

KTA-TATOR, Inc.

Protective Coating Consultants 115 Technology Drive Pittsburgh, PA 412-788-1300 NIOSH Project

Facili	ty:					Blas	t Cl	eanii	ng		A	ir T	RE	i	DP		ST	Bar
Date:			IR #:	J953	31-01	Inspec	ction	Rep	ort	Time	c	F	%		°F		°F	Pre
			•															
KTA/	SET Jol	Number	J9533	1														
Gener	ric Abra	sive						Trac	le Nam	e								
Abras	ive Log	Number						Size Designation Grade										
	sive Mfg							Supp	plier									
		eckboxes	:	1						1								
Abrasive Riffle 100g Sieve Analysis ASTN												licro	hard	ness IT				
	ample N			3	00ml Samp		D-49	940 K	ΓA Lab			Samp	ole K	TA			~	
Iten	n No:		rface		Surfa					Emb	edme	ent					Stee	
Dan	-1 NJ		aration	Conn	Profile (T .	Δ	1	A 2	Ι Δ	2	Δ	- 1	Δ	. =		Samp	
1	el No:	Spec SP-10	Act	Spe 2-3		Act.	Are	2a 1	Area 2	Are	ea 3	Are	a 4	Area	13		Area	#
2		SP-10		2-3														
3		SP-10		2-3														
4		SP-10		2-3														
5		SP-10		2-3														
6		SP-10		2-3	1													
7		SP-10		2-3	3													
8		SP-10		2-3														
9		SP-10		2-3	}													
				tion	and Cle	aning R	ate			To	tal I	Blast	t Tin	ne				
		nt of Abı			Spec		Act.			_		Valve						
		(hose an	d pot)							Me	terin	g Va	lve S	ettin	g			
Squa	re Feet	Cleaned																
i	S. P. Q	UALIT	TY ITE	MS				CAL OK			Instr	umer	nt			SER	RIAL NU	JMBER
Hose/	Nozzle :	Number U	Jsed		1	2			HY	GRO]	MET	ER						
		e Gauge				3 4 5 6				RFAC				ETE	R			
ASTN	M D-428	5 Blotter	Test Res	ults	P	F			TE: Use	STEX ed	TAF	PΕ	XC	С			N/A	
Nozzle Pressure psi						RING												
Hose	Flushed	and dried	i		Y	N				ZZLE			E GA	GE				
									BA	ROM	ETE	R						
		neckboxe	s:															
	ive Riff	le				nple NIOS	SH	1				g Sie				STM	I C-136	
Technician Signature				ect Sup	erviso	or			Signa	ture								
Date				Print				Date						Print				

KIA lator Bi	ast Cleaning	Q	PF-WDC345R.1			
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KTA Sieve Analysis Report Form

MATF 100R.2

Revision No. 2

Issued 3/12/96

KTA-Tator, Inc.

MATS Group Sieve Analysis

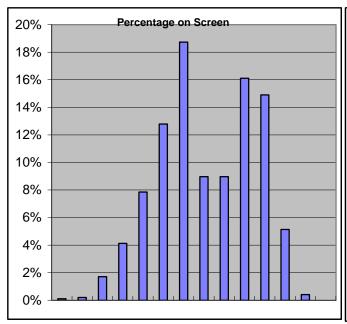
Sample Number	Date _	
Weight of Sample	Technician _	
Sample Description	Job	

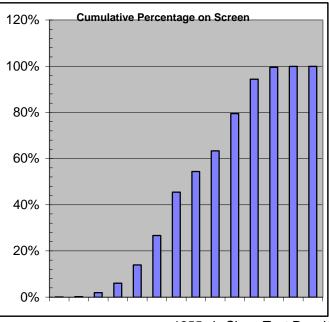
					Cum % of	S.O.S.** in	Particle
Sieve #	Cup and Grit	Cup	Grit	% of Total	Total	mm	Size Avg
10	12.7	12.6	0.1	0.10%	0.10%	2.000	0.20
12	13.1	12.9	0.2	0.20%	0.20%	1.700	0.34
16	15.2	13.5	1.7	1.71%	1.91%	1.180	2.01
20	16.8	12.7	4.1	4.13%	6.04%	0.850	3.49
30	20.6	12.8	7.8	7.85%	13.90%	0.600	4.68
40	25.4	12.7	12.7	12.79%	26.69%	0.425	5.40
50	31.5	12.9	18.6	18.73%	45.42%	0.300	5.58
60	21.7	12.8	8.9	8.96%	54.38%	0.250	2.23
70	21.8	12.9	8.9	8.96%	63.34%	0.210	1.87
100	28.9	12.9	16	16.11%	79.46%	0.150	2.40
140	27.7	12.9	14.8	14.90%	94.36%	0.110	1.63
200	17.5	12.4	5.1	5.14%	99.50%	0.075	0.38
270	13.1	12.7	0.4	0.40%	99.90%	0.053	0.02
Pan*	12.8	12.8	0	0.00%	99.90%	0.038	0.00
Total			99.3	100.00%		Sum =	30.21

^{*} Approximated as a #400 Sieve

Average particle size = Sum / Total Wt. (in mm) = 0.30

^{**} S.O.S. is Screen Opening Size





1255.xls Sieve Test Results

KTA/SET ENVIRONMENTAL

115 Technology Drive Pittsburgh, PA 412-788-1300

Project: CDC/NIOSE	f; Phase 2	Pump Cal Repo		Facility: Consolidated Coal Co., Elizabeth, PA				
Date:	Time:		Generic Abr.	Type:				
KTA/SET Project Nu	mber: J95119		Trade Name:					
Abrasive Log Number	r :		Supplier:					
Abrasive Mfg.:			Size:					
			Grade:					
Calibration Equipmen	t:							
Gilibrator Precision F	low Bubble Meter		SN:					
Gilibrator Standard Fl	ow Cell		SN:					
Calibration Conducted	d By:		(print)	(signature)				
Comments:								

Location: Make-up Air Sample Bank									
Pump ID	Hose	Media	Target (l/min)		Actu	al Flow (l/	min)		Ave Flow
_	No.			1	2	3	4	5	(l/min)
A	1	PVC (Resp. Dust)	1.7						
В	2	PVC (Resp. R.A.)	1.7						
С	3	PVC (Total R.A.)	4.0						
D	4	0.8 μ m MCE	2.0						
		_		•					

KTA/SE	T Pump Calibrat	ion Report Form				
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Exhibit 3 (con't)

KTA/SET ENVIRONMENTAL

115 Technology Drive Pittsburgh, PA 412-788-1300

	Location: Operator Air Sample Bank								
Pump ID	Hose	Media	Target (l/min)	Farget (l/min) Actual Flow (l/min) Ave Flow					
	No.			1	2	3	4	5	(l/min)
E	5	PVC (Resp.)	1.7						
F	6	PVC (R.A.)	1.7						
G	7	PVC (Total R.A.)	4.0	·					
Н	8	0.8 μ m MCE	2.0						

	Location: Exhaust Sample Bank								
Pump ID	Hose	Media	Target (l/min)	Target (l/min) Actual Flow (l/min) Ave Flow					
	No.			1	2	3	4	5	(l/min)
I	9	PVC (Resp.)	1.7						
J	10	PVC (Resp. R.A.)	1.7						
K	11	PVC (Total R.A.)	4.0						
L	12	0.8 μ m MCE	2.0						

	Location: Make-up Air Sample Bank								
Pump ID	Hose	Media	Target (l/min)	Target (l/min) Actual Flow (l/min) Ave Flow					
_	No.			1 2 3 4 5 (l/min)					
M	13	PVC (Resp. Dust)	1.7						
N	14	0.8 μ m MCE	2.0						
N	14 0.8 μ m MCE 2.0								

KTA/SE	T Pump Calibrat	ion Report Form				
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KTA/SET ENVIRONMENTAL MECHANICAL VENTILATION EVALUATION FORM

Project: CDC/NIOSH, Phase 2	Evaluator:
Equipment:	Inspection Date:
Air Measurement Instrument:	KTA/SET No.: J97119
A. LOCATION DIAGRAM	
AIR VELOCITY MEASUREMENTS INSIDE BLAST ROOM	MEASUREMENT RESULTS
1 2 3 4 5 6 7 8 9 10 11 12	1
Measurements are made at the center of the blast room, across the cross-sectional area perpendicular ot the air flow.	Average Air Velocity (AAV) = FPM

KTA/SET ENVIRONMENTAL

115 Technology Drive Pittsburgh, PA 412-788-1300

Industrial Hygiene

Facility: Consolidated Coal Co., Elizabeth, PA

Project: CDC/NIOSH; PHASE 2

				Report					
Date:	Time	<u> </u>		Gene	eric Abr. Type:				
	roject Number:				e Name:				
Abrasive Lo				Supp					
Abrasive Mt					Size:				
	perly Protected	(√)		Grad	Grade:				
			<u>.</u>						
Ventilatio	n Assessmen	t Complet	te (✓)	Ven	tilation Forn	n Comple	te (√)		
Cleaning	Verification	(√)							
Hopper		Walls							
Hose		Ceiling							
Nozzle		Floor							
Reclaimer		Worker							

Chain of C	Custody – Air	- Complet	te (√)						
			_	I					
Technician	n		Project Sup	ervisor		1			
Print			Print			_			
Signature			Signature						
Date			Date						
KTA/SE	T Industria	al Hygie	ne Report 1	Form					
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Exhibit 5 (con't)

AIR SAMPLING DATA

	Location: Make-up Air Sample Bank										
Pump	Hose	Sample No.	Media	Time On	Time Off	Elapsed	Volume				
ID	No.					Time					
A	1		0.5 μ m								
			PVC								
В	2		0.5 μ m								
			PVC								
С	3		0.5 μ m								
			PVC								
D	4		0.8 μ m								
			MCE								

	Location: Make-up Air Sample Bank											
Pump	Hose	Sample No.	Media	Time On	Time Off	Elapsed	Volume					
ID	No.					Time						
Е	4		0.5 μ m									
			PVC									
F	5		0.5 μ m PVC									
G	6		0.5 μ m PVC									
Н	7		0.8 μ m MCE									

	Location: Make-up Air Sample Bank											
Pump	Hose	Sample No.	Media	Time On	Time Off	Elapsed	Volume					
ID	No.					Time						
I	8		0.5 μ m									
			PVC									
J	9		0.5 μ m									
			PVC									
K	10		0.5 μ m									
			PVC									
L	11		0.8 μ m									
			MCE									

	Location: Operator Breathing Zone											
Pump	Hose	Sample No.	Media	Time On	Time Off	Elapsed	Volume					
ID	No.					Time						
M	13		0.5 μ m									
			PVC									
N	14		0.8 μ m									
			MCE									

KTA Daily Inspection Report Form					
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NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

Division of Respiratory Disease Studies 1095 Willowdale Road Morgantown, WV 26505-2888 (304) 285-5754

SAMPLE SUBMITTAL FORM

NIOSH Investigator: Mark F. Greskevitch
Sampling Site: KTA/SET ENVIRONMENTAL, INC. ENCLOSED
Date: July 1, 1996
Project No: DRDS 96-057

BLASTING BOOTH in PITTSBURGH, PA

Industrial Process: SIC 1700 CONSTRUCTION

Collection Date: 06-07-96 Air Temp (°C): N/A

Shipment Date: 06-27-96

Sequence Number	Analysis Requested	Sample Characteristics (Type*, Manuf., Lot No.)
8395	Elemental: ICP-AES (7300) and Graphite furnace method for 4 elements listed in comments	Airborne samples for elemental analysis, see attached MSDS sheets of abrasive used and spec sheets for steel blasted upon

^{*} Specify: Solid Sorbent Tube (eg. Charcoal), Filter Type, Impinger Solution, Bulk Sample, Blood, Urine, Tissue, Other

Laboratory Sample Number	Field Sample Number	Air Vol. (liters)

CHAIN OF CUSTODY RECORI	O - AIR SAMPLING FORM		SHEET OF
1. PROJECT NUMBER:	J95331	2. DATE:	
3. PROJECT NAME/LOCATION	: NIOSH/CDC - PITTSBURGH, PA		
4. NAME OF SAMPLER	Print	Signature	
	Name	Company KTA/SET E	Environmental
	City Pittsburgh	State PA	Zip Code 15275
6. SAMPLE NUMBERS			
	LINQUISHED BY		LES RECEIVED BY
NAME DA	ATE TIME (note am/pm)	NAME	DATE TIME (note am/pm)

KTA/SET ENVIRONMENTAL	115 TECHNOLOGY DRIVE	PHONE: (412) 788-1300
	PITTSBURGH, PA 15275	FAX: (412) 788-1306

KTA/SET ENVIRONMENTAL

115 Technology Drive Pittsburgh, PA 412-788-1300

Project: CDC/NIOSH	; Phase 2	Pump Flow Verification Report	Facility: Consolidated Coal Co., Elizabeth, PA
Date:	Time:	Generic Abr.	Type:
KTA/SET Project Nui	mber: J97119	Trade Name:	
Abrasive Log Number	••	Supplier:	
Abrasive Mfg.:		Size:	
		Grade:	
Verification Equipmen	nt:		
Gilibrator Precision Fl	low Bubble Meter	SN:	
Gilibrator Standard Fl	ow Cell	SN:	
Calibration Conducted	l By:	(print)	(signature)
Comments:		_	

	Location: Make-up Air Sample Bank									
Pump ID	Hose	Media	Target (l/min)	Target (l/min) Actual Flow (l/min) Ave Flo					Ave Flow	
	No.			1	2	3	4	5	(l/min)	
A	1	PVC (Resp.)	1.7							
В	2	PVC (Resp. R.A.)	1.7							
C	3	PVC (Total R.A.)	4.0							
D	4	0.8 μ m MCE	2.0							

KTA/SET Pump Flow Verification Report Form								
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Exhibit 8 (con't)

Location: Operator Area Sample Bank										
Pump ID	Pump ID Hose Media Target (l/min) Actual Flow (l/min) Ave Flo									
	No.			1 2 3 4 5					(l/min)	
Е	5	PVC (Resp.)	1.7							
F	6	PVC (Resp. R.A.)	1.7							
G	7	PVC (Total R.A.)	4.0							
Н	8	0.8 μ m MCE	2.0							

Location: Exhaust Sample Bank										
Pump ID	Pump ID Hose Media Target (l/min) Actual Flow (l/min) Ave Flow									
	No.			1 2 3 4 5 (l/mi					(l/min)	
I	9	PVC (Resp.)	1.7							
J	10	PVC (Resp. R.A.)	1.7							
K	11	PVC (Total R.A.)	4.0							
L	12	0.8 μ m MCE	2.0							

Location: Operator Breathing Zone										
Pump ID	Hose	Media	Target (l/min)	t (l/min) Actual Flow (l/min) Ave Flow						
	No.			1	2	3	4	5	(l/min)	
M	13	PVC (Resp. Dust)	1.7							
N	14									

KTA/SET Pump Flow Verification Report Form								
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