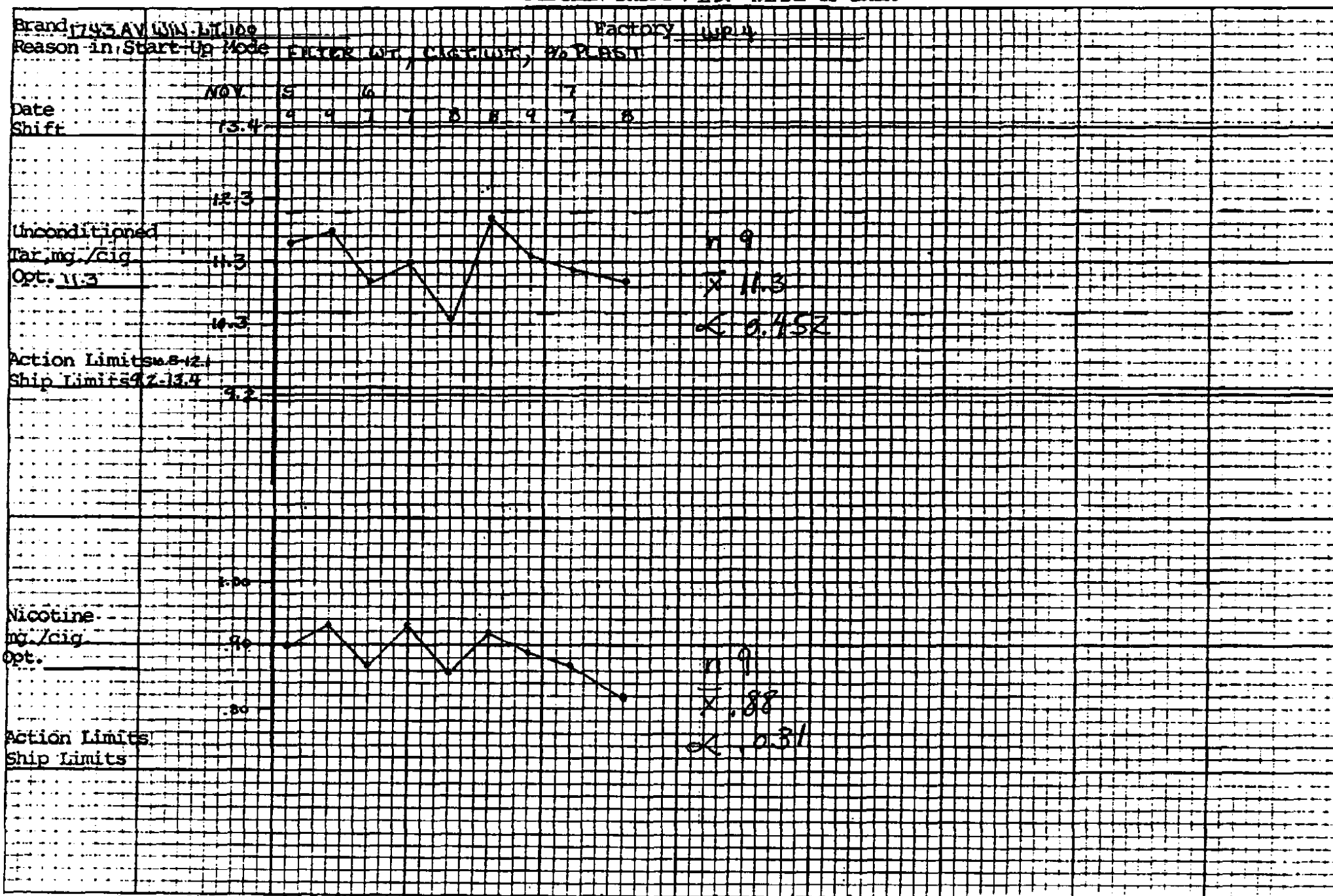


Final copy 11-12-34

FIFTEEN SHIFT 'TAR' START-UP DATA



NOTE: During a fifteen shift start-up mode, product is accepted or rejected based on shift averages.

51327 7297

[illegible]

NOTE: During a fifteen shift start-up mode, product is accepted or rejected based on shift averages.

Source: <https://www.industrydocuments.ucsf.edu/docs/hlfh0065>

Brand 1713AV W.W. 1.100

Factory WP-4

51327 7299

11-1-84

Reason in Start-Up Mode: FILTER WT, CIG WT, %PLAST

Date	Q	Shift	Wt., g.	Draft mm.	Dilution,	Size,	Firm,	FC	Pack	Unconditioned	G-132	PACK	LONG	MIDWINGS	STAVE	Filling	
				Open.	Closed	mm.	O.1mm.	Moist. %	Moist. %	Tar, mg./cig.	Nicotine mg./cig.	MEN. %	STRAWS		% Fines	Cap ml/2.3mm	
11-5-84	9	9	1.131	119	154	32	24.91	9.1	12.75	12.38	11.6	90	15.7	34	49	17	418
9	9	9	1.123	116	153	34	.88	9.0	12.61	12.41							
9	9	9	1.118	119	157	34	.85	9.1	12.98	12.44			18.0	31	52	17	420
11	9	9	1.131	117	152	32	.91	9.3	12.69	12.69	11.8	93	15.9	33	50	17	423
12	9	9	1.124	118	154	32	.87	9.2	12.70	12.42							
12	9	9	1.134	116	156	35	.87	8.8	12.40	12.40							
14	9	9	1.130	116	155	34	.90	8.9	12.88	12.40			16.1	36	48	16	424
14	1	7	1.124	118	154	34	.90	9.9	12.30	12.30	11.0	.87	14.6	35	50	16	420
2	7	7	1.128	121	158	33	.86	9.4	12.94	12.42							
13	7	7	1.123	117	154	32	.83	9.4	12.50	12.50							
14	7	7	1.135	112	149	33	.91	8.8	12.71	12.49	11.3	.87	16.0	36	48	16	419
15	7	7	1.127	117	153	32	.89	9.0	12.47	12.47							
16	7	7	1.133	116	153	34	.93	9.8	12.96	12.47			17.9	35	48	16	416
17	7	7	1.132	117	155	34	.93	8.8	12.50	12.50							
44	8	8	1.138	117	158	35	.87	8.9	12.79	12.41	10.4	.86		36	48	15	422
45	8	8	1.124	114	151	34	.89	9.6	12.45	12.45			16.6				
47	8	8	1.130	115	152	34	.91	9.7	13.00	12.53				36	49	15	422
60	8	8	1.123	116	153	34	.84	10.0	12.51	12.51							
61	8	8	1.132	116	154	34	.85	9.2	12.95	12.52	12.0	.92	15.8	34	49	17	421
62	8	8	1.125	121	157	33	.85	10.3	12.57	12.57							
63	8	8	1.132	115	153	35	.85	9.2	12.93	12.64			16.4	39	47	15	421
6	9	9	1.128	119	158	34	.90	9.4	12.53	12.53	11.4	.89					
10	9	9	1.126	120	158	33	.89	9.6	12.90	12.67			18.8	34	51	15	416
11	9	9	1.120	117	157	35	.89	9.8	12.65	12.65							
12	9	9	1.137	120	160	35	.95	9.7	12.85	12.67			18.4	34	50	16	417
13	9	9	1.136	118	157	34	.90	9.1	12.55	12.55							
14	9	9	1.123	117	154	34	.87	9.0	12.81	12.54			17.5	34	51	15	416
15	9	9	1.144	119	160	34	.94	9.2	12.67	12.67							
11-7	1	7	1.117	120	159	33	.89	9.5	12.76	12.70	11.2	.87	17.1	35	50	15	414
3	7	7	1.137	122	160	33	.91	9.2	12.42	12.42							
10	7	7	1.139	122	158	32	.88	9.4	12.89	12.44			15.7	36	48	16	416
11	7	7	1.125	119	157	33	.88	9.5	12.57	12.57							
12	7	7	1.134	117	155	34	.96	9.5	12.55	12.46			16.0	32	50	17	421
Samples 13	7	7	1.120	123	161	33	.95	9.5	12.34	12.34							
Avg. 14	7	7	1.123	115	152	34	.94	9.9	12.90	12.46			17.8	33	50	18	418
Target:			1.131	115	147	31	24.80			12.50	11.3		15.5				
Region Lmts.			1.08-1.142	±10	±10	25-37	±10			12.15-12.85	10.5-12.1						
Age Lmts.			1.085-1.176	±20	±20	19-43				±1.0	9.2-13.4						

FIFTEEN SHIFT 'TAR' START-UP FILTER DATA

Brand 143 JV W.M. L.T. 100 Factory W.P. 4
 Reason in Start-Up Mode FIL. WT., CIG. WT., % PLAST.

Date	Shift	Wt., g.	Draft, mm.	Size, mm.	Menthol, mg./rod
11-5-84	9	.786	370	.24.64	
	9	.792	377	.62	
	9	.784	372	.60	
	9	.783	367	.64	
	9	.791	378	.58	
	9	.792	378	.61	
	9	.789	378	.58	
11-6-84	7	.781	364	.64	
	7	.792	377	.62	
	7	.798	382	.64	
	7	.796	379	.64	
	7	.794	372	.63	
	7	.793	375	.63	
	7	.794	379	.63	
	8	.792	379	.60	
	8	.789	369	.65	
	8	.789	363	.67	
	8	.794	372	.69	
	8	.791	369	.66	
	8	.790	373	.63	
	8	.793	368	.70	
	9	.784	359	.66	
	9	.793	373	.63	
	9	.796	382	.63	
	9	.793	375	.63	
	9	.788	367	.63	
	9	.781	361	.62	
	9	.794	371	.64	
11-7-84	7	.796	376	.59	
	7	.786	372	.61	
	7	.793	379	.64	
	7	.791	377	.66	
	7	.787	374	.59	
No. Samples	7	.790	374	.62	
Avg.	7	.790	366	.66	
Std. Dev.		.793	376	.24.53	
Targets:					
Action Limits		.777-.809	350-402	±.10	
Ship Limits		.773-.813	323-429	±.15	
	8	.783	379	.24.58	
	8	.794	383	.63	
	8	.788	372	.60	
	8	.791	375	.65	
	8	.786	372	.62	
	8	.786	372	.58	
	8	.797	380	.66	
	7	.42	42	.42	
	X	.790	373	.24.63	
	2	.004	5.67	.0281	

* *high on lower*
gang - Target:
24.60

51327 7300

QUEUE #? 2

DATE: JUNE 20, 84

TIME: 18:47

TARE WEIGHT:

SCHEDULED: JUNE 20

CL-100 1953 AM

AT WP-4 SHIFT: 9

TYPE OF MACHINE:

MACHINES SAMPLED: 0 (00001729WP-4)

NO	WEIGHT GM	CIGARETTE		FIRM 0.1 MM	VIS
		DRAFT MM	SIZE MM		
1	1.203	152.00	24.98	10.9	
2	1.151	136.00	24.87	11.3	
3	1.152	143.00	24.83	8.9	
4	1.213	149.00	25.01	11.2	
5	1.213	157.00	25.02	11.4	
6	1.148	142.00	24.85	9.3	
7	1.180	138.00	24.78	8.3	
8	1.228	158.00	24.95	10.5	
9	1.145	160.00	24.74	11.4	
10	1.137	141.00	24.86	9.3	
11	1.132	139.00	24.77	9.1	
12	1.087	131.00	24.75	9.8	
13	1.121	136.00	24.80	9.7	
14	1.161	145.00	24.88	10.4	
15	1.133	136.00	24.83	8.8	
16	1.142	150.00	24.79	13.1	
17	1.136	140.00	24.81	9.8	
18	1.210	151.00	24.94	13.4	
19	1.180	149.00	24.87	9.8	
20	1.177	141.00	24.78	12.4	
AVG	1.1625	144.70	24.85	10.45	
SD	.0369	8.18	.09	1.43	

51327 7301

NO	AIR DILUTION			DILUTION METER	
	H.OPEN MM	H.CLOSED MM	DELTAP MM	H.OPEN MM	%DIL MM
1				150.00	19.00
2				143.00	17.00
3				139.00	20.00
4				155.00	17.00
5				156.00	13.00
6				138.00	19.00
7				138.00	16.00
8				131.00	16.00
9				136.00	15.00
10				146.00	14.00
11				134.00	17.00
12				148.00	16.00
13				139.00	17.00
14				151.00	16.00
15				149.00	16.00
16				143.00	18.00
17				148.00	15.00
18				157.00	13.00
19				140.00	18.00
20				153.00	19.00
AVG				144.70	16.55
SD				7.69	1.96

2

CIG GROUP WT: 23.2320 AVG: 1.1616 CHECK: .0009

CIG/I.W.:

CIG VIS DEFECTS

METHODS INCOMPLETE:

APPROVED? YRH

TRACK. = 83

CH2 1953AM CL 100 WP-4 6-20

5 CIG/PORT 38 MM

PORT	PUFFS/CIG	TPM(MG/CIG)	H2O(MG/CIG)	NIC(MG/CIG)	TAR(MG/CIG)
5	10.2	14.1	0.0	0.00 *	14.1
6	9.8 *	14.1	0.0	0.00 *	14.1
7	10.1	13.8	0.0	0.00 *	13.8
8	10.0	13.8	0.0	0.00 *	13.8
	-----	-----	-----	-----	-----
AV.	10.0	13.9	0.0	0.00	13.9 11.9

51327 7303

QUEUE #2 B

DATE: JUNE 20, 84

TIME: 18:47

TARE WEIGHT:

SCHEDULED: JUNE 20

CL-100 1953 AL

: AT WP-4 SHIFT: 9

TYPE OF MACHINE:

MACHINES SAMPLED: 0 (00001729WP-4)

NO	WEIGHT GM	CIGARETTE		FIRM 0.1 MM	VIS
		DRAFT MM	SIZE MM		
1	1.147	138.00	24.87	11.0	
2	1.139	140.00	24.75	11.2	
3	1.130	136.00	24.80	9.3	
4	1.196	138.00	24.89	10.4	
5	1.146	147.00	24.70	11.1	
6	1.174	145.00	24.83	10.5	
7	1.165	149.00	24.78	8.9	
8	1.181	138.00	24.94	11.2	
9	1.124	131.00	24.79	10.3	
10	1.125	153.00	24.86	10.0	
11	1.128	141.00	24.68	9.1	
12	1.125	143.00	24.87	9.9	
13	1.168	143.00	25.00	9.5	
14	1.158	147.00	24.80	8.7	
15	1.140	138.00	24.87	8.5	
16	1.176	138.00	24.92	10.3	
17	1.160	133.00	24.95	9.4	
18	1.166	148.00	24.84	13.6	
19	1.127	136.00	24.79	10.4	
20	1.149	128.00	24.77	9.3	
AVG	1.1512	140.50	24.83	10.13	
SD	.0216	6.39	.08	1.17	

51327 7304

NO	AIR DILUTION			DILUTION METER	
	H.OPEN MM	H.CLOSED MM	DELTAP MM	H.OPEN MM	XDIL MM
1				138.00	16.00
2				140.00	17.00
3				137.00	14.00
4				139.00	20.00
5				146.00	18.00
6				141.00	17.00
7				147.00	17.00
8				139.00	17.00
9				132.00	21.00
10				156.00	16.00
11				141.00	19.00
12				140.00	20.00
13				143.00	19.00
14				146.00	15.00
15				139.00	19.00
16				140.00	18.00
17				135.00	19.00
18				147.00	15.00
19				136.00	19.00
20				128.00	22.00
AVG				140.50	17.90
SD				6.06	2.10

CIG GROUP WT: 23.0090 AVG: 1.1505 CHECK: .0007

CIG/I.W.:

CIG VIS DEFECTS

METHODS INCOMPLETE:

APPROVED? YRH

51327 7305

TRACK, = 83

CH1 1953AL CL 100 WP-4 6-20

5 CIG/PORT 38 MM

PORT	PUFFS/CIG	TPM(MG/CIG)	H2O(MG/CIG)	NIC(MG/CIG)	TAR(MG/CIG)
1	10.0	13.5	0.0	0.00 *	13.5
2	9.9	13.9	0.0	0.00 *	13.9
3	9.6	12.7	0.0	0.00 *	12.7
4	9.6	13.2	0.0	0.00 *	13.2
	-----	-----	-----	-----	-----
AV.	9.8	13.3	0.0	0.00	13.3 11.4

51327 7306

~~QUEUE #2 3~~
~~QUEUE # KILLED! ANOTHER #?~~
QUEUE #? 4

DATE: JUNE 20, 84

TIME: 18:47

TARE WEIGHT:

SCHEDULED: JUNE 20

WL-100 1743 AT

AT WP-4 SHIFT: 9

TYPE OF MACHINE:

MACHINES SAMPLED: 0 (00001729WP-4)

NO	WEIGHT GM	CIGARETTE		FIRM 0.1 MM	VIS
		DRAFT MM	SIZE MM		
1	1.191	136.00	24.82	9.4	
2	1.163	143.00	24.85	8.9	
3	1.168	152.00	24.84	10.5	
4	1.110	139.00	24.90	10.9	
5	1.140	138.00	24.92	9.4	
6	1.153	142.00	24.83	10.4	
7	1.163	153.00	24.88	8.8	
8	1.148	128.00	24.80	9.5	
9	1.166	140.00	24.80	10.1	
10	1.154	143.00	24.91	10.0	
11	1.175	145.00	24.82	10.6	
12	1.190	154.00	24.91	11.9	
13	1.164	132.00	24.94	11.8	
14	1.147	142.00	24.86	11.9	
15	1.145	145.00	24.73	9.7	
16	1.143	144.00	24.87	11.7	
17	1.120	138.00	24.82	9.4	
18	1.092	138.00	24.84	10.5	
19	1.133	138.00	24.98	8.7	
20	1.207	146.00	25.01	10.0	
AVG	1.1536	141.80	24.87	10.21	
SD	.0275	6.54	.07	1.03	

51327 7307

NO	AIR DILUTION			DILUTION METER	
	H.OPEN MM	H.CLOSED MM	DELTAP MM	H.OPEN MM	%DIL MM
1				136.00	24.00
2				144.00	16.00
3				148.00	18.00
4				137.00	18.00
5				137.00	15.00
6				141.00	16.00
7				155.00	18.00
8				129.00	21.00
9				142.00	18.00
10				141.00	16.00
11				142.00	20.00
12				149.00	16.00
13				141.00	11.00
14				145.00	18.00
15				147.00	19.00
16				145.00	15.00
17				137.00	14.00
18				138.00	14.00
19				142.00	13.00
20				147.00	14.00
AVG				142.15	16.70
SD				5.73	3.01

CIG GROUP WT: 23.0660 AVG: 1.1533 CHECK: .0003

CIG/I.W.:

CIG VIS DEFECTS

METHODS INCOMPLETE:

APPROVED? YRH

51327 7308

TRACK. = 03

CH4 1743AT WL100 6-20

5 CIG/PORT 38 MM

PORT	PUFFS/CIG	TPM(MG/CIG)	H2O(MG/CIG)	NIC(MG/CIG)	TAR(MG/CIG)
13	9.4	13.2	0.0	0.00 *	13.2
14	9.4	13.2	0.0	0.00 *	13.2
16	9.2	13.4	0.0	0.00 *	13.4
	-----	-----	-----	-----	-----
AV.	9.4	13.3	0.0	0.00	13.3 11.4

51327 7309

QUEUE #? 5

DATE: JUNE 20, 84

TIME: 18:47

TARE WEIGHT:

SCHEDULED: JUNE 20

WL-100 1743 AU

AT WP-4 SHIFT: 9

TYPE OF MACHINE:

MACHINES SAMPLED: 0 (00001729WP-4)

NO	WEIGHT GM	CIGARETTE		FIRM 0.1 MM	VIS
		DRAFT MM	SIZE MM		
1	1.139	144.00	24.77	9.8	
2	1.158	134.00	24.87	11.3	
3	1.160	145.00	24.80	10.2	
4	1.142	141.00	24.92	10.3	
5	1.162	145.00	24.87	9.8	
6	1.158	124.00	24.84	9.5	
7	1.170	145.00	24.84	10.5	
8	1.151	148.00	24.86	9.1	
9	1.133	140.00	24.91	8.8	
10	1.149	131.00	24.89	9.3	
11	1.133	140.00	24.86	8.7	
12	1.144	148.00	24.94	8.6	
13	1.178	140.00	24.93	10.7	
14	1.124	155.00	24.80	11.0	
15	1.174	143.00	24.70	10.3	
16	1.154	143.00	24.74	10.2	
17	1.151	145.00	24.83	10.8	
18	1.158	147.00	24.86	10.6	
19	1.187	138.00	24.87	11.4	
20	1.116	141.00	24.86	9.0	
AVG	1.1521	141.85	24.85	10.00	
SD	.0180	6.67	.06	.87	

51327 7310

AIR DILUTION			DILUTION METER		
NO	H.OPEN MM	H.CLOSED MM	DELTAP MM	H.OPEN MM	XDIL MM
1				141.00	16.00
2				132.00	15.00
3				146.00	19.00
4				136.00	16.00
5				144.00	17.00
6				124.00	32.00
7				145.00	18.00
8				147.00	16.00
9				138.00	18.00
10				130.00	21.00
11				138.00	15.00
12				148.00	17.00
13				142.00	19.00
14				157.00	14.00
15				140.00	15.00
16				140.00	16.00
17				143.00	18.00
18				146.00	17.00
19				139.00	19.00
20				144.00	17.00
AVG				141.00	17.75
SD				7.15	3.77

CIG GROUP WT: 23.0200 AVG:1.1510 CHECK: .0010

CIG/I.W.:

CIG VIS DEFECTS

METHODS INCOMPLETE:

APPROVED? YRH

51327 7311

TRACK = 83

CH3 1743AU WL100 6-20

5 CIG/PORT 38 MM

PORT	PUFFS/CIG	TPM(MG/CIG)	H2O(MG/CIG)	NIC(MG/CIG)	TAR(MG/CIG)
9	9.8	13.8	0.0	0.00 *	13.8
10	9.9	13.8	0.0	0.00 *	13.8
11	10.1 *	14.2	0.0	0.00 *	14.2
12	9.9	13.3	0.0	0.00 *	13.3
	----	----	-----	-----	-----
AV.	9.9	13.8	0.0	0.00	13.8 11.8

51327 7312

QUEUE #? 6

DATE: JUNE 20, 84

TIME: 18:47

TARE WEIGHT:

SCHEDULED: JUNE 20

WL-100 1743 AU

+ Jilla

AT WP-8 SHIFT: 9

TYPE OF MACHINE:

MACHINES SAMPLED:

0 (00001729WP-8)

NO	WEIGHT GM	CIGARETTE		FIRM 0.1 MM	VIS
		DRAFT MM	SIZE MM		
1	1.171	147.00	24.79	9.1	
2	1.140	147.00	24.73	12.2	
3	1.168	139.00	24.83	9.2	
4	1.140	145.00	24.79	9.2	
5	1.121	134.00	24.87	11.2	
6	1.149	149.00	24.90	10.1	
7	1.159	137.00	24.85	9.3	
8	1.171	138.00	24.95	9.8	
9	1.197	139.00	24.92	10.3	
10	1.144	146.00	24.96	11.4	
11	1.157	153.00	24.86	10.3	
12	1.139	144.00	24.85	11.2	
13	1.172	152.00	24.88	10.6	
14	1.143	143.00	24.79	8.6	
15	1.171	144.00	24.79	12.9	
16	1.212	152.00	24.90	10.4	
17	1.144	140.00	24.91	12.5	
18	1.177	140.00	24.96	10.1	
19	1.117	127.00	24.85	8.4	
20	1.161	139.00	25.00	9.4	
AVG	1.1576	142.75	24.87	10.31	
SD	.0234	6.52	.07	1.27	

51327 7313

NO	AIR DILUTION			DILUTION METER	
	H.OPEN MM	H.CLOSED MM	DELTAP MM	H.OPEN MM	%DIL MM
1				148.00	18.00
2				143.00	17.00
3				138.00	20.00
4				144.00	20.00
5				137.00	17.00
6				150.00	16.00
7				138.00	19.00
8				140.00	16.00
9				135.00	20.00
10				142.00	17.00
11				149.00	18.00
12				145.00	15.00
13				153.00	15.00
14				148.00	14.00
15				149.00	17.00
16				151.00	19.00
17				140.00	15.00
18				142.00	17.00
19				128.00	21.00
20				149.00	15.00

AVG 143.45 17.30
SD 6.35 2.03

CIG GROUP WT: 23.1430 AVG: 1.1572 CHECK: .0005

CIG/I.W.:

CIG VIS DEFECTS

METHODS INCOMPLETE:

APPROVED? YRH

51327 7314

TRACK = 83

CH5 1743AU TOBVILLE 2:50 6-20

5 CIG/PORT 38 MM

PORT	PUFFS/CIG	TPM(MG/CIG)	H2O(MG/CIG)	NIC(MG/CIG)	TAR(MG/CIG)
17	9.9	13.5	0.0	0.00 *	13.5
18	9.7	13.3	0.0	0.00 *	13.3
19	9.6	14.1	0.0	0.00 *	14.1
20	9.9	13.9	0.0	0.00 *	13.9
	-----	-----	-----	-----	-----
AV.	9.8	13.7	0.0	0.00	13.7 11.7

APPROVE: YES OR NO? YES
BYE

51327 7315

STEELE
NATIONAL TRADING PAPER DIVISION
INDIANAPOLIS, INDIANA

Drivally Cars

WP-4	110133
1-1	
1-4	
646	

Brand: 1743 AM
 Reason in Start-Up Mode: Cause III

2100 COLDESTIA TYPING

[illegible]

Unconditioned

Var. *mg / cing*

Gr: 11.9

10.9

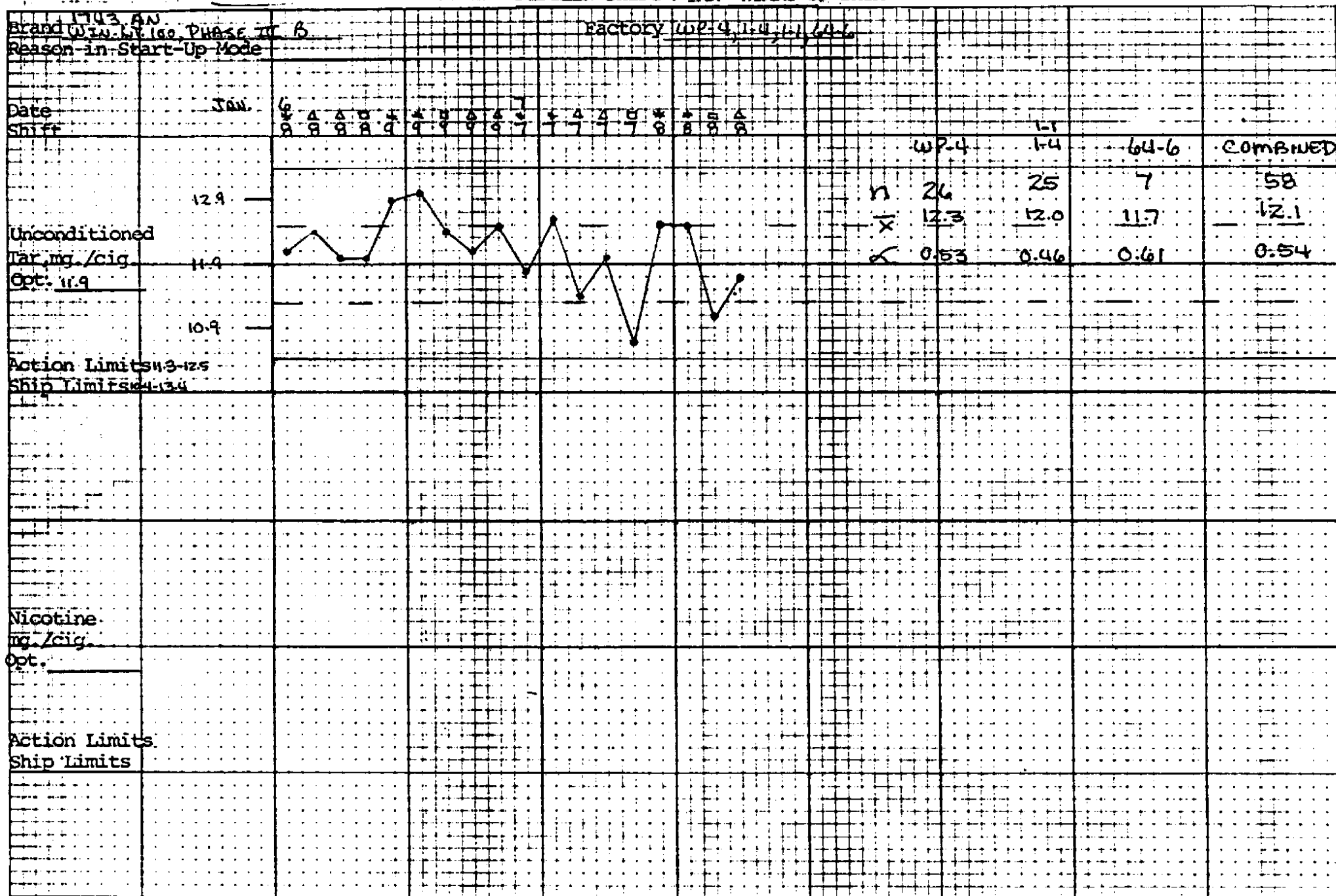
Action Limits 11-3-12.9
Ship Limits 11-4-13.9

Nicotine
mg./cig.
Opt. . . .

	Action Limits
	Ship Limits

NOTE: During a fifteen shift start-up mode, product is accepted or rejected based on shift averages.

FIFTEEN SHIFT 'TAR' START-UP DATA



NOTE: During a fifteen shift start-up mode, product is accepted or rejected based on shift averages.

9-49 4-1 1-1 4-10

10

Brand W11V. 67100. Phase 1111
Reason in Start-up Mode

~~2000 CORESTA TIDP~~

Factory Building and its

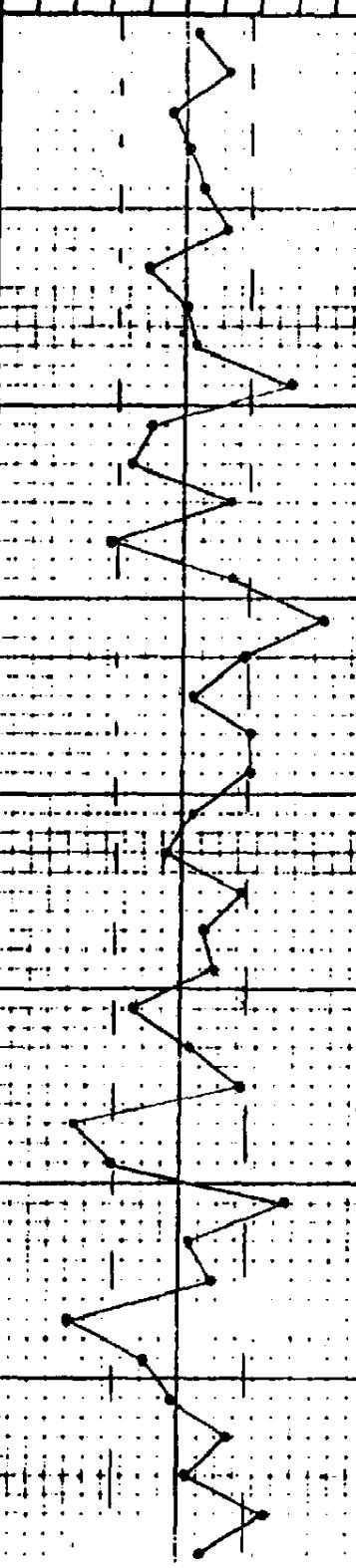
DEC:

[illegible]

Moisture, 8

001: 12.50

Action Limits	12.15-12.45	11:30 -
Ship Limits	11:50-13:00	11:50



Back
Venthol, 8
Qrt:

Action Limits

NOTE: During a fifteen shift start-up mode, product is accepted or rejected based on shift averages.

* WP-4
Δ 1-1
● 1-4
□ 64-6

51327 7319

11/1/53

FIFTEEN SHIFT 'TAR' START-UP DATA

Brand <u>W.P. 4</u>	Reason in Start-up Mode	2100 CORESTA TIPPING	Factory <u>WP-4, 1-4, 1-1, AND 64-6</u>			
Date	JAN.					
Shift		6 * 8 8 8 8 9 9 9 9 9 7 7 7 7 7 8 8 8 8				
Pack Moisture, %				WP-4	1-4	64-6
				n	25	25
				\bar{x}	12.68	12.45
				σ	0.196	0.280
Opt. 12.5%						
Action Limits 12.15-12.45						
Ship Limits 11.50-13.00						
Pack Menthol, %						
Opt.						
Action Limits						
Shift Limits						

NOTE: During a fifteen shift start-up mode, product is accepted or rejected based on shift averages.

1743 AU
Brand Alternative Taste JCB

Fifteen Shutt "Year" Start-Up Cigarette Data
Factory W-4, 1-1 and 1-4, 1-6, 4-6

Final Copy

51327 7320

Reason in Start-Up Mode

2100 Cigarettes TYPING

Date	Shift	Wt. g.	Open	Draft mm.	Dilution, %	Size, mm.	Firm, 0.1mm	PC	Pack	Unconditioned Tar, mg./cig.	Nicotine mg./cig.	Tippling Porosity, G-13, %	Pack Ment. %	Tob. Prod Draft, mm	Save % Flues
12/22	8	1.157	134		16.5	24.84	10.9	12.84	12.58	13.3	1.02	2057 2057-2062	15.7	49	17
	8	1.150	131		15.4	24.89	11.2	12.98	12.74	12.7	.99	2151 2151-2156	13.7	50	17
	8	1.154	133		15.9	24.88	11.6	12.82	12.54	12.0		2141 2141-2146		57	19
	8	1.151	133		18.7	24.80	10.5	12.68	12.52	10.8				54	17
	9	1.142	135		15.4	24.87	11.1	12.81	12.44	11.8	.93	2047 1946-2047	15.7	52	21
	9	1.143	123		17.1	24.81	11.1	12.91	12.72	12.6	.96	2125 1972-2125	19.0	50	20
	9	1.164	140		18.0	24.95	9.1	12.19	12.31	12.3	1.06	2134 2008-2134	17.5	65	16
	9	1.161	142		16.4	24.84	9.0	12.45	12.52	12.3	.95	2052 2052-2054	14.9	60	14
12/23	7	1.154	131		16.2	24.84	10.8	12.64	12.57	12.2	.92	2100 1949-2100	14.9	54	19
	7	1.154	132		16.7	24.79	12.9	13.46	13.04	12.8	.92	2102 2044-2102		52	21
	7	1.154	141		15.4	24.81	10.6	12.60	12.35	11.7	.87	2101 1800-2101	15.1	58	17
	7	1.174	140		20.0	24.82	9.2	12.51	12.22	12.1	.93	2044 2111-2044	15.2	65	18
	8	1.158	137		17.3	24.87	10.1	12.84	12.76	11.7		2100 2057-2100	15.2	52	20
	8	1.138	138		18.8	24.86	10.6	12.48	12.11	11.6		2242 2107-2242	16.4	57	20
	9	1.154	129		19.9	24.81	11.5	13.17	12.77	12.0		2242 2152-2242	16.7	54	16
	9	1.142	139		16.7	24.77	11.1	13.41	13.25	12.5		2222 2222-2222	15.7	52	20
1-4-83	8	1.158	138		17.9	24.88	11.4	13.04	12.83	12.0		2194 1949-2194		57	21
	8	1.154	141		15.4	24.80	10.7	12.56	12.56	12.0		2225 2100-2225	16.1	59	16
	9	1.150	132		15.9	24.74	10.5	12.84	12.84	12.2			14.6	61	
	9	1.150	138		14.7	24.84	12.0	13.01	12.84	13.5		1872 1844-1872	14.9	56	24
	9	1.147	139		13.4	24.78	10.2	12.60	12.58	12.6		2176 2104-2176	15.4	58	19
	9	1.147	124		14.9	24.86	10.5	12.57	12.43	12.6		2243 2172-2243	15.4	53	18
1-5-83	7	1.157	133		15.2	24.83	12.2	13.22	12.83	13.1		2145 2172-2145	15.3	45	20
	7	1.157	131		15.1	24.84	10.8	12.74	12.63	11.9		2042 1904-2042		52	17
	7	1.153	141		17.9	24.84	10.4	12.51	12.68	12.5		2318 2242-2318	16.5	60	17
	7	1.158	143		17.2	24.84	10.2	12.82	12.55	12.0		2123 2107-2123		54	18
	8	1.148	137		16.9	24.82	11.7	13.17	12.83	12.2		2046 1951-2046	14.9	54	20
	8	1.147	133		15.9	24.81	9.9	12.86	11.95	11.7		2046 1950-2046	17.1	56	17
	8	1.143	138		15.5	24.82	10.1	12.44	12.76	11.4				57	20
	8	1.145	140		17.0	24.80	11.6	13.11	13.07	11.5		2042 2042-2042	13.5	54	16
	9	1.150	141		14.4	24.78	10.8	12.81	12.57	11.9		2044 1949-2044		56	20
	9	1.160	140		18.5	24.81	10.2	12.64	12.49	11.5		2048 1953-2048		55	19
No. Samples															
AVG.		1.153	133		17	24.80			12.50	11.4		2100	15	60	
Target:		1.144	124-134		14-24	24.70-24.90	10-11.0		12.15-12.85	11.3-12.5		1724-2100		56-65	
Action Limits.										10.8-13.4					
Ship Lims.															

* PRACT A.A
Notified

* W-4
A 1-4
• 1-4
• 6-4-6

Tob. Prod
Draft, mm

Save % Flues
Filling
Cigarettes

* WP-4

Factory WP-4, 1-1, 1-4, AND 64-6

ZINA CORESTA TIPPIN

1-4

• 1-4

□ 64-6

Source: <https://www.industrydocuments.ucsf.edu/docs/hlfh0065>

Fifteen Shift "Tar" Start-Up Cigarette Data

1743 AN
Brand Wm. L. 100, Phase III BFactory WP4, 1-1, 1-4 and 64-6

Reason in Start-Up Mode

Zion Cigarette TIPPING

Date	Shift	Wt., g.	Draft mm.		Dilution, %	Size, mm.	Firm, 0.1mm.	PC Moist. %	Pack Moist. %	Unconditioned Tar, mg./cig.	Nicotine mg./cig.	Tipping Porosity, Coresta	G-13, %	Pack Men. %	Tab. rod Draft, mm	Stem % Fines	Filling Cap. ml/d 2.3751
WP-4	n	26	26		26	26	26	26	25	26		24	14		26	26	
	x	1.153	134		16.1	24.84	11.1	12.86	12.48	12.3		2.081	14.8		52	19	
	cc	.006	4.21		0.950	0.046	0.568	0.262	0.196	0.53		77.18	0.731		2.14	1.79	
1-1 1-4	n	25	25		25	25	24	25	25	25		22	16		25	25	
	x	1.151	139		16.5	24.83	10.5	12.59	12.45	12.0		2.203	16.4		58	17	
	cc	.009	3.95		2.06	0.054	0.730	0.271	0.280	0.46		78.82	1.094		3.03	1.83	
64-6	n	7	7		7	7	7	6	7	7		5	6		7	6	
	x	1.152	139		17.2	24.77	11.5	13.32	13.12	11.7		2.101	15.1		59	16	
	cc	.007	1.68		1.38	0.033	0.744	0.189	0.188	0.61		93.92	0.592		3.05	1.63	
COMBINED																	
	n	58	58		58	58	57	57	57	58		51	36		58	57	
	x	1.152	137		16.4	24.85	10.9	12.79	12.63	12.1		2.136	15.6		55	18	
	cc	.007	4.58		1.58	0.052	0.745	0.340	0.315	0.54		98.00	1.162		4.08	2.10	
No. Samples																	
Avg.																	
Target:		1.153	133		17	24.80			12.50	11.9		2.100	15		60		
Action Lmts.		1.144-1.164	128-138		14-20	24.70-24.90	10.0-11.0		12.15-12.85	11.3-12.5		1750-2450			55-65		
Ship Lmts.										10.4-13.4							

FIFTEEN SHIFT 'TAR' START-UP FILTER DATA

1743 AN
Brand WYLLIAMS, 100, PAPER 1E Factory W-4, 1-1, 1-4, AND 64-6
Reason in Start-Up Mode 2100 CIGARETTA TIPPING

* WP-4

Δ 1-1

• 1-4

□ 64-6

Date	Shift	Wt., g.	Draft, mm.	Size, mm.	Menthol, mg./rod
12/22	8 *	.725	392	24.58	
	8 *	.721	410	24.60	
	8 *	.727	383	24.58	
	8 Δ	.751	396	24.67	
	9 *	.726	395	24.59	
	9 *	.719	376	24.55	
	9 *	.727	392	24.60	
	9 Δ	.738	400	24.59	
12/23	7 *	.724	367	24.64	
	7 *	.729	379	24.64	
	7 *	.730	395	24.57	
	7 Δ	.728	382	24.63	
	8 *	.725	395	24.57	
	8 *	.740	408	24.58	
	9 *	.754	407	24.67	
1-4-83	8 *	.731	401	24.61	
	8 *	.734	397	24.62	
	8 Δ	.721	377	24.64	
	8 □	.708	375	24.58	
	9 *	.734	390	24.60	
	9 Δ	.730	392	24.59	
	9 Δ	.735	384	24.62	
1-5-83	7 *	.720	379	24.66	
	7 *	.734	384	24.68	
	7 Δ	.739	404	24.58	
	7 Δ	.745	409	24.54	
	8 *	.736	396	24.70	
	8 *	.742	401	24.64	
	8 Δ	.743	410	24.54	
	8 Δ	.740	407	24.58	
	8 □	.718	387	24.57	
	9 *	.731	404	24.63	
	9 *	.735	411	24.62	
No. Samples					
Avg.					
Std. Dev.					
Targets:		.738	386	24.60	
Action Limits		.718-.747	359-412	24.50-24.70	
Ship Limits					

FIFTEEN SHIFT 'TAR' START-UP FILTER DATA

1743 AM
Brand WP-4, L-1, L-4, and L-6
Readon in Start-Up Mode
Factory WP-4, L-1, L-4, and L-6
2100 CORONA TIPPING

* WP-4
Δ 1-1
• 1-4
□ 64-6

Date	Shift	Wt., g.	Draft, mm.	Size, mm.	Menthol, mg./rod
1-5-83	9 Δ	.735	393	24.61	
	9 Δ	.726	393	24.54	
1-6-83	7 *	.731	404	24.59	
	7 *	.737	409	24.61	
	7 Δ	.724	396	24.63	
	7 □	.728	389	24.57	
	8 *	.732	398	24.64	
	8 *	.730	398	24.64	
	8 Δ	.721	393	24.50	
	8 Δ	.734	417	24.55	
	8 □	.730	395	24.59	
	9 *	.718	379	24.60	
	9 *	.722	368	24.64	
	9 □	.738	396	24.56	
	9 Δ	.737	413	24.59	
	9 Δ	.725	381	24.64	
1-7-83	7 *	.727	380	24.59	
	7 *	.736	383	24.63	
	7 Δ	.729	383	24.63	
	7 Δ	.730	381	24.64	
	7 □	.733	394	24.57	
	8 *	.738	398	24.66	
	8 *	.736	399	24.62	
	8 □	.745	417	24.56	
	8 Δ	.741	396	24.70	
WP-4	n	26	26	26	
	x	.731	392	24.62	
	∞	.006	12.49	.0347	
1-1	n	25	25	25	
1-4	x	.733	396	24.59	
	∞	.008	11.38	.0507	
		.733	386	24.60	
Targets:		.718-.747	359-413	24.50-24.70	
Action Limits					
Ship Limits					

64-6

n	7	7	7
x	.729	393	24.57
∞	.012	12.68	.0107

COMBINED

n	58	58	58
x	.732	394	24.60
∞	.008	11.98	.0343

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Fifteen Shift 'Tar' Start-Up Cigarette Data

Factory WP-4 AND WP-7V

Brand 1743 Ro. Win. LT. 100

Reason in Start-Up Mode

10mm DR4 415E

Filtration Draft mm.

Dilution, %

Size, mm.

Firm, 0.1mm.

FC Moist. %

Pack Moist. %

Unconditioned Tar, mg./cig.

Nicotine mg./cig.

Tipping Porosity, Coresta

G-13, %

Pack Men. %

Tob. rod Draft, mm

Sieve % Fines

Filling Cap. ml./2.375

Date	Shift	Wt., g.	Open.	Closed	%	mm.	0.1mm.	Moist. %	Moist. %	Tar, mg./cig.	Nicotine mg./cig.	Tipping Porosity, Coresta	G-13, %	Pack Men. %	Tob. rod Draft, mm	Sieve % Fines	Filling Cap. ml./2.375
9/15	70	✓ 8	1.152	131	151	18	24.75	12.8	12.87	12.72	13.2	.94	15.2			16	395
	72	8	1.153	130	152	18	.81	12.3	12.66	12.58	12.7		17.1			14	409
	29	9	1.153	132		18	.82	10.6	12.85	12.70	13.0	.89			53	17	406
	30	✓ 9	1.147	132		17	.83	11.1	12.47	12.75	12.9	.92			52	16	405
9/16	43	8	1.154	132	155	19	.80	10.0	12.53	12.40	12.5	.96	17.1			15	418
	54	✓ 8	1.151	130	155	21	.83	11.1	12.37	12.26	12.7	.96				14	416
	4	9	1.152	129	152	20	.83	10.0	12.40	12.46	13.4	1.00	17.7			14	420
	7	✓ 9	1.160	131	157	22	.79	10.2	12.58	12.47	13.0	.99	15.9			15	413
9/19	9	7	1.163	129	156	23	.86	10.0	12.81	12.65	12.4	.90	14.8			17	407
	10	✓ 7	1.148	128	150	20	.72	10.7	12.66	12.64	12.4	.95	14.5			16	408
	30	8	1.153	128	153	21	.83	10.4	12.80	12.35	12.5	.94	15.5			15	417
	31	✓ 8	1.152	138	161	20	.77	11.0	12.26	12.20	12.2	.92	13.9			17	416
	23	9	1.163	134	155	18	.84	10.8	12.59	12.44	12.6	.92	15.0			15	406
	24	✓ 9	1.149	126	144	20	.81	10.6	12.64	12.49	12.6	.92	17.2			15	405
9/20	1	7	1.147	130	151	19	.78	11.7	13.03	12.67	12.2	.91	17.3			16	395
	3	✓ 7	1.154	123	148	22	.84	11.0	12.93	12.56	12.0	.88				16	403
	14	8	1.145	128	154	22	.75	11.4	12.92	12.50	12.2	.91	17.3			15	406
	15	✓ 8	1.165	131	156	21	.85	10.7	12.20	12.07	12.0	.91				18	414
	5	9	1.147	129	151	20	.93	12.3	12.66	12.64	12.2		17.2			17	405
	7	✓ 9	1.152	134	153	17	.76	11.5	12.85	12.85	11.8		13.9			17	403
9/21	4	7	1.159	132	155	20	.78	11.2	12.73	12.87	11.9		16.6			14	410
	7	✓ 7	1.146	134	155	19	.78	10.5	12.67	12.72	11.8		15.1			16	408
	31	8	1.154	134	156	18	.73	12.2	13.05	12.89	12.8		16.1				
	30	✓ 8	1.158	140	160	17	.87	10.7	12.42	12.11	12.5		17.7				
	4	9	1.151	131	153	19	.87	11.7	12.55	12.48	12.3		16.8			15	410
	5	✓ 9	1.156	135	158	19	.83	11.9	12.74	12.63	12.3		18.6			16	405
9/22	12	7	1.146	129	152	20	.81	12.1	12.28	12.37	11.6		16.8			17	408
	9	✓ 7	1.137	126	148	19	.79	11.5	12.68	12.61	12.6		17.3			16	410
		n	28	28	26	28	28	28	28	28	17		23			26	26
		2	1.152	131	154	20	24.81	11.1	12.65	12.55	12.4	.93	16.3			16	408
		<	.006	3.58	3.34	1.62	.047	0.772	0.228	0.216	0.437	.033	1.31			1.12	4.20
No. Samples																	
Avg.																	
Target:			1.153	135	(152)	17	24.80			12.50	12.0		2100	15.5		55	
Action Lmts.			1.141-1.164	±10		14-20	±10	10.5-11.5		12.15-12.85	11.4-12.6				50-60		
Ship Lmts.			1.147-1.149	±20		5-29	±20			±1.0	10.5-13.5						

C.L. Manning
L.G. James
J.H. Wilson
G.W. Wallace
D.W. Brown
W.C. AldersonFINAL
J.W. Davis

51327 7325

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