Note: This is a reference cited in *AP 42, Compilation of Air Pollutant Emission Factors, Volume I Stationary Point and Area Sources.* AP42 is located on the EPA web site at www.epa.gov/ttn/chief/ap42/

The file name refers to the reference number, the AP42 chapter and section. The file name "ref02_c01s02.pdf" would mean the reference is from AP42 chapter 1 section 2. The reference may be from a previous version of the section and no longer cited. The primary source should always be checked.

Commonwealth of Pennsylvania
Environmental Resources
July 8, 1992

Subject: Source Test Review

To: Data File
Berks Products Corporation
Ontelaunee Township, Berks County

From: Richard St. Louis, Chief
Source Testing Unit
Division of Technical Services and Monitoring
Bureau of Air Quality Control

Through: Chief, Source Testing and Monitoring Section

Berks Products Corporation operates an asphalt plant in Ontelaunee Township, Berks County. The McCarter batch mix unit has a maximum production rate of 200 tons per hour with the burner fired by No. 2 fuel oil. Emissions generated by this facility are controlled by a fabric filter collector.

On April 3 through 7, 1992, three particulate emission tests were conducted at the baghouse house exhaust stack by representatives of Spotts, Stevens and McCoy, Inc. The tests appear to have been conducted in accordance with the pretest protocol and are acceptable to the Department. I contacted the consultant to verify the stack diameter and traverse points as they were incorrectly shown in the pretest protocol as compared to the actual stack diameter and traverse points shown in the test report.

The following information was extracted from the test report:

Test Run Number	1	2	3
Date Test Conducted	April 3	April 6	April 7
Volumetric Flowrate (dscfm)	31,850	32,269	32,683
Particulate Emission Rate (lb/hr)	0.51	0.24	0.40
Particulate Concentration (gr./dscf)	0.002	0.001	0.001
Allowable Particulate Concentration (gr./dscf)	0.04	0.04	0.04
Isokinectic (96)	90.6	99.1	102.0
Design Rate (Ton/hr.)	200	200	200
Rate During Test (Ton/hr)	129	147	153

cc: Roger A. Fitterling, Southcentral Region
Permit File No. 06-303-023
A&C
EPA/RSL
Reading File

BR:bam

STD-501, 9-86

COMMONWEALTH OF PENNSYLVANIA

DATE: June 11, 1992

Southcentral Region
Reading District Office
8-468-4175

SUBJECT: Berks Products
Asphalt Batch Plant
File No. 06-303-023
Ontelaunee Township, Berks County

TO: L. BLAINE DeHAVEN, Chief
Source Testing & Monitoring Section
Division of Technical Services & Monitoring

FROM: Roger A. Fitterling
Air Pollution Control Engineer

Technical Services personnel are requested to review the attached stack test report to determine compliance with the requirements of Chapter 139. Sampling for particulate emissions from the company's asphalt batch plant was conducted on April 3, 6, and 7, 1992 by representatives of Spotts, Stevens, & McCoy, Inc. The source is covered by Plan Approval No. 06-303-023, and issuance of an Operating Permit will be based upon the acceptability of the test. This source shall comply with the standards set in NSPS Subpart I.

Attachments

cc: Abatement and Compliance
Reading District Office
Southcentral Regional Office
Re30 RF163.3

RECEIVED
JUN 15 1992
DER-AIR QUALITY CONTROL
DIV. OF ABATEMENT & COMPLIANCE

7/17

REPORT OF PARTICULATE AND VISIBLE EMISSION TESTING

BERKS PRODUCTS CORPORATION

ASPHALT BATCH PLANT

ONTELAUNEE TOWNSHIP, PENNSYLVANIA

TESTING PERFORMED ON

BAGHOUSE EXHAUST STACK

TEST PERFORMED

APRIL 3, 6-7, 1992

SSM FILE NO. 1133-002

SSM
SPOTTS, STEVENS and McCOY, INC.
ENGINEERS • PLANNERS • SCIENTISTS

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C - ANALYTICAL RESULTS

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REPORT OF PARTICULATE AND VISIBLE EMISSION TESTING

BERKS PRODUCTS CORPORATION
ASPHALT BATCH PLANT
ONTELAUNEE TOWNSHIP, PENNSYLVANIA

TESTING PERFORMED ON
BAGHOUSE EXHAUST STACK

TEST PERFORMED
APRIL 3, 6-7, 1992

1.0 INTRODUCTION

Pursuant to a request from management, compliance particulate and visible emission tests were performed on the Asphalt Batch Plant's baghouse exhaust stack.

A total of three tests were performed at the location. All tests were performed at normal production rates.

2.0 SUMMARY

2.1 The particulate and visible emission test results from the baghouse exhaust stack are as follows:

Run No.	Location	Gr./ DSCF (PaDER)	Lbs./Hr. (PaDER)	Gr./DSCF (Total)	Lbs./Hr. (Total)	Opacity %
BP-S-1	Baghouse Exhaust	0.002	0.51	0.003	0.74	0
BP-S-2	Baghouse Exhaust	0.001	0.24	0.001	0.41	0
BP-S-3	Baghouse Exhaust	0.001	0.40	0.002	0.50	0
Average		0.001	0.38	0.002	0.55	0

The results of the average of the three test runs at baghouse exhaust stack indicated the particulate matter was being exhausted at an average rate of

SSM
SPOTTS, STEVENS and McCOY, INC
ENGINEERS • PLANNERS • SCIENTISTS

TABLE 2-1

BERKS PRODUCTS CORPORATION
ONTELAUNEE TOWNSHIP, PA

BAGHOUSE
EXHAUST STACK

SUMMARY OF RESULTS

DATE	4/3/92	4/6/92	4/7/92
LOCATION	STACK	STACK	STACK
RUN NO.	BP-S-1	BP-S-2	BP-S-3
START TIME	1001	822	952
FLUE GAS CHARACTERISTICS			
Velocity, FPM	3,976	3,840	4,041
DSCFM	31,850	32,269	32,683
ACFM	40,245	38,874	40,901
Temperature, °F	132	127	138
Moisture, %	9.9	7.6	9.3
Static Pressure, IN. H2O	-0.58	-0.61	-0.60
Barometric Pressure, IN. HG.	29.5	29.95	29.92
EMISSIONS			
Particulate			
Gr/DSCF	0.002	0.001	0.001
Lbs/Hr	0.51	0.24	0.4
Gr/DSCF, Average		0.001	
Visible Emissions			
Opacity, %	0.0	0.0	0.0
Opacity, Average, %		0.0	

0.001 grains per dry standard cubic foot. This is below the allowable rate of 0.04 grains per dry standard cubic foot.

The average visible emission results of the runs was 0 percent opacity. This was below the allowable of 20% opacity.

3.0 SAMPLING AND ANALYTICAL PROCEDURES

3.1 The emission testing was performed by methods similar to those outlined in the Code of Federal Regulations, Title 40, Chapter 1, Subchapter C, Part 60, Appendix A, Method 5 - Determination of Particulate Emissions from Stationary Sources.

3.1.1 The sampling train used in this test is shown schematically in Figure 3-1. The main components of the sampling train were:

3.1.1.1 Nozzle - stainless steel tip with sharp, tapered leading edge; 0.243" diameter tip for run BP-S-1, BP-S-2 and BP-S-3.

3.1.1.2 Probe - sheathed stainless steel with heating system to keep the sample gases above the dew point.

3.1.1.3 Pitot Tube - S-type, attached to probe and inclined manometer, in order to monitor stack gas velocity at each traverse point.

3.1.1.4 Temperature Indicator - Thermocouple wire attached to probe and potentiometer to monitor stack temperature at each traverse point.

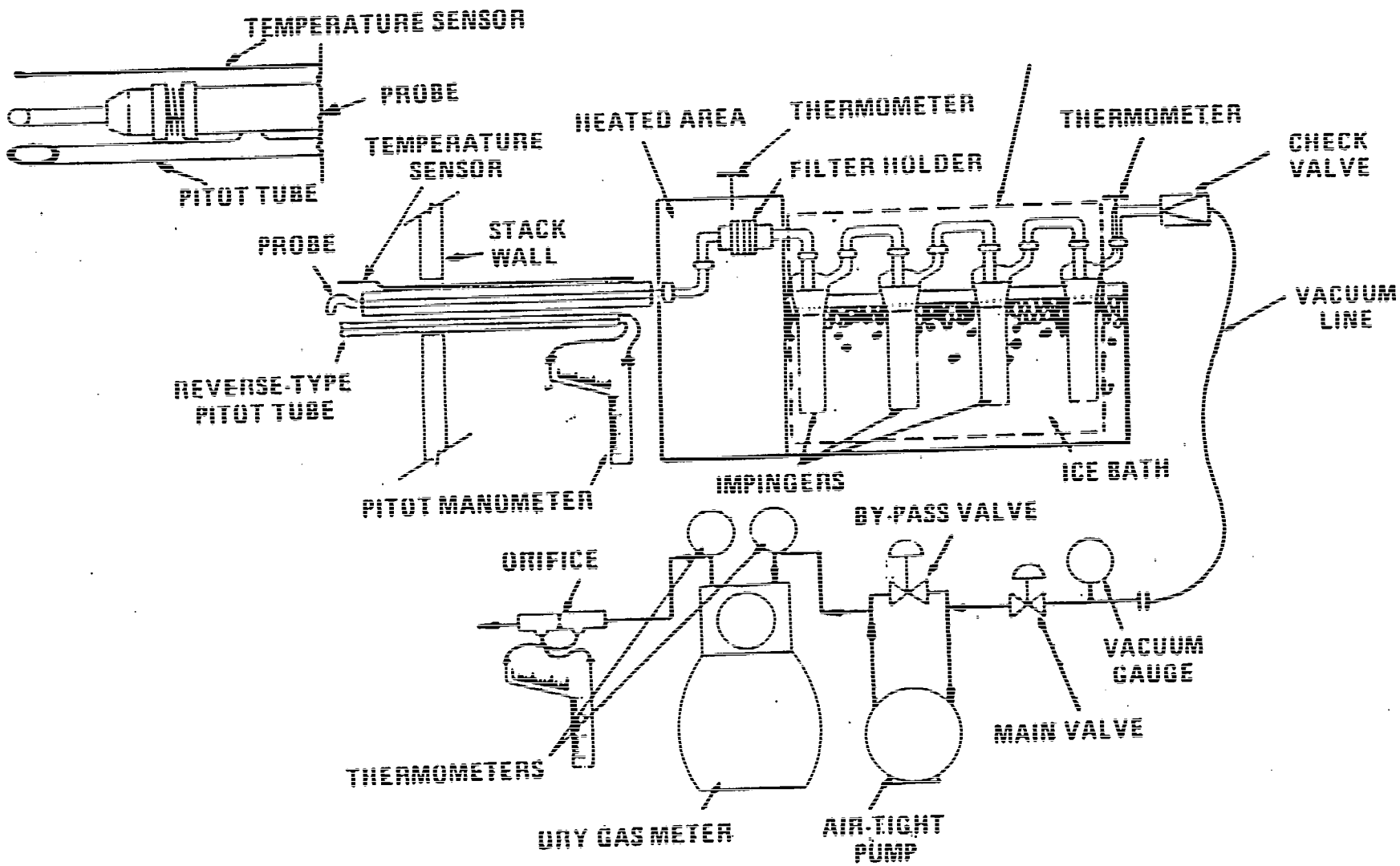


FIGURE 3–1

Berks Products Corp.
Asphalt Batch Plant
Ontelaunee Facility
EPA Method 5 Test Train
Baghouse Exhaust Stack

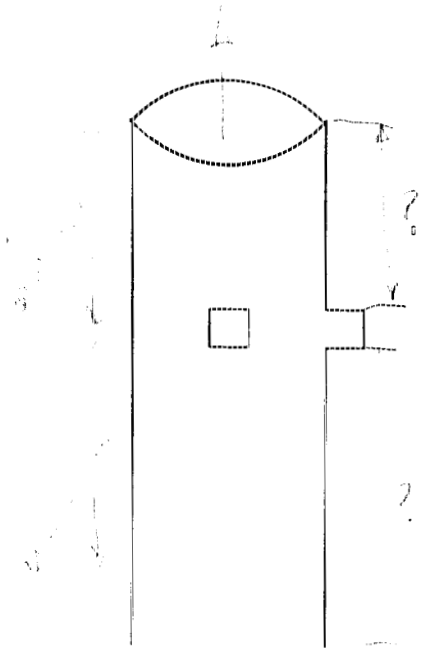
3.1.1.5 Filter Holder - Pyrex glass filter holder located in heated area. A Reeve Angel (934 AH) glass fiber filter was used.

3.1.1.6 Impingers - Four Greenburg-Smith impingers connected in series with glass ball joint fittings. The first, third and fourth impingers were modified by replacing the tip with a 1/2 inch I.D. glass tube extending to 1/2 inch from the bottom on the bottle. The first and second impingers each contained 150 ml of distilled water, and the third impinger was dry at the start of sampling. The fourth impinger contained 200 grams of preweighed silica gel to collect any remaining moisture in the gas stream before entering the vacuum pump.

3.1.1.7 Metering System - Vacuum gauge, leakless pump, flow adjust valves, thermometers capable of measuring temperatures to within 2°F, calibrated dry gas meter with 3% accuracy and calibrated orifice tube -- all necessary equipment needed to maintain isokinetic sampling rates and determine sample volume.

3.1.2 The sample locations are described below.

3.1.2.1 Two sampling ports were located on 90° centers in the baghouse exhaust stack. Twenty-four (24) traverse points were sampled at the discharge stack in order to obtain representative samples. Refer to Figure 3-2 for location of the traverse points.



SAMPLE POINT	DISTANCE FROM PORT, INCHES
1	1.00
2	3.01 2.88
3	5.07
4	7.61
5	10.75
6	15.31
7	29.62 27.09
8	32.25
9	35.39
10	37.93
11	40.12
12	42.00

FIGURE 3--2

Berks Products Corp.
Asphalt Batch Plant
Ontelaunee Facility
Sample Port and Traverse Point Location
Baghouse Exhaust Stack

3.1.3 Before testing, the complete sampling train was leak checked to 15 inches of mercury vacuum.

3.1.4 The required sampling time for the test, to maintain a 1 hour minimum test time and 50 DSCF sample volume, was 72 minutes. Time per test point was 3.0 minutes. The volume collected was in excess of the 50 DSCF required by PaDER regulations.

3.1.5 After testing, the sample train was again leak tested. The leak test vacuum was above the highest vacuum recorded during the test.

3.1.6 After the leak check, the sampling train was cleaned up in the following manner:

3.1.6.1 The probe was removed from the sample train. It was then rinsed with DI water, brushed three times and again rinsed with DI water and placed into container number 1. Container number 2 was then used to collect the acetone wash of the probe.

3.1.6.2 The nozzle was also rinsed into container number 1 with DI water, brushed, and rinsed again with DI water. It was then rinsed with acetone into container number 2.

3.1.6.3 The filter holder was then removed from the sampling train and sealed. After the testing was completed for the day, the filter holder was cleaned up. The filter was removed and placed into its petri dish. The front half of the filter holder was rinsed with DI water, brushed and rinsed again with the DI water and put into container number 1. The front half of the filter holder was then

rinsed into container number 2 with acetone. The back half of the filter holder was then rinsed with DI water into container number 3 -- the impinger water wash, and then with acetone into container number 4 -- the impinger acetone wash.

3.1.6.4 The final volumes of the first, second and third impinger were measured and placed into container number 3. The impingers and connecting glassware were then rinsed into container number 3 with DI water, then into container number 4 with acetone.

3.1.6.5 The silica gel in the fourth impinger was transferred into its container and reweighed.

3.1.7 The samples were analyzed individually, by the methods outlined below for determination of soluble and insoluble particulate matter in each sample:

3.1.7.1 Container number 1, containing the DI water washings of the nozzle, probe and front half of the filter holder, was desiccated to a constant weight.

3.1.7.2 Container number 2, containing the acetone wash of the nozzle, probe and front half of the filter holder, was desiccated to a constant weight.

3.1.7.3 The glass fiber filter was removed from its petri dish and desiccated until it reached a constant weight.

3.1.7.4 The impinger water sample, container number 3, was filtered through a 0.22 micron filter. This filter was also dried down to a constant weight.

3.1.7.5 The soluble portion of the container number 3 was dried down to a constant weight.

3.1.7.6 The acetone impinger wash, container number 4, was dried down to a constant weight.

3.1.8 The final particulate weight consists of nozzle, probe and front half filter holder washes, the weight of the glass fiber filter and the 0.22 micron filtration of the impinger water.

3.1.9 The Spotts, Stevens and McCoy, Inc. Chemistry Laboratory performed all analytical work for this project.

4.0 DISCUSSION OF RESULTS

4.1 Sample Run BP-S-1

A PaDER weight of 8.00 mg of particulate was collected in the sampling train during the test. Based on a volumetric flow rate of 31,850 DSCFM at the stack, the particulate concentration was calculated to be 0.002 grains per dry standard cubic foot.

A total weight of 11.70 mg of particulate was collected in the sampling train during the test. Based on a volumetric flow rate of 31,850 DSCFM at the start, the particulate concentration was calculated to be 0.003 grains per dry standard cubic foot.

The visible emissions were measured at 0% opacity.

4.2 Sample Run BP-S-2

A PaDER weight of 4.20 mg of particulate was collected in the sampling train during the test. Based on a volumetric flow rate of 32,269 DSCFM at the stack, the particulate concentration was calculated to be 0.001 grains per dry standard cubic foot.

A total weight of 7.10 mg of particulate was collected in the sampling train during the test. Based on volumetric flow rate of 32,269 DSCFM at the stack, the particulate concentration was calculated to be 0.001 grains per standard cubic foot.

The visible emissions were measured at 0% opacity.

4.3 Sample Run BP-S-3

A PaDER weight of 7.20 mg of particulate was collected in the sampling train during the test. Based on a volumetric flow rate of 32,683 DSCFM at the stack, the particulate concentration was calculated to be 0.001 grains per dry standard cubic foot.

A total weight of 9.00 mg of particulate was collected in the sampling train during the test. Based on a volumetric flow of 32,683 DSCFM at the stack, the particulate concentration was calculated to be 0.002 grains per dry standard cubic foot.

The visible emissions were measured at 0% opacity.

4.4 Sample Run Averages

The results of the particulate tests show that the average emission rate is 0.001 grains per standard cubic foot. This is below the allowable emission rate of 0.04 grains per standard cubic foot.

The results of the visible emission tests show that the average was 0 percent opacity. This is below the allowable rate of 20 percent opacity.

APPENDICES

APPENDIX A

PROJECT PARTICIPANTS

APPENDIX A

PROJECT PARTICIPANTS

Field Sampling Participants:

David J. Hofmann	Project Leader
Donald Wary	Sr. Engineering Technician
Jeff Jessell	Engineering Technician
Bob Maurer	Engineering Technician

Laboratory Participants:

Vaughan O'Neill	Chemist

APPENDIX B

PRODUCTION DATA

BERKS PRODUCTS
BATCH ASPHALT PLANT
ONTELAUNEE FACILITY
TEST PRODUCTION

10:01 [illegible] = 69 min.
11:21 → 12:16 = 55 min.

DATE	4/3/92
TIME	0957–1023
TIME	26 MIN
LOAD WT., LBS	43,815
	43,914
	44,031
TOTAL WT., LBS	131,760
TIME	1041–1110
TIME	29 MIN
LOAD WT., LBS	43,975
	44,170
	44,025
TOTAL WT., LBS	132,170
TIME	1117–1145
TIME	28 MIN
LOAD WT., LBS	44,423
	44,145
	23,975
TOTAL WT., LBS	112,543
TIME	1216–1257
TIME	41 MIN
LOAD WT., LBS	31,957
	44,231
	43,982
TOTAL WT., LBS	120,170
TIME	1305–1316
TIME	11 MIN
LOAD WT., LBS	44,079
	44,023
TOTAL WT., LBS	88,102

[illegible] 36 min.
9:04 – 10:13 = 69 min.

DATE	4/6/92
TIME	0822–0859
TIME	37 MIN
LOAD WT., LBS	44,071
	44,023
	24,019
	44,001
	43,980
TOTAL WT., LBS	200,094
TIME	0904–0932
TIME	28 MIN
LOAD WT., LBS	43,967
	43,949
TOTAL WT., LBS	87,916
TIME	0948–1013
TIME	25 MIN
LOAD WT., LBS	44,057
	20,006
	44,031
	44,074
TOTAL WT., LBS	152,168

220 [illegible] 90 min = 1.5 hrs
1.5 hrs 147 tons
hr

9:52 – 10:28 – 36
10:47 11:23 36

DATE	4/7/92
TIME	0952–1028
TIME	36 MIN
LOAD WT., LBS	44,057
	20,006
	44,031
	44,074
TOTAL WT., LBS	152,168
TIME	1031–1047
TIME	16 MIN
LOAD WT., LBS	44,131
	44,037
	36,109
TOTAL WT., LBS	124,277
TIME	1047–1123
TIME	36 MIN
LOAD WT., LBS	44,131
	43,945
	44,205
	40,245
TOTAL WT., LBS	172,526

224.5 tons
1.47 hr
= 153 tons/hr

Total time = 26 + 29 + 28 + 41 + 11 = 135 min ÷ 60 = 2.25 hrs

= 584,745 lbs
= 292.37 tons

= 129 tons/hr.

	13:00	9/3/92
FLAME METER	215	
STACK TEMP	156	
MATERAL TEMP	338	
PRESURE	0.8	
	1315	
FLAME METER	210	
STACK TEMP	160	
MATERIAL TEMP	351	
PRESURE	0.8	
	1330	
FLAME METER	210	
STACK TEMP	135	
MATERAL TEMP	348	
PRESURE	1.0	

4/3/92

Time 0955
Flame meter 210
Stack Temp 140
Material Temp 358
Pressure In Hg 1.0

TIME 10:10
FLAME METER 210
STACK TEMP 152
MATERAL TEMP 344
PRESSURE 0.7

TIME SHUTDOWN 10:25

10:55
FLAME METER 210
STACK TEMP 135
MATERAL TEMP 337
PRESURE 1.5

1110

FLAME METER 220
STACK TEMP 159
MATERIAL TEMP 356
PRESURE 0.8

11:25
FLAME METER 210
STACK TEMP 148
MATERAL TEMP 350
PRESURE 1.0

4/6/92

TIME 0825
FLAME METER 205
STACK TEMP 130
MATERIAL TEMP 360
PRESSURE IN H_2O 1.3

TIME 0840
FLAME METER 210
STACK TEMP 130
MATERIAL TEMP 348
PRESSURE IN H_2O 1.0

Time 8:55
Flame Meter 195
Stack Temp 125
Material Temp 375
Pressure In H_2O 1.25

Time 9:10
Flame Meter 210
Stack Temp 137
Material Temp 345
Pres. In H_2O 1.0

Time 9:25
Flame Meter 200
Stack Temp 124
Material Temp 378
Pres. In H_2O 1.3

Time ~~9:20~~ 10:05

Flame Meter 210
Stack Temp 136
Mat. Temp 355
Pres In H2O 1.5

Time : 10:20

Flame Meter
Stack Temp
Mat. Temp
Pres. In H2O

8/7/92

TIME	0955
FLAME METER	210
STACK TEMP	161
MATERIAL TEMP	348
PRES IN H_2O	0.8

Time	10:10
Flame Meter	210
Stack Temp	149
Material Temp	350
Pres in H_2O	0.8

Time	10 15
Flame Meter	100
Stack Temp	139
Material Temp	369
Pres in H_2O	1.3

Time	1040
Flame Meter	105
Stack Temp	152
Material Temp	341
Pres in H_2O	0.9
Pres	

4/7/92

Time	10:55
Flame Meter	210
Stack Temp	147
Material Temp	355
Pres in H_2O	1.0

Time	11:10
Flame Meter	210
Stack Temp	149
Material Temp	355
Pres in H_2O	1.2

Time	1125
Flame Meter	210
Stack Temp	158
Material Temp	353
Pres in H_2O	1.0

Time	
Flame Meter	
Stack Temp	
Material Temp	
Pres in H_2O	

1

No. 0 - 010

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

CHECK NO.
SUB TOTAL
TAX
TOTAL

SOLD TO: BERKS PRODUCTS INC.
ONTE. ROAD

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
09:57	04/03/92	3	106031	02612	BIND TP	7

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
30-BIND TP 009-0198.91	10-10ID2W	21-1/4WEAR

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		21.91

DRIVER _____ RECVD. BY _____

PURCHASE ORDER NO.

WEIGHPERSON

TEM #

SEAL NO.

TEMP

NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	ASPHALT	BATCH TOT
		SAND	1/4	1/2	2B	M.F.				ASP1	
1	0	1835	2490	3080	6000	6000			.0	252.3	6252
2	0	1855	2490	3065	5970	6010			1.5	252.6	6263
3	0	1865	2075	3010	5970	6020			1.5	248.7	6269
4	0	1930	2081	3035	5950	6015			1.5	248.7	6264
5	0	1910	2045	3010	5965	6000			.5	248.0	6248
6	0	1905	2495	3080	5959	6005			.0	249.3	6254
7	0	1885	2495	3055	5958	6015			.0	250.0	6265

INSPECTOR'S SIGNATURE

LOAD TOTAL 43815

1

No. 0 - 0108

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

CHECK NO.
SUB TOTAL
TAX
TOTAL

SOLD TO: BERKS PRODUCTS INC.
ONTE. ROAD

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
10:06	04/03/92	3	106031	02613	BIND TP	1

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
30-BIND TP 010-0220.87	10-10ID2W	21-1/4WEAR

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		21.96

DRIVER ..... RECVD. BY .....

PURCHASE ORDER NO. WEIGHPERSON

ITEM # SEAL NO. TEMP

NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	ASPHALT	BATCH TOT
		SAND	1/4	1/2	2B	M.F.				ASP1	
1	0	1835	2470	3050	5950	6000			.0	252.9	6253
2	0	1950	2102	3000	5960	6010			1.5	254.1	6264
3	0	1905	2045	3010	5945	6030			.5	249.5	6280
4	0	1895	2080	3030	5960	6025			.0	253.4	6278
5	0	1870	2515	3050	5990	6002			1.0	251.6	6254
6	0	1895	2090	3005	5985	6052			1.0	251.0	6303
7	0	1880	2515	3055	5985	6030			.0	251.5	6282

INSPECTOR'S SIGNATURE

LOAD TOTAL 43914

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

1
No. 0 - 010

CHECK NO.
SUB TOTAL
TAX
TOTAL

SOLD TO: BERKS PRODUCTS INC.
ONTE. ROAD

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
10:15	04/03/92	3	106031	02614	BIND TP	7

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
30--BIND TP 011--0242.89	10--10ID2W	21--1/4WEAR

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		22.02

DRIVER _____ RECVD. BY _____

PURCHASE ORDER NO.

WEIGHPERSON

ITEM #

SEAL NO.

NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	TEMP ASPHALT	BATCH TOT
		SAND	1/4	1/2	2B	M.F.				ASP1	
1	0	1950	2040	3005	5972	6045			.0	251.5	6297
2	0	1885	2525	3055	5972	6031			.0	254.5	6286
3	0	1850	2520	3050	5963	6014			.0	250.1	6264
4	0	1885	2070	3005	5985	6020			.5	251.8	6272
5	0	1895	2485	3050	5955	6049			.0	250.5	6300
6	0	1905	2040	3010	5990	6059			.5	251.8	6311
7	0	1875	2470	3055	6050	6050			.0	251.2	6301

INSPECTOR'S SIGNATURE

LOAD TOTAL 44031

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

1
No. 0 - 0109

CHECK NO.
SUB TOTAL
TAX
TOTAL

SOLD TO: BERKS PRODUCTS INC.
ONTE. ROAD

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
10:41	04/03/92	3	106031	02615	BIND TP	1

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
30-BIND TP 012-0264.88	10-10ID2W	21-1/4WEAR

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		21.99

DRIVER _____ RECVD. BY _____

PURCHASE ORDER NO.

WEIGHPERSON

ITEM #

SEAL NO.

NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	TEMP ASPHALT	BATCH TOT
		SAND	1/4	1/2	2B	M.F.				ASP1	
1	0	1965	2070	3010	5963	6045			.0	250.3	6295
2	0	1865	2480	3050	5995	6000			1.5	251.1	6251
3	0	1835	2460	3035	5960	6050			1.0	251.5	6302
4	0	1875	2065	2995	5974	6038			.0	247.7	6286
5	0	1910	2090	3020	5945	6053			.5	249.0	6302
6	0	1850	2485	3050	5970	6035			.5	248.8	6284
7	0	1880	2080	2995	6000	6005			.0	249.8	6255

INSPECTOR'S SIGNATURE

LOAD TOTAL 43975

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

1
No. 0 - 0109

CHECK NO.
SUB TOTAL
TAX
TOTAL

SOLD TO: BERKS PRODUCTS INC.
ONTE. ROAD

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
10:58	04/03/92	3	106031	02616	BIND TP	7

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
30-BIND TP 013-0286.97	10-10ID2W	21-1/4WEAR

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		22.09

DRIVER ..... RECVD. BY .....

PURCHASE ORDER NO.

WEIGHPERSON

ITEM #

SEAL NO.

TEMP

NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	ASPHALT	BATCH TOT
		SAND	1/4	1/2	2B	M.F.			.	ASP1	
1	0	1855	2505	3040	6180	6170			.0	252.9	6423
2	0	1885	2101	2995	6010	6010			.5	251.5	6262
3	0	1865	2505	3050	5960	6020			2.0	250.4	6270
4	0	1855	2475	3045	5985	6015			1.0	248.7	6264
5	0	1885	2033	2995	5990	6081			.0	250.1	6331
6	0	1870	2470	3050	6100	6105			.5	249.5	6355
7	0	1910	2030	2990	5965	6021			.0	251.6	6275

INSPECTOR'S SIGNATURE

LOAD TOTAL 44175

1

No. 0 - 0109

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

CHECK NO.
SUB TOTAL
TAX
TOTAL

SOLD TO: BERKS PRODUCTS INC.
ONTE. ROAD

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
11:07	04/03/92	3	106031	02617	BIND TP	1

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
30-BIND TP 014-0308.98	10-101D2W	21-1/4WEAR

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		22.01

DRIVER ..... RECVD. BY .....

PURCHASE ORDER NO.

WEIGHPERSON

ITEM #

SEAL NO.

TEMP

NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	ASPHALT	BATCH TOT
		SAND	1/4	1/2	2B	M.F.				ASP1	
1	0	1880	2075	3005	5950	6043			.0	249.5	6293
2	0	1915	2045	3005	5995	6010			.0	255.5	6266
3	0	1865	2515	3045	6095	6100			1.0	249.5	6350
4	0	1875	2475	3050	5950	6021			1.5	250.1	6271
5	0	1865	2460	3050	5950	6055			.0	250.5	6306
6	0	1900	2040	2990	5995	6010			.0	250.5	6261
7	0	1905	2035	3000	6030	6025			.5	252.7	6278

SPECTOR'S SIGNATURE

LOAD TOTAL 44025

1

No. 0 - 0103

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

CHECK NO.
SUB TOTAL
TAX
TOTAL

SOLD TO: BERKS PRODUCTS INC.
ONTE. ROAD

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
11:17	04/03/92	3	106031	02618	BIND TP	7

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
30-BIND TP 015-0331.19	10-10IDZW	21-1/4WEAR

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		22.21

DRIVER ..... RECVD. BY .....

PURCHASE ORDER NO. WEIGHPERSON

ITEM # SEAL NO. TEMP

NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	ASPHALT	BATCH TOT
		SAND	1/4	1/2	2B	M.F.				ASP1	
1	0	1910	2035	3005	6150	6145			.0	254.2	6399
2	0	1865	2510	3050	6105	6100			.5	253.3	6358
3	0	1900	2470	3045	6105	6100			.5	250.6	6351
4	0	1875	2455	3045	6150	6140			1.0	251.1	6391
5	0	1900	2095	3005	6115	6110			.0	250.6	6361
6	0	1890	2085	3000	6030	6025			.0	250.8	6276
7	0	1880	2480	3060	6040	6040			1.0	252.2	6292

INSPECTOR'S SIGNATURE

LOAD TOTAL 44423

1

No. 0 - 01091

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

CHECK NO.
SUB TOTAL
TAX
TOTAL

SOLD TO: BERKS PRODUCTS INC.
ONTE. ROAD

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
11:26	04/03/92	3	106031	02619	BIND TP	1

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
30-BIND TP 016-0353.26	10-10ID2W	21-1/4WEAR

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		22.07

DRIVER _____ RECVD. BY _____

PURCHASE ORDER NO.

WEIGHPERSON

ITEM #

SEAL NO.

NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	TEMP ASPHALT	BATCH TOT
		SAND	1/4	1/2	2B	M.F.				ASP1	
1	0	1860	2460	3040	6085	6080			.0	253.6	633#
2	0	1845	2425	3030	6080	6075			1.0	254.4	632[illegible]
3	0	1880	2065	3000	6080	6075			1.0	254.9	633[illegible]
4	0	1880	2087	2995	6100	6100			.0	251.1	635[illegible]
5	0	1900	2085	3000	6020	6020			.5	250.1	627[illegible]
6	0	1840	2495	3040	5975	6015			.0	250.5	626[illegible]
7	0	1860	2455	3050	6015	6015			.0	250.1	6265

INSPECTOR'S SIGNATURE

LOAD TOTAL 44145

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

1
No. 0 - 010

SOLD TO: BERKS PRODUCTS INC.
ONTE. ROAD

CODE NO.

CHECK NO.
SUB TOTAL
TAX
TOTAL

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
11:45	04/03/92	3	106031	02620	BIND TP	1

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
30--BIND TP 017-0365.25	10--10ID2W	26--FINEBIN

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		11.99

DRIVER _____ RECV'D. BY _____

PURCHASE ORDER NO.

WEIGHPERSON

ITEM #

SEAL NO.

TEMP

NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	ASPHALT	BATCH TOT
		SAND	1/4	1/2	2B	M.F.				ASP1	
1	0	1780	1970	2860	5790	5790			.0	244.8	6035
2	0	1855	1975	2855	5750	5745			2.5	239.7	5985
3	15	1815	1950	2855	5735	5735			2.5	243.3	5978
4	0	1810	2395	2925	5735	5735			2.0	240.3	5975

INSPECTOR'S SIGNATURE

LOAD TOTAL 23973

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

3
No. 0 - 01097

CHECK NO.
SUB TOTAL
TAX
TOTAL

SOLD TO:
ECKMAN J.D.
PA TURNPIKE
CONT.91-007-RG33-C
RDG.INT.

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
12:16	04/03/92	3	118820	02621	BIND TP	1

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
30-BIND TP 001-0015.98	10-101D2W	04-ID2BIND

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		15.98

DRIVER _____ RECVD. BY _____

PURCHASE ORDER NO.

WEIGHPERSON

TEM #

SEAL NO.

TEMP

NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	ASPHALT	BATCH TOT
		SAND	174	172	28	M.F.				ASF1	
1	0	1945	2130	3050	6095	6156			.0	258.0	6414
2	0	1885	2595	3095	6103	6128			2.0	259.3	6387
3	0	1945	2088	3045	6100	6121			2.5	258.7	6380
4	0	1920	2590	3095	6105	6120			2.5	260.9	6381
5	0	1966	2130	3050	6055	6136			3.0	258.7	6395

INSPECTOR'S SIGNATURE

LOAD TOTAL 31957

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

1
No. 0 - 0109

CHECK NO.
SUB TOTAL
TAX
TOTAL

SOLD TO: BERKS PRODUCTS INC.
ONTE. ROAD

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
12:32	04/03/92	3	106031	02622	FINEBIN	7

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
30-BIND TP 017-0365.25	10-10ID2W	26-FINEBIN 001-0022.12

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		22.12

DRIVER _____ RECVD. BY _____

URCHASE ORDER NO.

WEIGHPERSON

ITEM #

SEAL NO.

TEMP

NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	ASPHALT	BATCH TOT
		SAND	1/4	1/2	2B	M.F.				ASP1	
1	0	2195	3385	4335	5905	5935			.0	314.3	6249
2	0	2185	3340	4345	5900	5997			1.5	313.6	6311
3	0	2190	3305	4350	5880	5987			1.0	314.8	6302
4	0	2125	3340	4350	5883	5975			.5	314.1	6289
5	0	2270	3300	4335	5860	5973			.5	314.1	6287
6	0	2195	3292	4340	6175	6185			1.0	313.8	6499
7	0	2235	3300	4350	5884	5980			.0	313.8	6294

NSPECTOR'S SIGNATURE

LOAD TOTAL 44231

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

1
No. 0 - 0109

CHECK NO.
SUB TOTAL
TAX
TOTAL

SOLD TO: BERKS PRODUCTS INC.
ONTE. ROAD

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
12:57	04/03/92	3	106031	02623	FINEBIN	1

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
30-BIND TP 017-0365.25	10-10ID2W	26-FINEBIN 002-0044.11

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		21.99

DRIVER ..... RECVD. BY .....

PURCHASE ORDER NO. WEIGHPERSON

ITEM # SEAL NO. TEMP

NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	ASPHALT	BATCH TOT
		SAND	1/4	1/2	2B	M.F.				ASP1	
1	0	2195	3285	4345	5876	5983			.0	314.7	6298
2	0	2125	3285	4345	5882	5974			1.5	314.4	6286
3	0	2105	3225	4345	5895	5959			.5	314.1	6273
4	0	2235	3190	4350	5945	5955			.5	313.7	6269
5	0	2150	3160	4345	5845	5989			.0	314.0	6303
6	0	2170	3180	4340	5870	5984			.0	312.8	6297
7	0	2241	3200	4360	5940	5940			.5	313.6	6254

INSPECTOR'S SIGNATURE

LOAD TOTAL 43981

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

1
No. 0 - 011

CHECK NO.
SUB TOTAL
TAX
TOTAL

SOLD TO: BERKS PRODUCTS INC.
ONTE. ROAD

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
13:06	04/03/92	3	106031	02624	FINEBIN	7

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
30-BIND TP 017-0365.25	10-10ID2W	26-FINEBIN 003-0066.15

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		22.04

DRIVER ..... RECVD. BY .....

PURCHASE ORDER NO.

WEIGHPERSON

ITEM #

SEAL NO.

TEMP

NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	ASPHALT	BATCH TOT
		SAND	1/4	1/2	2B	M.F.				ASP1	
1	0	2160	3150	4367	5920	5940			.0	313.9	6254
2	0	2120	3145	4355	5900	6020			.0	315.8	6336
3	0	2135	3115	4350	5896	6025			.0	314.6	6340
4	0	2135	3125	4340	5900	5945			.5	313.6	6259
5	0	2200	3130	4374	5885	6025			.5	313.4	6338
6	0	2150	3125	4340	5895	5945			.0	313.5	6257
7	0	2220	3120	4335	5902	5980			.0	313.4	6293

INSPECTOR'S SIGNATURE

LOAD TOTAL 44075

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

1
No. 0 - 0110

CHECK NO.
SUB TOTAL
TAX
TOTAL

SOLD TO: BERKS PRODUCTS INC.
ONTE. ROAD

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
13:13	04/03/92	3	106031	02625	FINEBIN	1

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
30-BIND TP 017-0365.25	10-10ID2W	26-FINEBIN 004-0088.16

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		22.01

DRIVER ..... RECVD. BY .....

PURCHASE ORDER NO.

WEIGHPERSON

ITEM #

SEAL NO.

TEMP

NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	ASPHALT	BATCH TOT
		SAND	1/4	1/2	2B	M.F.				ASP1	
1	0	2125	3110	4355	5870	5981			.0	315.4	6296
2	0	2165	3130	4340	5880	5996			.5	316.3	6312
3	0	2190	3120	4375	5878	5986			.0	315.5	6302
4	0	2190	3130	4340	5845	5980			2.0	314.1	6294
5	0	2115	3075	4345	5845	5972			2.5	314.7	6287
6	0	2130	3070	4350	5858	5973			.0	312.6	6286
7	0	2095	3065	4340	5877	5935			2.0	311.1	6246

INSPECTOR'S SIGNATURE

LOAD TOTAL 44023

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

No. U - 01124

CHECK NO.	
SUB TOTAL	
TAX	
TOTAL	

SOLD TO: BERKS PRODUCTS INC.
ONTE. ROAD

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
08:25	04/06/92	3	106031	02647	FINEBIN	7

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
30-BIND TP	10-10ID2W	26-FINEBIN 001-0022.04

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		22.04

DRIVER _____ RECVD. BY _____

PURCHASE ORDER NO.

WEIGHPERSON

ITEM #

SEAL NO.

TEMP

NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	ASPHALT	BATCH TOT
		SAND	1/4	1/2	2B	M.F.				ASP1	
1	0	2115	3075	4385	5860	6020			.0	312.8	6333
2	0	2125	3080	4375	5885	5984			1.5	313.1	6297
3	0	2135	3075	4407	5885	5975			1.5	315.1	6290
4	0	2140	3135	4370	5845	5971			.5	314.4	6285
5	0	2115	3095	4375	5855	5976			.0	312.6	6289
6	0	2140	3110	4380	5850	5981			.0	312.6	6294
7	0	2155	3095	4370	5885	5970			.0	313.3	6283

INSPECTOR'S SIGNATURE

LOAD TOTAL 44071

6-546623

3

No. 0 - 01126

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

CHECK NO.	
SUB TOTAL	
TAX	
TOTAL	

SOLD TO: WEXCON

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
08:46	04/06/92	3	183255	02649	BCBC	1

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
01-BCBC 001-0012.01	04-ID2BIND	10-101D2W

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		12.01

DRIVER Ron C RECVD. BY

PURCHASE ORDER NO.						WEIGHPERSON					
ITEM #						SEAL NO.				TEMP	
NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	ASPHALT	BATCH TOT
		SAND	1/4	1/2	2B	M.F.				ASP1	
1	0	1685	1780	2655	5663	5780			.0	234.5	6015
2	0	1715	1795	2630	5647	5765			1.0	244.6	6010
3	0	1775	1780	2635	5625	5752			.0	248.0	6000
4	0	1670	1775	2635	5654	5749			.5	245.4	5994

INSPECTOR'S SIGNATURE

LOAD TOTAL 24019

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

No. 0 - 01125

CHECK NO.
SUB TOTAL
TAX
TOTAL

BERKS PRODUCTS INC.
ONTE. ROAD

CODE NO.

DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
04/06/92	3	106031	02648	FINEBIN	1

UCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
ND TP	10-10102W	26-FINEBIN 002-0044.05

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		22.01

RECVD. BY

ER NO.				WEIGHPERSON					
				SEAL NO.				TEMP	
AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	ASPHALT	BATCH TOT
SAND	1/4	1/2	2B	M.F.				ASP1	
2175	3105	4355	6025	6025			.0	313.5	6339
2210	3105	4355	5960	5960			.5	313.3	6273
2165	3095	4335	5940	5940			.0	315.7	6256
2175	3095	4345	5915	5950			.0	310.0	6260
2085	3030	4365	5920	5948			.5	310.5	6259
2175	3055	4360	5885	6020			.5	312.2	6332
2180	3045	4350	5850	5989			.5	314.8	6304

LOAD TOTAL 44023

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

No. 0 - 01127

CHECK NO.
SUB TOTAL
TAX
TOTAL

SOLD TO: BERKS PRODUCTS INC.
ONTE. ROAD

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
08:53	04/06/92	3	106031	02650	FINEBIN	7

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
30-BIND TP	10-10ID2W	26-FINEBIN 003-0066.05

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		22.00

DRIVER _____ RECVD. BY _____

PURCHASE ORDER NO.						WEIGHPERSON					
ITEM #						SEAL NO.				TEMP	
NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	ASPHALT	BATCH TOT
		SAND	1/4	1/2	2B	M.F.				ASP1	
1	0	2150	3120	4330	5850	5963			1.5	316.8	6280
2	0	2195	3090	4345	5855	5984			2.0	315.9	6300
3	0	2150	3105	4350	5865	5970			2.5	319.6	6290
4	0	2185	3125	4350	5879	5966			2.5	319.8	6286
5	0	2160	3110	4340	5883	5961			2.0	318.8	6280
6	0	2135	3095	4345	5880	5965			2.5	318.2	6283
7	0	2210	3120	4345	5859	5964			2.5	318.4	6282

INSPECTOR'S SIGNATURE

LOAD TOTAL 44001

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

No. 0 - 01128

CHECK NO.
SUB TOTAL
TAX
TOTAL

SOLD TO: BERKS PRODUCTS INC.
ONTE.ROAD

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
08:59	04/06/92	3	106031	02651	FINEBIN	1

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
30-BIND TP	10-10ID2W	26-FINEBIN 004-0088.04

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		21.99

DRIVER _____ RECVD. BY _____

PURCHASE ORDER NO.

WEIGHPERSON

ITEM #

SEAL NO.

TEMP

NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	ASPHALT	BATCH TOT
		SAND	1/4	1/2	2B	M.F.				ASP1	
1	0	2145	3115	4345	5884	5968			2.5	317.8	6286
2	0	2170	3140	4365	5845	5973			3.0	315.6	6289
3	0	2155	3130	4345	5855	5967			2.0	316.9	6284
4	0	2200	3100	4365	5860	5955			3.0	317.2	6272
5	0	2125	3120	4380	5887	5974			2.0	315.7	6290
6	0	2115	3090	4380	5878	5959			2.5	316.9	6276
7	0	2185	3120	4385	5860	5967			3.0	316.4	6283

INSPECTOR'S SIGNATURE

LOAD TOTAL 43980

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

No. 0 - 01129

CHECK NO.
SUB TOTAL
TAX
TOTAL

SOLD TO: BERKS PRODUCTS INC.
ONTE. ROAD

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
09:12	04/06/92	3	106031	02652	FINEBIN	7

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
30-BIND TP	10-10ID2W	26-FINEBIN 005-0110.02

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		21.98

DRIVER _____ RECVD. BY _____

PURCHASE ORDER NO.

WEIGHPERSON

ITEM #

SEAL NO.

TEMP

NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	ASPHALT	BATCH TOT
		SAND	1/4	1/2	2B	M.F.				ASP1	
1	0	2150	3085	4340	5886	5963			.5	313.6	6277
2	0	2155	3050	4335	5850	5974			1.5	314.7	6289
3	0	2185	3050	4345	5865	5968			2.0	316.0	6284
4	0	2135	3085	4365	5870	5966			2.0	315.1	6281
5	0	2110	3085	4375	5870	5960			2.0	314.6	6275
6	0	2160	3045	4260	5890	5960			1.5	313.1	6273
7	0	2210	3045	4375	5896	5973			1.5	314.5	6288

INSPECTOR'S SIGNATURE

LOAD TOTAL 43967

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

No. 0 - 01130

CHECK NO.	
SUB TOTAL	
TAX	
TOTAL	

SOLD TO: BERKS PRODUCTS INC.
ONTE. ROAD

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
09:22	04/06/92	3	106031	02653	FINEBIN	1

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
30-BIND TP	10-10ID2W	26-FINEBIN 006-0131.99

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		21.97

DRIVER _____ RECVD. BY _____

PURCHASE ORDER NO.

WEIGHPERSON

ITEM #

SEAL NO.

TEMP

NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	ASPHALT	BATCH TOT
		SAND	1/4	1/2	2B	M.F.				ASP1	
1	0	2125	3030	4350	5879	5966			.0	311.5	6278
2	0	2190	3105	4300	5873	5964			1.0	313.1	6277
3	0	2160	3070	4410	5851	5968			1.0	314.9	6283
4	0	2120	3025	4685	5860	5971			.0	315.0	6286
5	0	2210	3045	4315	5905	5936			.5	314.1	6250
6	0	2165	3105	4255	5860	5973			.0	313.1	6286
7	0	2175	3035	4267	5895	5981			.5	308.3	6289

INSPECTOR'S SIGNATURE

LOAD TOTAL 43949

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

No. 0 - 01131

CHECK NO.
SUB TOTAL
TAX
TOTAL

SOLD TO:

BERKS PRODUCTS INC.
ONTE. ROAD

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
09:48	04/06/92	3	106031	02654	FINEBIN	7

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
30-BIND TP	10-10ID2W	26-FINEBIN 007-0154.00

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		22.01

DRIVER _____ RECVD. BY _____

PURCHASE ORDER NO. | WEIGHPERSON

ITEM # | SEAL NO. | TEMP

NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	ASPHALT	BATCH TOT
		SAND	1/4	1/2	2B	M.F.				ASP1	
1	0	2265	3035	4425	5885	5985			2.0	330.5	6316
2	0	2235	3040	4415	5878	5971			2.5	317.8	6289
3	0	2185	3045	4420	5875	5981			3.0	312.2	6293
4	0	2205	3065	4405	5860	5977			2.5	312.2	6289
5	0	2165	3035	4425	5867	5972			3.0	314.5	6287
6	0	2220	3095	4295	5882	5958			2.5	312.9	6271
7	0	2225	3105	4495	5865	5965			2.5	313.2	6278

INSPECTOR'S SIGNATURE

LOAD TOTAL 44023

3

No. U - 01132

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

CHECK NO.
SUB TOTAL
TAX
TOTAL

SOLD TO: FOLK PAVING, INC
RONNIE C.

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
10:12	04/06/92	3	123013	02655	FINEBIN	24

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
10-10ID2W	05-COMMBIND	26-FINEBIN 004-0075.00

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		18.03

DRIVER Tim H RECVD. BY

PURCHASE ORDER NO. WEIGHPERSON

ITEM # SEAL NO. TEMP

NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	ASPHALT	BATCH TOT
		SAND	1/4	1/2	2B	M.F.				ASP1	
1	0	2075	2895	4245	5590	5691			.0	301.1	5992
2	0	2045	2900	4205	5624	5680			1.5	300.7	5981
3	0	2085	2900	4075	5626	5723			.5	300.1	6023
4	0	2080	2890	4070	5595	5755			.0	300.4	6055
5	0	2070	2950	4099	5595	5715			.0	300.2	6015
6	0	2120	2905	4095	5632	5700			.0	299.5	6000

INSPECTOR'S SIGNATURE

LOAD TOTAL 36066

1

No. U - 01165

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

CHECK NO.
SUB TOTAL
TAX
TOTAL

SOLD TO: BERKS PRODUCTS INC.
ONTE. ROAD

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
09:57	04/07/92	3	106031	02687	BIND TP	1

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
30-BIND TP 001-0022.03	10-10ID2W	26-FINEBIN

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		22.03

DRIVER _____ RECVD. BY _____

PURCHASE ORDER NO.						WEIGHPERSON					
ITEM #						SEAL NO.				TEMP	
NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	ASPHALT	BATCH TOT
		SAND	1/4	1/2	2B	M.F.				ASP1	
1	0	1815	2045	3036	5965	6033			.0	248.7	6282
2	0	1840	2070	3015	5974	6028			.5	249.5	6278
3	0	1855	2070	3010	5950	6053			.0	252.2	6305
4	0	1815	2055	3035	5945	6080			.0	252.1	6332
5	0	1930	2040	3015	5981	6020			.5	251.1	6271
6	0	1885	2128	2995	5950	6050			.0	251.6	6302
7	0	1815	2435	3055	5970	6035			.0	251.7	6287

INSPECTOR'S SIGNATURE

LOAD TOTAL 44057

3

No. 0 - 01166

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

CHECK NO.	
SUB TOTAL	
TAX	
TOTAL	

SOLD TO: FOLK PAVING, INC
RONNIE C.

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
10:01	04/07/92	3	123013	02688	FINEBIN	6

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
17-SP.WEAR.	05-COMMBIND	26-FINEBIN 009-0171.22

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		10.00

DRIVER _____ RECVD. BY _____

PURCHASE ORDER NO.

WEIGHPERSON

ITEM #

SEAL NO.

TEMP

NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT.	TARE	ASPHALT	BATCH TOT.
		SAND	1/4	1/2	2B	M.F.				ASP1	
1	0	2245	3460	4595	6205	6334			.0	330.6	6665
2	0	2365	3455	4605	6205	6345			1.5	333.6	6679
3	0	2220	3415	4595	6215	6330			.0	332.2	6662

INSPECTOR'S SIGNATURE

LOAD TOTAL 20006

1

NO. G - 01167

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

CHECK NO.	
SUB TOTAL	
TAX	
TOTAL	

SOLD TO: BERKS PRODUCTS INC.
ONTE. ROAD

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
10:07	04/07/92	3	106031	02689	BIND TP	7

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
30-BIND TP 002-0044.05	10-10IDZW	26-FINEBIN

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		22.02

DRIVER _____ RECVD. BY _____

PURCHASE ORDER NO.

WEIGHPERSON

ITEM #

SEAL NO.

TEMP

NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	ASPHALT	BATCH TOT
		SAND	1/4	1/2	2B	M.F.				ASP1	
1	0	1850	2095	3015	5983	6005			.0	249.0	6254
2	0	1930	2035	3015	5960	6045			.0	251.5	6297
3	0	1915	2035	3010	5960	6040			.0	251.2	6291
4	0	1870	2095	3005	5978	6000			.0	250.1	6250
5	0	1840	2080	3020	5960	6060			.0	251.7	6312
6	0	1890	2095	3005	5975	6080			.5	250.9	6331
7	0	1855	2475	3075	5989	6044			1.0	251.7	6296

INSPECTOR'S SIGNATURE

LOAD TOTAL 44031

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

No. 0 - 01168

CHECK NO.
SUB TOTAL
TAX
TOTAL

SOLD TO: BERKS PRODUCTS INC.
ONTE. ROAD

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
10:18	04/07/92	3	106031	02690	BIND TP	1

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
30-BIND TP 003-0066.09	10-10ID2W	26-FINEBIN

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		22.04

DRIVER _____ RECVD. BY _____

PURCHASE ORDER NO. | WEIGHPERSON

ITEM # | SEAL NO. | TEMP

NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	ASPHALT	BATCH TOT
		SAND	1/4	1/2	2B	M.F.				ASP1	
1	0	1875	2080	3015	5955	6048			.0	247.8	6296
2	0	1875	2030	3010	5993	6055			.0	250.4	6305
3	0	1865	2500	3060	5993	6046			.0	251.7	6298
4	0	1960	2080	3010	5950	6055			.0	252.1	6307
5	0	1910	2035	3005	5955	6044			.5	251.8	6296
6	0	1940	2050	3010	5960	6041			.0	250.0	6291
7	0	1970	2080	3020	5950	6030			.5	250.9	6281

INSPECTOR'S SIGNATURE

LOAD TOTAL 44074

1

NO. C - 01109

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

CHECK NO.	
SUB TOTAL	
TAX	
TOTAL	

SOLD TO: BERKS PRODUCTS INC.
ONTE.ROAD

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
10:31	04/07/92	3	106031	02691	BIND TP	7

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
30-BIND TP 004-0088.16	10-10ID2W	26-FINEBIN

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		22.07

DRIVER _____ RECVD. BY _____

PURCHASE ORDER NO. | WEIGHPERSON

ITEM # | SEAL NO. | TEMP

NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	ASPHALT	BATCH TOT
		SAND	1/4	1/2	2B	M.F.				ASP1	
1	0	1880	2560	3050	5975	6021			.0	249.2	6270
2	0	1960	2040	3020	5987	6025			1.5	250.8	6276
3	0	1975	2080	3000	5940	6100			.0	251.6	6352
4	0	1835	2600	2970	5975	6056			.0	251.9	6308
5	0	1895	2560	3060	5945	6056			.5	251.2	6307
6	0	1945	2085	3030	5980	6013			.5	251.0	6264
7	0	1970	2073	3025	5945	6102			.0	251.5	6354

INSPECTOR'S SIGNATURE

LOAD TOTAL 44131

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

No. U - 01170

CHECK NO.
SUB TOTAL
TAX
TOTAL

SOLD TO: BERKS PRODUCTS INC.
ONTE.ROAD

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
10:37	04/07/92	3	106031	.02692	BIND TP	1

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
30-BIND TP 005-0110.18	10-10ID2W	26-FINEBIN

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		22.02

DRIVER _____ RECVD. BY _____

PURCHASE ORDER NO. | WEIGHPERSON

ITEM # | SEAL NO. | TEMP

NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	ASPHALT	BATCH TOT
		SAND	1/4	1/2	2B	M.F.				ASP1	
1	0	1805	2665	3040	5965	6037			.5	251.1	6288
2	0	1845	2660	3040	5975	6024			.0	249.2	6273
3	0	1815	2595	3100	5975	6058			.5	251.9	6310
4	0	1850	2535	3100	5960	6045			.0	251.9	6297
5	0	1820	2520	3105	5975	6050			.5	250.5	6301
6	0	1875	2143	3060	5965	6055			.0	251.1	6306
7	0	1940	2082	3045	5975	6010			1.0	251.6	6262

INSPECTOR'S SIGNATURE

LOAD TOTAL 44037

3

No. 0 - 01171

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

CHECK NO.
SUB TOTAL
TAX
TOTAL

SOLD TO: FOLK PAVING, INC
RONNIE C.

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
10:43	04/07/92	3	123013	02693	FINEBIN	7

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
17-SP.WEAR.	05-COMMBIND	26-FINEBIN 010-0189.27

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		18.05

DRIVER _____ RECVD. BY _____

PURCHASE ORDER NO.						WEIGHPERSON					
ITEM #						SEAL NO.				TEMP	
NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	ASPHALT	BATCH TOT
		SAND	1/4	1/2	2B	M.F.				ASP1	
1	0	2080	3160	4180	5600	5723			.5	294.1	6017
2	0	2080	2875	4165	5595	5721			.0	298.5	6020
3	0	2150	2865	4165	5615	5726			.0	298.1	6024
4	0	2110	2911	4180	5590	5717			.5	298.9	6016
5	0	2165	2970	4185	5605	5719			.5	299.8	6019
6	0	2130	3045	4165	5615	5713			.0	299.7	6013

INSPECTOR'S SIGNATURE Chris Graff

LOAD TOTAL 36109

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

No. U - 01172

CHECK NO.
SUB TOTAL
TAX
TOTAL

SOLD TO: BERKS PRODUCTS INC.
ONTE.ROAD

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
10:51	04/07/92	3	106031	02694	BIND TP	7

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
30-BIND TP 006-0132.25	10-10ID2W	26-FINEBIN

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		22.07

DRIVER _____ RECVD. BY _____

PURCHASE ORDER NO. | WEIGHPERSON

ITEM # | SEAL NO. | TEMP

NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	ASPHALT	BATCH TOT
		SAND	1/4	1/2	2B	M.F.				ASP1	
1	0	1855	2505	3055	5970	6005			.0	251.3	6256
2	0	1870	2100	3010	5979	6059			1.5	253.5	6313
3	0	1970	2115	3005	5985	6080			1.0	253.1	6333
4	0	1920	2045	3005	5980	6022			.0	252.5	6275
5	0	1915	2525	3060	6130	6125			.0	252.1	6377
6	0	1955	2065	2995	5965	6039			.5	251.8	6291
7	0	1900	2420	3045	5940	6035			.0	251.0	6286

INSPECTOR'S SIGNATURE

LOAD TOTAL 44131

1

No. U - 01173

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

CHECK NO.
SUB TOTAL
TAX
TOTAL

SOLD TO: BERKS PRODUCTS INC.
ONTE.ROAD

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
10:59	04/07/92	3	106031	02695	BIND TP	1

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
30-BIND TP 007-0154.22	10-101D2W	26-FINEBIN

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		21.97

DRIVER _____ RECVD. BY _____

PURCHASE ORDER NO. | WEIGHPERSON

ITEM # | SEAL NO. | TEMP

NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	ASPHALT	BATCH TOT
		SAND	1/4	1/2	2B	M.F.				ASP1	
1	0	1875	2480	3050	6000	6000			.0	248.4	6248
2	0	1910	2157	3000	5940	6030			.0	251.0	6281
3	0	1910	2130	3010	5970	6012			.5	251.6	6264
4	0	1935	2065	3015	5995	6010			.0	252.1	6262
5	0	1885	2565	3040	5965	6090			1.0	251.8	6342
6	0	1960	2080	3049	6035	6035			1.0	252.1	6287
7	0	1865	2540	3050	6010	6010			.0	251.3	6261

INSPECTOR'S SIGNATURE

LOAD TOTAL 43945

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

No. 0 - 01174

CHECK NO.	
SUB TOTAL	
TAX	
TOTAL	

SOLD TO: BERKS PRODUCTS INC.
ONTE. ROAD

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
11:09	04/07/92	3	106031	02696	BIND TP	7

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
30-BIND TP 008-0176.32	10-10ID2W	26-FINEBIN

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		22.10

DRIVER _____ RECVD. BY _____

PURCHASE ORDER NO.						WEIGHPERSON					
ITEM #						SEAL NO.				TEMP	
NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	ASPHALT	BATCH TOT
		SAND	1/4	1/2	2B	M.F.				ASP1	
1	0	1870	2525	3035	6140	6140			.0	248.3	6388
2	0	1835	2505	3035	6145	6145			1.5	249.3	6394
3	0	1895	2130	2965	6040	6045			1.0	252.5	6298
4	0	1905	2030	2975	6030	6035			2.0	250.7	6286
5	0	1895	2465	3040	5985	6030			.5	251.3	6281
6	0	1840	2565	2990	6050	6050			.0	250.5	6301
7	0	1840	2495	3045	5960	6005			.0	251.8	6257

INSPECTOR'S SIGNATURE

LOAD TOTAL 44205

3

No. U - 01175

BERKS PRODUCTS

BLACKTOP PLANTS
MAIN OFFICE: 726 SPRING ST. P.O. BOX 421
READING, PA 19603
RT. 222 AT TEMPLE (215) 374-5131
ROUTE 61 LEESPORT (215) 929-4302

CHECK NO.
SUB TOTAL
TAX
TOTAL

SOLD TO: FOLK PAVING, INC
RONNIE C.

CODE NO.

TIME	DATE	PLANT #	CUSTOMER #		TYPE MATERIAL	TRUCK #
11:17	04/07/92	3	123013	02697	FINEBIN	9

PRODUCT # - NAME / LOAD # - ACCUMULATED TOTALS (TONS)		
17-SP.WEAR.	05-COMMBIND	26-FINEBIN 011-0209.39

TRUCK WEIGHT IN TONS		
GROSS	TARE	NET
		20.12

DRIVER SY RECVD. BY

PURCHASE ORDER NO. WEIGHPERSON

ITEM # SEAL NO. TEMP

NO.	TARE	AGG 1	AGG 2	AGG 3	AGG 4	AGG 5	AGG 6	AGG TOT	TARE	ASPHALT	BATCH TOT
		SAND	1/4	1/2	2B	M.F.				ASP1	
1	0	2270	3285	4575	6390	6390			.0	330.6	6721
2	0	2250	3175	4630	6450	6450			1.5	333.3	6783
3	0	2375	3184	4640	6390	6390			.0	332.5	6723
4	0	2375	3190	4615	6355	6355			.5	333.2	6688
5	0	2325	3160	4530	6335	6335			.0	333.3	6668
6	0	2390	3340	4665	6330	6330			.5	332.0	6662

INSPECTOR'S SIGNATURE

LOAD TOTAL 40245

APPENDIX C

ANALYTICAL RESULTS

SSM /Laboratories

ANALYTICAL REPORT

Client: Berks Products Corporation

Report to: D.J.Hofmann
SSM/Spotts, Stevens and McCoy, Inc.

Project: 112038
Received: 07-APR-92
Reported: 15-APR-92

WORK ORDER: 1133-002

Sampled: 06-APR-92 By: D. Hoffman

	RESULT	UNITS	METHOD
BP-S-1			
SSM Sample: 1046503			
PARTICULATE WEIGHT - WASH SOLUTIONS			EPA 5
Wt - Wash Soln' (0.22u filter)	0.3	mg	
Wt - Acetone Impinger	2.1	mg	
Wt - Acetone Probe	0.9	mg	
Wt - Water Probe	5.9	mg	
Wt - Water Impinger	1.3	mg	
Particulate Weight - Filter	0.9	mg	EPA 5
	11.7		
BP-S-2			
SSM Sample: 1046504			
PARTICULATE WEIGHT - WASH SOLUTIONS			EPA 5
Wt - Wash Soln' (0.22u filter)	0.7	mg	
Wt - Acetone Impinger	1.6	mg	
Wt - Acetone Probe	0.8	mg	
Wt - Water Probe	1.9	mg	
Wt - Water Impinger	1.3	mg	
Particulate Weight - Filter	0.8	mg	EPA 5
	11		
BP-S-3			
SSM Sample: 1046505			
PARTICULATE WEIGHT - WASH SOLUTIONS			EPA 5
Wt - Wash Soln' (0.22u filter)	0.5	mg	
Wt - Acetone Impinger	1.2	mg	
Wt - Acetone Probe	1.1	mg	
Wt - Water Probe	2.0	mg	
Wt - Water Impinger	0.6	mg	
	9.0		

30 Noble Street ■ P.O. Box 6527 ■ Reading, PA 19611-0527 ■ 215/376-4595 or 215/376-6581 ■ Fax: 215/376-8522
Engineering Offices in Baltimore, Lehigh Valley and Reading.

SSM /Laboratories

Client: Berks Products Corporation
Project: 112038

	RESULT	UNITS	METHOD
BP-S-3			
SSM Sample: 1046505 - continued			
Particulate Weight - Filter	3.6	mg	EPA 5

Respectfully submitted,

Vaughan J. O'Neill

Vaughan J. O'Neill,
Group Leader, Physical Testing

30 Noble Street ■ P.O. Box 6527 ■ Reading, PA 19611-0527 ■ 215/376-4595 or 215/376-6581 ■ Fax: 215/376-8522
Engineering Offices in Baltimore, Lehigh Valley and Reading.

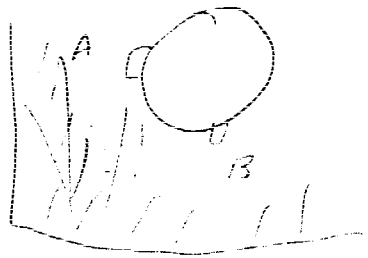
APPENDIX D

RAW FIELD DATA

SPOTTS, STEVENS and McCOY, INC.
AIR PROGRAMS

SHEET 1 OF 2

CLIENT: Berks Products
W.O. NO.: 1133-002
PLANT: Leesport
LOCATION: Asphalt Batch Stack
DATE: 4/3/92
RUN NO.: BP-S-1
OPERATOR: JCJ
SAMPLE BOX NO.:
METER BOX NO.: 44
METER H:
C FACTOR: .65 .80 t_m = 50 t_s = 135



PITOT TUBE COEF.: .84
PITOT TUBE NO.:
AMBIENT TEMP.: 38
BP: 29.50
ASSUMED MOIS.: 25
PROBE LENGTH:
NOZZLE DIA.: .243
PROBE HEAT SET:
LEAK RATE: Good @ 8"
THIMBLE NO.:
FILTER NO.:

POINT NO.	POINT DIS.	CLOCK TIME ACTUAL	CLOCK TIME RUN MIN.	METER CU. FT.	PITOT "H2O ΔP	ORIFICE "H2O ΔH	STACK TEMP. °F	PROBE TEMP. °F	FILTER TEMP. °F	IMP. TEMP. °F	METER TEMP. INLET °F	METER TEMP. OUTLET °F	PUMP VAC. "HG	Stack
B1	1.00	1001	0	964.313	.68	1.50	103	242	237	36	45	44	3	
2	2.81		3	966.4	.88	2.0	122	242	239	37	45	44	4	
3	4.96		6	968.8	.93	2.15	132	246	241	37	47	45	4	
4	7.73		9	971.1	1.10	2.55	128	238	244	38	49	45	5	1.53
5	10.5		12	973.9	1.10	2.55	135	243	244	38	53	45	5	
6	14.91		15	976.5	1.20	2.79	133	245	245	39	54	45	5	
7	27.09		18	979.3	1.40	3.25	137	239	245	42	57	47	6	
8	31.50	*	21	982.3	1.45	3.40	137	243	245	40	58	47	6	
9	34.57		24	985.3	1.10	2.55	138	242	245	43	52	49	5	
10	37.04		27	988.0	1.20	2.79	137	246	243	44	54	50	5	
11	39.19		30	990.8	1.15	2.69	139	242	245	48	59	51	5	
12	41.18		33	993.5	1.10	2.55	144	243	246	49	60	57	5	
Total		1110	36	996.192	12.57	29.15	150				633	563		
				31.88		12								
							31.512							
							131.5							

* 1023 1057
22'09" 111

IMPINGERS	END	START	DIFF
1	250	150	100
2	186	150	36
3	5	0	5
4			
5			
GEL	253	237	15

16

ORSAT	CO2	CO2+O2	O2
2.0 1	3.0	18.4	15.4
2	2.2	20.2	18.0
3	2.0	18.6	16.6

17.4

SSM
SPOTTS, STEVENS and McCOY, INC.
ENGINEERS • PLANNERS • SCIENTISTS

SCOTTS, STEVENS and McCOY, INC.
AIR PROGRAMS

SHEET 2 OF 2

CLIENT: Bates Products
W.O. NO.:
PLANT: Lewisport
LOCATION: Baghouse Stack

DATE: 9/3/92
RUN NO.: BP-5-1
OPERATOR: LCJ

POINT NO.	POINT DIS.	CLOCK TIME ACTUAL	CLOCK TIME RUN MIN.	METER CU. FT.	PITOT "H2O	ORIFICE "H2O	STACK TEMP. °F	PROBE TEMP. °F	FILTER TEMP. °F	IMP. TEMP. °F	METER TEMP. INLET °F	METER TEMP. OUTLET °F	PUMP VAC. "HG	Delta
A1		1121	0	996.192	.98	2.28	125	240	243	46	54	53	4	
2			3	998.7	1.25	2.91	142	241	252	46	56	52	5	
3			6	1001.6	1.30	3.05	139	238	251	47	61	53	5.5	
4			9	1004.5	1.40	3.25	139	239	248	49	63	53	6	
5			12	1007.5	1.40	3.25	139	244	247	49	65	54	6	
6			15	1010.4	1.60	3.45	133	248	244	50	66	54	6.5	
7			18	1013.7	1.25	2.91	126	242	245	54	67	55	5.5	
8			21	1016.5	1.3	3.05	[illegible]	239	244	52	67	55	5.5	-.62
9			24	1019.3	1.40	3.25	122	241	242	42	49	48	6	
10			27	1022.5	1.20	2.79	121	241	244	44	51	48	5	
11			30	1025.3	1.20	2.79	128	247	244	45	54	48	5	
12			33	1028.0	1.15	2.69	131	249	244	47	56	49	5	
Stop		1316	36	1030.755							721	622		
				34.56	13.54	11.57	1576				1354	1165		

COMMENTS: 1145 1305
23'35"

SSM
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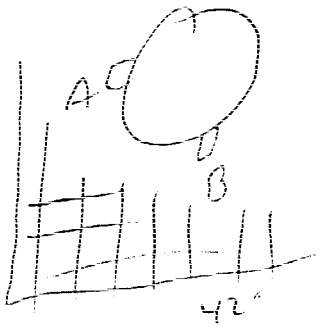
ENGINEERS • PLANNERS • SCIENTISTS

SPOTTS, STEVENS and McCOY, INC
AIR PROGRAMS

SHEET 1 OF

CLIENT: Berks Products
W.O. NO.: 1133 - 002
PLANT: Leesport
LOCATION: Baghouse Stack
DATE: 4/6/92
RUN NO.: BP-S-2
OPERATOR: JCJ
SAMPLE BOX NO.:
METER BOX NO.: 44
METER H:
C FACTOR: .85 .63 T_m = 50 T_s = 135
.88 T_m = 60 T_s = 135



PITOT TUBE COEF.: .84
PITOT TUBE NO.:
AMBIENT TEMP.: 45
BP: 29.95
ASSUMED MOIS.: 10
PROBE LENGTH:
NOZZLE DIA.: .243
PROBE HEAT SET:
LEAK RATE: Dead @ 8"
THIMBLE NO.:
FILTER NO.:

POINT NO.	POINT DIS.	CLOCK TIME ACTUAL	CLOCK TIME RUN MIN.	METER CU. FT.	PITOT "H2O	ORIFICE "H2O	STACK TEMP. °F	PROBE TEMP. °F	FILTER TEMP. °F	IMP. TEMP. °F	METER TEMP. INLET °F	METER TEMP. OUTLET °F	PUMP VAC. "HG	Static
A1		0822	0	30.905	1.00	2.98	132	238	243	48	48	48	5	
2			3	33.7	1.25	3.70	130	243	243	43	50	48	6	
3			6	36.9	1.35	4.02	128	240	243	46	54	49	6	
4			9	40.1	1.40	4.11	126	243	244	51	58	50	6.5	-0.6
5			12	43.4	1.45	4.30	126	246	245	55	61	51	7	
6			15	46.9	1.40	4.11	125	245	244	57	63	52	7	
7			18	—	1.15	3.44	124	245	245	60	65	53	5	
8			21	53.6	.98	2.95	124	247	243	59	65	57	5	
9			24	56.3	.85	2.53	125	241	245	58	65	55	4	
10			27	59.0	.90	2.68	125	241	244	57	65	55	4	
11			30	61.7	.88	2.61	124	246	243	56	65	56	4	
12			33	64.4	.90	2.68	123	241	244	56	66	56	5	
Stop		0858	36	67.153										

IMPINGERS	END	START	DIFF	
1	252	150	[illegible]	102
2	160	150	[illegible]	10
3				
4				
5				
GEL	254	237		17

ORSAT	CO2	CO2+O2	O2
1	2.0	19.6	17.6
2	2.4	22.2	19.8
3	2.2	21.0	18.8

SSM
SPOTTS, STEVENS and McCOY, INC
ENGINEERS • PLANNERS • SCIENTISTS

SCOTTO, STEVENS and McJOY, INC.
AIR PROGRAMS

SHEET 2 OF 2

CLIENT: B/K Products
W.O. NO.: 1133-002
PLANT: Newport
LOCATION: Bypass Stack

DATE: 4/6/92
RUN NO.: BP-S-2
OPERATOR: JC

POINT NO.	POINT DIS.	CLOCK TIME ACTUAL	CLOCK TIME RUN MIN.	METER CU. FT.	PITOT "H2O	ORIFICE "H2O	STACK TEMP. °F	PROBE TEMP. °F	FILTER TEMP. °F	IMP. TEMP. °F	METER TEMP. INLET °F	METER TEMP. OUTLET °F	PUMP VAC. "HG	Static
B1		0904	0	67.153	1.10	3.25	125	243	242	52	59	57	5	
2			3	70.2	1.25	3.70	129	245	241	50	61	57	6	
3			6	73.3	1.30	3.88	129	244	242	51	63	57	6	
4			9	76.65	1.40	4.15	132	247	243	53	67	58	6.5	
5			12	80.1	1.40	4.15	132	245	244	53	67	58	6.5	
6			15	83.3	1.40	4.15	132	241	242	54	68	58	6.5	-.62
7			18	86.8	1.25	3.70	127	240	243	55	68	58	6.5	
8			21	90.0	1.10	3.25	125	247	241	56	68	59	5.5	
9			24	93.0	.92	2.72	123	243	241	54	66	57	5	
10		*	27	95.7	.92	2.72	122	240	242	54	65	58	5	
11			30	98.6	.85	2.55	134	245	241	47	52	52	5	
12			33	101.4	1.25	3.70	139	243	242	47	57	52	6	
STOP		1013	36	104.287										

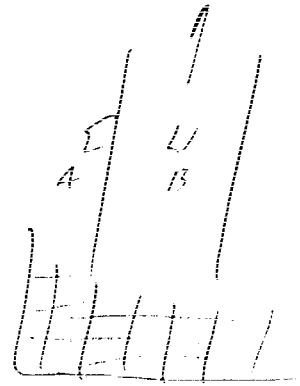
COMMENTS: 0932 1005
28'34"

SSM
SCOTTO, STEVENS and McJOY, INC.
ENGINEERS • PLANNERS • MANAGERS

SPOTTS, STEVENS and McCOY, INC.
AIR PROGRAMS

SHEET 1 OF 1

CLIENT: Berks Products
W.O. NO.: 1133-002
PLANT: Leesport
LOCATION: Baghouse stack
DATE: 4/7/92
RUN NO.: BP-S-3
OPERATOR: JCS
SAMPLE BOX NO.:
METER BOX NO.: 44
METER H:
C FACTOR: .85 .62 T_m=50 T_s=135



PITOT TUBE COEF.: .84
PITOT TUBE NO.:
AMBIENT TEMP.: 38
BP: 29.92
ASSUMED MOIS.: 10
PROBE LENGTH:
NOZZLE DIA.: .273
PROBE HEAT SET:
LEAK RATE: Dead @ 9"
THIMBLE NO.:
FILTER NO.:

POINT NO.	POINT DIS.	CLOCK TIME ACTUAL	RUN MIN.	METER CU. FT.	PITOT "H2O	ORIFICE "H2O	STACK TEMP. °F	PROBE TEMP. °F	FILTER TEMP. °F	IMP. TEMP. °F	METER TEMP. INLET °F	METER TEMP. OUTLET °F	PUMP VAC. "HG	Static
A1		0952	0	104.538	1.00	2.98	140	239	244	47	50	48	5	
2			3	107.4	1.20	3.59	142	240	245	48	52	49	6	
3			6	110.5	1.35	4.08	144	238	244	49	55	49	7	
4			9	113.8	1.40	4.19	148	241	244	49	58	50	7	-.58
5			12	117.1	1.45	4.37	147	240	243	49	60	51	8	
6			15	120.5	1.50	4.42	143	243	245	49	62	51	8	
7			18	124.0	1.35	4.08	140	242	246	55	64	53	7	
8			21	127.3	1.30	3.90	140	242	247	55	66	53	7	
9			24	130.6	1.20	3.59	135	240	244	53	64	52	6	
10			27	133.8	1.20	3.59	133	238	242	50	62	52	6	
11			30	136.9	1.15	3.42	136	234	243	50	62	54	6	
12			33	140.0	1.10	3.28	132	240	243	51	62	54	6	
End		1028	36	~~143.056~~										

IMPINGERS	END	START	DIFF
1	280	150	130
2	164	150	14
3			
4			
5			
GEL	261	237	24

*. Diff. Cu. Ft than "B" Port due to Leak Check

ORSAT	CO2	CO2+O2	O2
1	1.0	17.0	16.0
2	2.2	17.8	15.6
3	1.0	16.6	15.6

SSM
SPOTTS, STEVENS and McCOY, INC.
ENGINEERS • PLANNERS • SCIENTISTS

SPOTTS, STEVENS and McCOY, INC.
AIR PROGRAMS

SHEET 2 OF 2

CLIENT: Bates Products
W.O. NO.: 1133-002
PLANT: Leesport
LOCATION: Baghouse Stack

DATE: 4/7/92
RUN NO.: BP-S-3
OPERATOR: JCJ

POINT NO.	POINT DIS.	CLOCK TIME ACTUAL	CLOCK TIME RUN MIN.	METER CU. FT.	PITOT "H2O	ORIFICE "H2O	STACK TEMP. °F	PROBE TEMP. °F	FILTER TEMP. °F	IMP. TEMP. °F	METER TEMP. INLET °F	METER TEMP. OUTLET °F	PUMP VAC. "HG	Stack
B1		1047	0	143.99	.78	2.31	125	247	247	54	53	52	4	
2			3	145.7	.90	2.69	127	245	247	53	55	54	5	
3			6	148.4	.97	2.91	136	241	246	55	57	54	5	
4			9	151.3	1.10	3.29	133	239	246	55	59	54	6	
5			12	154.3	1.20	3.57	132	244	246	57	61	55	6	
6			15	157.4	1.30	3.90	132	237	246	59	62	55	7	
7			18	160.6	1.40	4.19	139	240	248	60	63	56	7	7.62
8			21	164.1	1.45	4.37	142	243	249	58	64	56	8	
9			24	167.5	1.40	4.19	143	245	249	66	67	58	7	
10			27	170.9	1.40	4.19	142	246	248	64	66	57	7	
11			30	174.2	1.25	3.80	144	243	249	66	67	58	7	
12			33	177.5	1.15	3.42	142	244	250	68	68	60	6	
STOP		1123	36	180.797										

COMMENTS: [illegible] port B due to leak check

SSM
SPOTTS, STEVENS and McCOY, INC.
ENGINEERS • PLANNERS • ADVISORS

Figure 9-1. Field data sheet.

COMPANY Banks Products

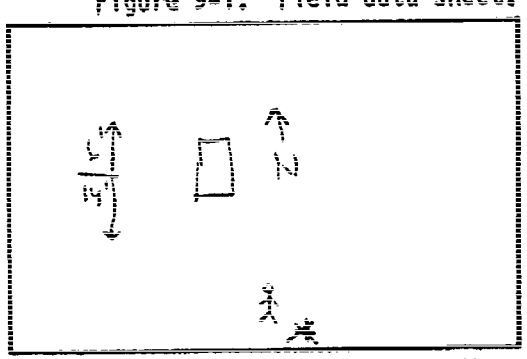
LOCATION Oklahoma

TEST NUMBER BP-S-1

DATE 4/3/92

TYPE FACILITY asphalt

CONTROL DEVICE baghouse



HOURS OF OBSERVATION 1000-1312

OBSERVER D Owen

OBSERVER CERTIFICATION DATE 7/2/92

OBSERVER AFFILIATION SSM

POINT OF EMISSIONS

HEIGHT OF DISCHARGE POINT

	Initial			Final
CLOCK TIME	1000			1312
OBSERVER LOCATION Distance to Discharge	200'			
Direction from Discharge	S			
Height of Observation Point	ground			
BACKGROUND DESCRIPTION	gray			
WEATHER CONDITIONS Wind Direction	NW			
Wind Speed	5-15			
Ambient Temperature	38			
SKY CONDITIONS (clear, overcast, % clouds, etc.)	no clouds			
PLUME DESCRIPTION Color				
Distance Visible				
OTHER INFORMATION				

SUMMARY OF AVERAGE OPACITY

Set Number	Time Start--End	Opacity Sum	Opacity Average
1	1000-1312	0	0

Readings ranged from 0 to 0 % opacity

The source was/was not in compliance with ____ at the time evaluation was made.

FIGURE 9-2 OBSERVATION RECORD (Continued)

PAGE 1 OF 2

COMPANY Berks Products
LOCATION Oaklands
TEST NUMBER BP-S-1
DATE 4/3/90

OBSERVER D. Cox
TYPE FACILITY
POINT OF EMISSIONS

Hr.	Min.	Seconds 0	15	30	45	STEAM PLUME (check if applicable) Attached	Detached	COMMENTS
1000	0	0	0	0	0	✓		
1001	1	0	0	0	0			
	2	0	0	0	0			
	3	0	0	0	0			
	4	0	0	0	0			
	5	0	0	0	0			
	6	0	0	0	0			
	7	0	0	0	0			
	8	0	0	0	0			
	9	0	0	0	0			
	10	0	0	0	0			
	11	0	0	0	0			
	12	0	0	0	0			
	13	0	0	0	0			
	14	0	0	0	0			
	15	0	0	0	0			
	16	0	0	0	0			
1017	17	0	0	0	0			
	18	0	0	0	0			
	19	0	0	0	0			
	20	0	0	0	0			
	21	0	0	0	0			
	22	0	0	0	0			
	23	0	0	0	0			
	24	0	0	0	0			
	25	0	0	0	0			
	26	0	0	0	0			
	27	0	0	0	0			
	28	0	0	0	0			
1029	29	0	0	0	0			

See Back Page

FIGURE 9-2 OBSERVATION RECORD (Continued)

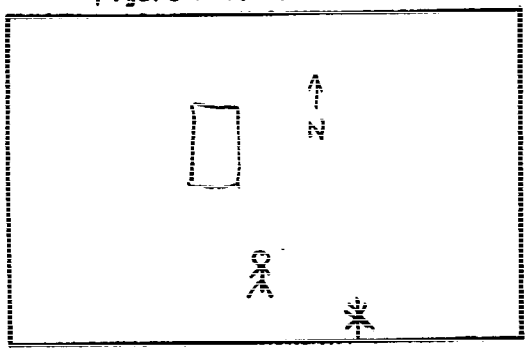
COMPANY _____
LOCATION _____
TEST NUMBER BP-S-1
DATE _____

OBSERVER _____
TYPE FACILITY _____
POINT OF EMISSIONS _____

Hr.	Min.	Seconds 0	15	30	45	STEAM PLUME (check if applicable) Attached	Detached	COMMENTS
1100	30	0	0	0	0			
	31	0	0	0	0			
	32	0	0	0	0			
	33	0	0	0	0			
	34	0	0	0	0			
	35	0	0	0	0			
	36	0	0	0	0			
	37	0	0	0	0			
	38	0	0	0	0			
	39	0	0	0	0			
	40	0	0	0	0			
	41	0	0	0	0			
	42	0	0	0	0			
	43	0	0	0	0			
	44	0	0	0	0			
	45	0	0	0	0			
1130	46	0	0	0	0			
1200	47	0	0	0	0			
	48	0	0	0	0			
	49	0	0	0	0			
	50	0	0	0	0			
	51	0	0	0	0			
	52	0	0	0	0			
	53	0	0	0	0			
	54	0	0	0	0			
	55	0	0	0	0			
	56	0	0	0	0			
	57	0	0	0	0			
	58	0	0	0	0			
1230	59	0	0	0	0			

Figure 9-1. Field data sheet.

COMPANY Berks Products
LOCATION Ontelaunee
TEST NUMBER BP-S-2
DATE 4/6/92
TYPE FACILITY asphalt
CONTROL DEVICE Laghouse



HOURS OF OBSERVATION 0825-1017
OBSERVER D. Wery
OBSERVER CERTIFICATION DATE 4/2/92
OBSERVER AFFILIATION SSM
POINT OF EMISSIONS
HEIGHT OF DISCHARGE POINT

	Initial			Final
CLOCK TIME	0825			1017
OBSERVER LOCATION Distance to Discharge	200'			
Direction from Discharge	S			
Height of Observation Point	ground			
BACKGROUND DESCRIPTION	gray			
WEATHER CONDITIONS Wind Direction	W			
Wind Speed	0-5			
Ambient Temperature	44			
SKY CONDITIONS (clear, overcast, % clouds, etc.)	clear			
PLUME DESCRIPTION Color				
Distance Visible				
OTHER INFORMATION				

SUMMARY OF AVERAGE OPACITY

Set Number	Time Start--End	Opacity Sum	Opacity Average
	0825-1017	0	0

Readings ranged from 0 to 0 % opacity

The source was/was not in compliance with ____ at the time evaluation was made.

FIGURE 9-2 OBSERVATION RECORD (Continued)

COMPANY Berk Products
LOCATION Oshawa
TEST NUMBER BP-S-2
DATE 4/6/92

OBSERVER [illegible]
TYPE FACILITY
POINT OF EMISSIONS

Hr.	Min.	Seconds 0	15	30	45	STEAM PLUME (check if applicable) Attached	Detached	COMMENTS
0805	0	0	0	0	0			
	1	0	0	0	0			
	2	0	0	0	0			
	3	0	0	0	0			
	4	0	0	0	0			
	5	0	0	0	0			
	6	0	0	0	0			
	7	0	0	0	0			
	8	0	0	0	0			
	9	0	0	0	0			
	10	0	0	0	0			
	11	0	0	0	0			
	12	0	0	0	0			
	13	0	0	0	0			
	14	0	0	0	0			
	15	0	0	0	0			
	16	0	0	0	0			
	17	0	0	0	0			
	18	0	0	0	0			
	19	0	0	0	0			
	20	0	0	0	0			
	21	0	0	0	0			
	22	0	0	0	0			
	23	0	0	0	0			
	24	0	0	0	0			
	25	0	0	0	0			
	26	0	0	0	0			
	27	0	0	0	0			
	28	0	0	0	0			
	29	0	0	0	0			

FIGURE 9-2 OBSERVATION RECORD (Continued)

COMPANY
LOCATION
TEST NUMBER RP-S-2
DATE

OBSERVER
TYPE FACILITY
POINT OF EMISSIONS

Hr.	Min.	Seconds 0	15	30	45	STEAM PLUME (check if applicable) Attached	Detached	COMMENTS
0851	30	0	0	0	0			
	31	0	0	0	0			
	32	0	0	0	0			
	33	0	0	0	0			
	34	0	0	0	0			
	35	0	0	0	0			
	36	0	0	0	0			
	37	0	0	0	0			
	38	0	0	0	0			
	39	0	0	0	0			
	40	0	0	0	0			
	41	0	0	0	0			
	42	0	0	0	0			
	43	0	0	0	0			
	44	0	0	0	0			
	45	0	0	0	0			
	46	0	0	0	0			
	47	0	0	0	0			
	48	0	0	0	0			
	49	0	0	0	0			
	50	0	0	0	0			
	51	0	0	0	0			
	52	0	0	0	0			
	53	0	0	0	0			
	54	0	0	0	0			
	55	0	0	0	0			
	56	0	0	0	0			
	57	0	0	0	0			
	58	0	0	0	0			
	59	0	0	0	0			

FIGURE 9-2 OBSERVATION RECORD (Continued)

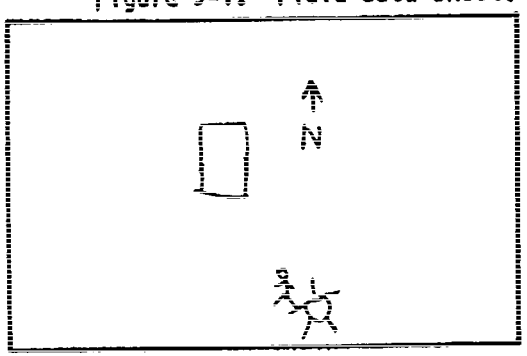
COMPANY
LOCATION
TEST NUMBER BP-S-2
DATE

OBSERVER DCW
TYPE FACILITY
POINT OF EMISSIONS

Hr.	Min.	Seconds 0	15	30	45	STEAM PLUME (check if applicable) Attached	Detached	COMMENTS
0800	0	0	0	0	0			
	1	0	0	0	0			
	2	0	0	0	0			
	3	0	0	0	0			
	4	0	0	0	0			
	5	0	0	0	0			
	6	0	0	0	0			
	7	0	0	0	0			
	8	0	0	0	0			
	9	0	0	0	0			
	10	0	0	0	0			
0900	11	0	0	0	0			
	12	0	0	0	0			
	13	0	0	0	0			
	14	0	0	0	0			
	15	0	0	0	0			
	16	0	0	0	0			
	17	0	0	0	0			
	18	0	0	0	0			
	19	0	0	0	0			
1000	20							
	21							
	22							
	23							
	24							
	25							
	26							
	27							
	28							
	29							

Figure 9-1. Field data sheet.

COMPANY Barks Products
LOCATION Ontelaunee
TEST NUMBER BP-S-3
DATE 4/7/92
TYPE FACILITY asphalt
CONTROL DEVICE baghouse



HOURS OF OBSERVATION 0955-1126
OBSERVER D C Wang
OBSERVER CERTIFICATION DATE 4/2/92
OBSERVER AFFILIATION SSM
POINT OF EMISSIONS
HEIGHT OF DISCHARGE POINT

	Initial			Final
CLOCK TIME	0955			1126
OBSERVER LOCATION Distance to Discharge	200'			
Direction from Discharge	S			
Height of Observation Point	ground			
BACKGROUND DESCRIPTION	gray			
WEATHER CONDITIONS Wind Direction	NE			
Wind Speed	0-5			
Ambient Temperature	46			
SKY CONDITIONS (clear, overcast, % clouds, etc.)	clouds			
PLUME DESCRIPTION Color				
Distance Visible				
OTHER INFORMATION				

SUMMARY OF AVERAGE OPACITY

Set Number	Time Start--End	Opacity Sum	Opacity Average
	0955-1126	0	0

Readings ranged from 0 to 0 % opacity

The source was/was not in compliance with ____ at the time evaluation was made.

FIGURE 9-2 OBSERVATION RECORD (Continued)

COMPANY [illegible]
LOCATION [illegible]
TEST NUMBER RP-S-3
DATE 4/21/92

OBSERVER [illegible]
TYPE FACILITY
POINT OF EMISSIONS

Hr.	Min.	Seconds 0	15	30	45	STEAM PLUME (check if applicable) Attached	Detached	COMMENTS
0956	0	0	0	0	0			
	1	0	0	0	0			
	2	0	0	0	0			
	3	0	0	0	0			
	4	0	0	0	0			
	5	0	0	0	0			
	6	0	0	0	0			
	7	0	0	0	0			
	8	0	0	0	0			
	9	0	0	0	0			
	10	0	0	0	0			
	11	0	0	0	0			
	12	0	0	0	0			
	13	0	0	0	0			
	14	0	0	0	0			
	15	0	0	0	0			
	16	0	0	0	0			
	17	0	0	0	0			
	18	0	0	0	0			
	19	0	0	0	0			
	20	0	0	0	0			
	21	0	0	0	0			
	22	0	0	0	0			
	23	0	0	0	0			
	24	0	0	0	0			
	25	0	0	0	0			
	26	0	0	0	0			
	27	0	0	0	0			
	28	0	0	0	0			
	29	0	0	0	0			

FIGURE 9-2 OBSERVATION RECORD
(Continued)

COMPANY
LOCATION
TEST NUMBER BP-5-3
DATE

OBSERVER D. Wang
TYPE FACILITY
POINT OF EMISSIONS

Hr.	Min.	Seconds 0	15	30	45	STEAM PLUME (check if applicable) Attached	Detached	COMMENTS
	30	0	0	0	0			
	31	0	0	0	0			
	32	0	0	0	0			
	33	0	0	0	0			
	34	0	0	0	0			
	35	0	0	0	0			
	36	0	0	0	0			
	37	0	0	0	0			
	38	0	0	0	0			
	39	0	0	0	0			
	40	0	0	0	0			
	41	0	0	0	0			
	42	0	0	0	0			
	43	0	0	0	0	Stop 1037		
1047	44	0	0	0	0			
	45	0	0	0	0			
	46	0	0	0	0			
	47	0	0	0	0			
	48	0	0	0	0			
	49	0	0	0	0			
	50	0	0	0	0			
	51	0	0	0	0			
	52	0	0	0	0			
	53	0	0	0	0			
	54	0	0	0	0			
	55	0	0	0	0			
	56	0	0	0	0			
	57	0	0	0	0			
	58	0	0	0	0			
	59	0	0	0	0			

FIGURE 9-2 OBSERVATION RECORD (Continued)

COMPANY
LOCATION
TEST NUMBER BP-S-3
DATE

OBSERVER D. [illegible]
TYPE FACILITY
POINT OF EMISSIONS

Hr.	Min.	Seconds 0	15	30	45	STEAM PLUME (check if applicable) Attached	Detached	COMMENTS
	0	0	0	0	0			
	1	0	0	0	0			
	2	0	0	0	0			
	3	0	0	0	0			
	4	0	0	0	0			
	5	0	0	0	0			
	6	0	0	0	0			
	7	0	0	0	0			
	8	0	0	0	0			
	9	0	0	0	0			
	10	0	0	0	0			
	11	0	0	0	0			
	12	0	0	0	0			
	13	0	0	0	0			
	14	0	0	0	0			
	15	0	0	0	0			
	16	0	0	0	0			
	17	0	0	0	0			
	18	0	0	0	0			
	19	0	0	0	0			
max.	20	0	0	0	0			
	21							
	22							
	23							
	24							
	25							
	26							
	27							
	28							
	29							

APPENDIX E

COMPUTER PRINTOUT

Client:	BERKS PRODUCTS	Plant:	ONTELAUNEE QUARRY
Unit Tested:	ASPHALT BATCH PLANT	Pollutant:	PARTICULATE & FLOW
Sampling Location:	BAGHOUSE EXHAUST STACK	W.O. NO.:	1133--002

DATE	4/3/92	4/6/92	4/7/92
RUN NUMBER	BP--S--1	BP--S--2	BP--S--3
DN -- NOZZLE DIAMETER, IN.	0.243	0.243	0.243
PB -- BAROMETRIC PRESS, IN. OF HG.	29.50	29.95	29.92
TT -- NET SAMPLING TIME, MIN.	72.0	72.0	72.0
VM -- VOLUME METERED, ACF	66.442	73.382	76.166
TM -- AVG. METER TEMP., DEG. F	53	60	57
PM -- AVG. DELTA H, IN. OF H2O	2.772	3.418	3.681
Y -- GAS METER CALIB. FACTOR	0.98	0.98	0.98
VMSTD -- STD. GAS VOL., SCF	66.584	73.737	76.908
VW -- TOTAL WATER COLLECTED, ML.	156	129	168
%M -- PERCENT MOISTURE	9.9	7.6	9.3
MD -- MOLE FRACTION DRY	0.90	0.92	0.91
%CO2 -- PERCENT CO2 DRY	2.4	2.2	1.4
%O2 -- PERCENT O2 DRY	16.7	18.7	15.7
MWD -- DRY MOLECULAR WEIGHT	29.05	29.10	28.85
MW -- WET MOLECULAR WEIGHT	27.95	28.25	27.84
%EA -- PERCENT EXCESS AIR	354.6	856.9	256.1
AS -- STACK AREA, SQ. IN.	1,452.2	1,452.2	1,452.2
PST -- STATIC PRESS., IN. OF H2O	--0.58	--0.61	--0.60
TS -- STACK TEMP., DEG. F	132	127	138
CP -- PITOT COEFFICIENT	0.84	0.84	0.84
VS -- STACK GAS VELOCITY, FPM	3,976	3,840	4,041
QS -- STACK GAS FLOW, DSCFM	31,850	32,269	32,683
QA -- STACK GAS FLOW, ACFM	40,245	38,874	40,901
%I -- ISOKINETIC RATIO	90.6	99.1	102.0
GR/DSCF, LOADING	0.002	0.001	0.001
LBS/HR, EMISSIONS	0.51	0.24	0.40
AVG. GR/DSCF EMISSION RATE		0.001	

0.0014

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SPOTTS, STEVENS AND McCOY, INC
AIR PROGRAMS
ISOKINETIC SAMPLING ANALYSIS

Client: BERGS PRODUCTS — Plant: ONTELAUNEE QUARRY

Unit Tested: ASPHALT BATCH PLANT — Pollutant: PARTICULATE & FLOW

Sampling Location: BAGHOUSE EXHAUST STACK — W.O. NO.: 1199--002

Run No: BP--S--1 Date: 4/8/92 Start: 1057 End: 1316

DATA

DN:	0.349	PB:	29.90	PST:	--0.90	AB:	1,458.2
CP86:	1.67	CO2%:	2.4	N2%:	80.0	VW:	166
GAS METER Y--FACTOR:			0.98	E.A.%:	36.0		

SAMPLE POINT	DISTANCE AT POINT	CLOCK TIME	TIME AT POINT	GAS METER	VELOCITY HEAD	PM ORIFICE	METER IN	TEMP OUT	STACK TEMP.	SQE	VEL	Co2
B--1		1001	3.0	964.319	0.880	1.580	45	44	103	19.57	2,838	15.4
2			3.0	966.400	0.880	2.000	45	44	1.22	22.63	3,360	18.0
3			3.0	968.800	0.930	2.150	47	45	1.32	23.46	3,524	18.6
4			3.0	971.100	1.100	2.560	49	45	1.28	25.43	3,819	
5			3.0	973.900	1.100	2.560	53	45	1.35	25.58	3,842	
6			3.0	976.500	1.200	2.760	54	45	1.33	26.08	4,008	
7			3.0	979.300	1.400	3.250	57	47	1.37	28.01	4,341	
8			3.0	982.300	1.450	3.400	58	47	1.33	29.32	4,404	
9			3.0	985.300	1.100	2.560	52	49	1.38	25.65	3,852	
10			3.0	988.000	1.200	2.760	54	50	1.37	26.77	4,019	
11			3.0	990.800	1.150	2.660	56	51	1.36	26.25	3,941	
12			3.0	993.500	1.100	2.560	60	51	1.44	25.78	3,871	
A--1		1121	3.0	996.102	0.980	2.280	55	53	1.25	23.94	3,593	
2			3.0	998.700	1.250	2.910	56	52	1.42	27.43	4,119	
3			3.0	1001.600	1.300	3.050	61	53	1.36	27.91	4,191	
4			3.0	1004.500	1.400	3.250	63	53	1.39	28.95	4,349	
5			3.0	1007.500	1.400	3.250	65	54	1.39	28.95	4,349	
6			3.0	1010.400	1.500	3.460	66	54	1.33	29.82	4,479	
7			3.0	1013.700	1.250	2.910	67	55	1.28	27.08	4,064	
8			3.0	1016.500	1.300	3.050	67	55	1.31	27.72	4,162	
9			3.0	1019.300	1.400	3.250	49	48	1.22	28.54	4,287	
10			3.0	1022.500	1.200	2.760	51	48	1.21	26.40	3,965	
11			3.0	1025.300	1.200	2.760	54	48	1.28	26.55	3,989	
12			3.0	1028.000	1.150	2.660	56	49	1.31	26.07	3,915	
		1316		1030.755								
RESULTS			TT	VM	PIT	PM		TM	TS	SQE	VEL	Co2
			72.0	66.442	-0.880	2.772		53	1.32	26.46	3,976	18.7
			avg	net	avg	avg		avg	avg	avg	avg	avg

PSM=	29.70	VMSTD=	65.564	VWGAS=	7.848	%M=	9.9
MD=	0.90	MWD=	29.05	MW=	27.95	PS=	29.46

STACK GAS VELOCITY =	3,975 FPM
STACK GAS VOLUME =	31,850 DSCFM
STACK GAS VOLUME =	40,245 ACFM
STACK GAS VOLUME =	1.58E+05 LBS/HR
ISOKINETIC RATIO =	90.6

EMISSIONS

	PADEP	TOTAL=
Weight mg =	8.00	11.70
GR/DSCF =	0.002	0.003
LBS/HR =	0.51	0.74

REV.0(4/20/92)

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SPOTTS, STEVENS AND McCOY, INC
AIR PROGRAMS
ISOKINETIC SAMPLING ANALYSIS

Client:	BERKS PRODUCTS	Plant:	CONTEL ALLENTOWN COUNTY
Unit Tested:	ASPHALT BATCH PLANT	Pollutant:	PARTICULATE & FLOW
Sampling Location:	BAGHOUSE EXHAUST STACK	W.O. NO.:	1139--002

Run No: BP--S--2 Date: 4/6/92 Start: 0922 End: 1013

DATA

DN:	0.345	PB:	29.96	PST:	--0.01	AS:	1,492.2
CO2%:	10.7	O2%:	2.2	N2%:	79.1	WW:	120
GAS METER Y--FACTOR:			0.96	E.A.%:	99.9		

SAMPLE POINT	DISTANCE AT POINT	CLOCK TIME	TIME AT POINT	GAS METER	VELOCITY HEAD	PM ORIFICE	METER IN	TEMP OUT	STACK TEMP.	SOE	VEL.	O2
A--1		0922	3.0	30.905	1.000	2.980	48	48	132	24.30	3.807	17.0
2			3.0	33.700	1.250	3.700	50	48	130	27.16	4.038	16.8
3			3.0	36.900	1.350	4.020	54	49	128	28.17	4.177	16.8
4			3.0	40.100	1.400	4.110	58	50	126	28.64	4.240	
5			3.0	43.400	1.450	4.300	61	51	126	29.15	4.321	
6			3.0	46.900	1.400	4.110	63	52	125	28.62	4.242	
7			3.0		1.150	3.440	65	53	124	25.52	3.842	
8			3.0	53.600	0.980	2.950	65	54	124	23.52	3.548	
9			3.0	56.300	0.850	2.530	65	55	125	22.30	3.308	
10			3.0	59.000	0.900	2.680	65	55	125	22.66	3.402	
11			3.0	61.700	0.880	2.610	65	56	124	22.57	3.381	
12			3.0	64.400	0.900	2.680	66	56	123	22.91	3.399	
B--1			3.0	67.153	1.100	3.250	59	59	125	25.37	3.791	
2			3.0	70.200	1.250	3.700	61	61	124	27.02	4.006	
3			3.0	73.300	1.300	3.880	63	63	129	27.67	4.102	
4			3.0	76.600	1.400	4.150	67	67	132	28.79	4.268	
5			3.0	80.100	1.400	4.150	67	67	132	28.79	4.268	
6			3.0	83.300	1.400	4.150	68	68	132	28.79	4.268	
7			3.0	86.800	1.250	3.700	68	68	127	27.09	4.016	
8			3.0	90.000	1.100	3.250	68	68	125	25.37	3.791	
9			3.0	93.000	0.920	2.720	66	65	123	23.16	3.430	
10			3.0	95.700	0.920	2.720	65	65	122	23.14	3.430	
11			3.0	98.600	0.850	2.550	52	52	134	22.47	3.331	
12			3.0	101.400	1.250	3.700	57	57	139	27.36	4.056	
		1013		104.267								
RESULTS			TT	VM	PIT	PM		TM	TS	SOE	VEL.	O2
			72.0	73.362	1.115	3.418		60	127	25.91	3.840	16.7
			mat	mat	(avg)	(avg)		(avg)	(avg)	(avg)	(avg)	(avg)

PSM=	30.20	VM/STD=	73.737	VWEMS=	6.075	%M=	7.6
MD=	0.92	MWD=	29.10	MW=	28.25	PS=	29.91

STACK GAS VELOCITY =	3,840 FPM
STACK GAS VOLUME =	92,259 DSCFM
STACK GAS VOLUME =	98,874 ACFM
STACK GAS VOLUME =	1.54E+05 LBS/HR
ISOKINETIC RATIO =	99.1

EMISSIONS

	PADER	TOTAL
Weight, mg =	4.20	7.10
GR/DSCF =	0.001	0.001
LBS/HR =	0.24	0.41

REV.0(4/20/92)

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AIR PROGRAMS
ISOKINETIC SAMPLING ANALYSIS

Client:	BERKS PRODUCTS	Plant:	CONTELAUNEE COUNTY
Unit Tested:	ASPHALT BATCH PLANT	Pollutant:	PARTICULATE & FLOW
Sampling Location:	BAGHOUSE EXHAUST STACK	W.O. NO.:	1139--002

Run No: BP--9--9 Date: 4/2/98 Start: 0952 End: 1123

DATA

DN:	0.249	PB:	29.88	PST:	--0.60	ASK:	1,498.2
O2%:	15.7	CO2%:	1.4	N2%:	82.9	VW:	100
GAS METER Y--FACTOR:			0.98	BAR%:	29.1		

SAMPLE POINT	DISTANCE AT POINT	CLOCK TIME	TIME AT POINT	GAS METER	VELOCITY HEAD	PM ORIFICE	METER IN	TEMP OUT	STACK TEMP.	SQDE	VEL	O2
A--1		0952	3.0	104.538	1.000	2.980	50	48	140	24.49	3.960	16.0
2			3.0	107.400	1.200	3.560	52	49	142	28.88	4.016	15.8
3			3.0	110.500	1.350	4.080	55	49	144	28.58	4.287	15.8
4			3.0	113.800	1.400	4.150	58	50	148	29.18	4.369	
5			3.0	117.100	1.450	4.370	60	51	147	29.67	4.433	
6			3.0	120.500	1.500	4.420	62	51	143	30.07	4.494	
7			3.0	124.000	1.350	4.080	64	53	140	28.48	4.252	
8			3.0	127.300	1.300	3.900	65	53	140	27.93	4.173	
9			3.0	130.600	1.200	3.560	64	52	135	26.72	3.992	
10			3.0	133.800	1.200	3.560	62	52	133	26.68	3.998	
11			3.0	136.900	1.150	3.420	62	54	136	26.18	3.912	
12			3.0	140.000	1.100	3.280	62	54	132	25.92	3.873	
B--1			3.0	143.149	0.780	2.310	53	52	125	21.35	3.192	
2			3.0	145.700	0.900	2.660	55	54	127	22.68	3.434	
3			3.0	148.400	0.970	2.910	57	54	136	24.04	3.593	
4			3.0	151.300	1.100	3.250	56	54	133	25.54	3.818	
5			3.0	154.300	1.200	3.560	61	55	132	26.65	3.982	
6			3.0	157.400	1.300	3.900	62	55	132	27.74	4.145	
7			3.0	160.500	1.400	4.150	63	56	139	28.65	4.327	
8			3.0	164.100	1.450	4.370	64	56	142	29.54	4.414	
9			3.0	167.500	1.400	4.150	67	56	143	29.05	4.341	
10			3.0	170.900	1.400	4.150	66	57	142	29.03	4.338	
11			3.0	174.200	1.250	3.800	67	58	144	27.48	4.106	
12			3.0	177.500	1.150	3.420	68	60	142	26.31	3.931	
		1123		180.797								
RESULTS			TT	VM	PIT	PM		TM	TS	SQDE	VEL	O2
			72.0	76.166	1.222	3.661		57	138	27.04	4.041	15.7
			min	mcf	in/g	in/g		deg F	deg F	in/g	fps	pct

PSM=	30.19	VMSTD=	70.908	VWGAS=	7.913	%M=	9.3
MD=	0.91	MWD=	28.85	MW=	27.84	PS=	29.85

STACK GAS VELOCITY =	4,041 FPM
STACK GAS VOLUME =	32,683 DSCFM
STACK GAS VOLUME =	40,601 ACFM
STACK GAS VOLUME =	1.57E+05 LBS/HR
ISOKINETIC RATIO =	102.0

EMISSIONS

	PADERI	TOTAL
Weight, mg =	7.20	9.00
GR/DSCF =	0.001	0.002
LBS/HR =	0.40	0.50

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APPENDIX F

CALIBRATION DATA

SPOTTS, STEVENS & McCOY, INC.
AIR PROGRAMS
METER BOX CALIBRATION

METER BOX NUMBER: 80444 DATE: 3/12/92

CALIBRATED BY: WARY BAROMETRIC PRESSURE: 29.70

ORIFICE MANOMETER SETTING (delta H) IN. H2O	WET GAS METER (Vn) cu. ft.	DRY TEST METER (Vd) cu. ft.	WET TEST METER (Tw) deg. F	INLET (Tdi) deg. F	OUTLET (Tdo) deg. F	AVERAGE (Td) deg. F	TIME min.	Yi	delta H@i
0.5	5.029	5.107	71	73.5	72.5	73.0	12.35	0.99	1.67
1.0	5.751	5.824	71	76.5	73.5	75.0	10.13	0.99	1.74
1.5	10.435	10.679	72	85.5	79	82.3	15.35	0.99	1.81
2.0	10.098	10.444	71.5	85.5	80.5	83.0	12.92	0.98	1.79
3.0	10.172	10.578	72	89	81.5	85.3	10.70	0.98	1.80
4.0	10.093	10.595	71.5	91	82.5	86.8	9.35	0.97	1.84

FORMULAS:

$$Yi = \frac{(Vw)(BP)(Td+460)}{(Vd)(BP+(H/13.6)(Tw+460)}$$

$$Qm = \frac{(Vd)(Tdo+460)}{(Time)(Td+460)}$$

$$Km = Qm \sqrt{\frac{(BP)(29)}{(Tdo+460)(delta\ H)}}$$

$$delta\ H@i = \frac{0.921}{(Km)(Km)}$$

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SPOTTS,STEVENS & McCOY, INC.
AIR PROGRAMS
METER BOX CALIBRATION

METER BOX NUMBER: 80444

DATE: 4/13/92

CALIBRATED BY: MAURER

BAROMETRIC PRESSURE: 30.35

ORIFICE MANOMETER SETTING (delta H) IN. H2O	WET GAS METER (Vw) cu. ft.	DRY TEST METER (Vd) cu. ft.	WET TEST METER (Tw) deg. F	INLET (Tdi) deg. F	OUTLET (Tdo) deg. F	AVERAGE (Td) deg. F	TIME min.	Yi	delta H@i
0.5	5.095	5.131	67.5	68	66.5	67.3	12.41	0.99	1.61
1.0	5.062	5.126	68.5	71.5	68.5	70.0	9.03	0.99	1.72
1.5	10.091	10.266	69.5	77	71.5	74.3	15.18	0.99	1.84
2.0	10.005	10.296	70	84	77.5	80.8	13.13	0.99	1.85
3.0	10.000	10.386	70	85.5	79	82.3	10.75	0.98	1.93
4.0	9.946	10.411	72	87.5	81.5	84.5	9.40	0.97	1.87

FORMULAS:

$$Yi = \frac{(Vw)(BP)(Td+460)}{(Vd)(BP+(H/13.6)(Tw+460)}$$

$$Qm = \frac{(Vd)(Tdo+460)}{(Time)(Td+460)}$$

$$Km = Qm \sqrt{\frac{(BP)(29)}{(Tdo+460)(delta\ H)}}$$

$$delta\ H@i = \frac{0.921}{(Km)(Km)}$$

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APPENDIX G

SAMPLE CALCULATIONS

SPOTTS, STEVENS AND McCOY, INC.
AIR PROGRAMS

ISOKINETIC SAMPLING EQUATIONS

1. Y = Meter Calibration Factor

2. BP = Barometric Pressure, Inches Hg

3. DN = Nozzle Diameter, Inches

4. TT = Net Sampling Time, Minutes

5. AS = Sampling Locaton Area, Square Inches

6. VM = Sample Gas Meter Volume, Cu.Ft.

7. PM = Average Orifice Pressure Drop, Inches H2O

8. TM = Average Dry Gas Meter Temperature, F

9. VW = Total Moisture Collected, ml

10. PST = Static Pressure, Inches H2O

PS = Stack Pressure, Inches Hg

11. PS = (PST/13.6) + BP

12. TS = Sampling Location Temperature

13. VMSTD = Volume Of Dry Gas Sampled At Standard Conditions, DSCF

$$VMSTD = \frac{17.65 * VM * Y * (BP * (PM/13.6))}{(TM + 460)}$$

14. VW gas = Volume Of Water At Standard Conditions

VW gas = (0.0471 * VW)

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15. % M = Percent Moisture In Stack Gas

$$\% M = \frac{(100 * VW\ gas)}{(VMSTD + VW\ gas)}$$

16. MD = Mole Fraction Of Dry Gas

$$MD = \frac{(100 * \% M)}{100}$$

17. MWD = Molecular Weight Of Dry Gas

$$MWD = (\%CO2 * 0.44) + (\%O2 * 0.32) + [(\%CO2 + N2) * 0.28]$$

18. %EA = % Excess Air

$$\%EA = \frac{[(\%O2) - 0.5 * (\%CO)]}{0.264(\%N2) - [(\%O2) + 0.5 * (\%CO)]} * 100$$

19. MW = Molecular Weight Of Wet Stack Gas

$$MW = (MWD * MD) + 18 (1 - MD)$$

20. SDE = Average Square Root Of (Velocity Head * Absolute Stack Temp

$$SDE = [Delta\ P * (TS + 460)]^{1/2}$$

21. VS = Stack Gas Velocity At Stack Conditions

$$VS = 5130 * CP * Avg(SDE) * [1/(PS * MW)]^{1/2}$$

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22. QS = Stack Gas Volumetric Flow Rate At Standard Conditions, DSCFM

$$QS = \frac{0.123 * VS * AS * MD * PS}{(TS + 460)}$$

23. QA = Stack Gas Volumetric Flow Rate At Stack Conditions, ACFM

$$QA = \frac{0.05667 * QS * (TS + 460)}{PS * MD}$$

24. %I = Percent Isokinetic

$$\%I = \frac{1032 * (TS + 460) * VMSTD}{VS * TT * PS * MD * (DN * DN)}$$

25. Gr/DSCF = Lead Loading

$$Gr/DSCF = \frac{0.0154 * mg}{VMSTD}$$

26. LB/HR = Lead, LB/HR

$$LB/HR = 0.00857 * Gr/Hr * QS$$

APPENDIX H

CERTIFICATIONS

VISIBLE EMISSIONS EVALUATOR

This is to certify that

[illegible]

met the specifications of Federal Reference Method 9 and qualified as a visible emissions evaluator. Maximum [illegible] and black smoke did not exceed 7.5% opacity and no single [illegible] opacity was incurred during the certification test conducted by Eastern Technical Associates of Raleigh, North Carolina. This certificate is valid for [illegible] from date of issue.

[illegible]
President

[illegible]33374
Certificate Number

[illegible]
Certificate

[illegible]
Location

David B. Savage, Jr.
Program Manager

April 1, 1992
Date of Issue

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VISIBLE EMISSIONS EVALUATOR

This is to certify that

[illegible]

met the specifications of Federal Reference Method 9 and qualified as a visible emissions evaluator. Maximum deviation on white and black smoke did not exceed 7.5% opacity and no single error exceeding 15% opacity was incurred during the certification test conducted by Eastern Technical Associates of Raleigh, North Carolina. This certificate is valid for six months from date of issue.

[illegible]
President

[illegible]
Certificate Number

[illegible]
Vice President

[illegible]
Vice President

David B. Savage, Jr.
Program Manager

April 2, 1992
Date of Issue

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