.48	CD	CHRYSOTILE		
		F	8	8	3.5	205	0.38	22.28		AMOSITE		
		MD11	9		35	130	3.80	14.13				
		MF		9	1	130	0.11	14.13	CD	CHRYSOTILE		
1A	E34	MD11	10		40	195	4.35	21.20				
		MF		10	1.5	195	0.16	21.20	CD	CHRYSOTILE		
		F	11	11	1	80	0.11	8.70	CD	CHRYSOTILE		
1A	C41	MD11	12		15	88	1.63	9.57				
		MF		12	1.5	88	0.16	9.57		AMOSITE		
		MD11			60	400	6.52	43.48				
		MF			8	400	0.87	43.48				Non Asbestos
		MD11	13		95	110	10.33	11.96				
		MF		13	1	92	0.11	10.00	CD	CHRYSOTILE		
		MD11	14		8	70	0.87	7.61				
		MF		14	0.2	70	0.02	7.61	CD	CHRYSOTILE		
1A	E44	MD21	15		75	98	8.15	10.65				
		MF		15	1	98	0.11	10.65		AMOSITE		
1A	F41	MD11	16		60	112	6.52	12.17				
		MF		16	0.5	112	0.05	12.17	CD	CHRYSOTILE		
		F	17	17	0.5	50	0.05	5.43	CD	CHRYSOTILE		
		MD21	18		60	880	6.52	95.65				Double
		MF		18	2	880	0.22	95.65		AMOSTIE		Double
		MD11	19		80	110	8.70	11.96				
		MF		19	1	60	0.11	6.52	CD	CHRYSOTILE		
		MD11			40	180	4.35	19.57				
		MB			6.5	180	0.71	19.57	CD	CHRYSOTILE		
1A	G43	MD21	20		20	125	2.17	13.59				
		MF		20	2.5	125	0.27	13.59	CD	CHRYSOTILE		
		F	21	21	0.5	50	0.05	5.43	CD	CHRYSOTILE		

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NIOSH 7402/ISO

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Report Number:	[redacted]
Sample number:	SSAN5-[redacted]

Analyzed by:	[redacted]
Date of Analysis:	[redacted]

Grid ID	Grid Opening	Structure Type	Structure Number				Dimensions (µm)		Level of ID	Mineral Type	Image Number	Structure Comments
			Primary	Total			Width	Length				
1B	C31	F			0.5	65	0.05	7.07				
		F	22	22	0.5	90	0.05	9.78	CD	CHRYSOTILE		
		MD11	23		50	60	5.43	6.52				
		MF		23	1	60	0.11	6.52		AMOSITE		
		MD11	24		18	55	1.96	5.98				
		MF		24	0.2	55	0.02	5.98	CD	CHRYSOTILE		
		MD11	25		30	165	3.26	17.93				
		MB		25	2.5	165	0.27	17.93	CD	CHRYSOTILE		
1B	E31	MD11	26		45	115	4.89	12.50				
		MF		26	0.5	110	0.05	11.96	CD	CHRYSOTILE		
		MD11	27		60	90	6.52	9.78				
		MF		27	0.5	55	0.05	5.98	CD	CHRYSOTILE		
		F	28	28	0.5	170	0.05	18.48	CD	CHRYSOTILE		
		MD11	29		10	55	1.09	5.98				
		MF		29	0.2	50	0.02	5.43	CD	CHRYSOTILE		
1B	F34	MD11	30		100	130	10.87	14.13				
		MF		30	1.5	50	0.16	5.43	CD	CHRYSOTILE		
		MD11	31		10	55	1.09	5.98				
		MF		31	0.2	55	0.02	5.98	CD	CHRYSOTILE		
		F	32	32	1.5	98	0.16	10.65		AMOSITE		
		MD11	33		20	165	2.17	17.93				
		MF		33	1.5	165	0.16	17.93		AMOSITE		
		MD11			80	110	8.70	11.96				
		MF			1	60	0.11	6.52				Non Asbestos
		MD11			30	110	3.26	11.96				
		MF			8	65	0.87	7.07		AMOSITE		
1B	C33	MD11	34		10	60	1.09	6.52				
		MF		34	1	60	0.11	6.52	CD	CHRYSOTILE		
		F	35	35	1	185	0.11	20.11	CD	CHRYSOTILE		
		F	36	36	2.5	70	0.27	7.61		AMOSITE		
		MD11			38	75	4.13	8.15				
		MF			6.5	75	0.71	8.15		AMOSITE		
1B	C36	F	37	37	1.5	50	0.16	5.43	CD	CHRYSOTILE		
		MD11	38		80	170	8.70	18.48				
		MF		38	0.5	55	0.05	5.98	CD	CHRYSOTILE		
		F	39	39	1	98	0.11	10.65	CD	CHRYSOTILE		
		MD11			110	160	11.96	17.39				
		MF			5.5	160	0.60	17.39		AMOSITE		
1B	E33	MD11			70	75	7.61	8.15				
		MF			6.5	75	0.71	8.15	CD	CHRYSOTILE		
		MD32	40		90	175	9.78	19.02				
		MF		40	1	75	0.11	8.15	CD	CHRYSOTILE		
		MF		41	1	110	0.11	11.96	CD	CHRYSOTILE		
1B	C44	MD11	41		15	115	1.63	12.50				
		MF		42	1	115	0.11	12.50	CD	CHRYSOTILE		
		MD21	42		30	100	3.26	10.87				
		MF		43	1	70	0.11	7.61	CD	CHRYSOTILE		
1C	C23	MD11	43		100	160	10.87	17.39				
		MF		44	1	90	0.11	9.78	CD	CHRYSOTILE		
1C	C26	F			1.5	60	0.16	6.52				Non Asbestos
		MD11	44		12	72	1.30	7.83				
		MF		45	1.5	72	0.16	7.83	CD	CHRYSOTILE		
		MD21	45		30	380	3.26	41.30				Double
		MF		46	1	380	0.11	41.30	CD	CHRYSOTILE		

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Report Number:	[redacted]
Sample number:	[redacted]

Analyzed by:	[redacted]
Date of Analysis:	[redacted]

Grid ID	Grid Opening	Structure Type	Structure Number				Dimensions (µm)		Level of ID	Mineral Type	Image Number	Structure Comments
			Primary	Total			Width	Length				
1C	E26	MD11			30	105	3.26	11.41				
		MF			0.5	105	0.05	11.41				
1C	C31	MD11	46		50	68	5.43	7.39				
		MF		47	0.5	55	0.05	5.98	CD	CHRYSOTILE		
		F	47	48	1	60	0.11	6.52	CD	CHRYSOTILE		
		MD11	48		5	55	0.54	5.98				
		MF		49	0.5	55	0.05	5.98	CD	CHRYSOTILE		
1C	C33	F			9	140	0.98	15.22		AMOSITE		
1C	C36	F			4.5	150	0.49	16.30		AMOSITE		Double
		F	49	50	1	60	0.11	6.52	CD	CHRYSOTILE		
1C	E33	MD11	50		12	80	1.30	8.70				
		MF		51	0.5	80	0.05	8.70	CD	CHRYSOTILE		
		MD11	51		55	170	5.98	18.48				
		MF		52	1.5	170	0.16	18.48	CD	CHRYSOTILE		
		F	52	53	0.5	85	0.05	9.24	CD	CHRYSOTILE		
		MD21			80	220	8.70	23.91				
		MB			12.5	140	1.36	15.22	CD	CHRYSOTILE		
1C	F33	MD11			40	210	4.35	22.83				
		MF			5	210	0.54	22.83				Non Asbestos
		MD11			22	105	2.39	11.41				
		MF			2.5	90	0.27	9.78				
1C	F36	MD11	53		35	70	3.80	7.61				
		MB		54	3.5	70	0.38	7.61	CD	CHRYSOTILE		
		MD11			75	90	8.15	9.78				
		MF			5.5	70	0.60	7.61				Non Asbestos
1C	C41	MD11	54		80	110	8.70	11.96				
		MF		55	1	70	0.11	7.61		AMOSITE		
		MD11	55		35	110	3.80	11.96				
		MF		56	0.5	70	0.05	7.61	CD	CHRYSOTILE		
		F	56	57	1	100	0.11	10.87	CD	CHRYSOTILE		
		F	57	58	1	100	0.11	10.87	CD	CHRYSOTILE		
		F	58	59	0.5	52	0.05	5.65	CD	CHRYSOTILE		
		MD11	59		10	70	1.09	7.61				
		MF		60	0.2	70	0.02	7.61	CD	CHRYSOTILE		
		MD11	60		15	52	1.63	5.65				
		MF		61	0.2	52	0.02	5.65	CD	CHRYSOTILE		
1D	C23	MD11	61		15	80	1.63	8.70				
		MF		62	0.5	80	0.05	8.70	CD	CHRYSOTILE		
		MD22	62		80	225	8.70	24.46				
		MF		63	1	225	0.11	24.46	CD	CHRYSOTILE		
		MF		64	0.5	130	0.05	14.13	CD	CHRYSOTILE		
		MD11	63		100	110	10.87	11.96				
		MF		65	3	60	0.33	6.52		AMOSITE		
1D	F34	MD21	64		80	90	8.70	9.78				
		MF		66	1	58	0.11	6.30	CD	CHRYSOTILE		
1D	G31	MD11	65		60	110	6.52	11.96				
		MF		67	0.5	110	0.05	11.96	CD	CHRYSOTILE		
		F	66	68	2.5	85	0.27	9.24		AMOSITE		
		MD11	67		30	100	3.26	10.87				
		MF		69	3.5	100	0.38	10.87		AMOSITE		
		F	68	70	0.5	52	0.05	5.65	CD	CHRYSOTILE		
		MD11			30	115	3.26	12.50				
		MF			5.5	85	0.60	9.24		AMOSITE		
		F	69	71	0.5	88	0.05	9.57	CD	CHRYSOTILE		

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Report Number:	[redacted]
Sample number:	[redacted]

Analyzed by:	[redacted]
Date of Analysis:	[redacted]

Grid ID	Grid Opening	Structure Type	Structure Number				Dimensions (µm)		Level of ID	Mineral Type	Image Number	Structure Comments
			Primary	Total			Width	Length				
1E	C26	MD11	70		20	90	2.17	9.78				
		MF		72	0.5	70	0.05	7.61	CD	CHRYSOTILE		
		MD11			10	52	1.09	5.65				
		MF			12.5	52	1.36	5.65	CD	CHRYSOTILE		
		F	71	73	0.5	80	0.05	8.70	CD	CHRYSOTILE		
1E	E23	F	72	74	0.5	105	0.05	11.41	CD	CHRYSOTILE		
		F	73	75	0.5	68	0.05	7.39	CD	CHRYSOTILE		
1E	F31	MD11	74		10	60	1.09	6.52				
		MF		76	3	55	0.33	5.98		AMOSITE		
		MD11			80	130	8.70	14.13				
		MF			15	130	1.63	14.13				Non Asbestos
		MD11	75		30	100	3.26	10.87				
		MF		77	1	100	0.11	10.87	CD	CHRYSOTILE		
		MD11	76		30	100	3.26	10.87				
		MF		78	1	100	0.11	10.87	CD	CHRYSOTILE		
		MD11	77		55	85	5.98	9.24				
		MF		79	1	85	0.11	9.24	CD	CHRYSOTILE		
		F	78	80	0.5	98	0.05	10.65				
		F			5	55	0.54	5.98		AMOSITE		
1E	G36	MD21	79		90	100	9.78	10.87				
		MF		81	0.5	55	0.05	5.98	CD	CHRYSOTILE		
1E	H44	F			5	55	0.54	5.98		AMOSITE		
		F	80	82	3.5	125	0.38	13.59		AMOSITE		
		MD11	81		45	175	4.89	19.02				
		MF		83	0.5	85	0.05	9.24	CD	CHRYSOTILE		
1E	E46	MD11	82		80	90	8.70	9.78				
		MF		84	0.5	80	0.05	8.70	CD	CHRYSOTILE		
		MD11	83		35	70	3.80	7.61				
		MF		85	0.5	55	0.05	5.98	CD	CHRYSOTILE		
		MD11	84		50	105	5.43	11.41				
		MF		86	0.5	105	0.05	11.41	CD	CHRYSOTILE		
		F	85	87	1.5	100	0.16	10.87		AMOSITE		
		MD11	86		35	300	3.80	32.61				DOUBLE
		MF		88	0.5	300	0.05	32.61	CD	CHRYSOTILE		DOUBLE
	F54	MD11			30	220	3.26	23.91				
		MF			5	220	0.54	23.91		AMOSITE		
		MD11	87		100	120	10.87	13.04				
		MF		89	0.5	80	0.05	8.70	CD	CHRYSOTILE		
		MD11	88		60	90	6.52	9.78				
		MF		90	0.5	80	0.05	8.70	CD	CHRYSOTILE		
	G54	F	89	91	0.2	55	0.02	5.98	CD	CHRYSOTILE		
		MD11	90		35	170	3.80	18.48				
		MF		92	1	140	0.11	15.22	CD	CHRYSOTILE		
	C56	MD11	91		30	80	3.26	8.70				
		MF		93	1	80	0.11	8.70	CD	CHRYSOTILE		
		MD11	92		35	175	3.80	19.02				
		MF		94	1.5	175	0.16	19.02		AMOSITE		
		MD11	93		25	70	2.72	7.61				
		MF		95	0.5	60	0.05	6.52	CD	CHRYSOTILE		
		MD11	94		45	120	4.89	13.04				
		MF		96	0.5	120	0.05	13.04	CD	CHRYSOTILE		
	E51	MD11	95		30	38	3.26	4.13				
		MF		97	0.2	55	0.02	5.98	CD	CHRYSOTILE		
		F	96	98	0.5	58	0.05	6.30	CD	CHRYSOTILE		
		F	97	99	2.5	115	0.27	12.50		AMOSITE		
		MD11			60	120	6.52	13.04				NON ASBESTOS
		MF			10	120	1.09	13.04				
	B36	F	98	100	2.5	68	0.27	7.39		AMOSITE		
		MD11			35	140	3.80	15.22				
		MF			5	100	0.54	10.87		AMOSITE		
		F	99	101	0.5	50	0.05	5.43	CD	CHRYSOTILE		

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NIOSH 7402/ISO

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Report Number:	[redacted]
Sample number:	[redacted]

Analyzed by:	[redacted]
Date of Analysis:	[redacted]

Grid ID	Grid Opening	Structure Type	Structure Number				Dimensions (µm)		Level of ID	Mineral Type	Image Number	Structure Comments
			Primary	Total			Width	Length				
		MD11			30	130	3.26	14.13				DOUBLE
		MF			5	130	0.54	14.13		AMOSITE		DOUBLE
	C33	F	100	102	0.5	120	0.05	13.04	CD	CHRYSOTILE		
		F	101	103	3	68	0.33	7.39		AMOSITE		
		MD11	102		30	90	3.26	9.78				
		MF		104	1	80	0.11	8.70		AMOSITE		

Sample # 137866 - SSAN5-03-0.33 BPC

Dish wt.	31.47 g	
Dish + samp.	131.50 - 31.47	= 100.03g (initial wt.)
9:35 - 10:35	125.33 - 31.47	= 93.86
11:10 - 12:10	124.28 - 31.47	= 92.81
12:30 - 1:30	124.24 - 31.47	= 92.77g (Final wt.)

$$\% \text{ moisture} = 100 \times \frac{100.03 - 92.77}{92.77} = 7.83\%$$

#138491 - SSQ4-03-1.50 BPC

Dish wt.	31.44 g	
Dish + samp.	132.44 - 31.44	= 101.0g (initial wt.
9:35 - 10:35	127.48 - 31.44	= 96.04
11:10 - 12:10	126.92 - 31.44	= 95.48
12:30 - 1:30	126.90 - 31.44	= 95.46 (Final wt.)

$$\% \text{ moisture} = 100 \times \frac{101.0 - 95.46}{95.46} = 5.8\%$$

BP

#137865 - #SSALG-02-0.33 BPC
8-12-10

Dish wt.	31.47 g	
dish + samp	132.65 g - 31.47	= 101.18g (initial wt.)
10:10 - 11:10	125.02 - 31.47	= 93.55
11:30 - 12:30	124.90 - 31.47	= 93.43
1:00 - 2:00	124.87 - 31.47	= 93.40 (Final wt.)

$$\% \text{ moisture} = 100 \times \frac{101.18g - 93.40}{93.40} = 8.33\%$$

BP

Elutriator Data

Date: 8/12/10 Client: Northgate

Lab #: 137866

Sample ID: SSAN5-03-0.33 BPC Sample weight (g): 72.3

Time air flow started: 800 Tumbler rpm: 30 / 20 *

IST Flowmeter (mL/min): 100 ME Flowmeter (mL/min): 1370

Filter No.	Start Time	Tested flow rate (mL/min)	Final Filter Wt (mg)	Initial Filter Wt (mg)	Dust Weight (mg)	Time Value (min)	Avg. rate of deposition (ug/min)	Optimal time (min)	
1	1000	185	0.04401	0.02448	19.53	30			30% Loss
2	1030		0.03341	0.02413	9.28	7			10% Loss
3	1037		0.04810	0.02425	23.85	25			4% Loss
4	1102		0.03803	0.02433	13.70	15			OK
5	117		0.04334	0.02420	19.14	25			5% Loss
6	142		0.03390	0.02427	9.63	15			10% loss
7	157		0.03901	0.02527	13.74	20			OK
8	1217		0.03273	0.02517	7.56	10			OK
	Time						Dep. Rate	Estiimate	
1	1110	1112½		4.495	4.399	0.096	2½		
2	1127	1131		4.473	4.341	0.134	4		
3	1147	1153		4.734	4.480	0.254	6		
4	1200	1204.45		4.547	4.343	0.204	* 4.45		
5	1210	1214.15		4.579	4.374	0.205	4.15		
6	1222	1226		4.447	4.292	0.155	4		
7									
8									

* Lower RPM to 20 @ 1037

90.90

Copy

:ount (Page of) NIOSH 7402/ISO

Prep Time: 900-1130

eport number : 137866
ample number: SSAN5-03-0.33 BPC
le name: Northgate
ample Description: 155 mg

eparation date: 8/13/10 By JAP
nalysis date: By
(A): ADX, ADQ
id loading Condition of Grid

Filter Type: PC 385 mm2
Date Sample was Run: 8/12/10

Magnification: 9,200 X

Grid opening dimension: 0.0094 mm^2
Level of Analysis: (C): CD, CDX

Grid	Grid Opening	Number of structures Primary	Number of structures Total	Class	Type of Structure	Width mm	Length mm	Comments
A	E2-6	1			MD11	12	65	EDS Crysotil
					MF	1	65	
	F2-3	2			F	0.5	55	Chryso
		3			MD11	20	100	chryso
					MF	1	60	
	F2-6				F	125	110	Nonasb
		4			F	74	220X	EDS amosite double
	F3-1	5			F	1.5	50	#3565 chryso
		6			MD11	30	90	EDS amosite
					MF	1.5	60	
		7			MD11	50	100	chryso.
					MF	0.2	75	
		8			F	1	78	chryso
		9			F	35	205	EDS amosite
		10			MD11	25	130	chryso
					MF	1	130	
	E3-4	11			MD11	40	195	Chryso
					MF	1.5	195	
		12			F	1	80	chryso
	C4-7				MD11	15	88	EDS amosite
		13			MF	1.5	88	"
					MD11	60	400	Nonasb
					MF	8	400	
		14			MD11	95	110	
					MF	1	92	Chryso
		15			MD11	8	70	chryso.
					MF	0.2	70	
	E4-4	16			MD21	75	98	EDS amosite
					MF	1	98	
	F4-7	17			MD11	60	112	Chryso.
					MF	0.5	112	

TEM Asbestos Structure Count (Page of)

Report number: 137864 SAMPLE NO: SSANS-03-0.33 BRC X 9,200

Grid	Grid Opening	Number of structures primary	Number of structures Total	Class	Type of Structure	Width Mm	Length Mm	Comments
		18			E	0.1-	50	Chryso
		19			MD21	60	880	double amosite E12
					MF	2	880	
		20			MD11	80	110	Chryso.
					MI-	1	60	
		21			MD11	40	180	chryso.
					MB	0.5	180	
	G14-3	22			MD21	20	125-	Chryso
					MI=	2.5-	125	
		23			E	0.5	50	Chryso
13	C3-1				E	0.1-	65-	SI
		24			E	0.1-	90	Chryso
		25			MD11	50	60	FDS amosite
					MF-	1	60	
		26			MD11	18	55-	chryso
					MF-	0.2	55-	
		27			MD11	30	165-	chryso
					MI3	2.5-	165-	
	E3-1	28			MD11	4.1-	115-	chryso
					MI-	0.3-	110	
		29			MD11	60	90	Chryso
					MI-	0.5	55-	
		30			E	0.1-	170	chryso
		31			MD11	10	55-	Chryso.
					MF-	0.2	50	
	E3-4	32			MD11	100	130	Chryso
					MI-	1.5-	50	
		33			MD11	10	55-	Chryso.
					MI-	0.2	55-	
		34			E	1.5	98	amosite
		35			MD11	20	165-	amosite
					MF-	1.5-	165-	
		36			MD11	80	110	Non asb
					MI-	1	60	
		37			MD11	30	110	amosite
					MF-	8	65-	

TEM Asbestos Structure Count (Page of)

Report number: 137864 SAMPLE NO: SSANS-03-0033 BRC X 9,200

Grid	Grid Opening	Number of structures primary	Number of structures Total	Class	Type of Structure	Width Mm	Length Mm	Comments
B	C3 3	38			MDII	10	60	chryso.
					MI=	1	60	
		39			F=	1	185	chryso
		40			I=	2.5	70	amosi2
		41			MDII	38	75	amosi2
					MF=	6.1	75	
	C3 6	42			F=	1.1	50	chryso
		43			MDII	80	170	chryso
					MF=	0.5	55	
		44			I=	1	95	chryso
		45			MDII	110	160	amosi2
					MI=	5.5	160	
	E3 3	46			MDII	70	75	chryso
					MF=	0.5	75	
		47			MD32	90	175	chryso
					MF=	1	75	
					MI=	1	110	
	C4-4	48			MDII	15	115	chryso
					MF=	1	115	
		49			MD21	30	100	chryso
					MI=	1	70	
1C	C2.3	50			MDII	100	160	Chryso
					MI=	1	90	
	C2-6				F=	1.2	60	Non ash
		51			MDII	12	72	
					MF=	1.5	72	chryso
		52			MD21	30	380	double Chryso
					MI=	1	380	
	E2-6	53			MDII	30	105	Non ash.
					MF=	0.5	105	
	C3-1	54			MDII	50	60	chryso
					MF=	0.5	55	
		55			F=	1	60	chryso
		56			MDII	5	55	chryso
					MF=	0.1	55	
	13-3	57			I=	9	140	amosi2
	C3-6	58			F=	4.5	150	amosi2 dark

TEM Asbestos Structure Count (Page of)

Report number: 137864 SAMPLE NO: SSANS-03-0.33 BRC X 9,200

Grid	Grid Opening	Number of structures primary	Number of structures Total	Class	Type of Structure	Width Mm	Length Mm	Comments
		59			I=	1	60	chryso
	E2-3	60			MDII	12	80	Chryso
					MF=	0.5	80	
		61			MDII	55=	170	Chryso
					MF	1.5=	170	
		62			I=	0.5=	85=	Chryso;
		63			MD21	80	220	Chryso
					MB	12.5	140	
	F3-3				MDII	40	210	Non asb.
					MF	5	210	
		64			MDII	22	105	
					MF=	2.5=	90	
	R3-6	65			MDII	35=	70	Chryso
					MB	3.5=	90	
					MDII	75	90	Non asb.
					MF	5.5	70	
	C4-1	66			MDII	80	110	amosite
					MI=	1	70	
		67			MDII	35=	110	Chryso
					MF=	0.5	70	
		68			I=	1	100	Chryso
		69			I=	1	100	Chryso
		70			I=	0.5=	52	"
		71			MDII	10	70	Chryso
					MF=	0.2	70	
		72			MDII	1.5=	52	Chryso
					MI=	0.2	52	
LD	C23	73			MDII	15=	80	Chryso
					MF=	0.5=	80	
		74			MD22	80	225	Chryso
					MF	1	225	
					MF=	0.5	130	
		75			MDII	100	110	amosite
					MF	3	60	
	F3-1	76			MD21	80	90	Chryso
					MF	1	55	

TEM Asbestos Structure Count (Page of)

Report number: 137864 SAMPLE NO: SSANS-03-0.33 BRC X 9,200

Grid	Grid Opening	Number of structures primary	Number of structures Total	Class	Type of Structure	Width Mm	Length Mm	Comments
D	G3-1	77			MDII	60	110	chryso
					MF	0.5	110	
		78			F	2.5	85	amosiz
		79			MDII	30	100	amosilt #35 66
					MF	3.5	100	
		80			F	0.5	52	Chryso
		81			MDII	30	115	amosiz
					MF	5.5	85	
		82			F	0.5	88	Chryso.
E	G-6	83			MDII	20	90	chryso
					MF	0.1	70	
		84			MDII	10	52	chryso
					MF	0.1	52	
		85			F	0.5	80	chryso
	E-23	86			F	0.5	105	chryso
		87			F	0.5	65	chryso
	F3-1	88			MDII	10	60	amosilt
					MF	3	55	
					MDII	80	130	Nonasb.
					MF	1.5	130	
		89			MDII	30	100	chryso
					MF	1	100	
		90			MDII	30	100	chryso
					MF	1	100	
		91			MDII	55	65	chryso
					MF	1	85	
		92			F	0.5	90	
		93			F	5	55	amosilt
	G3-6	94			MDII	90	100	chryso
		95			MF	0.1	55	
	H4	96			F	5	55	amosil
		97			F	3.5	125	amo
		98			MDII	41	175	Chryso.
					MF	0.5	85	

TEM Asbestos Structure Count (Page of)

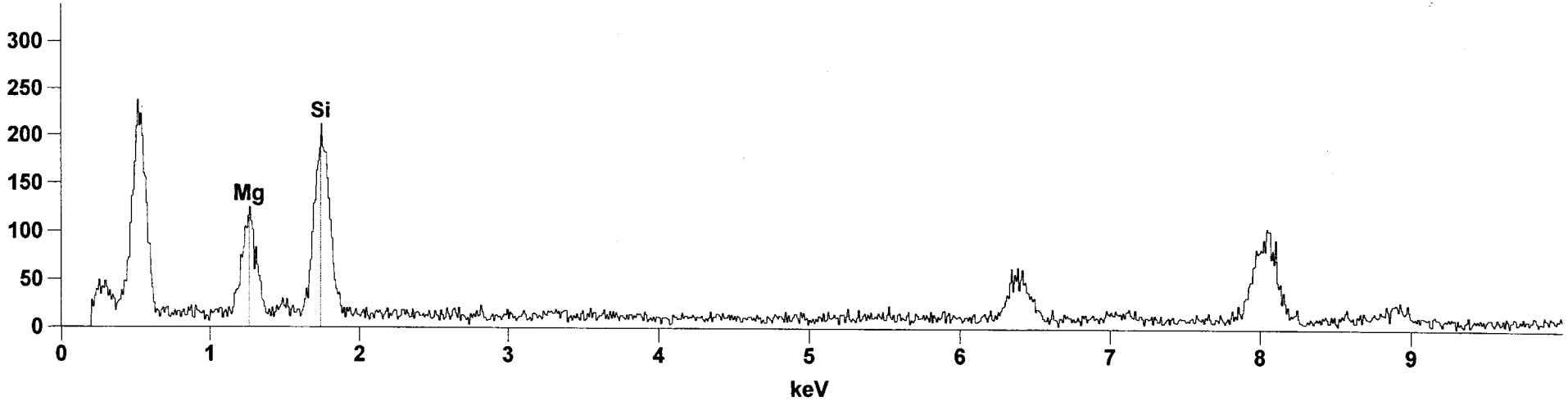
Report number: 137864 SAMPLE NO: SSANS-03-0.33 BRC X 9,200

Grid	Grid Opening	Number of structures primary	Number of structures Total	Class	Type of Structure	Width Mm	Length Mm	Comments
1E	E4-6	99			MDII	60	90	Chryso
					MF	0.1-	80	
		100			MDII	3J-	70	Chryso
					MF	0.J-	5J-	
		101			MDII	50	10T	Chryso
					MF	0.J	10J-	
		102			F	1.J-	100	amosiz
					MDII	3J-	3wY	dublr Chryso
					MF	0.J-	3wY	
	E5-4	103			MDII	30	220	amosiz
					MF	5	220	
		104			MDII	100	120	Chryso
					MF	0.5	80	
		105			MDII	60	90	Chryso.
					MF	0.J-	80	
	G1-4	106			F	0.2	5J-	Chryso
		107			MDII	3J-	170	Chryso
					MF	1	140	
	C5-6	108			MDII	30	80	chryso.
					MF	1	80	
		109			MDII	3J-	17J-	amosiz
					MF	1.J-	17J	
		120			MDII	2J-	70	Chryso
					MF	0J-	60	
		111			MDII	4J-	120	Chryso
					MF	0.J-	120	
	E5-1	112			MDII	30	6Y	Chryso.
					MF	0.2	5J-	
		113			F	0.J-	58.	Chryso.
		114			F	2.J-	11J-	amosiz
					MDII	60	120	nmaib.
					MF	10	120	
	B3-6	116			F	2.J-	6Y	amosz
					MDII	3J-	140	amosiz
					MF	5-	10	
		117			F	1.5-	50	Chryso
		118			MDII	30	130Y	dublw amos
					MF	5	130Y	
	C3-3	119			F	0.5-	120	Chryso.
		120			F	3	68	amosiz
		12Y			MDII	30	90	amosiz
					MF	1	80	

Project: New Project

Full scale counts: 312

137866-SSAN5-03-033-A E26



Mon Aug 16 11:25:21 2010
Gaussian Fit With Standards Chi Squared:0.980
Correction Method: Cliff-Lorimer (MBTS) w/o Absorbance

Live Time:105.7 sec.
Acc.Voltage: 100.0 kV
Take Off Angle: 35.0 deg.
Detector: Det B- Quantum

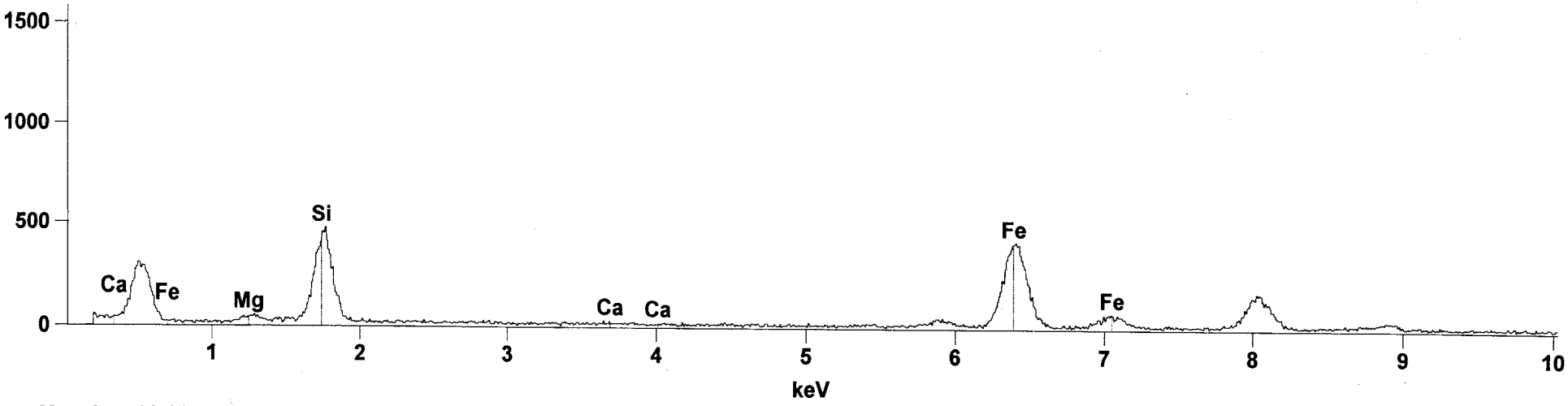
Quantitative Results 137866-SSAN5-03-033-A E26

Element Line	Net Counts	Weight %	Weight % Error	Atom %	Atom % Error
Mg K	1135	49.07	---	52.68	+/- 1.72
Si K	2238	50.93	---	47.32	+/- 1.08
Total		100.00		100.00	

Project: New Project

Full scale counts: 1452

137866-SSAN5-03-033-A F2-6



Mon Aug 16 11:41:37 2010
Gaussian Fit With Standards Chi Squared:3.107
Correction Method: Cliff-Lorimer (MBTS) w/o Absorbance

Live Time:47.7 sec.
Acc.Voltage: 100.0 kV
Take Off Angle: 35.0 deg.
Detector: Det B- Quantum

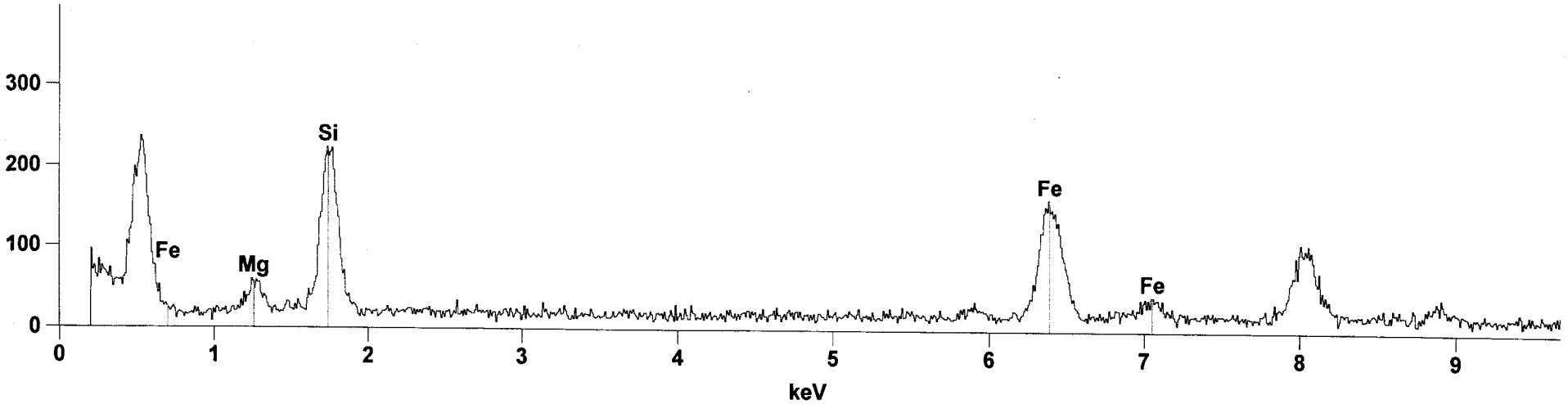
Quantitative Results 137866-SSAN5-03-033-A F2-6

Element Line	Net Counts	Weight %	Weight % Error	Atom %	Atom % Error
Mg K	411	4.57	---	7.36	+/- 0.52
Si K	6348	37.15	---	51.76	+/- 0.69
Ca K	24	0.19	---	0.19	+/- 0.19
Fe K	8270	58.09	---	40.70	+/- 0.49
Total		100.00		100.00	

Project: New Project

Full scale counts: 365

137866-SSAN5-03-033-AF3-1



Mon Aug 16 11:55:42 2010
Gaussian Fit With Standards Chi Squared:2.095
Correction Method: Cliff-Lorimer (MBTS) w/o Absorbance

Live Time:107.1 sec.
Acc.Voltage: 100.0 kV
Take Off Angle: 35.0 deg.
Detector: Det B- Quantum

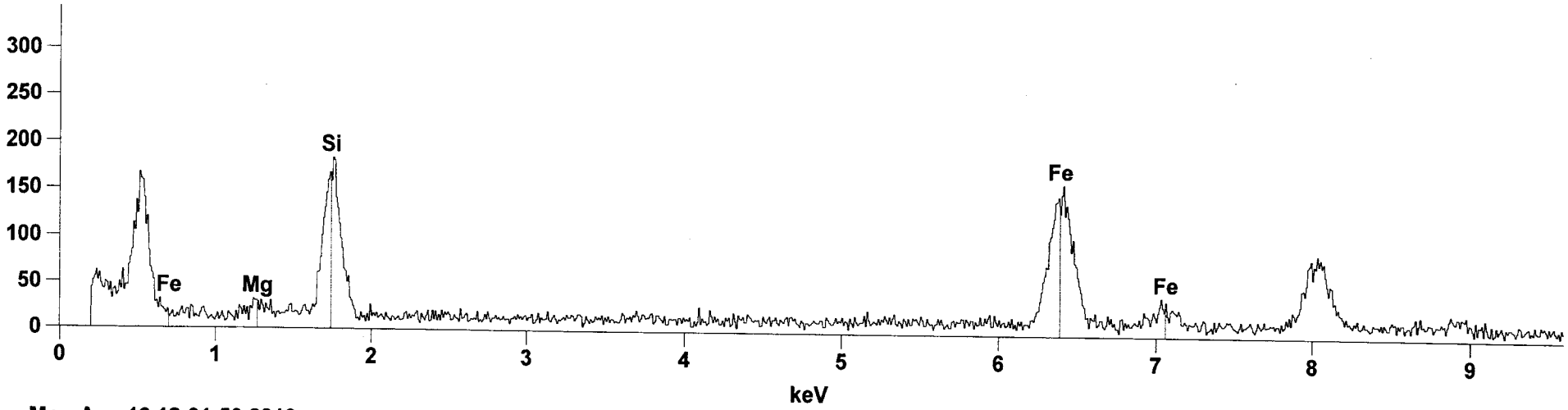
Quantitative Results 137866-SSAN5-03-033-AF3-1

Element Line	Net Counts	Weight %	Weight % Error	Atom %	Atom % Error
Mg K	478	13.36	---	19.54	+/- 1.14
Si K	2736	40.25	---	50.94	+/- 1.06
Fe K	2628	46.39	---	29.53	+/- 0.67
Total		100.00		100.00	

Project: New Project

Full scale counts: 318

137866-SSAN5-03-033F3-1



Mon Aug 16 12:01:50 2010
Gaussian Fit With Standards Chi Squared:2.334
Correction Method: Cliff-Lorimer (MBTS) w/o Absorbance

Live Time:57.4 sec.
Acc.Voltage: 100.0 kV
Take Off Angle: 35.0 deg.
Detector: Det B- Quantum

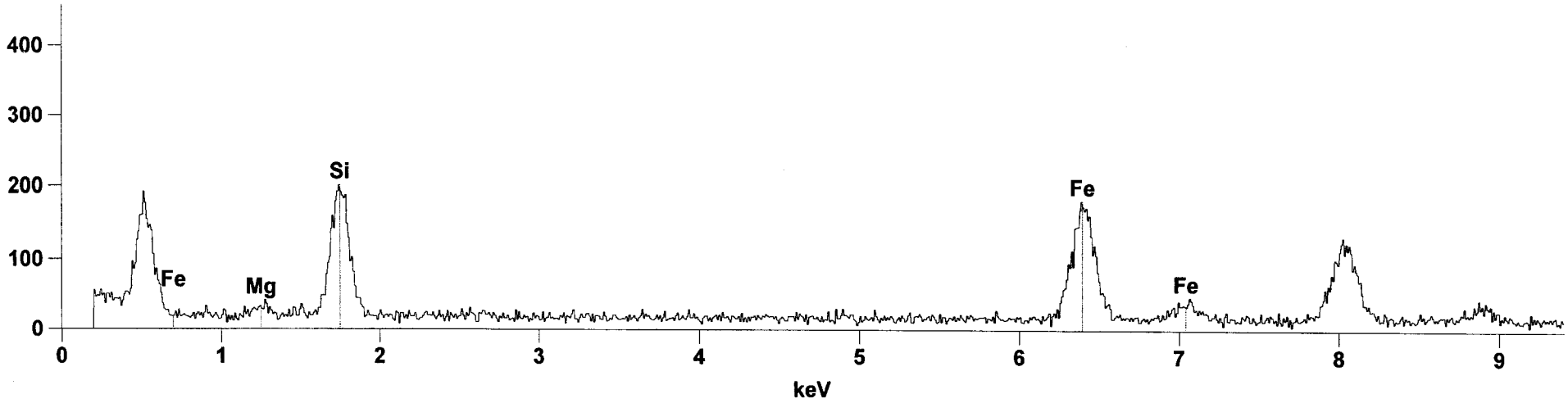
Quantitative Results 137866-SSAN5-03-033F3-1

Element Line	Net Counts	Weight %	Weight % Error	Atom %	Atom % Error
Mg K	176	6.20	---	9.83	+/- 1.12
Si K	2019	37.45	---	51.34	+/- 1.25
Fe K	2531	56.34	---	38.84	+/- 0.87
Total		100.00		100.00	

Project: New Project

Full scale counts: 421

137866-SSAN5-03-033-A(C4-1



Mon Aug 16 12:30:30 2010
Gaussian Fit With Standards Chi Squared:1.550
Correction Method: Cliff-Lorimer (MBTS) w/o Absorbance

Live Time:55.8 sec.
Acc.Voltage: 100.0 kV
Take Off Angle: 35.0 deg.
Detector: Det B- Quantum

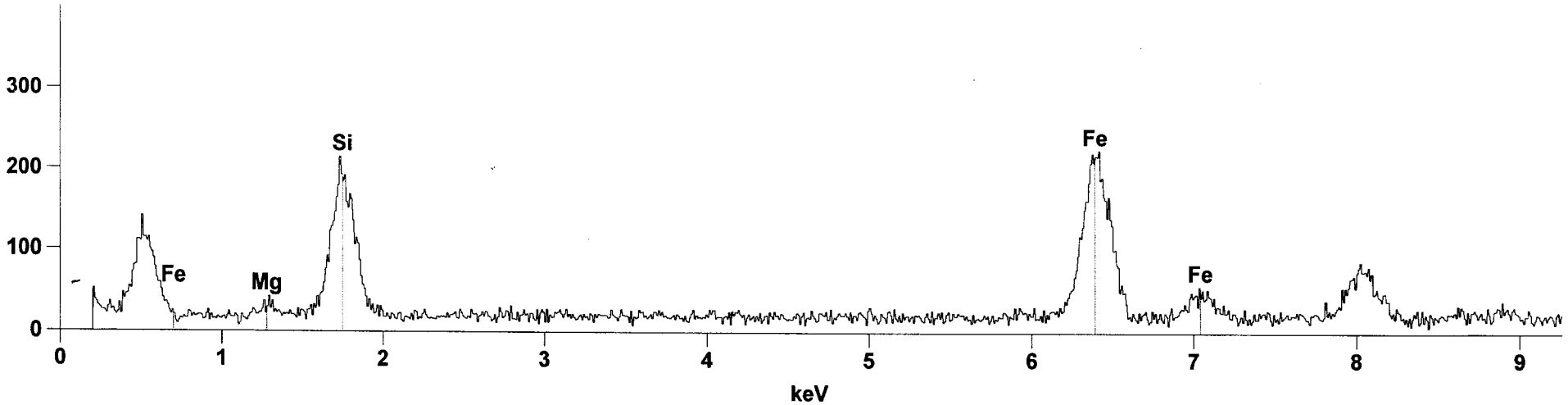
Quantitative Results 137866-SSAN5-03-033-A(C4-1

Element Line	Net Counts	Weight %	Weight % Error	Atom %	Atom % Error
Mg K	154	6.01	---	9.41	+/- 1.16
Si K	1913	39.27	---	53.27	+/- 1.34
Fe K	2221	54.72	---	37.32	+/- 0.91
Total		100.00		100.00	

Project: New Project

Full scale counts: 368

137866-SSAN5-03-033-A(6)



Mon Aug 16 12:40:19 2010
Gaussian Fit With Standards Chi Squared:1.797
Correction Method: Cliff-Lorimer (MBTS) w/o Absorbance

Live Time:24.2 sec.
Acc.Voltage: 100.0 kV
Take Off Angle: 35.0 deg.
Detector: Det B- Quantum

Quantitative Results 137866-SSAN5-03-033-A(6)

Element Line	Net Counts	Weight %	Weight % Error	Atom %	Atom % Error
Mg K	195	4.58	---	7.48	+/- 0.92
Si K	2843	35.15	---	49.68	+/- 1.03
Fe K	4063	60.27	---	42.84	+/- 0.77
Total		100.00		100.00	