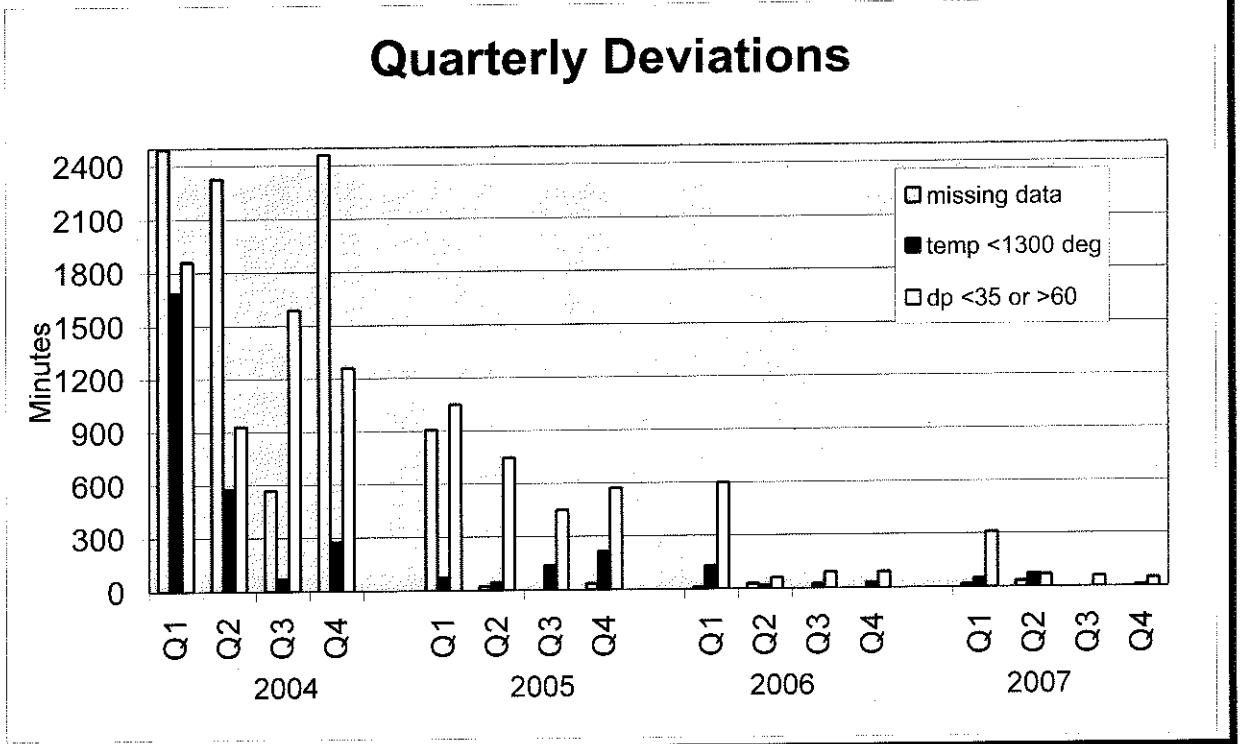
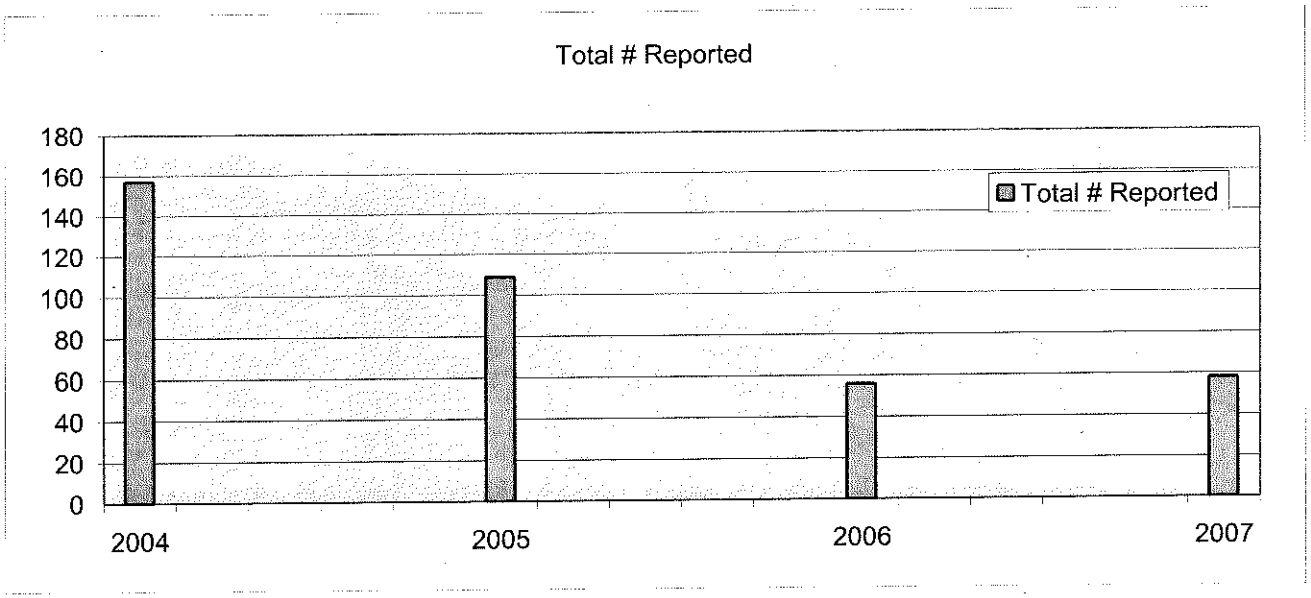
866

		Equip down (minutes)	Temp (minutes)	Pressure (minutes)
2004	Q1	2493	1684	1860
	Q2	2327	576	930
	Q3	568	70	1590
	Q4	2461	275	1260
2005	Q1	908	75	1050
	Q2	24	44	750
	Q3	0	138	450
	Q4	36	215	570
2006	Q1	12	130	600
	Q2	28	18	60
	Q3	0	25	90
	Q4	0	31	90
2007	Q1	16	49	311
	Q2	34	76	69
	Q3	0	0	60
	Q4	0	9	49



		Total #	
2004	Q1	57	
	Q2	33	
	Q3	20	
	Q4	47	157
2005	Q1	30	
	Q2	20	
	Q3	23	
	Q4	36	109
2006	Q1	36	
	Q2	8	
	Q3	7	
	Q4	5	56
2007	Q1	14	
	Q2	16	
	Q3	2	
	Q4	26	58



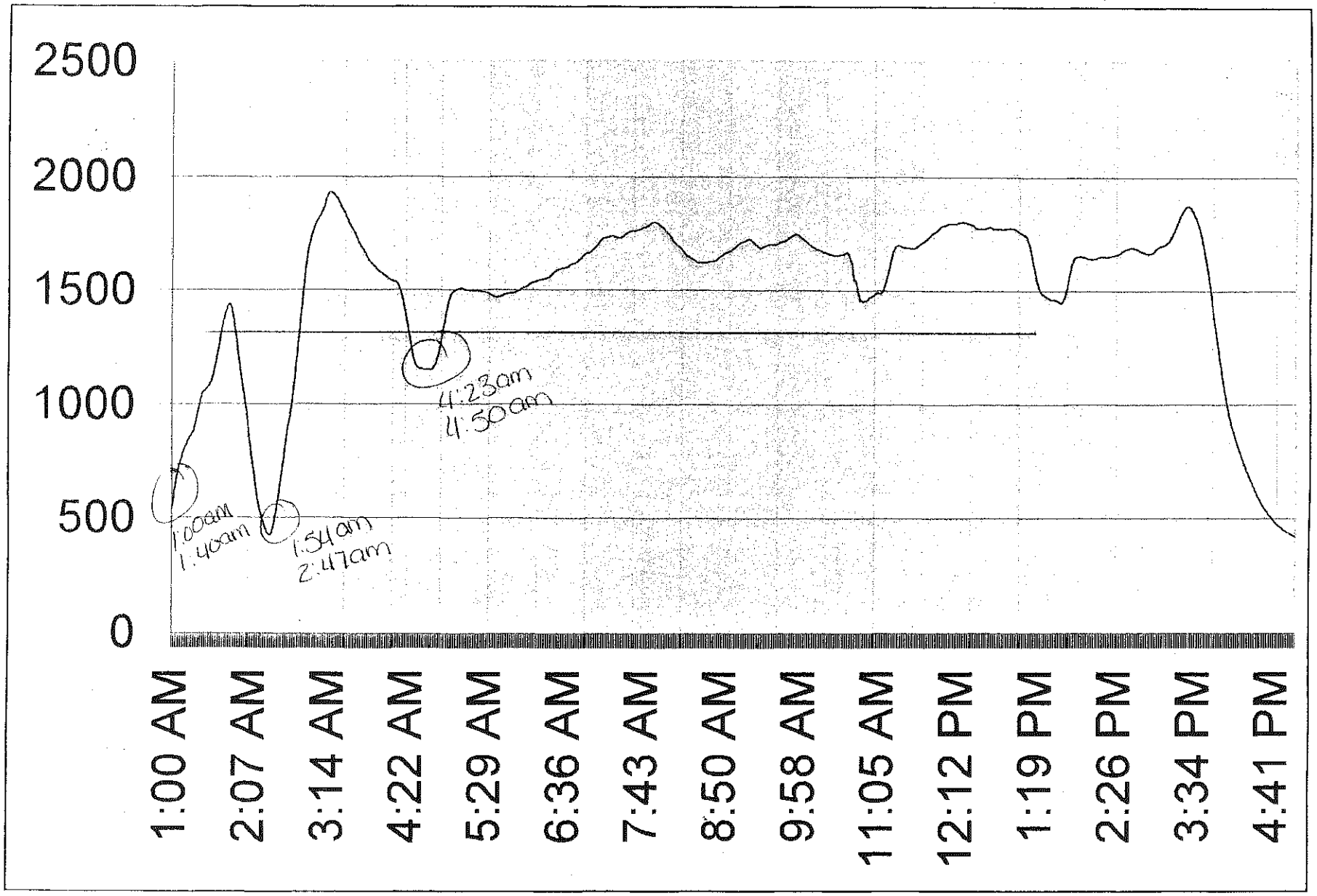
Summary of Deviations from Afterburner Temperature and Scrubber Pressure Drop Operating Restrictions and Temperature and Pressure Drop Monitoring Requirements by Calendar Quarter for Clow Water Systems Company in Coshocton, Ohio

Quarter	Year	No. of Days When Afterburner Temp. was <1300F/Total Minutes	No. of Days When Pressure Drop was < 35 inches of Water Column/ Total Hours	No. of Days When Pressure Drop Monitor(s) Not in Operation/ Total Hours
3rd	2000	34 days/1,465 minutes	6 days/72 hours	11 days/82 hours
4th	2000	37 days/727 minutes		17 days/127 hours
1st	2001	41 days/828 minutes	1 day/4 hours	1 day/4 hours
2nd	2001	18 days/196 minutes		
3rd	2001	7 days/145 minutes	3 days/19.5 hours	3 days/33 hours
4th	2001	9 days/136 minutes	7 days/47 hours	
1st	2002	5 days/179 minutes		3 days/14.5 hours
2nd	2002	25 days/489 minutes		10 days/34.7 hours
3rd	2002	3 days/83 minutes	11 days/29.76 hours	
4th	2002	29 days/1,471 minutes	10 days/47.66 hours	
1st	2003	39 days/2,006 minutes	27 days/22.5 hours	
2nd	2003	38 days/1,146 minutes	18 days/28 hours	
3rd	2003	18 days/154 minutes	21 days/39.1 hours	
4th	2003	4 days/556 minutes	15 days/23.5 hours	1 day/NK
1st	2004	33 days/1,684 minutes	17 days/31 hours	
2nd	2004	16 days/576 minutes	12 days/15.5 hours	
3rd	2004	6 days/70 minutes	11 days/26.5 hours	4 days/NK
4th	2004	19 days/275 minutes	21 days/21 hours	7 days/NK
1st	2005	13 days/75 minutes	14 days/17.5 hours	1 day/NK
2nd	2005	7 days/44 minutes	11 days/12.5 hours	
3rd	2005	12 days/138 minutes	11 days/7.5 hours	
4th	2005	19 days/215 minutes	14 days/9.5 hours	
1st	2006	17 days/130 minutes	15 days/10 hours	1 day/0.5 hours
2nd	2006	4 days/18 minutes	2 days/1 hour	
3rd	2006	4 days/25 minutes	3 days/2 hours	
4th	2006	2 days/31 minutes	3 days/2 hours	
1st	2007	5 days/65 minutes	9 days/5.18 hours	
Total:		**464 days/12,927 minutes**	**262 days/476.7 hours**	**59 days/NK**

Summary of Deviations from Afterburner Temperature and Scrubber Pressure Drop Operating Restrictions and Temperature and Pressure Drop Monitoring Requirements by Calendar Quarter for Clow Water Systems Company in Coshocton, Ohio

Quarter	Year	No. of Days When Afterburner Temp. was <1300F/Total Minutes	No. of Days When Pressure Drop was < 35 inches of Water Column/ Total Hours	No. of Days When Pressure Drop Monitor(s) Not in Operation/ Total Hours	No. of Days When Temp. Monitor Not in Operation/ Total Hours
3rd	2000	34 days/1,465 minutes	6 days/72 hours	11 days/82 hours	
4th	2000	37 days/727 minutes		17 days/127 hours	
1st	2001	41 days/828 minutes	1 day/4 hours	1 day/4 hours	
2nd	2001	18 days/196 minutes			
3rd	2001	7 days/145 minutes	3 days/19.5 hours	3 days/33 hours	
4th	2001	9 days/136 minutes	7 days/47 hours		2 days/NK
1st	2002	5 days/179 minutes		3 days/14.5 hours	12 days/NK
2nd	2002	25 days/489 minutes		10 days/34.7 hours	
3rd	2002	3 days/83 minutes	11 days/29.76 hours		3 days/NK
4th	2002	29 days/1,471 minutes	10 days/47.66 hours		3 days/NK
1st	2003	39 days/2,006 minutes	27 days/22.5 hours		4 days/NK
2nd	2003	38 days/1,146 minutes	18 days/28 hours		12 days/NK
3rd	2003	18 days/154 minutes	21 days/39.1 hours		2 days/NK
4th	2003	4 days/556 minutes	15 days/23.5 hours	1 day/NK	3 days/NK
1st	2004	33 days/1,684 minutes	17 days/31 hours		7 days/41.5 hours
2nd	2004	16 days/576 minutes	12 days/15.5 hours		5 days/NK
3rd	2004	6 days/70 minutes	11 days/26.5 hours	4 days/NK	2 days/9.47 hours
4th	2004	19 days/275 minutes	21 days/21 hours	7 days/NK	
Total:		**381 days/12,186 minutes**	**180 days/427.02 hours**	**57 days/NK**	**55 days/NK**

CLOW #44 DOCUMENT



07 13 04

Melting Department Cupola Temperature and Pressure Report

Date: 7-13-04 Foreman: Bouse

Record times, reasons and causes that the cupola temperature drops below 1300 degrees F or ΔP across the venturi drops below 35".

Time Start	Time Stop	Value T or P	Reason	Cause	Air On Yes/No
406	425	640/37	FULL LADLE		No
10:36	10:	870/35	Spar feeder plugged		No
106	115	36/600			No

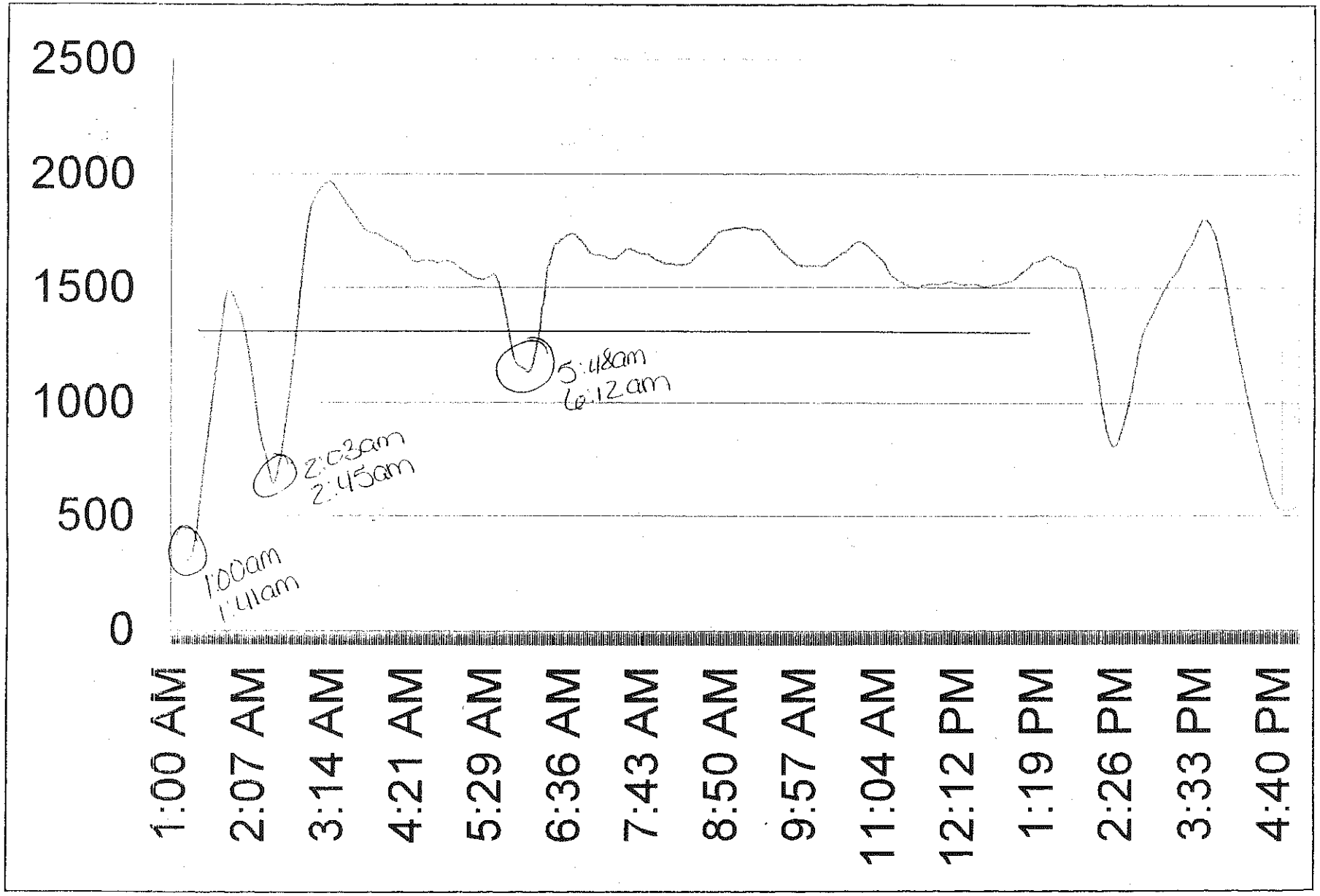
If the pressure or temperature indicating and/or recording devices, thermocouples or pressure gages malfunction, record the start/end times, equipment and corrective action taken in the table below.

Start Time	Time End	Equipment	Corrective Action taken

MLT-6 05/20/03

Forward completed form to the EHS Manager

#45


2500
2000
1500
1000
500
0
1:00 AM
2:07 AM
3:14 AM
4:21 AM
5:29 AM
6:36 AM
7:43 AM
8:50 AM
9:57 AM
11:04 AM
12:12 PM
1:19 PM
2:26 PM
3:33 PM
4:40 PM
1:00am
1:41am
2:03am
2:45am
5:48am
6:12am

07 14 04

Melting Department Cupola Temperature and Pressure Report

Date: 7-14-04

Foreman: Thompson

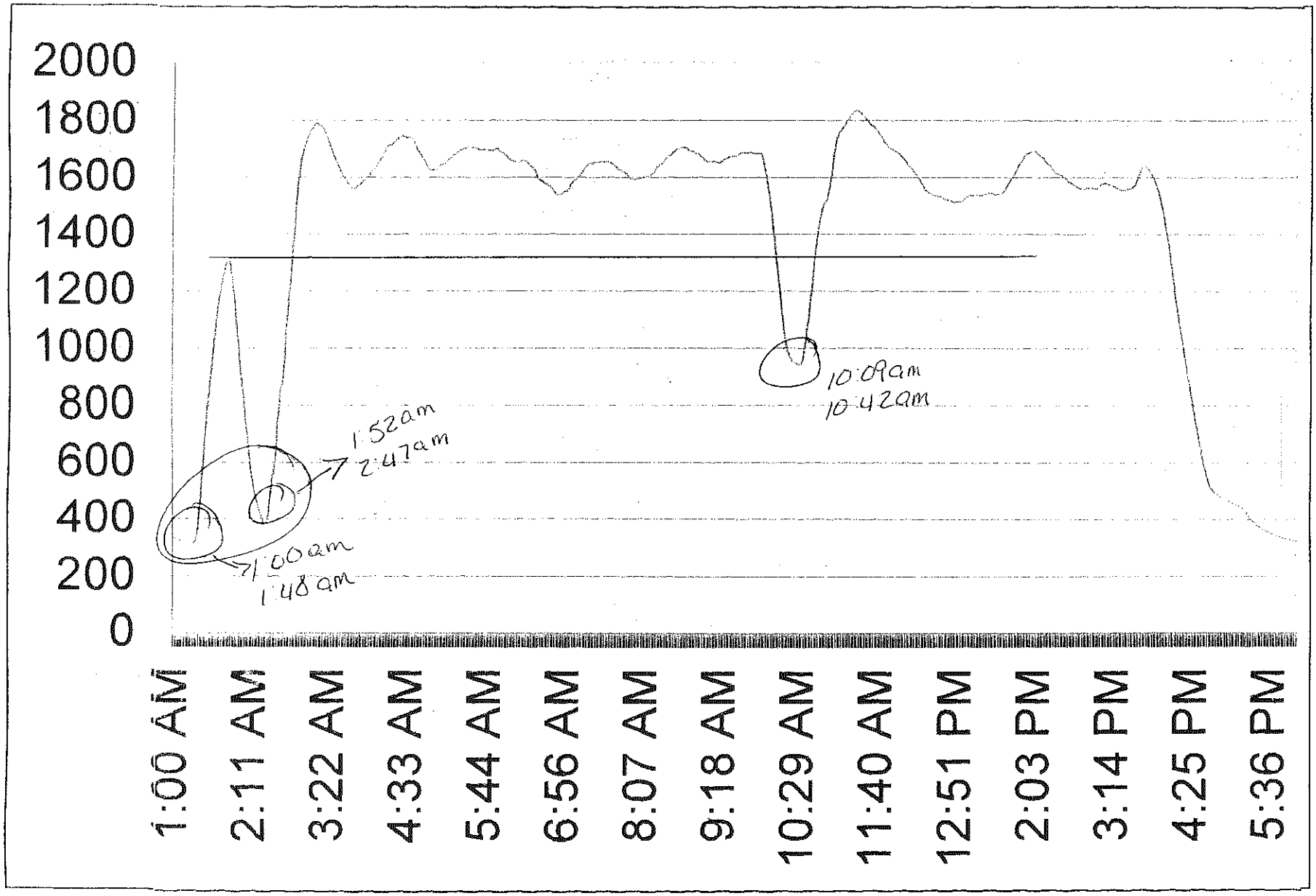
Record times, reasons and causes that the cupola temperature drops **below** 1300 degrees F or ΔP across the venturi drops **below** 35".

Time Start	Time Stop	Value T or P	Reason	Cause	Air On Yes/No
5:29AM	5:47AM	629	FULL LADLE		No
147	234	500 / 37	Full ladle	Hot Pit Cleane Down	No

MLT-6 04/11/03

Forward completed form to the EHS Manager

#46


2000
1800
1600
1400
1200
1000
800
600
400
200
0
1:00 AM
2:11 AM
3:22 AM
4:33 AM
5:44 AM
6:56 AM
8:07 AM
9:18 AM
10:29 AM
11:40 AM
12:51 PM
2:03 PM
3:14 PM
4:25 PM
5:36 PM
1:00am
1:48am
1:52am
2:47am
10:09am
10:42am

Melting Department Cupola Temperature and Pressure Report

Date: 2/6/24

Foreman: Thompson

Record times, reasons and causes that the cupola temperature drops **below** 1300 degrees F or ΔP across the venturi drops **below** 35".

Time Start	Time Stop	Value T or P	Reason	Cause	Air On Yes/No
9:48	10:15	/600	FULL LADLE LADLE CRANE DOWN		No
10:20	1029	/	STACK DOWN		

? Argon on off

MET-6 04/11/03

Forward completed form to the EHS Manager

Clow Water Systems Daily Emissions Report

Date 7/19/2004

Date and Time	Cupola Melting yes/no	Delta P 40 - 55	P1 >/= 48	P2 >/= 3	P3 >/= 55 - 80 =/<	Scrub PSI	North W/draw PSI	South W/draw PSI	Wet Cap PSI	East Scrub Pump Amps	West Scrub Pump Amps	North W/draw Pump Amps	South W/draw Pump Amps	Tower Inlet Temp	C T #1 outlet temp	C T #2 outlet temp	C T #3 outlet temp	C T#4 outlet temp	C ou te
7/16/2004 12:17:19 AM			28	5.37	56	48	0	0	0	10	0	0	0	69	65	66	65	65	
7/16/2004 12:47:20 AM			26	5.37	56	49	0	0	0	10	0	0	0	68	64	65	64	64	
7/16/2004 1:17:22 AM			9	5.37	53	50	0	0	0	10	0	0	0	68	64	65	64	64	
7/16/2004 1:47:24 AM			27	5.37	67	50	135	35	0	10	0	13	14	70	65	67	65	65	
7/16/2004 2:17:26 AM			28	5.37	69	49	0	0	0	10	0	0	0	67	63	64	63	63	
7/16/2004 2:47:28 AM	yes		40	5.37	95	48	0	0	0	10	0	0	0	70	64	66	64	64	
7/16/2004 3:17:29 AM	yes		40	5.37	89	50	0	0	0	10	0	0	0	70	64	66	64	64	
7/16/2004 3:47:31 AM	yes		35	5.37	64	51	0	0	0	10	0	0	1	80	68	71	69	69	
7/16/2004 4:17:34 AM	yes		25	5.37	57	50	135	35	0	10	0	13	14	87	71	75	71	72	
7/16/2004 4:47:36 AM	yes		44	5.37	95	50	135	35	0	10	0	13	14	91	74	79	75	75	
7/16/2004 5:17:39 AM	yes		43	5.37	92	50	135	35	0	10	0	13	14	91	75	79	75	75	
7/16/2004 5:47:42 AM	yes	42	43	5.37	91	50	0	0	0	10	0	0	0	94	74	79	74	75	
7/16/2004 6:17:44 AM	yes		40	5.37	94	51	135	35	0	10	0	13	14	95	74	79	75	75	
7/16/2004 6:47:46 AM	yes		41	5.37	89	50	135	35	0	10	0	13	14	95	75	79	75	75	
7/16/2004 7:17:48 AM	yes		39	5.37	91	51	135	35	0	10	0	13	14	93	75	79	75	76	
7/16/2004 7:47:50 AM	yes	45	50	5.37	92	47	0	0	0	10	0	0	0	95	76	80	76	76	
7/16/2004 8:17:52 AM	yes		39	5.37	85	47	0	0	0	10	0	0	0	97	76	81	76	77	
7/16/2004 8:47:55 AM	yes	42	47	5.37	90	50	0	0	0	10	0	0	0	94	76	80	76	76	
7/16/2004 9:17:58 AM	yes	44	49	5.37	96	47	0	35	0	10	0	0	15	96	76	80	76	77	
7/16/2004 9:47:59 AM	yes	43	48	5.37	94	50	0	35	0	10	0	0	14	94	76	80	76	77	
7/16/2004 10:18:01 AM	yes	46	51	5.37	98	51	0	35	0	10	0	0	15	84	71	74	71	72	
7/16/2004 10:48:03 AM	yes	44	49	5.37	96	49	0	35	0	10	0	0	15	90	75	78	75	75	
7/16/2004 11:18:05 AM	yes	41	46	5.37	89	50	0	35	0	10	0	0	14	91	76	80	76	76	
7/16/2004 11:48:06 AM	yes	[illegible]	45	5.37	93	49	0	35	0	10	0	0	14	94	76	80	76	77	
7/16/2004 12:18:08 PM	yes	52	51	-0.98	90	49	0	35	0	10	0	0	15	96	77	82	77	78	
7/16/2004 12:48:10 PM	yes	48	49	0.86	93	48	0	35	0	10	0	0	15	94	77	81	77	78	
7/16/2004 1:18:12 PM	yes	[illegible]	40	0.79	89	49	0	35	0	10	0	0	15	94	77	81	77	77	
7/16/2004 1:48:15 PM	yes	45	46	0.83	92	48	0	0	0	10	0	0	0	97	78	83	78	79	
7/16/2004 2:18:17 PM	yes	43	44	0.89	93	48	0	0	0	10	0	0	0	98	78	82	78	79	
7/16/2004 2:48:19 PM	yes	[illegible]	43	3.24	93	49	0	35	0	10	0	0	14	98	79	83	79	79	

Clow Water Systems Daily Fan Vibration Report

Date 7/19/2004

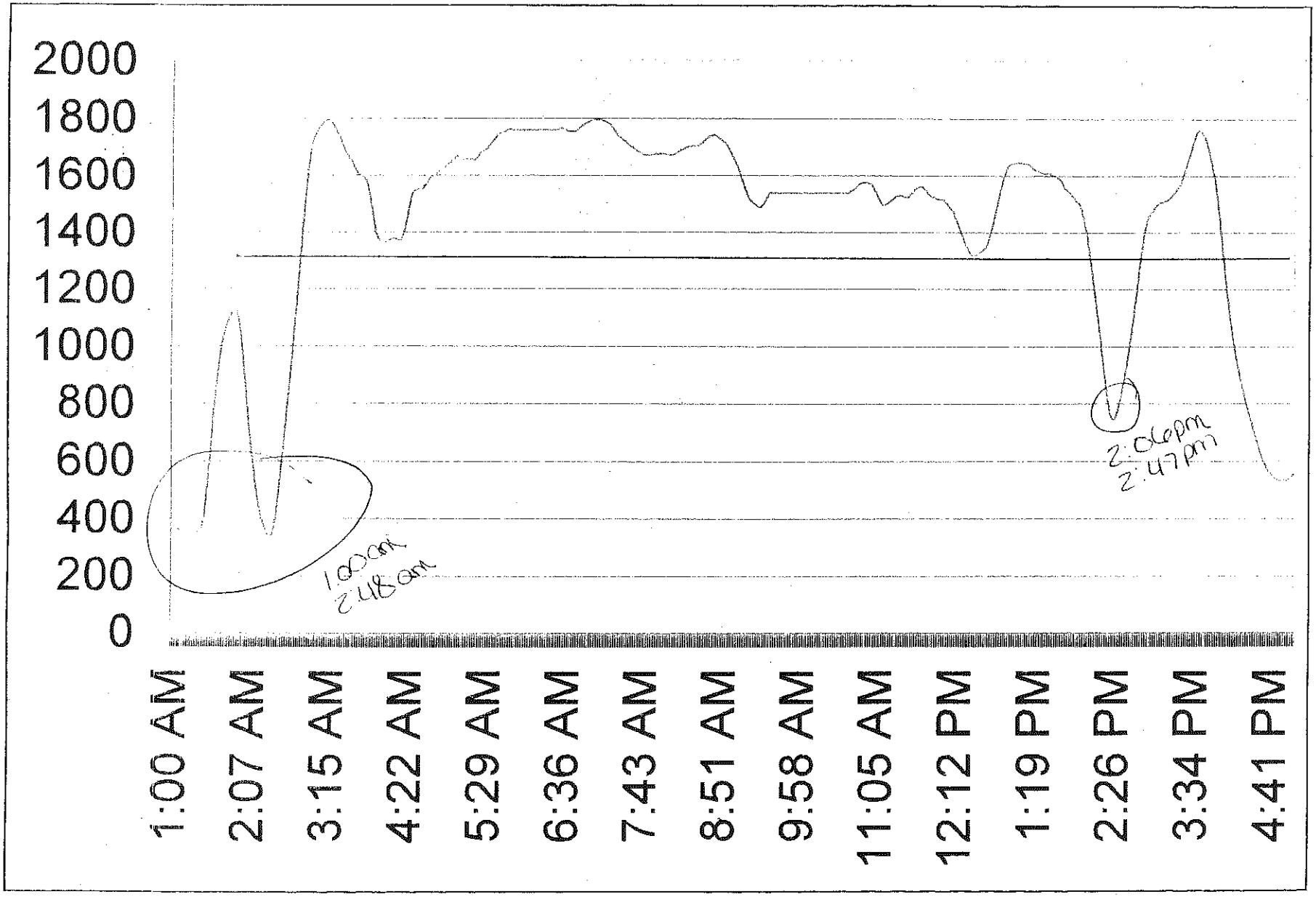
T#5 Outlet Temp	Date and Time	Cupola Melting yes/no	East Fan Amps	East Mtr Outboard	East Mtr Inboard	East Fan Inboard	East Fan Outboard	West Fan Amps	West Mtr Outboard	West Mtr Inboard	West Fan Inboard	West Fan Outboard
64	7/16/2004 12:17:19 AM	no	73	0	0.000	0	0	78	0	0	0	0
64	7/16/2004 12:47:20 AM	no	73	0	0.000	0	0	73	0	0	0	0
64	7/16/2004 1:17:22 AM	no	41	0	0.000	0	0	54	0	0	0	0
65	7/16/2004 1:47:24 AM	no	87	0	0.000	0	0	76	0	0	0	0
62	7/16/2004 2:17:26 AM	no	88	0	0.000	0	0	73	0	0	0	0
64	7/16/2004 2:47:28 AM	yes	109	0	0.000	0	0	104	0	0	0	0
64	7/16/2004 3:17:29 AM	yes	97	0	0.000	0	0	107	0	0	0	0
68	7/16/2004 3:47:31 AM	yes	96	0	0.000	0	0	107	0	0	0	0
70	7/16/2004 4:17:34 AM	yes	91	0	0.000	0	0	75	0	0	0	0
73	7/16/2004 4:47:36 AM	yes	102	0	0.000	0	0	108	0	0	0	0
73	7/16/2004 5:17:39 AM	yes	98	0	0.000	0	0	95	0	0	0	0
73	7/16/2004 5:47:42 AM	yes	89	0	0.000	0	0	102	0	0	0	0
73	7/16/2004 6:17:44 AM	yes	113	0	0.000	0	0	114	0	0	0	0
73	7/16/2004 6:47:46 AM	yes	99	0	0.000	0	0	100	0	0	0	0
74	7/16/2004 7:17:48 AM	yes	100	0	0.000	0	0	103	0	0	0	0
74	7/16/2004 7:47:50 AM	yes	85	0	0.000	0	0	91	0	0	0	0
75	7/16/2004 8:17:52 AM	yes	77	0	0.000	0	0	85	0	0	0	0
74	7/16/2004 8:47:55 AM	yes	83	0	0.000	0	0	95	0	0	0	0
75	7/16/2004 9:17:58 AM	yes	100	0	0.000	0	0	95	0	0	0	0
75	7/16/2004 9:47:59 AM	yes	91	0	0.000	0	0	91	0	0	0	0
70	7/16/2004 10:18:01 AM	yes	99	0	0.000	0	0	107	0	0	0	0
74	7/16/2004 10:48:03 AM	yes	90	0	0.000	0	0	102	0	0	0	0
75	7/16/2004 11:18:05 AM	yes	104	0	0.000	0	0	93	0	0	0	0
75	7/16/2004 11:48:06 AM	yes	97	0	0.000	0	0	108	0	0	0	0
77	7/16/2004 12:18:08 PM	yes	91	0	0.000	0	0	105	0	0	0	0
76	7/16/2004 12:48:10 PM	yes	91	0	0.000	0	0	106	0	0	0	0
76	7/16/2004 1:18:12 PM	yes	94	0	0.000	0	0	96	0	0	0	0
77	7/16/2004 1:48:15 PM	yes	100	0	0.000	0	0	101	0	0	0	0
77	7/16/2004 2:18:17 PM	yes	94	0	0.000	0	0	95	0	0	0	0
77	7/16/2004 2:48:19 PM	yes	96	0	0.000	0	0	103	0	0	0	0

Date 7/19/2004

Date and Time	Cupola Melting yes/no	Delta P 40 - 55	P1 >/= 48	P2 >/= 3	P3 >/= 55 - 80 =/<	Scrub PSI	North W/draw PSI	South W/draw PSI	Wet Cap PSI	East Scrub Pump Amps	West Scrub Pump Amps	North W/draw Pump Amps	South W/draw Pump Amps	Tower Inlet Temp	C T #1 outlet temp	C T #2 outlet temp	C T #3 outlet temp	C T#4 outlet temp	C ou te
7/16/2004 3:18:21 PM			43	4.95	90	48	0	35	0	11	0	0	15	98	78	82	78	79	
7/16/2004 3:48:23 PM			43	3.71	88	49	0	35	0	11	0	0	15	95	79	83	78	79	
7/16/2004 4:18:26 PM			40	2.76	89	49	0	35	0	10	0	0	15	86	74	77	74	74	
7/16/2004 4:48:28 PM			0	0.00	0	0	0	0	0	0	0	0	0	81	71	74	71	72	
7/16/2004 5:18:29 PM			0	0.00	0	0	0	0	0	0	0	0	0	78	70	72	70	70	
7/16/2004 5:48:31 PM			0	0.00	0	0	0	0	0	0	0	0	0	76	69	71	70	69	
7/16/2004 6:18:33 PM			0	0.00	0	0	0	0	0	0	0	0	0	74	68	70	68	68	
7/16/2004 6:48:35 PM			0	0.00	0	0	0	0	0	0	0	0	0	73	68	69	68	68	
7/16/2004 7:18:37 PM			0	0.00	0	0	0	34	0	0	0	0	15	72	67	69	67	67	
7/16/2004 7:48:40 PM			0	0.00	0	0	0	0	0	0	0	0	0	71	68	69	68	68	
7/16/2004 8:18:42 PM			0	0.00	0	0	0	0	0	0	0	0	0	70	67	68	67	67	
7/16/2004 8:48:43 PM			0	0.00	0	0	0	0	0	0	0	0	0	70	67	68	67	67	
7/16/2004 9:18:45 PM			0	0.00	0	0	0	0	0	0	0	0	0	69	66	67	67	66	
7/16/2004 9:48:47 PM			0	0.00	0	0	0	0	0	0	0	0	0	69	66	67	66	66	
7/16/2004 10:18:49 PM			0	0.00	0	0	0	0	0	0	0	0	0	68	66	66	66	66	
7/16/2004 10:48:51 PM			0	0.00	0	0	0	0	0	0	0	0	0	68	65	66	66	66	
7/16/2004 11:18:53 PM			0	0.00	0	0	0	0	0	0	0	0	0	68	65	66	65	65	
7/16/2004 11:48:55 PM			0	0.00	0	0	0	0	0	0	0	0	0	67	65	66	65	65	
7/17/2004 12:18:57 AM			0	0.00	0	0	0	0	0	0	0	0	0	66	64	65	65	64	
7/17/2004 12:49:00 AM			0	0.00	0	0	0	0	0	0	0	0	0	66	64	65	64	64	
7/17/2004 1:19:03 AM			0	0.00	0	0	0	0	0	0	0	0	0	66	64	65	64	64	
7/17/2004 1:49:05 AM			0	0.00	0	0	0	0	0	0	0	0	0	65	64	65	64	64	
7/17/2004 2:19:06 AM			0	0.00	0	0	0	34	0	0	0	0	16	65	64	65	64	64	
7/17/2004 2:49:08 AM			0	0.00	0	0	0	0	0	0	0	0	0	65	64	64	64	63	
7/17/2004 3:19:09 AM			0	0.00	0	0	0	0	0	0	0	0	0	65	64	64	64	64	
7/17/2004 3:49:11 AM			0	0.00	0	0	0	0	0	0	0	0	0	65	63	64	64	63	
7/17/2004 4:19:14 AM			0	0.00	0	0	0	0	0	0	0	0	0	64	63	64	63	63	
7/17/2004 4:49:15 AM			0	0.00	0	0	0	0	0	0	0	0	0	64	63	64	63	63	
7/17/2004 5:19:18 AM			0	0.00	0	0	0	0	0	0	0	0	0	64	63	64	63	63	
7/17/2004 5:49:20 AM			0	0.00	0	0	0	0	0	0	0	0	0	64	62	63	62	62	
7/17/2004 6:19:22 AM			0	0.00	0	0	0	0	0	0	0	0	0	64	62	63	62	62	
7/17/2004 6:49:24 AM			0	0.00	0	0	0	0	0	0	0	0	0	64	62	63	62	62	
7/17/2004 7:19:26 AM			0	0.00	0	0	0	0	0	0	0	0	0	63	62	63	62	62	

T#5 ıtlet ımp	Date and Time Date 7/19/2004	Cupola Melting yes/no	East Fan Amps	East Mtr Outboard	East Mtr Inboard	East Fan Inboard	East Fan Outboard	West Fan Amps	West Mtr Outboard	West Mtr Inboard	West Fan Inboard	West Fan Outboard
77	7/16/2004 3:18:21 PM	no	93	0	0.000	0	0	104	0	0	0	0
77	7/16/2004 3:48:23 PM	no	95	0	0.000	0	0	105	0	0	0	0
73	7/16/2004 4:18:26 PM	no	120	0	0.000	0	0	123	0	0	0	0
71	7/16/2004 4:48:28 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
70	7/16/2004 5:18:29 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
69	7/16/2004 5:48:31 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
68	7/16/2004 6:18:33 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
68	7/16/2004 6:48:35 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
67	7/16/2004 7:18:37 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
68	7/16/2004 7:48:40 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
67	7/16/2004 8:18:42 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
66	7/16/2004 8:48:43 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
66	7/16/2004 9:18:45 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
66	7/16/2004 9:48:47 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
65	7/16/2004 10:18:49 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
65	7/16/2004 10:48:51 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
65	7/16/2004 11:18:53 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
65	7/16/2004 11:48:55 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
64	7/17/2004 12:18:57 AM	no	-1	0	0.000	0	0	-1	0	0	0	0
64	7/17/2004 12:49:00 AM	no	-1	0	0.000	0	0	-1	0	0	0	0
64	7/17/2004 1:19:03 AM	no	-1	0	0.000	0	0	-1	0	0	0	0
64	7/17/2004 1:49:05 AM	no	-1	0	0.000	0	0	-1	0	0	0	0
64	7/17/2004 2:19:06 AM	no	-1	0	0.000	0	0	-1	0	0	0	0
63	7/17/2004 2:49:08 AM	no	-1	0	0.000	0	0	-1	0	0	0	0
63	7/17/2004 3:19:09 AM	no	-1	0	0.000	0	0	-1	0	0	0	0
63	7/17/2004 3:49:11 AM	no	-1	0	0.000	0	0	-1	0	0	0	0
63	7/17/2004 4:19:14 AM	no	-1	0	0.000	0	0	-1	0	0	0	0
63	7/17/2004 4:49:15 AM	no	-1	0	0.000	0	0	-1	0	0	0	0
63	7/17/2004 5:19:18 AM	no	-1	0	0.000	0	0	-1	0	0	0	0
62	7/17/2004 5:49:20 AM	no	-1	0	0.000	0	0	-1	0	0	0	0
62	7/17/2004 6:19:22 AM	no	-1	0	0.000	0	0	-1	0	0	0	0
62	7/17/2004 6:49:24 AM	no	-1	0	0.000	0	0	-1	0	0	0	0
62	7/17/2004 7:19:26 AM	no	-1	0	0.000	0	0	-1	0	0	0	0

#47


2000
1800
1600
1400
1200
1000
800
600
400
200
0
1:00 AM
2:07 AM
3:15 AM
4:22 AM
5:29 AM
6:36 AM
7:43 AM
8:51 AM
9:58 AM
11:05 AM
12:12 PM
1:19 PM
2:26 PM
3:34 PM
4:41 PM
1:00am
2:48am
2:06pm
2:47pm

07 19 04

Melting Department Cupola Temperature and Pressure Report

Date: 7-19-04

Foreman: Thompson

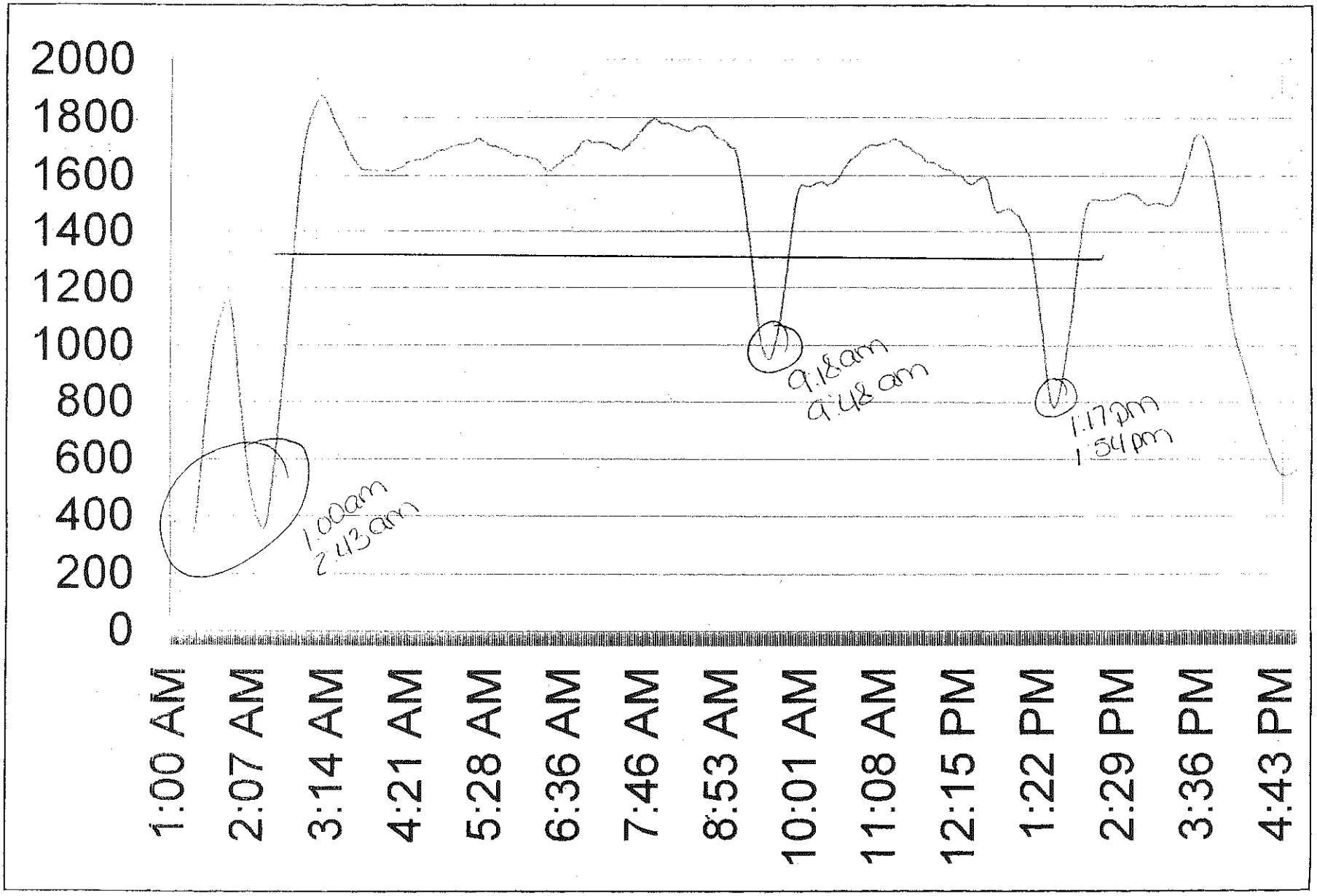
Record times, reasons and causes that the cupola temperature drops **below** 1300 degrees F or ΔP across the venturi drops **below** 35".

Time Start	Time Stop	Value T or P	Reason	Cause	Air On Yes/No
340	354	389/	Full Ladle		NO
550	556	1029/48	Lost Control Power	?	No
928	935	1050/40	" "	?	No
212	149	447/35	Non MET Hopper Doors	23 min	No

MLT 6 04/11/03

Forward completed form to the EHS Manager

#48


2000
1800
1600
1400
1200
1000
800
600
400
200
0
1:00 AM
2:07 AM
3:14 AM
4:21 AM
5:28 AM
6:36 AM
7:46 AM
8:53 AM
10:01 AM
11:08 AM
12:15 PM
1:22 PM
2:29 PM
3:36 PM
4:43 PM
1:00am
2:13am
9:18am
9:48am
1:17pm
1:54pm

07 20 04

Melting Department Cupola Temperature and Pressure Report

Date: 7-20-04 Foreman: Boise

Record times, reasons and causes that the cupola temperature drops below 1300 degrees F or ΔP across the venturi drops below 35".

Time Start	Time Stop	Value T or P	Reason	Cause	Air On Yes/No
903	927	532/39	Lost Power in Coke Rm		No
12:35	12:40	997/43	FULL LADLE		No
102	132	500/42	Cranes. V-5 - W-8 Down		No

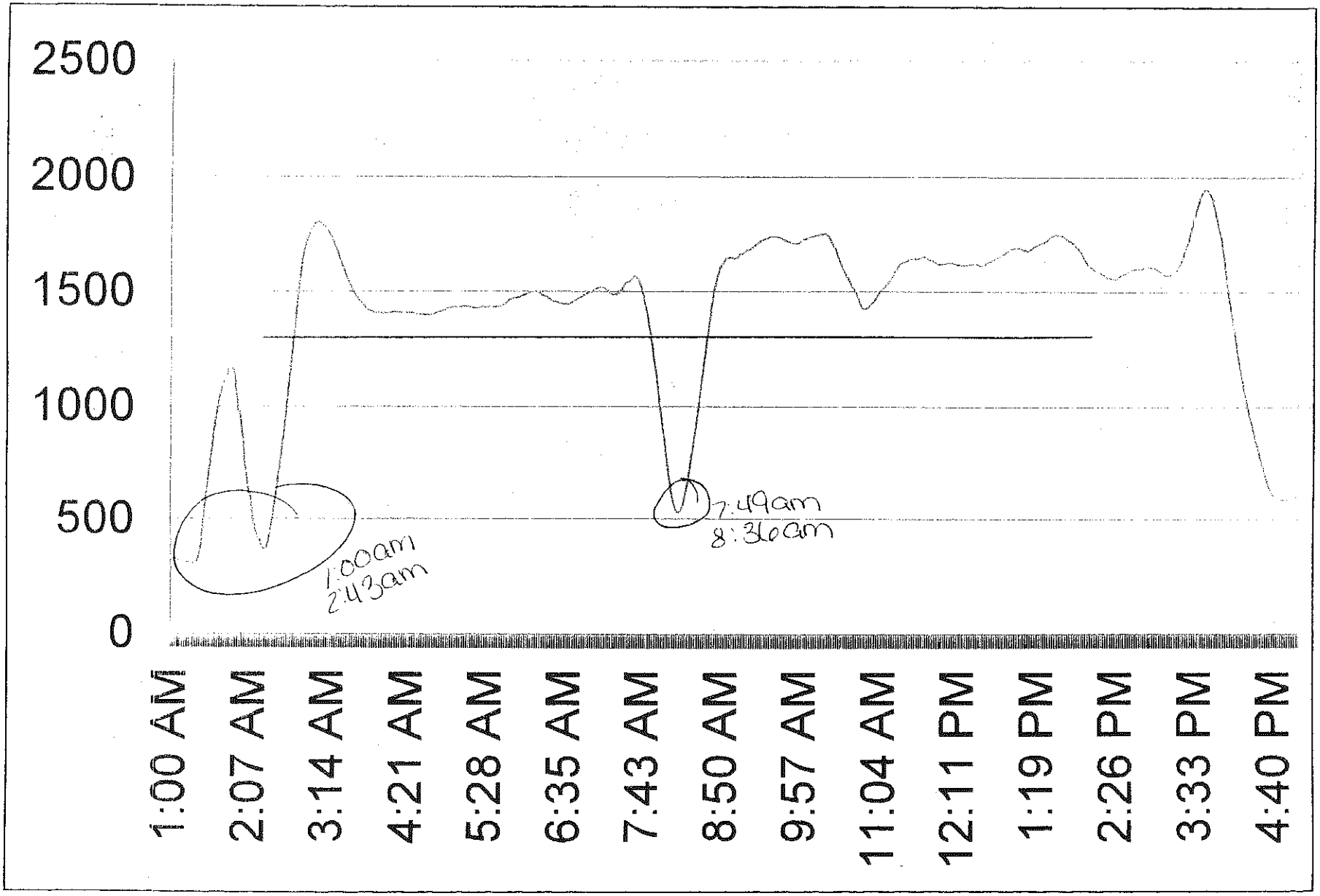
If the pressure or temperature indicating and/or recording devices, thermocouples or pressure gages malfunction, record the start/end times, equipment and corrective action taken in the table below.

Start Time	Time End	Equipment	Corrective Action taken

MLT-6 05/20/03

Forward completed form to the EHS Manager

#49


2500
2000
1500
1000
500
0
1:00 AM
2:07 AM
3:14 AM
4:21 AM
5:28 AM
6:35 AM
7:43 AM
8:50 AM
9:57 AM
11:04 AM
12:11 PM
1:19 PM
2:26 PM
3:33 PM
4:40 PM
1:00am
2:43am
7:49am
8:36am

07 21 04

Melting Department Cupola Temperature and Pressure Report

Date: 7-21-04 Foreman: Thompson

Record times, reasons and causes that the cupola temperature drops below 1300 degrees F or ΔP across the venturi drops below 35".

Time Start	Time Stop	Value T or P	Reason	Cause	Air On Yes/No
734	815	409/35	Dropped Charge	?	No

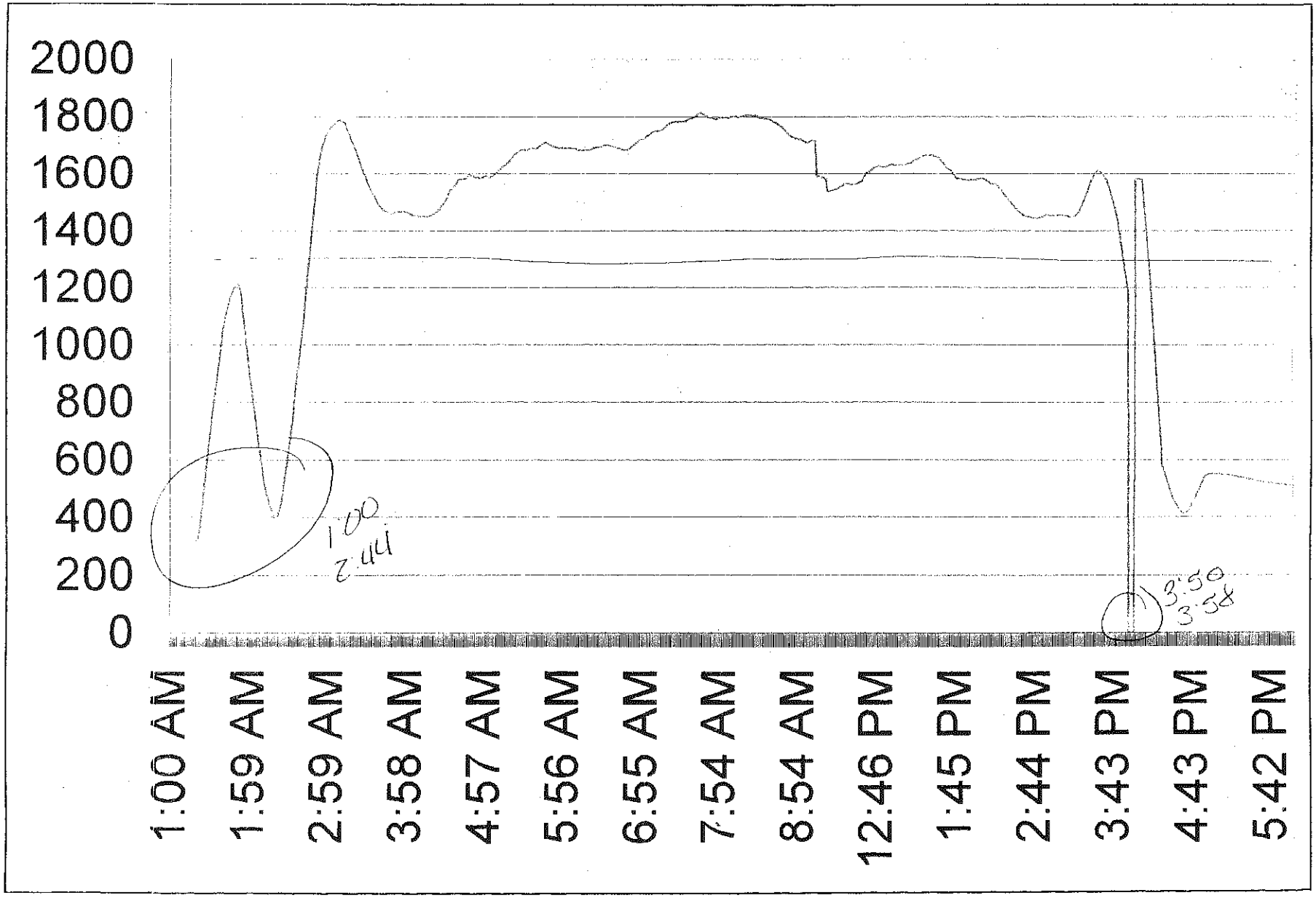
If the pressure or temperature indicating and/or recording devices, thermocouples or pressure gages malfunction, record the start/end times, equipment and corrective action taken in the table below.

Start Time	Time End	Equipment	Corrective Action taken

MLT-6 05/20/03

Forward completed form to the EHS Manager

#50


2000
1800
1600
1400
1200
1000
800
600
400
200
0
1:00 AM
1:59 AM
2:59 AM
3:58 AM
4:57 AM
5:56 AM
6:55 AM
7:54 AM
8:54 AM
12:46 PM
1:45 PM
2:44 PM
3:43 PM
4:43 PM
5:42 PM
1:00
2:44
3:50
3:58

07 22 04

Melting Department Cupola Temperature and Pressure Report

Date: 7-22-04 Foreman: Thompson

Record times, reasons and causes that the cupola temperature drops below 1300 degrees F or ΔP across the venturi drops below 35".

Time Start	Time Stop	Value T or P	Reason	Cause	Air On Yes/No

If the pressure or temperature indicating and/or recording devices, thermocouples or pressure gages malfunction, record the start/end times, equipment and corrective action taken in the table below.

Start Time	Time End	Equipment	Corrective Action taken

MLT-6 05/20/03

Forward completed form to the EHS Manager

Clow Water Systems Daily Emissions Report

Date 7/28/2004

Date and Time	Cupola Melting yes/no	Delta P 40 - 55	P1 >/= 48	P2 >/= 3	P3 >/= 55 - 80 =/<	Scrub PSI	North W/draw PSI	South W/draw PSI	Wet Cap PSI	East Scrub Pump Amps	West Scrub Pump Amps	North W/draw Pump Amps	South W/draw Pump Amps	Tower Inlet Temp	C T #1 outlet temp	C T #2 outlet temp	C T #3 outlet temp	C T#4 outlet temp	C ou te
7/22/2004 11:39:10 AM	yes	51	51	0.08	98	47	135	0	0	0	10	13	0	0	0	0	0	0	
7/22/2004 11:47:03 AM	yes	54	54	0.10	100	47	0	0	0	0	10	0	0	106	84	89	85	85	
7/22/2004 12:16:50 PM	yes	47	47	-0.23	88	46	135	0	0	0	10	13	0	0	0	0	0	0	
7/22/2004 12:46:51 PM	yes	48	53	5.37	99	48	135	0	0	0	10	13	0	105	85	90	86	86	
7/22/2004 1:16:52 PM	yes	45	50	5.37	89	48	135	0	0	0	10	13	0	102	84	88	84	85	
7/22/2004 1:46:54 PM	yes	41	46	5.32	88	47	135	0	0	0	10	13	0	105	85	90	86	86	
7/22/2004 2:16:55 PM	yes	48	53	5.37	96	48	135	0	0	0	10	13	0	105	85	90	86	86	
7/22/2004 2:46:57 PM	yes	50	55	5.37	100	49	135	0	0	0	10	13	0	106	85	90	86	86	
7/22/2004 3:16:59 PM		51	56	5.37	99	50	135	0	0	0	10	13	0	106	85	90	86	86	
7/22/2004 3:47:01 PM		43	48	4.90	94	48	135	0	0	0	10	13	0	103	85	89	86	86	
7/22/2004 4:17:02 PM			44	4.22	84	47	135	0	0	0	10	13	0	92	81	85	82	82	
7/22/2004 4:47:04 PM			0	0.00	0	0	135	0	0	0	0	13	0	88	79	82	80	80	
7/22/2004 5:17:06 PM			0	0.00	0	0	135	0	0	0	0	14	0	86	78	80	79	79	
7/22/2004 5:47:07 PM			0	0.00	0	0	0	0	0	0	0	0	0	84	78	80	78	78	
7/22/2004 6:17:09 PM			0	0.00	0	0	0	0	0	0	0	0	0	83	77	79	78	78	
7/22/2004 6:47:10 PM			0	0.00	0	26	135	0	0	0	13	13	0	82	77	78	77	77	
7/22/2004 7:17:12 PM			0	0.00	0	0	0	0	0	0	0	0	0	81	76	78	77	77	
7/22/2004 7:47:14 PM			0	0.00	0	0	0	0	0	0	0	0	0	80	76	78	77	76	
7/22/2004 8:17:15 PM			0	0.00	0	0	0	0	0	0	0	0	0	79	75	76	76	75	
7/22/2004 8:47:17 PM			0	0.00	0	0	0	0	0	0	0	0	0	78	75	76	75	75	
7/22/2004 9:17:18 PM		48	51	2.87	79	27	135	34	0	0	13	13	16	78	75	76	75	75	
7/22/2004 9:47:20 PM		47	50	3.02	77	26	135	0	0	0	13	13	0	77	74	75	75	74	
7/22/2004 10:17:21 PM		49	52	2.66	80	27	135	34	0	0	13	12	15	76	74	75	74	74	
7/22/2004 10:47:23 PM		47	50	2.91	79	26	135	0	0	0	13	13	0	76	74	74	74	73	
7/22/2004 11:17:24 PM		48	51	2.89	81	28	135	0	0	0	13	13	0	76	73	74	73	73	
7/22/2004 11:47:25 PM	yes	46	50	3.74	80	25	135	34	0	0	13	12	15	76	73	74	73	73	
7/23/2004 12:17:26 AM		[illegible]	18	0.41	53	27	135	34	0	0	13	12	15	78	74	75	74	74	
7/23/2004 12:47:28 AM		[illegible]	16	0.29	51	27	135	0	0	0	13	13	0	77	73	74	74	73	
7/23/2004 1:17:29 AM	yes		17	0.53	53	27	135	0	0	0	13	13	0	77	73	74	73	73	
7/23/2004 1:47:31 AM		[illegible]	43	4.16	73	26	135	34	0	0	13	12	15	79	74	76	75	75	

Clow Water Systems Daily Fan Vibration Report

Date 7/28/2004

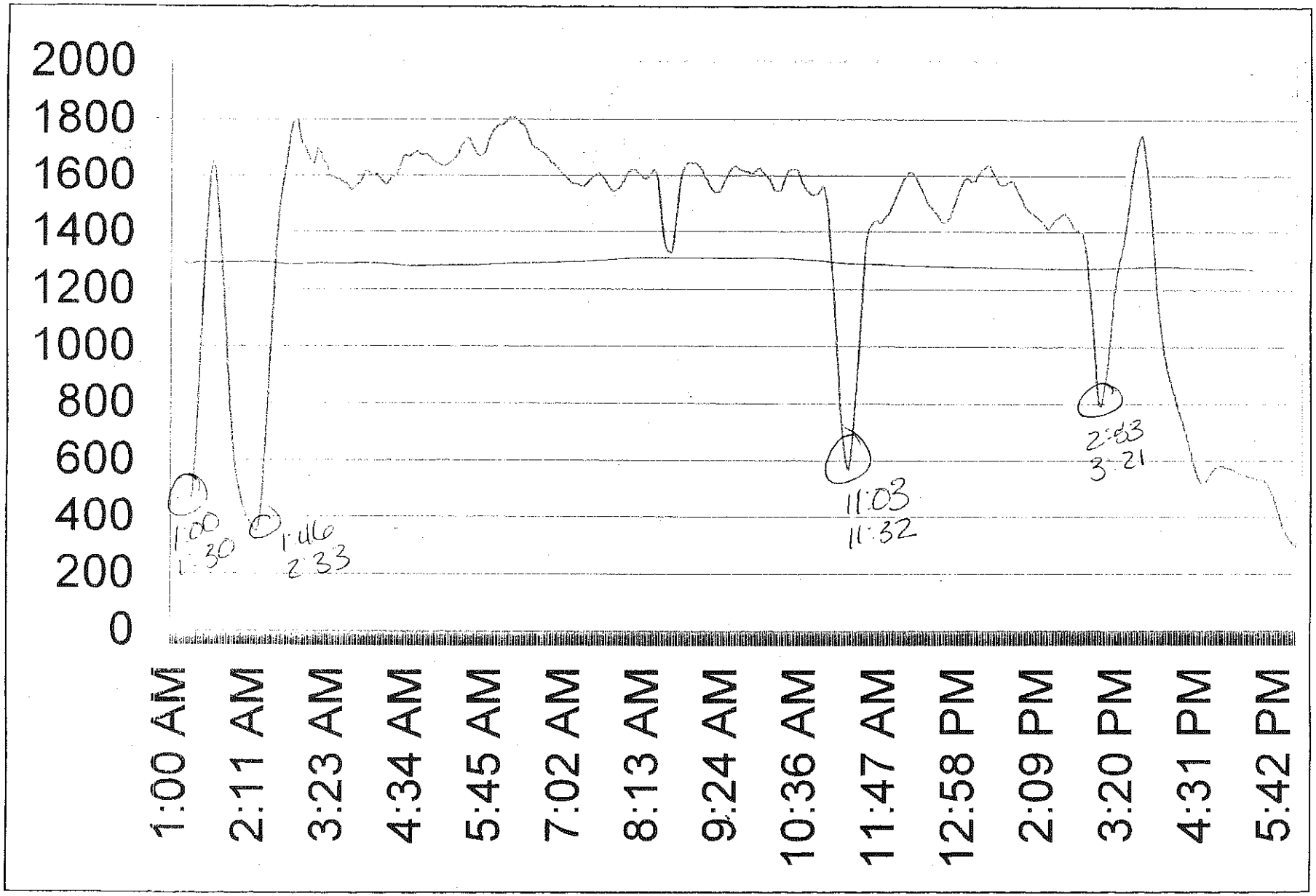
T#5 Outlet Temp	Date and Time	Cupola Melting yes/no	East Fan Amps	East Mtr Outboard	East Mtr Inboard	East Fan Inboard	East Fan Outboard	West Fan Amps	West Mtr Outboard	West Mtr Inboard	West Fan Inboard	West Fan Outboard
0	7/22/2004 11:39:10 AM	yes	88	0	0.000	0	0	76	0	0	0	0
83	7/22/2004 11:47:03 AM	yes	89	0	0.000	0	0	81	0	0	0	0
0	7/22/2004 12:16:50 PM	yes	86	0	0.000	0	0	87	0	0	0	0
84	7/22/2004 12:46:51 PM	yes	92	0	0.000	0	0	78	0	0	0	0
84	7/22/2004 1:16:52 PM	yes	94	0	0.000	0	0	94	0	0	0	0
85	7/22/2004 1:46:54 PM	yes	80	0	0.000	0	0	100	0	0	0	0
84	7/22/2004 2:16:55 PM	yes	87	0	0.000	0	0	79	0	0	0	0
84	7/22/2004 2:46:57 PM	yes	91	0	0.000	0	0	79	0	0	0	0
84	7/22/2004 3:16:59 PM	no	92	0	0.000	0	0	84	0	0	0	0
84	7/22/2004 3:47:01 PM	no	102	0	0.000	0	0	90	0	0	0	0
81	7/22/2004 4:17:02 PM	no	101	0	0.000	0	0	87	0	0	0	0
79	7/22/2004 4:47:04 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
78	7/22/2004 5:17:06 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
78	7/22/2004 5:47:07 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
77	7/22/2004 6:17:09 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
77	7/22/2004 6:47:10 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
77	7/22/2004 7:17:12 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
76	7/22/2004 7:47:14 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
75	7/22/2004 8:17:15 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
75	7/22/2004 8:47:17 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
74	7/22/2004 9:17:18 PM	no	93	0	0.000	0	0	78	0	0	0	0
74	7/22/2004 9:47:20 PM	no	94	0	0.000	0	0	82	0	0	0	0
74	7/22/2004 10:17:21 PM	no	95	0	0.000	0	0	83	0	0	0	0
74	7/22/2004 10:47:23 PM	no	92	0	0.000	0	0	86	0	0	0	0
73	7/22/2004 11:17:24 PM	no	93	0	0.000	0	0	80	0	0	0	0
73	7/22/2004 11:47:25 PM	yes	93	0	0.000	0	0	82	0	0	0	0
74	7/23/2004 12:17:26 AM	no	41	0	0.000	0	0	58	0	0	0	0
73	7/23/2004 12:47:28 AM	no	42	0	0.000	0	0	53	0	0	0	0
73	7/23/2004 1:17:29 AM	yes	41	0	0.000	0	0	56	0	0	0	0
74	7/23/2004 1:47:31 AM	no	89	0	0.000	0	0	75	0	0	0	0

Date 7/28/2004

Date and Time	Cupola Melting yes/no	Delta P 40 - 55	P1 >/= 48	P2 >/= 3	P3 >/= 55 - 80 =/<	Scrub PSI	North W/draw PSI	South W/draw PSI	Wet Cap PSI	East Scrub Pump Amps	West Scrub Pump Amps	North W/draw Pump Amps	South W/draw Pump Amps	Tower Inlet Temp	C T #1 outlet temp	C T #2 outlet temp	C T #3 outlet temp	C T#4 outlet temp	C ou te
7/23/2004 2:17:33 AM	[illegible]		44	4.44	72	26	135	34	0	0	13	12	15	76	73	74	73	73	
7/23/2004 2:47:34 AM	[illegible]	51	56	5.37	98	27	135	0	0	0	13	13	0	80	74	76	75	74	
7/23/2004 3:17:35 AM	[illegible]	47	52	5.37	100	26	135	35	0	0	13	12	15	80	74	76	74	74	
7/23/2004 3:47:37 AM	[illegible]	47	52	5.37	94	25	135	35	0	0	13	12	14	91	79	82	79	80	
7/23/2004 4:17:38 AM	[illegible]	47	52	5.25	94	25	135	0	0	0	13	13	0	98	82	85	82	82	
7/23/2004 4:47:39 AM	[illegible]	60	63	3.28	98	25	135	0	0	0	13	13	0	98	82	86	83	83	
7/23/2004 5:17:41 AM	[illegible]	59	62	2.93	100	27	135	0	0	0	13	13	0	95	80	84	80	81	
7/23/2004 5:47:42 AM	[illegible]	58	61	2.86	100	26	135	35	0	0	13	12	14	98	81	85	82	82	
7/23/2004 6:18:08 AM	[illegible]	51	55	4.35	91	25	135	35	0	0	13	12	14	98	81	85	82	82	
7/23/2004 6:32:25 AM	[illegible]	51	55	4.43	97	28	135	35	0	0	13	12	14	98	81	85	81	81	
7/23/2004 6:38:01 AM	[illegible]	49	54	4.64	100	25	135	0	0	0	13	13	0	0	0	0	0	0	
7/23/2004 7:08:04 AM	[illegible]	51	55	4.37	93	25	135	0	0	0	13	13	0	99	81	86	82	82	
7/23/2004 7:38:14 AM	[illegible]	49	54	4.51	94	25	135	35	0	0	13	12	14	99	81	85	81	82	
7/23/2004 8:08:30 AM	[illegible]	49	53	4.48	93	26	135	0	0	0	13	13	0	100	82	86	82	82	
7/23/2004 8:38:32 AM	[illegible]	53	58	4.73	99	26	135	0	0	0	13	13	0	103	82	87	82	83	
7/23/2004 9:08:36 AM	[illegible]	44	49	5.15	95	25	135	0	0	0	13	13	0	101	81	86	82	82	
7/23/2004 9:38:37 AM	[illegible]	51	51	-0.08	97	25	135	0	0	0	13	13	0	103	81	86	81	82	
7/23/2004 10:08:39 AM	[illegible]	49	49	-0.12	91	25	135	35	0	0	13	12	14	102	81	86	82	82	
7/23/2004 10:38:40 AM	[illegible]	50	55	5.37	98	25	135	35	0	0	13	12	14	103	82	86	82	82	
7/23/2004 11:08:42 AM			39	4.62	80	26	135	0	0	0	13	13	0	99	81	85	81	82	
7/23/2004 11:38:56 AM	[illegible]	47	52	5.37	99	25	135	0	0	0	13	13	0	92	77	80	77	77	
7/23/2004 12:08:57 PM	[illegible]	43	48	5.37	90	27	135	0	0	0	13	13	0	101	81	86	82	82	
7/23/2004 12:38:58 PM	[illegible]	43	48	5.37	90	26	135	35	0	0	13	12	14	102	82	86	82	82	
7/23/2004 1:09:00 PM	[illegible]	43	48	5.37	89	25	135	35	0	0	13	12	14	102	82	86	82	83	
7/23/2004 1:39:01 PM	[illegible]	43	48	5.37	92	25	135	0	0	0	13	13	0	103	82	87	82	83	
7/23/2004 2:09:03 PM	yes	43	48	5.37	91	26	135	35	0	0	13	12	14	101	82	86	82	82	
7/23/2004 2:39:05 PM	yes	[illegible]	43	4.24	87	27	135	0	0	0	13	13	0	102	82	86	82	83	
7/23/2004 3:09:07 PM		46	51	5.37	96	27	135	0	0	0	13	13	0	102	81	86	82	82	
7/23/2004 3:39:08 PM		47	52	5.37	98	26	135	0	0	0	13	13	0	103	82	86	82	83	
7/23/2004 4:09:10 PM		[illegible]	40	4.67	79	25	135	0	0	0	13	13	0	99	80	85	81	81	
7/23/2004 4:39:11 PM		[illegible]	0	0.00	0	0	0	0	0	0	0	0	0	85	75	78	75	75	
7/23/2004 5:09:12 PM		[illegible]	0	0.00	0	0	0	0	0	0	0	0	0	82	73	75	73	73	
7/23/2004 5:39:14 PM		[illegible]	0	0.00	0	0	0	0	0	0	0	0	0	79	72	74	72	72	

T#5 itlet mp	Date and Time Date 7/28/2004	Cupola Melting yes/no	East Fan Amps	East Mtr Outboard	East Mtr Inboard	East Fan Inboard	East Fan Outboard	West Fan Amps	West Mtr Outboard	West Mtr Inboard	West Fan Inboard	West Fan Outboard
73	7/23/2004 2:17:33 AM	yes	88	0	0.000	0	0	70	0	0	0	0
74	7/23/2004 2:47:34 AM	yes	81	0	0.000	0	0	75	0	0	0	0
74	7/23/2004 3:17:35 AM	yes	86	0	0.000	0	0	77	0	0	0	0
79	7/23/2004 3:47:37 AM	yes	91	0	0.000	0	0	89	0	0	0	0
81	7/23/2004 4:17:38 AM	yes	80	0	0.000	0	0	93	0	0	0	0
82	7/23/2004 4:47:39 AM	yes	71	0	0.000	0	0	78	0	0	0	0
79	7/23/2004 5:17:41 AM	yes	72	0	0.000	0	0	78	0	0	0	0
80	7/23/2004 5:47:42 AM	yes	72	0	0.000	0	0	81	0	0	0	0
80	7/23/2004 6:18:08 AM	yes	80	0	0.000	0	0	84	0	0	0	0
80	7/23/2004 6:32:25 AM	yes	81	0	0.000	0	0	95	0	0	0	0
0	7/23/2004 6:38:01 AM	yes	78	0	0.000	0	0	86	0	0	0	0
80	7/23/2004 7:08:04 AM	yes	82	0	0.000	0	0	89	0	0	0	0
80	7/23/2004 7:38:14 AM	yes	83	0	0.000	0	0	88	0	0	0	0
81	7/23/2004 8:08:30 AM	yes	80	0	0.000	0	0	91	0	0	0	0
80	7/23/2004 8:38:32 AM	yes	86	0	0.000	0	0	93	0	0	0	0
80	7/23/2004 9:08:36 AM	yes	92	0	0.000	0	0	100	0	0	0	0
80	7/23/2004 9:38:37 AM	yes	88	0	0.000	0	0	100	0	0	0	0
80	7/23/2004 10:08:39 AM	yes	87	0	0.000	0	0	102	0	0	0	0
80	7/23/2004 10:38:40 AM	yes	95	0	0.000	0	0	78	0	0	0	0
80	7/23/2004 11:08:42 AM	no	108	0	0.000	0	0	110	0	0	0	0
76	7/23/2004 11:38:56 AM	yes	99	0	0.000	0	0	81	0	0	0	0
80	7/23/2004 12:08:57 PM	yes	96	0	0.000	0	0	98	0	0	0	0
81	7/23/2004 12:38:58 PM	yes	97	0	0.000	0	0	108	0	0	0	0
81	7/23/2004 1:09:00 PM	yes	91	0	0.000	0	0	97	0	0	0	0
81	7/23/2004 1:39:01 PM	yes	95	0	0.000	0	0	98	0	0	0	0
80	7/23/2004 2:09:03 PM	yes	93	0	0.000	0	0	104	0	0	0	0
81	7/23/2004 2:39:05 PM	yes	97	0	0.000	0	0	107	0	0	0	0
80	7/23/2004 3:09:07 PM	no	101	0	0.000	0	0	84	0	0	0	0
81	7/23/2004 3:39:08 PM	no	95	0	0.000	0	0	88	0	0	0	0
79	7/23/2004 4:09:10 PM	no	97	0	0.000	0	0	114	0	0	0	0
74	7/23/2004 4:39:11 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
73	7/23/2004 5:09:12 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
71	7/23/2004 5:39:14 PM	no	-1	0	0.000	0	0	-1	0	0	0	0

#51


2000
1800
1600
1400
1200
1000
800
600
400
200
0
1:00 AM
2:11 AM
3:23 AM
4:34 AM
5:45 AM
7:02 AM
8:13 AM
9:24 AM
10:36 AM
11:47 AM
12:58 PM
2:09 PM
3:20 PM
4:31 PM
5:42 PM
1:00
1:30
1:46
2:33
11:03
11:32
2:03
3:21

07 23 04

Melting Department Cupola Temperature and Pressure Report

Date: 7-23-04 Foreman: _____

Record times, reasons and causes that the cupola temperature drops below 1300 degrees F or ΔP across the venturi drops below 35".

Time Start	Time Stop	Value T or P	Reason	Cause	Air On Yes/No
1053	1118		Stack Down	Charger wont go up to Cupola	NO
10:53	1118		Bucket Not going up the hill		No
248			FULL LADLE		No

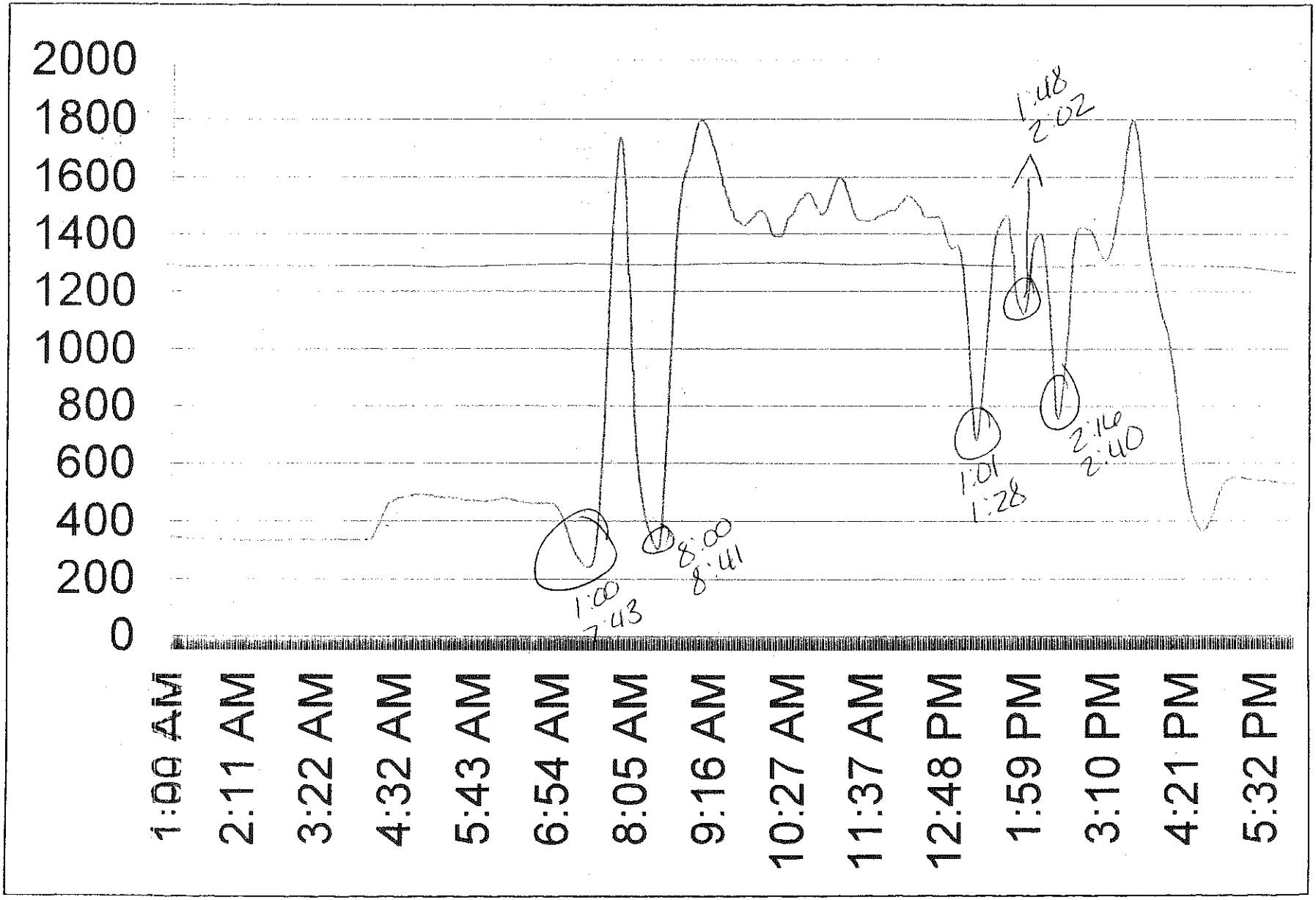
If the pressure or temperature indicating and/or recording devices, thermocouples or pressure gages malfunction, record the start/end times, equipment and corrective action taken in the table below.

Start Time	Time End	Equipment	Corrective Action taken

MLT-6 05/20/03

Forward completed form to the EHS Manager

#52


2000
1800
1600
1400
1200
1000
800
600
400
200
0
1:00 AM
2:11 AM
3:22 AM
4:32 AM
5:43 AM
6:54 AM
8:05 AM
9:16 AM
10:27 AM
11:37 AM
12:48 PM
1:59 PM
3:10 PM
4:21 PM
5:32 PM
1:00
7:43
8:00
8:41
1:01
1:28
1:48
2:02
2:16
2:40

07 26 04

Melting Department Cupola Temperature and Pressure Report

Date: 7-26-04 Foreman: Thompson

Record times, reasons and causes that the cupola temperature drops below 1300 degrees F or ΔP across the venturi drops below 35".

Time Start	Time Stop	Value T or P	Reason	Cause	Air On Yes/No
10:03	10:05	51/1750	?		YES
12:56	1:15	/38	Bucket NOT Going up hill		No
140	150	/38	SAME		No
2:11	2:28	600/37			No

If the pressure or temperature indicating and/or recording devices, thermocouples or pressure gages malfunction, record the start/end times, equipment and corrective action taken in the table below.

Start Time	Time End	Equipment	Corrective Action taken

Forward completed form to the EHS Manager

Clow Water Systems Daily Emissions Report

Date 7/28/2004

Date and Time	Cupola Melting yes/no	Delta P 40 - 55	P1 >/= 48	P2 >/= 3	P3 >/= 55 - 80 =/<	Scrub PSI	North W/draw PSI	South W/draw PSI	Wet Cap PSI	East Scrub Pump Amps	West Scrub Pump Amps	North W/draw Pump Amps	South W/draw Pump Amps	Tower Inlet Temp	C T #1 outlet temp	C T #2 outlet temp	C T #3 outlet temp	C T#4 outlet temp	C ou te
7/26/2004 12:17:21 AM			12	0.01	43	49	0	0	0	10	0	0	0	66	63	64	64	63	
7/26/2004 12:47:44 AM			13	0.27	42	49	0	34	0	11	0	0	15	66	64	64	64	64	
7/26/2004 1:18:05 AM			13	0.93	41	51	0	0	0	10	0	0	0	66	64	64	64	64	
7/26/2004 1:48:36 AM			12	0.93	42	51	0	34	0	10	0	0	14	66	64	64	64	64	
7/26/2004 2:18:57 AM			12	0.62	38	50	0	0	0	10	0	0	0	66	64	64	64	64	
7/26/2004 2:49:20 AM			12	0.72	40	49	0	34	0	10	0	0	15	66	64	64	63	63	
7/26/2004 3:19:42 AM			11	0.27	42	51	0	34	0	10	0	0	15	66	63	64	63	63	
7/26/2004 3:50:04 AM			11	0.25	38	50	0	34	0	10	0	0	15	66	63	64	63	63	
7/26/2004 4:20:28 AM			11	0.65	38	50	0	34	0	10	0	0	15	66	63	64	63	63	
7/26/2004 4:50:48 AM			12	-0.07	38	50	0	34	0	10	0	0	15	66	63	64	63	63	
7/26/2004 5:21:06 AM			12	0.76	39	49	0	0	0	10	0	0	0	66	63	64	63	63	
7/26/2004 5:51:26 AM			12	0.50	37	51	0	34	0	10	0	0	15	66	63	64	63	63	
7/26/2004 6:21:47 AM			11	0.42	38	51	0	34	0	10	0	0	15	66	63	64	63	63	
7/26/2004 6:52:09 AM			12	1.23	40	51	0	34	0	10	0	0	15	66	64	64	63	63	
7/26/2004 7:22:29 AM	[illegible]		13	0.57	39	49	0	34	0	10	0	0	15	65	63	64	63	63	
7/26/2004 7:52:51 AM			20	2.69	36	49	0	34	0	10	0	0	15	70	66	67	66	66	
7/26/2004 8:23:21 AM			42	5.26	83	49	0	34	0	10	0	0	15	66	64	64	64	64	
7/26/2004 8:53:42 AM	[illegible]	47	52	5.37	99	51	0	35	0	10	0	0	15	70	66	67	66	66	
7/26/2004 9:24:02 AM	[illegible]	44	49	5.37	90	49	0	35	0	10	0	0	15	70	66	67	66	66	
7/26/2004 9:54:24 AM	[illegible]	45	50	5.37	91	50	0	0	0	11	0	0	0	83	72	74	72	73	
7/26/2004 10:24:46 AM	yes	46	51	5.37	92	51	0	35	0	11	0	0	14	89	76	78	75	76	
7/26/2004 10:55:08 AM	[illegible]	41	46	4.36	89	48	0	35	0	10	0	0	15	89	76	79	75	77	
7/26/2004 11:25:30 AM	yes	41	46	5.09	90	49	0	35	0	10	0	0	15	91	77	79	76	77	
7/26/2004 11:55:52 AM	yes	42	47	4.28	88	48	135	35	0	11	0	13	14	96	79	82	78	79	
7/26/2004 12:26:15 PM	yes	42	47	3.76	86	48	0	0	0	10	0	0	0	97	79	83	79	80	
7/26/2004 12:56:35 PM		[illegible]	38	2.78	83	50	135	35	0	10	0	13	14	98	80	84	79	81	
7/26/2004 1:26:57 PM	yes	43	48	5.37	92	49	0	0	0	10	0	0	0	86	76	78	75	76	
7/26/2004 1:57:19 PM	[illegible]	[illegible]	45	2.69	87	49	135	35	0	10	0	13	14	99	80	84	80	81	
7/26/2004 2:27:47 PM	yes	50	55	5.37	100	48	0	0	0	10	0	0	0	90	78	80	77	78	
7/26/2004 2:58:11 PM		[illegible]	41	3.20	82	49	0	0	0	10	0	0	0	98	80	83	79	81	

Clow Water Systems Daily Fan Vibration Report

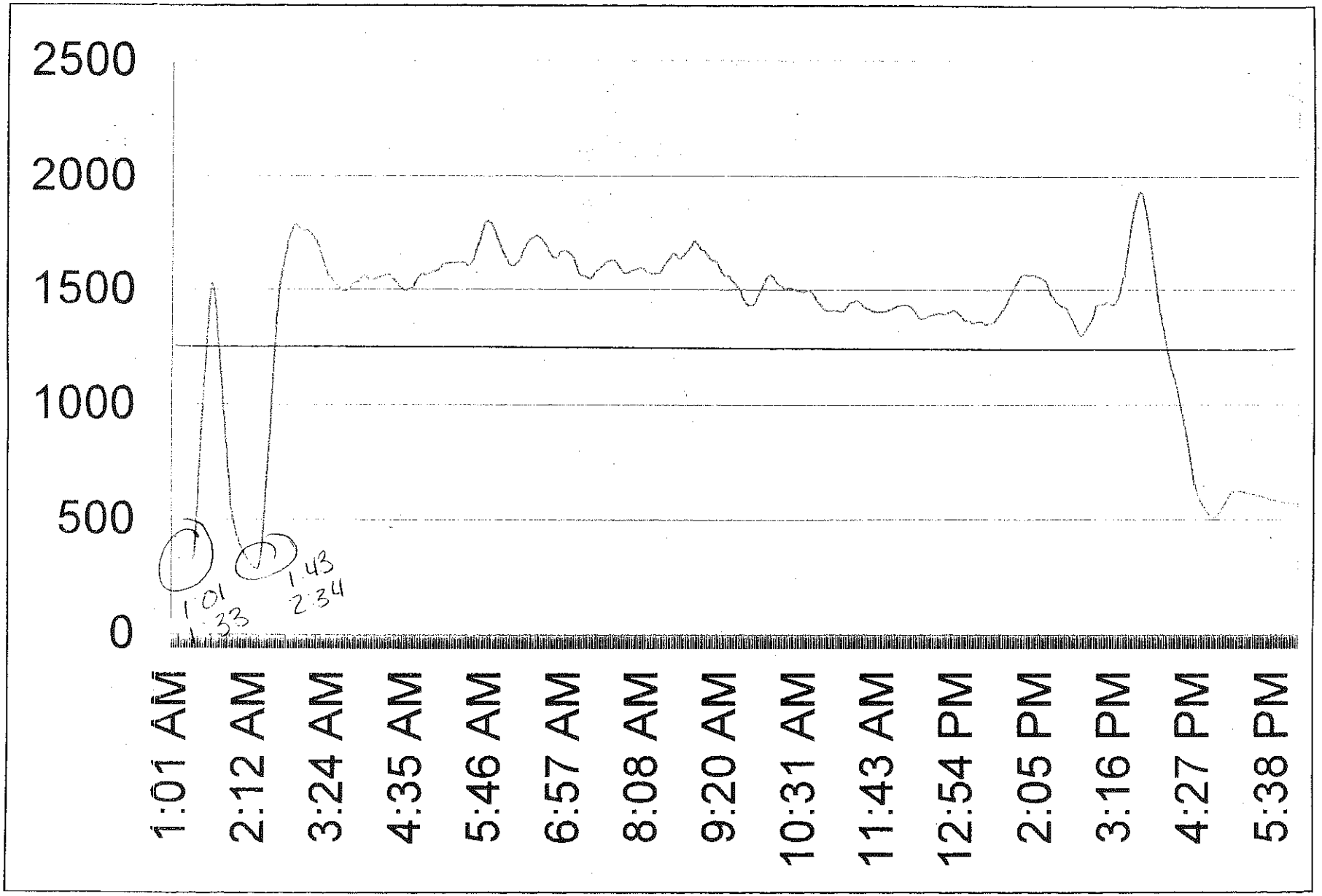
Date 7/28/2004

T#5 Outlet Temp	Date and Time	Cupola Melting yes/no	East Fan Amps	East Mtr Outboard	East Mtr Inboard	East Fan Inboard	East Fan Outboard	West Fan Amps	West Mtr Outboard	West Mtr Inboard	West Fan Inboard	West Fan Outboard
63	7/26/2004 12:17:21 AM	no	42	0	0.000	0	0	63	0	0	0	0
64	7/26/2004 12:47:44 AM	no	42	0	0.000	0	0	64	0	0	0	0
64	7/26/2004 1:18:05 AM	no	43	0	0.000	0	0	62	0	0	0	0
64	7/26/2004 1:48:36 AM	no	42	0	0.000	0	0	61	0	0	0	0
64	7/26/2004 2:18:57 AM	no	42	0	0.000	0	0	57	0	0	0	0
63	7/26/2004 2:49:20 AM	no	43	0	0.000	0	0	58	0	0	0	0
63	7/26/2004 3:19:42 AM	no	43	0	0.000	0	0	61	0	0	0	0
63	7/26/2004 3:50:04 AM	no	43	0	0.000	0	0	63	0	0	0	0
63	7/26/2004 4:20:28 AM	no	42	0	0.000	0	0	58	0	0	0	0
63	7/26/2004 4:50:48 AM	no	43	0	0.000	0	0	58	0	0	0	0
63	7/26/2004 5:21:06 AM	no	43	0	0.000	0	0	59	0	0	0	0
63	7/26/2004 5:51:26 AM	no	42	0	0.000	0	0	61	0	0	0	0
63	7/26/2004 6:21:47 AM	no	42	0	0.000	0	0	62	0	0	0	0
63	7/26/2004 6:52:09 AM	no	42	0	0.000	0	0	63	0	0	0	0
63	7/26/2004 7:22:29 AM	yes	42	0	0.000	0	0	59	0	0	0	0
65	7/26/2004 7:52:51 AM	no	47	0	0.000	0	0	68	0	0	0	0
64	7/26/2004 8:23:21 AM	no	98	0	0.000	0	0	82	0	0	0	0
65	7/26/2004 8:53:42 AM	yes	85	0	0.000	0	0	77	0	0	0	0
66	7/26/2004 9:24:02 AM	yes	93	0	0.000	0	0	108	0	0	0	0
72	7/26/2004 9:54:24 AM	yes	106	0	0.000	0	0	100	0	0	0	0
74	7/26/2004 10:24:46 AM	yes	101	0	0.000	0	0	94	0	0	0	0
75	7/26/2004 10:55:08 AM	yes	97	0	0.000	0	0	101	0	0	0	0
76	7/26/2004 11:25:30 AM	yes	89	0	0.000	0	0	99	0	0	0	0
77	7/26/2004 11:55:52 AM	yes	96	0	0.000	0	0	100	0	0	0	0
78	7/26/2004 12:26:15 PM	yes	96	0	0.000	0	0	102	0	0	0	0
79	7/26/2004 12:56:35 PM	no	100	0	0.000	0	0	115	0	0	0	0
75	7/26/2004 1:26:57 PM	yes	99	0	0.000	0	0	103	0	0	0	0
79	7/26/2004 1:57:19 PM	yes	91	0	0.000	0	0	101	0	0	0	0
77	7/26/2004 2:27:47 PM	yes	96	0	0.000	0	0	90	0	0	0	0
79	7/26/2004 2:58:11 PM	no	103	0	0.000	0	0	106	0	0	0	0

Date 7/28/2004

Date and Time	Cupola Melting yes/no	Delta P 40 - 55	P1 >/= 48	P2 >/= 3	P3 >/= 55 - 80 =/<	Scrub PSI	North W/draw PSI	South W/draw PSI	Wet Cap PSI	East Scrub Pump Amps	West Scrub Pump Amps	North W/draw Pump Amps	South W/draw Pump Amps	Tower Inlet Temp	C T #1 outlet temp	C T #2 outlet temp	C T #3 outlet temp	C T#4 outlet temp	C ou te
7/26/2004 3:28:31 PM		42	47	4.14	89	49	0	0	0	10	0	0	0	94	79	82	79	80	
7/26/2004 3:58:50 PM			41	4.59	85	50	0	0	0	10	0	0	0	94	79	82	78	79	
7/26/2004 4:29:15 PM		41	45	4.46	92	50	0	0	0	10	0	0	0	82	73	75	73	74	
7/26/2004 4:59:38 PM			0	0.00	0	43	135	34	0	12	0	13	14	79	72	74	72	72	
7/26/2004 5:29:59 PM			0	0.00	0	0	0	0	0	0	0	0	0	77	72	73	72	72	
7/26/2004 6:00:22 PM			0	0.00	0	0	0	0	0	0	0	0	0	76	71	72	71	71	
7/26/2004 6:30:46 PM			0	0.00	0	0	0	0	0	0	0	0	0	74	70	71	70	70	
7/26/2004 7:01:06 PM			0	0.00	0	0	0	0	0	0	0	0	0	74	70	70	69	70	
7/26/2004 7:31:30 PM			0	0.00	0	0	135	34	0	0	0	13	15	73	69	70	69	69	
7/26/2004 8:01:52 PM			0	0.00	0	0	0	0	0	0	0	0	0	72	68	69	68	68	
7/26/2004 8:32:13 PM			0	0.00	0	0	0	0	0	0	0	0	0	71	68	69	68	68	
7/26/2004 9:02:35 PM			0	0.00	0	0	0	0	0	0	0	0	0	71	68	69	68	68	
7/26/2004 9:32:55 PM		43	45	2.82	75	24	0	34	0	14	0	0	16	69	67	68	67	67	
7/26/2004 10:03:25 PM		43	45	2.62	73	25	0	34	0	14	0	0	16	69	66	67	66	66	
7/26/2004 10:33:48 PM		42	44	2.87	74	24	0	34	0	13	0	0	16	68	66	67	66	66	
7/26/2004 11:04:11 PM			43	2.17	75	27	135	34	0	13	0	13	15	68	66	66	66	66	
7/26/2004 11:34:34 PM		41	43	2.25	75	26	0	34	0	13	0	0	15	67	65	66	65	65	
7/27/2004 12:04:56 AM			10	-1.15	61	26	135	34	0	13	0	13	14	70	67	67	66	67	
7/27/2004 12:35:20 AM			25	0.27	44	27	135	34	0	14	0	13	14	69	67	67	67	67	
7/27/2004 1:05:53 AM			25	0.13	43	26	0	34	0	13	0	0	15	69	67	67	67	67	
7/27/2004 1:36:17 AM		41	43	2.30	70	27	0	34	0	14	0	0	15	73	69	70	69	69	
7/27/2004 2:06:42 AM			43	2.52	77	26	0	34	0	13	0	0	15	70	67	68	67	67	
7/27/2004 2:37:05 AM	[illegible]	61	60	-0.56	100	27	135	35	0	13	0	13	14	72	68	69	68	68	
7/27/2004 3:07:39 AM	[illegible]	57	56	-1.05	92	28	0	35	0	13	0	0	15	73	68	69	68	68	
7/27/2004 3:38:13 AM	[illegible]	57	56	-1.35	96	30	0	35	0	13	0	0	14	82	72	74	72	73	
7/27/2004 4:08:48 AM	yes	56	55	-1.35	95	29	0	35	0	13	0	0	15	89	76	78	75	76	
7/27/2004 4:39:17 AM	yes	54	53	-1.35	90	30	0	35	0	13	0	0	15	92	77	80	76	77	
7/27/2004 5:09:44 AM	yes	54	53	-1.35	91	29	135	36	0	13	0	13	14	95	78	81	77	79	
7/27/2004 5:40:08 AM	yes	55	54	-1.35	94	31	0	36	0	13	0	0	15	96	79	82	78	79	
7/27/2004 6:10:30 AM	yes	54	53	-1.35	91	31	0	36	0	13	0	0	15	98	80	83	79	80	
7/27/2004 6:40:54 AM	yes	57	56	-1.31	93	31	0	36	0	13	0	0	15	98	79	83	79	80	
7/27/2004 7:11:17 AM	yes	54	53	-1.14	91	31	0	36	0	13	0	0	15	100	80	84	79	81	
7/27/2004 7:41:37 AM	yes	52	51	-1.14	90	34	135	36	0	13	0	12	14	100	80	84	79	80	

T#5 tlet mp	Date and Time Date 7/28/2004	Cupola Melting yes/no	East Fan Amps	East Mtr Outboard	East Mtr Inboard	East Fan Inboard	East Fan Outboard	West Fan Amps	West Mtr Outboard	West Mtr Inboard	West Fan Inboard	West Fan Outboard
78	7/26/2004 3:28:31 PM	no	90	0	0.000	0	0	100	0	0	0	0
78	7/26/2004 3:58:50 PM	no	98	0	0.000	0	0	103	0	0	0	0
73	7/26/2004 4:29:15 PM	no	114	0	0.000	0	0	93	0	0	0	0
72	7/26/2004 4:59:38 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
71	7/26/2004 5:29:59 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
70	7/26/2004 6:00:22 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
70	7/26/2004 6:30:46 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
69	7/26/2004 7:01:06 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
69	7/26/2004 7:31:30 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
68	7/26/2004 8:01:52 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
68	7/26/2004 8:32:13 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
67	7/26/2004 9:02:35 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
66	7/26/2004 9:32:55 PM	no	102	0	0.000	0	0	80	0	0	0	0
66	7/26/2004 10:03:25 PM	no	98	0	0.000	0	0	79	0	0	0	0
66	7/26/2004 10:33:48 PM	no	92	0	0.000	0	0	81	0	0	0	0
65	7/26/2004 11:04:11 PM	no	99	0	0.000	0	0	87	0	0	0	0
65	7/26/2004 11:34:34 PM	no	96	0	0.000	0	0	82	0	0	0	0
66	7/27/2004 12:04:56 AM	no	40	0	0.000	0	0	45	0	0	0	0
66	7/27/2004 12:35:20 AM	no	53	0	0.000	0	0	68	0	0	0	0
66	7/27/2004 1:05:53 AM	no	49	0	0.000	0	0	69	0	0	0	0
68	7/27/2004 1:36:17 AM	no	97	0	0.000	0	0	72	0	0	0	0
66	7/27/2004 2:06:42 AM	no	94	0	0.000	0	0	78	0	0	0	0
68	7/27/2004 2:37:05 AM	yes	87	0	0.000	0	0	82	0	0	0	0
68	7/27/2004 3:07:39 AM	yes	86	0	0.000	0	0	97	0	0	0	0
72	7/27/2004 3:38:13 AM	yes	88	0	0.000	0	0	98	0	0	0	0
74	7/27/2004 4:08:48 AM	yes	87	0	0.000	0	0	92	0	0	0	0
76	7/27/2004 4:39:17 AM	yes	89	0	0.000	0	0	89	0	0	0	0
77	7/27/2004 5:09:44 AM	yes	85	0	0.000	0	0	96	0	0	0	0
77	7/27/2004 5:40:08 AM	yes	87	0	0.000	0	0	92	0	0	0	0
78	7/27/2004 6:10:30 AM	yes	91	0	0.000	0	0	91	0	0	0	0
78	7/27/2004 6:40:54 AM	yes	92	0	0.000	0	0	97	0	0	0	0
79	7/27/2004 7:11:17 AM	yes	97	0	0.000	0	0	102	0	0	0	0
79	7/27/2004 7:41:37 AM	yes	92	0	0.000	0	0	100	0	0	0	0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1500
1000
500
0
1:01 AM
2:12 AM
3:24 AM
4:35 AM
5:46 AM
6:57 AM
8:08 AM
9:20 AM
10:31 AM
11:43 AM
12:54 PM
2:05 PM
3:16 PM
4:27 PM
5:38 PM
1:01
1:33
1:43
2:34

Melting Department Cupola Temperature and Pressure Report

Date: 7-27-04

Foreman: Thompson

Record times, reasons and causes that the cupola temperature drops below 1300 degrees F or ΔP across the venturi drops below 35".

Time Start	Time Stop	Value T or P	Reason	Cause	Air On Yes/No
			P-2 Down ALL DAY	? ELECT	
2:30	233		?		YES

If the pressure or temperature indicating and/or recording devices, thermocouples or pressure gages malfunction, record the start/end times, equipment and corrective action taken in the table below.

Start Time	Time End	Equipment	Corrective Action taken
2 15	4 00	P-2 Down	Maint. Worker

MLT-6 05/20/03

Forward completed form to the EHS Manager

Clow Water Systems Daily Emissions Report

Date 7/28/2004

Date and Time	Cupola Melting yes/no	Delta P 40 - 55	P1 >/= 48	P2 >/= 3	P3 >/= 55 - 80 =/<	Scrub PSI	North W/draw PSI	South W/draw PSI	Wet Cap PSI	East Scrub Pump Amps	West Scrub Pump Amps	North W/draw Pump Amps	South W/draw Pump Amps	Tower Inlet Temp	C T #1 outlet temp	C T #2 outlet temp	C T #3 outlet temp	C T#4 outlet temp	C ou te
7/27/2004 12:04:56 AM			10	-1.15	61	26	135	34	0	13	0	13	14	70	67	67	66	67	
7/27/2004 12:35:20 AM			25	0.27	44	27	135	34	0	14	0	13	14	69	67	67	67	67	
7/27/2004 1:05:53 AM			25	0.13	43	26	0	34	0	13	0	0	15	69	67	67	67	67	
7/27/2004 1:36:17 AM		41	43	2.30	70	27	0	34	0	14	0	0	15	73	69	70	69	69	
7/27/2004 2:06:42 AM			43	2.52	77	26	0	34	0	13	0	0	15	70	67	68	67	67	
7/27/2004 2:37:05 AM	yes	61	60	-0.56	100	27	135	35	0	13	0	13	14	72	68	69	68	68	
7/27/2004 3:07:39 AM	yes	57	56	-1.05	92	28	0	35	0	13	0	0	15	73	68	69	68	68	
7/27/2004 3:38:13 AM	yes	57	56	-1.35	96	30	0	35	0	13	0	0	14	82	72	74	72	73	
7/27/2004 4:08:48 AM	yes	56	55	-1.35	95	29	0	35	0	13	0	0	15	89	76	78	75	76	
7/27/2004 4:39:17 AM	yes	54	53	-1.35	90	30	0	35	0	13	0	0	15	92	77	80	76	77	
7/27/2004 5:09:44 AM	yes	54	53	-1.35	91	29	135	36	0	13	0	13	14	95	78	81	77	79	
7/27/2004 5:40:08 AM	yes	55	54	-1.35	94	31	0	36	0	13	0	0	15	96	79	82	78	79	
7/27/2004 6:10:30 AM	yes	54	53	-1.35	91	31	0	36	0	13	0	0	15	98	80	83	79	80	
7/27/2004 6:40:54 AM	yes	57	56	-1.31	93	31	0	36	0	13	0	0	15	98	79	83	79	80	
7/27/2004 7:11:17 AM	yes	54	53	-1.14	91	31	0	36	0	13	0	0	15	100	80	84	79	81	
7/27/2004 7:41:37 AM	yes	52	51	-1.14	90	34	135	36	0	13	0	12	14	100	80	84	79	80	
7/27/2004 8:12:02 AM	yes	48	51	2.65	92	31	0	36	0	13	0	0	15	100	80	84	79	81	
7/27/2004 8:42:23 AM	yes	50	49	-1.35	88	32	135	36	0	13	0	12	14	99	80	84	79	81	
7/27/2004 9:12:43 AM	yes	47	50	-0.42	88	30	0	36	0	13	0	0	15	101	80	85	80	81	
7/27/2004 9:43:07 AM	yes	52	51	-1.35	88	31	135	36	0	13	0	13	14	101	80	85	80	81	
7/27/2004 10:13:28 AM	yes	50	49	-1.35	87	32	0	36	0	13	0	0	15	101	81	85	80	82	
7/27/2004 10:43:48 AM	yes	50	49	-1.35	90	33	135	36	0	13	0	13	14	99	80	84	79	80	
7/27/2004 11:14:09 AM	yes	48	47	-1.35	86	32	0	36	0	13	0	0	15	100	80	85	80	81	
7/27/2004 11:44:32 AM	yes	50	55	5.37	92	32	0	36	0	13	0	0	15	101	81	85	80	82	
7/27/2004 12:14:52 PM	yes	48	47	-1.04	87	33	135	36	0	13	0	13	14	101	81	85	80	82	
7/27/2004 12:45:14 PM	yes	48	47	-1.20	88	33	135	36	0	13	0	12	14	102	82	86	82	83	
7/27/2004 1:15:39 PM	yes	47	46	-1.35	86	31	0	36	0	13	0	0	15	102	82	86	81	82	
7/27/2004 1:46:05 PM	yes	49	54	5.37	93	31	0	36	0	13	0	0	15	100	81	85	81	82	
7/27/2004 2:16:31 PM	yes	51	50	-1.09	93	31	0	36	0	13	0	0	15	102	82	86	81	83	
7/27/2004 2:47:00 PM	yes	49	48	-1.08	88	32	135	36	0	13	0	6	14	100	82	86	81	83	

Clow Water Systems Daily Fan Vibration Report

Date 7/28/2004

T#5 Inlet Temp	Date and Time	Cupola Melting yes/no	East Fan Amps	East Mtr Outboard	East Mtr Inboard	East Fan Inboard	East Fan Outboard	West Fan Amps	West Mtr Outboard	West Mtr Inboard	West Fan Inboard	West Fan Outboard
66	7/27/2004 12:04:56 AM	no	40	0	0.000	0	0	45	0	0	0	0
66	7/27/2004 12:35:20 AM	no	53	0	0.000	0	0	68	0	0	0	0
66	7/27/2004 1:05:53 AM	no	49	0	0.000	0	0	69	0	0	0	0
68	7/27/2004 1:36:17 AM	no	97	0	0.000	0	0	72	0	0	0	0
66	7/27/2004 2:06:42 AM	no	94	0	0.000	0	0	78	0	0	0	0
68	7/27/2004 2:37:05 AM	yes	87	0	0.000	0	0	82	0	0	0	0
68	7/27/2004 3:07:39 AM	yes	86	0	0.000	0	0	97	0	0	0	0
72	7/27/2004 3:38:13 AM	yes	88	0	0.000	0	0	98	0	0	0	0
74	7/27/2004 4:08:48 AM	yes	87	0	0.000	0	0	92	0	0	0	0
76	7/27/2004 4:39:17 AM	yes	89	0	0.000	0	0	89	0	0	0	0
77	7/27/2004 5:09:44 AM	yes	85	0	0.000	0	0	96	0	0	0	0
77	7/27/2004 5:40:08 AM	yes	87	0	0.000	0	0	92	0	0	0	0
78	7/27/2004 6:10:30 AM	yes	91	0	0.000	0	0	91	0	0	0	0
78	7/27/2004 6:40:54 AM	yes	92	0	0.000	0	0	97	0	0	0	0
79	7/27/2004 7:11:17 AM	yes	97	0	0.000	0	0	102	0	0	0	0
79	7/27/2004 7:41:37 AM	yes	92	0	0.000	0	0	100	0	0	0	0
79	7/27/2004 8:12:02 AM	yes	93	0	0.000	0	0	103	0	0	0	0
79	7/27/2004 8:42:23 AM	yes	91	0	0.000	0	0	101	0	0	0	0
79	7/27/2004 9:12:43 AM	yes	99	0	0.000	0	0	102	0	0	0	0
79	7/27/2004 9:43:07 AM	yes	100	0	0.000	0	0	100	0	0	0	0
79	7/27/2004 10:13:28 AM	yes	99	0	0.000	0	0	103	0	0	0	0
78	7/27/2004 10:43:48 AM	yes	98	0	0.000	0	0	103	0	0	0	0
79	7/27/2004 11:14:09 AM	yes	102	0	0.000	0	0	106	0	0	0	0
79	7/27/2004 11:44:32 AM	yes	90	0	0.000	0	0	92	0	0	0	0
79	7/27/2004 12:14:52 PM	yes	103	0	0.000	0	0	110	0	0	0	0
80	7/27/2004 12:45:14 PM	yes	99	0	0.000	0	0	107	0	0	0	0
80	7/27/2004 1:15:39 PM	yes	100	0	0.000	0	0	110	0	0	0	0
80	7/27/2004 1:46:05 PM	yes	92	0	0.000	0	0	97	0	0	0	0
80	7/27/2004 2:16:31 PM	yes	88	0	0.000	0	0	101	0	0	0	0
80	7/27/2004 2:47:00 PM	yes	85	0	0.000	0	0	96	0	0	0	0

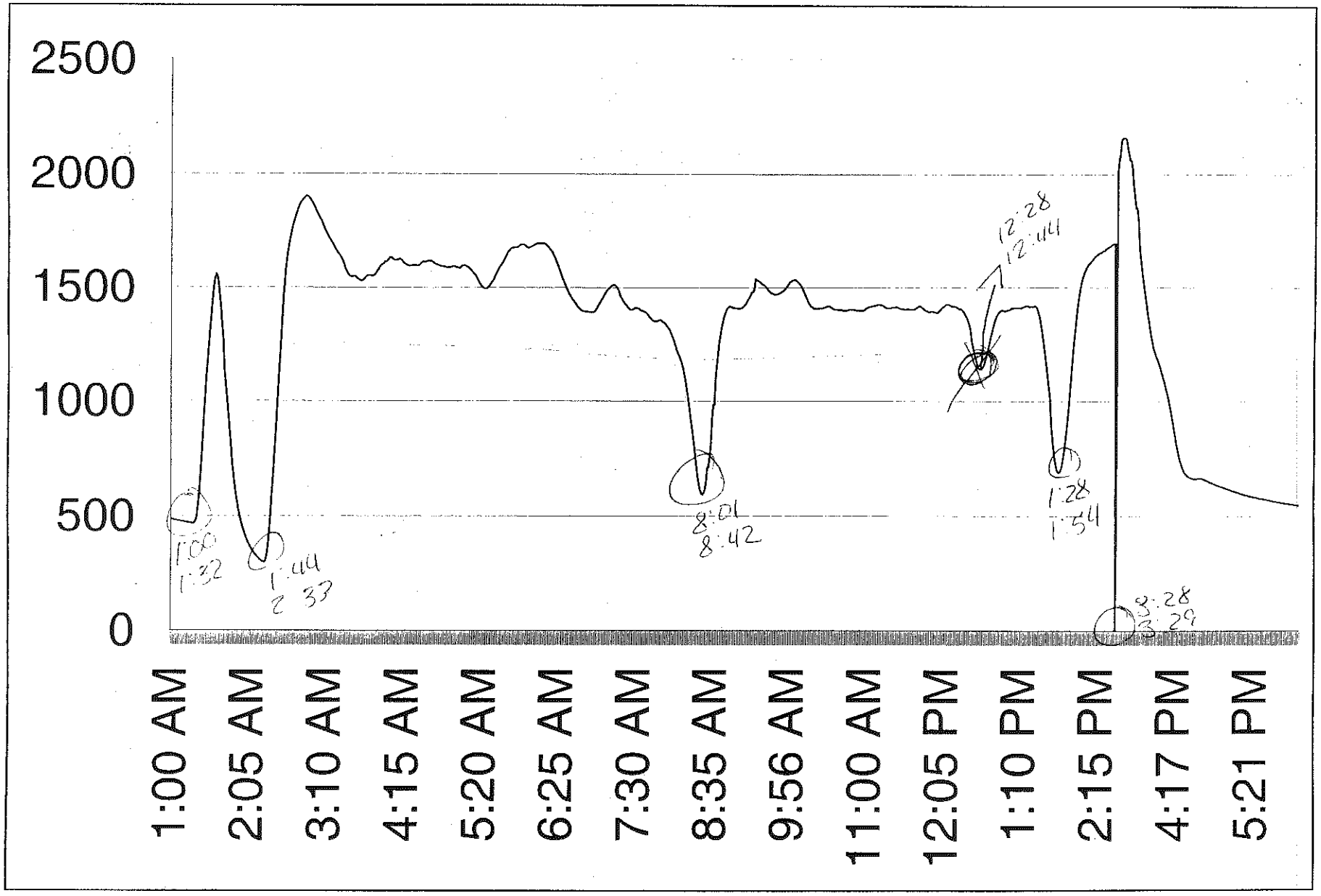
Date 7/28/2004

Date and Time	Cupola Melting yes/no	Delta P 40 - 55	P1 >/= 48	P2 >/= 3	P3 >/= 55 - 80 =/<	Scrub PSI	North W/draw PSI	South W/draw PSI	Wet Cap PSI	East Scrub Pump Amps	West Scrub Pump Amps	North W/draw Pump Amps	South W/draw Pump Amps	Tower Inlet Temp	C T #1 outlet temp	C T #2 outlet temp	C T #3 outlet temp	C T#4 outlet temp	C ou te
7/27/2004 3:17:27 PM		51	50	-1.02	91	33	135	36	0	13	0	12	14	98	82	85	81	82	
7/27/2004 3:47:55 PM		49	48	-1.03	93	32	135	36	0	13	0	6	14	96	81	85	81	82	
7/27/2004 4:18:21 PM		44	43	-1.00	81	32	135	35	0	13	0	13	14	86	76	79	76	77	
7/27/2004 4:48:47 PM			0	0.00	0	0	0	35	0	0	0	0	15	83	74	76	74	75	
7/27/2004 5:19:17 PM			0	0.00	0	0	0	34	0	0	0	0	6	81	73	75	73	73	
7/27/2004 5:49:43 PM			0	0.00	0	0	0	34	0	0	0	0	6	79	72	74	72	73	
7/27/2004 6:20:08 PM			0	0.00	0	0	0	34	0	0	0	0	6	78	72	73	72	72	
7/27/2004 6:50:42 PM			0	0.00	0	0	0	0	0	0	0	0	0	77	72	73	71	72	
7/27/2004 7:21:08 PM			0	0.00	0	0	0	0	0	0	0	0	0	77	71	72	70	71	
7/27/2004 7:51:34 PM			0	0.00	0	0	0	0	0	0	0	0	0	75	70	71	69	70	
7/27/2004 8:22:02 PM			0	0.00	0	0	0	0	0	0	0	0	0	74	69	70	69	69	
7/27/2004 8:52:29 PM			0	0.00	0	0	0	34	0	0	0	0	15	73	68	69	68	68	
7/27/2004 9:22:55 PM		45	44	-1.04	69	29	0	34	0	13	0	0	15	71	67	68	67	67	
7/27/2004 9:53:21 PM		49	48	-1.02	77	28	0	34	0	13	0	0	15	70	65	67	65	66	
7/27/2004 10:23:48 PM		47	46	-0.92	74	29	0	34	0	13	0	0	15	69	65	66	65	65	
7/27/2004 10:54:18 PM		47	46	-0.87	77	29	135	34	0	13	0	13	14	68	64	65	64	64	
7/27/2004 11:24:43 PM		46	45	-0.90	75	31	0	34	0	13	0	0	15	67	64	65	64	64	
7/27/2004 11:55:11 PM			13	-1.35	57	30	0	34	0	13	0	0	15	66	63	64	63	63	

Date 7/28/2004

T#5 tlet mp	Date and Time	Cupola Melting yes/no	East Fan Amps	East Mtr Outboard	East Mtr Inboard	East Fan Inboard	East Fan Outboard	West Fan Amps	West Mtr Outboard	West Mtr Inboard	West Fan Inboard	West Fan Outboard
80	7/27/2004 3:17:27 PM	no	91	0	0.000	0	0	93	0	0	0	0
80	7/27/2004 3:47:55 PM	no	95	0	0.000	0	0	101	0	0	0	0
76	7/27/2004 4:18:21 PM	no	94	0	0.000	0	0	108	0	0	0	0
74	7/27/2004 4:48:47 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
72	7/27/2004 5:19:17 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
72	7/27/2004 5:49:43 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
71	7/27/2004 6:20:08 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
71	7/27/2004 6:50:42 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
70	7/27/2004 7:21:08 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
69	7/27/2004 7:51:34 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
68	7/27/2004 8:22:02 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
68	7/27/2004 8:52:29 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
66	7/27/2004 9:22:55 PM	no	92	0	0.000	0	0	128	0	0	0	0
65	7/27/2004 9:53:21 PM	no	101	0	0.000	0	0	93	0	0	0	0
64	7/27/2004 10:23:48 PM	no	101	0	0.000	0	0	79	0	0	0	0
64	7/27/2004 10:54:18 PM	no	104	0	0.000	0	0	83	0	0	0	0
63	7/27/2004 11:24:43 PM	no	100	0	0.000	0	0	85	0	0	0	0
63	7/27/2004 11:55:11 PM	yes	42	0	0.000	0	0	52	0	0	0	0

#54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500
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1:00 AM
2:05 AM
3:10 AM
4:15 AM
5:20 AM
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7:30 AM
8:35 AM
9:56 AM
11:00 AM
12:05 PM
1:10 PM
2:15 PM
4:17 PM
5:21 PM
1:00
1:32
1:44
2:33
8:01
8:42
12:28
12:44
1:28
1:54
3:28
3:29

07 28 04

Melting Department Cupola Temperature and Pressure Report

Date: 7-28-04 Foreman: Thompson

Record times, reasons and causes that the cupola temperature drops below 1300 degrees F or ΔP across the venturi drops below 35".

Time Start	Time Stop	Value T or P	Reason	Cause	Air On Yes/No
8:09		48	Full Ladle	#5 C/m Down	No
12:21	12:35	1000	Closed Fan Dampers 2nd Afterburner turned on 12:22		Yes
1:22		500/37	Full Ladle		No

If the pressure or temperature indicating and/or recording devices, thermocouples or pressure gages malfunction, record the start/end times, equipment and corrective action taken in the table below.

Start Time	Time End	Equipment	Corrective Action taken
		P-2 Not Reading	

MLT-6 05/20/03

Forward completed form to the EHS Manager

Clow Water Systems Daily Emissions Report

Date 7/29/2004

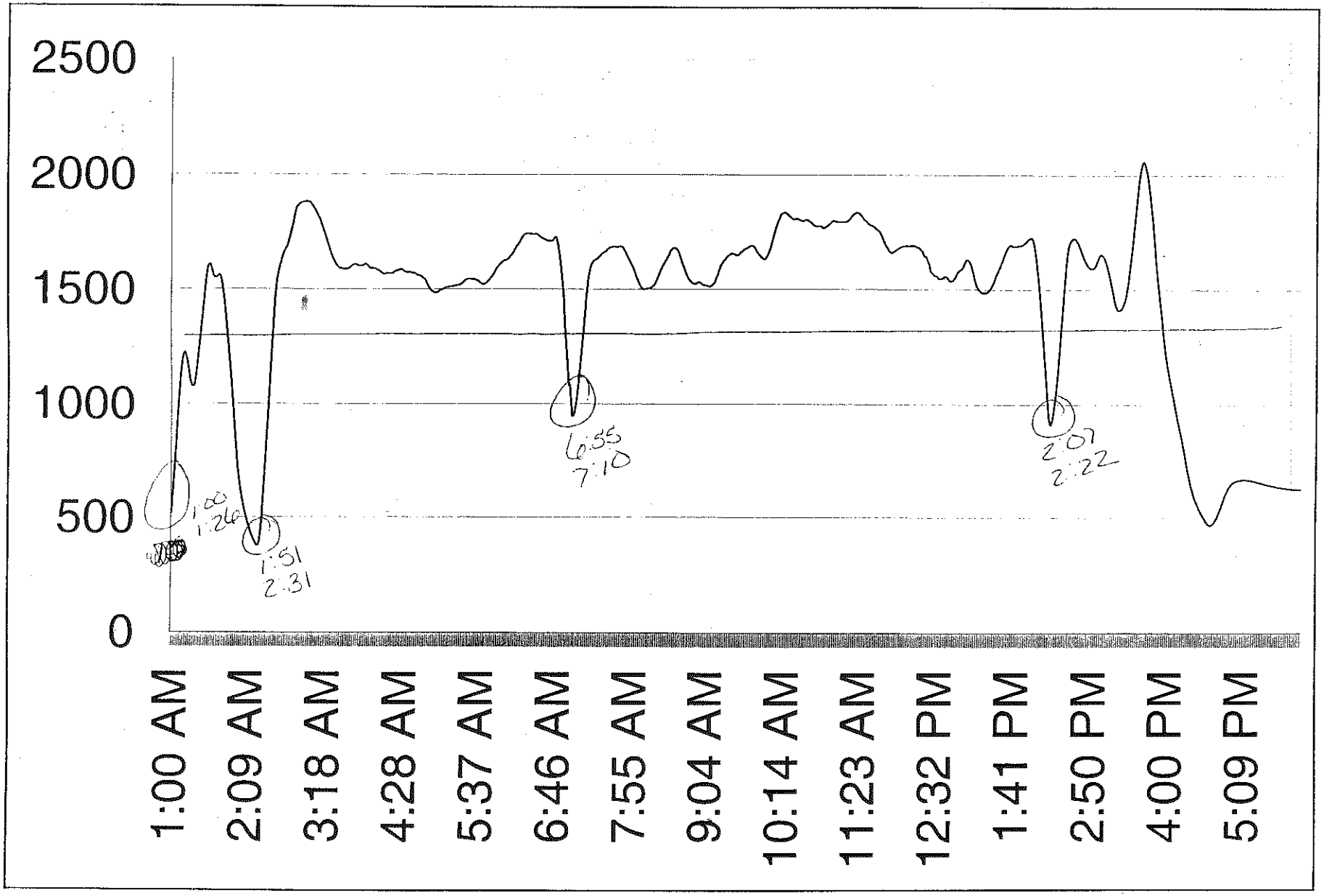
Date and Time	Cupola Melting yes/no	Delta P 40 - 55	P1 >/= 48	P2 >/= 3	P3 >/= 55 - 80 =/<	Scrub PSI	North W/draw PSI	South W/draw PSI	Wet Cap PSI	East Scrub Pump Amps	West Scrub Pump Amps	North W/draw Pump Amps	South W/draw Pump Amps	Tower Inlet Temp	C T #1 outlet temp	C T #2 outlet temp	C T #3 outlet temp	C T#4 outlet temp	C ou te
7/28/2004 9:26:08 AM	[illegible]	51	50	-1.35	90	32	135	35	0	13	0	12	14	91	74	78	74	75	
7/28/2004 9:56:24 AM	[illegible]	53	52	-1.35	94	31	135	36	0	13	0	13	14	94	75	79	75	76	
7/28/2004 10:25:58 AM	[illegible]	54	53	-1.35	91	31	0	36	0	13	0	0	15	93	75	79	74	76	
7/28/2004 10:26:43 AM	[illegible]	53	52	-1.35	90	31	135	36	0	13	0	12	14	94	75	79	75	76	
7/28/2004 10:57:05 AM	[illegible]	54	53	-1.35	91	30	0	36	0	13	0	0	15	96	77	80	76	78	
7/28/2004 11:27:23 AM	[illegible]	56	55	-1.35	90	29	0	35	0	13	0	0	15	97	77	81	77	78	
7/28/2004 11:57:54 AM	[illegible]	54	53	-1.35	92	30	135	36	0	13	0	13	14	94	76	79	75	76	
7/28/2004 12:28:14 PM	[illegible]		38	-1.35	72	30	135	36	0	13	0	12	14	94	77	80	76	77	
7/28/2004 12:58:34 PM	[illegible]	41	40	-1.35	74	30	0	36	0	13	0	0	15	94	76	80	76	77	
7/28/2004 1:28:56 PM			31	-1.35	64	30	0	36	0	13	0	0	15	91	75	79	75	76	
7/28/2004 1:59:25 PM	[illegible]		39	-1.35	73	30	0	35	0	13	0	0	15	94	77	80	76	78	
7/28/2004 2:29:37 PM	[illegible]	41	40	-1.35	73	31	135	36	0	13	0	12	14	96	77	81	77	78	
7/28/2004 3:27:56 PM		41	40	-1.35	71	30	0	36	0	13	0	0	15	0	0	0	0	0	
7/28/2004 3:57:58 PM			35	-1.35	67	31	0	36	0	13	0	0	15	95	78	82	77	78	
7/28/2004 4:27:59 PM			0	0.00	0	30	0	35	0	13	0	0	15	81	72	74	71	72	
7/28/2004 4:58:00 PM			0	0.00	0	0	0	0	0	0	0	0	0	78	70	72	70	71	
7/28/2004 5:28:03 PM			0	0.00	0	0	0	0	0	0	0	0	0	77	70	72	70	70	
7/28/2004 5:58:04 PM			0	0.00	0	0	0	0	0	0	0	0	0	75	69	70	69	69	
7/28/2004 6:28:05 PM			0	0.00	0	0	0	0	0	0	0	0	0	74	68	70	68	68	
7/28/2004 6:58:07 PM			0	0.00	0	0	0	35	0	0	0	0	16	73	68	69	68	68	
7/28/2004 7:28:09 PM			0	0.00	0	0	0	0	0	0	0	0	0	72	67	68	67	67	
7/28/2004 7:58:10 PM			0	0.00	0	0	0	0	0	0	0	0	0	71	67	68	67	67	
7/28/2004 8:28:11 PM			0	0.00	0	0	0	0	0	0	0	0	0	70	67	68	67	67	
7/28/2004 8:58:12 PM			0	0.00	0	0	0	35	0	0	0	0	16	70	66	67	66	66	
7/28/2004 9:28:15 PM			0	0.00	0	0	0	0	0	0	0	0	0	69	66	67	66	66	
7/28/2004 9:58:16 PM		43	43	-0.90	74	28	0	34	0	14	0	0	15	68	65	66	65	65	
7/28/2004 10:28:18 PM		47	46	-1.35	74	29	0	34	0	14	0	0	15	67	64	65	64	64	
7/28/2004 10:58:20 PM		44	43	-1.35	74	29	0	34	0	14	0	0	15	66	63	64	63	63	
7/28/2004 11:28:21 PM		45	44	-0.67	75	30	0	34	0	14	0	0	15	66	63	64	63	63	
7/28/2004 11:58:23 PM		43	42	-1.23	74	30	0	34	0	13	0	0	15	66	63	64	63	63	

Clow Water Systems Daily Fan Vibration Report

Date 7/29/2004

T#5 Outlet Temp	Date and Time	Cupola Melting yes/no	East Fan Amps	East Mtr Outboard	East Mtr Inboard	East Fan Inboard	East Fan Outboard	West Fan Amps	West Mtr Outboard	West Mtr Inboard	West Fan Inboard	West Fan Outboard
73	7/28/2004 9:26:08 AM	yes	95	0	0.000	0	0	96	0	0	0	0
74	7/28/2004 9:56:24 AM	yes	96	0	0.000	0	0	98	0	0	0	0
74	7/28/2004 10:25:58 AM	yes	97	0	0.000	0	0	101	0	0	0	0
74	7/28/2004 10:26:43 AM	yes	89	0	0.000	0	0	95	0	0	0	0
75	7/28/2004 10:57:05 AM	yes	94	0	0.000	0	0	99	0	0	0	0
76	7/28/2004 11:27:23 AM	yes	92	0	0.000	0	0	100	0	0	0	0
74	7/28/2004 11:57:54 AM	yes	97	0	0.000	0	0	98	0	0	0	0
75	7/28/2004 12:28:14 PM	yes	66	0	0.000	0	0	91	0	0	0	0
75	7/28/2004 12:58:34 PM	yes	61	0	0.000	0	0	85	0	0	0	0
74	7/28/2004 1:28:56 PM	no	62	0	0.000	0	0	83	0	0	0	0
76	7/28/2004 1:59:25 PM	yes	59	0	0.000	0	0	82	0	0	0	0
76	7/28/2004 2:29:37 PM	yes	58	0	0.000	0	0	80	0	0	0	0
0	7/28/2004 3:27:56 PM	no	53	0	0.000	0	0	72	0	0	0	0
77	7/28/2004 3:57:58 PM	no	60	0	0.000	0	0	85	0	0	0	0
71	7/28/2004 4:27:59 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
70	7/28/2004 4:58:00 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
69	7/28/2004 5:28:03 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
68	7/28/2004 5:58:04 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
68	7/28/2004 6:28:05 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
67	7/28/2004 6:58:07 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
67	7/28/2004 7:28:09 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
66	7/28/2004 7:58:10 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
66	7/28/2004 8:28:11 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
66	7/28/2004 8:58:12 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
65	7/28/2004 9:28:15 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
64	7/28/2004 9:58:16 PM	no	98	0	0.000	0	0	90	0	0	0	0
63	7/28/2004 10:28:18 PM	no	95	0	0.000	0	0	79	0	0	0	0
63	7/28/2004 10:58:20 PM	no	100	0	0.000	0	0	80	0	0	0	0
63	7/28/2004 11:28:21 PM	no	103	0	0.000	0	0	88	0	0	0	0
62	7/28/2004 11:58:23 PM	no	94	0	0.000	0	0	79	0	0	0	0

#55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12:32 PM
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5:09 PM
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1:26
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2:07
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07 29 04

Melting Department Cupola Temperature and Pressure Report

Date: _____ Foreman: _____

Record times, reasons and causes that the cupola temperature drops below 1300 degrees F or ΔP across the venturi drops below 35".

Time Start	Time Stop	Value T or P	Reason	Cause	Air On Yes/No
645	702	706/52	Charge Cranes down	mag lead	No
200	2:10	680/48	FULL LADLE		No

If the pressure or temperature indicating and/or recording devices, thermocouples or pressure gages malfunction, record the start/end times, equipment and corrective action taken in the table below.

Start Time	Time End	Equipment	Corrective Action taken
		P-2 Still NOT Working	

MLT-6 05/20/03

Forward completed form to the EHS Manager

Melting Department Cupola Temperature and Pressure Report

Date: 7-29-04

Foreman: Thompson

Record times, reasons and causes that the cupola temperature drops **below** 1300 degrees F or ΔP across the venturi drops **below** 35".

Time Start	Time Stop	Value T or P	Reason	Cause	Air On Yes/No
645	702	706 / 52	Charge Cranes Down.	Mag. Lead	NO
			P-2 STILL NOT WORKING		
200		/ 48	FULL LADLE		No
			WRONG FORM		

MLT 6 04/11/03

Forward completed form to the EHS Manager

Clow Water Systems Daily Emissions Report

Date 7/30/2004

Date and Time	Cupola Melting yes/no	Delta P 40 - 55	P1 >/= 48	P2 >/= 3	P3 >/= 55 - 80 =/<	Scrub PSI	North W/draw PSI	South W/draw PSI	Wet Cap PSI	East Scrub Pump Amps	West Scrub Pump Amps	North W/draw Pump Amps	South W/draw Pump Amps	Tower Inlet Temp	C T #1 outlet temp	C T #2 outlet temp	C T #3 outlet temp	C T#4 outlet temp	C ou te
7/29/2004 12:28:24 AM		45	44	-1.35	76	30	0	34	0	13	0	0	15	65	62	63	62	62	
7/29/2004 12:58:26 AM			13	-1.35	65	29	0	34	0	13	0	0	15	66	62	63	62	62	
7/29/2004 1:28:28 AM		45	45	-0.08	73	28	135	34	0	13	0	13	14	69	64	65	63	64	
7/29/2004 1:58:29 AM		46	45	-0.93	77	29	0	35	0	13	0	0	15	67	63	64	63	63	
7/29/2004 2:28:30 AM	yes	60	59	-1.35	100	31	0	35	0	13	0	0	15	68	63	64	63	63	
7/29/2004 2:58:32 AM	yes	61	60	-1.35	97	29	135	35	0	13	0	13	14	69	64	65	64	64	
7/29/2004 3:28:33 AM	yes	62	61	-1.30	100	30	0	36	0	13	0	0	15	69	64	65	64	64	
7/29/2004 3:58:34 AM	yes	59	58	-1.35	96	29	0	36	0	13	0	0	15	82	70	73	70	70	
7/29/2004 4:28:36 AM	yes	57	56	-1.35	98	29	135	36	0	13	0	15	13	86	72	74	71	72	
7/29/2004 4:58:37 AM	yes	62	61	-1.32	97	30	0	36	0	13	0	0	15	87	72	75	72	73	
7/29/2004 5:28:38 AM	yes	59	58	-1.35	97	29	0	36	0	13	0	0	15	89	73	76	72	73	
7/29/2004 5:58:40 AM	yes	58	57	-1.35	97	30	0	36	0	13	0	0	15	89	73	77	73	74	
7/29/2004 6:28:42 AM	yes	60	59	-1.35	99	29	0	36	0	13	0	0	15	93	74	78	74	75	
7/29/2004 6:58:43 AM	yes	62	61	-1.35	99	29	135	36	0	13	0	13	14	89	73	76	72	73	
7/29/2004 7:28:44 AM	yes	61	60	-1.35	98	30	0	36	0	13	0	0	15	90	73	76	72	73	
7/29/2004 7:58:46 AM	yes	62	61	-1.35	97	29	135	36	0	13	0	13	14	90	73	76	72	74	
7/29/2004 8:28:48 AM	yes	58	59	-1.35	97	30	135	36	0	13	0	13	14	95	76	80	75	77	
7/29/2004 8:58:50 AM	yes	61	60	-1.35	99	28	0	36	0	13	0	0	15	94	76	80	75	77	
7/29/2004 9:28:51 AM	yes	60	59	-1.35	97	29	0	36	0	13	0	0	15	98	78	82	77	79	
7/29/2004 9:58:54 AM	yes	61	61	-1.35	98	29	135	36	0	13	0	13	14	97	79	82	78	79	
7/29/2004 10:28:56 AM	yes	59	58	-1.35	94	28	0	36	0	13	0	0	15	99	79	83	78	80	
7/29/2004 10:58:58 AM	yes	56	55	-1.35	94	28	0	36	0	13	0	0	15	98	79	84	79	80	
7/29/2004 11:28:59 AM	yes	56	55	-1.35	91	29	135	36	0	13	0	13	14	98	79	83	79	80	
7/29/2004 11:59:01 AM	yes	57	56	-1.35	94	28	0	36	0	13	0	0	15	100	80	84	79	81	
7/29/2004 12:29:03 PM	yes	55	54	-1.35	92	30	0	36	0	13	0	0	15	101	81	85	80	81	
7/29/2004 12:59:05 PM	yes	57	56	-1.35	95	30	135	36	0	13	0	13	14	101	81	85	80	82	
7/29/2004 1:29:07 PM	yes	57	56	-1.35	97	29	135	36	0	13	0	13	14	101	81	85	80	81	
7/29/2004 1:59:09 PM		47	46	-1.35	84	29	135	36	0	13	0	13	14	99	80	85	80	81	
7/29/2004 2:29:10 PM	yes	53	52	-1.35	94	30	135	36	0	13	0	13	14	98	80	84	80	81	
7/29/2004 2:59:12 PM		55	54	-1.35	90	31	135	36	0	13	0	13	14	98	80	84	80	80	

Clow Water Systems Daily Fan Vibration Report

Date 7/30/2004

T#5 ıtlet ·mp	Date and Time	Cupola Melting yes/no	East Fan Amps	East Mtr Outboard	East Mtr Inboard	East Fan Inboard	East Fan Outboard	West Fan Amps	West Mtr Outboard	West Mtr Inboard	West Fan Inboard	West Fan Outboard
62	7/29/2004 12:28:24 AM	no	96	0	0.000	0	0	83	0	0	0	0
62	7/29/2004 12:58:26 AM	no	42	0	0.000	0	0	51	0	0	0	0
63	7/29/2004 1:28:28 AM	no	88	0	0.000	0	0	76	0	0	0	0
63	7/29/2004 1:58:29 AM	no	93	0	0.000	0	0	80	0	0	0	0
63	7/29/2004 2:28:30 AM	yes	92	0	0.000	0	0	72	0	0	0	0
63	7/29/2004 2:58:32 AM	yes	78	0	0.000	0	0	85	0	0	0	0
63	7/29/2004 3:28:33 AM	yes	85	0	0.000	0	0	89	0	0	0	0
69	7/29/2004 3:58:34 AM	yes	81	0	0.000	0	0	90	0	0	0	0
70	7/29/2004 4:28:36 AM	yes	81	0	0.000	0	0	93	0	0	0	0
71	7/29/2004 4:58:37 AM	yes	81	0	0.000	0	0	92	0	0	0	0
71	7/29/2004 5:28:38 AM	yes	84	0	0.000	0	0	93	0	0	0	0
72	7/29/2004 5:58:40 AM	yes	81	0	0.000	0	0	86	0	0	0	0
73	7/29/2004 6:28:42 AM	yes	85	0	0.000	0	0	86	0	0	0	0
71	7/29/2004 6:58:43 AM	yes	89	0	0.000	0	0	91	0	0	0	0
71	7/29/2004 7:28:44 AM	yes	79	0	0.000	0	0	88	0	0	0	0
72	7/29/2004 7:58:46 AM	yes	82	0	0.000	0	0	89	0	0	0	0
74	7/29/2004 8:28:48 AM	yes	77	0	0.000	0	0	89	0	0	0	0
75	7/29/2004 8:58:50 AM	yes	83	0	0.000	0	0	92	0	0	0	0
76	7/29/2004 9:28:51 AM	yes	81	0	0.000	0	0	89	0	0	0	0
77	7/29/2004 9:58:54 AM	yes	85	0	0.000	0	0	85	0	0	0	0
77	7/29/2004 10:28:56 AM	yes	81	0	0.000	0	0	81	0	0	0	0
78	7/29/2004 10:58:58 AM	yes	84	0	0.000	0	0	90	0	0	0	0
77	7/29/2004 11:28:59 AM	yes	92	0	0.000	0	0	92	0	0	0	0
78	7/29/2004 11:59:01 AM	yes	88	0	0.000	0	0	95	0	0	0	0
79	7/29/2004 12:29:03 PM	yes	88	0	0.000	0	0	90	0	0	0	0
79	7/29/2004 12:59:05 PM	yes	91	0	0.000	0	0	97	0	0	0	0
79	7/29/2004 1:29:07 PM	yes	89	0	0.000	0	0	97	0	0	0	0
79	7/29/2004 1:59:09 PM	no	96	0	0.000	0	0	106	0	0	0	0
79	7/29/2004 2:29:10 PM	yes	88	0	0.000	0	0	92	0	0	0	0
79	7/29/2004 2:59:12 PM	no	86	0	0.000	0	0	92	0	0	0	0

Date 7/30/2004

Date and Time	Cupola Melting yes/no	Delta P 40 - 55	P1 >/= 48	P2 >/= 3	P3 >/= 55 - 80 =/<	Scrub PSI	North W/draw PSI	South W/draw PSI	Wet Cap PSI	East Scrub Pump Amps	West Scrub Pump Amps	North W/draw Pump Amps	South W/draw Pump Amps	Tower Inlet Temp	C T #1 outlet temp	C T #2 outlet temp	C T #3 outlet temp	C T#4 outlet temp	C ou te
7/29/2004 3:29:14 PM		57	56	-1.35	95	30	0	36	0	13	0	0	14	96	80	84	79	80	
7/29/2004 3:59:15 PM		51	50	-1.35	90	28	0	36	0	13	0	0	14	95	79	83	79	80	
7/29/2004 4:29:16 PM		50	49	-1.35	87	30	0	35	0	13	0	0	15	82	74	76	74	74	
7/29/2004 4:59:18 PM			0	0.00	0	0	0	0	0	0	0	0	0	80	73	74	72	73	
7/29/2004 5:29:21 PM			0	0.00	0	0	0	0	0	0	0	0	0	78	72	74	72	73	
7/29/2004 5:59:22 PM			0	0.00	0	0	0	35	0	0	0	0	15	77	71	73	71	71	
7/29/2004 6:29:24 PM			0	0.00	0	0	0	0	0	0	0	0	0	77	71	72	71	71	
7/29/2004 6:59:26 PM			0	0.00	0	0	0	0	0	0	0	0	0	75	70	72	70	71	
7/29/2004 7:29:28 PM			0	0.00	0	0	0	0	0	0	0	0	0	75	70	71	70	70	
7/29/2004 7:59:29 PM			0	0.00	0	0	0	0	0	0	0	0	0	74	70	71	70	70	
7/29/2004 8:29:32 PM			0	0.00	0	0	0	0	0	0	0	0	0	73	70	70	69	70	
7/29/2004 8:59:33 PM			0	0.00	0	0	0	0	0	0	0	0	0	72	69	70	69	69	
7/29/2004 9:29:34 PM			0	0.00	0	0	0	0	0	0	0	0	0	71	69	70	69	69	
7/29/2004 9:59:36 PM		45	45	0.26	76	30	0	35	0	13	0	0	15	71	68	69	68	68	
7/29/2004 10:29:37 PM		44	44	0.23	74	32	0	34	0	13	0	0	15	71	68	69	68	68	
7/29/2004 10:59:40 PM		45	44	-1.35	76	33	0	34	0	13	0	0	15	71	68	69	68	68	
7/29/2004 11:29:42 PM		44	43	-1.35	75	32	0	34	0	13	0	0	15	71	68	69	68	68	
7/29/2004 11:59:45 PM			36	-1.35	52	33	0	34	0	13	0	0	15	70	67	68	67	67	

Date 7/30/2004

T#5 itlet mp	Date and Time	Cupola Melting yes/no	East Fan Amps	East Mtr Outboard	East Mtr Inboard	East Fan Inboard	East Fan Outboard	West Fan Amps	West Mtr Outboard	West Mtr Inboard	West Fan Inboard	West Fan Outboard
78	7/29/2004 3:29:14 PM	no	83	0	0.000	0	0	86	0	0	0	0
78	7/29/2004 3:59:15 PM	no	99	0	0.000	0	0	105	0	0	0	0
73	7/29/2004 4:29:16 PM	no	104	0	0.000	0	0	107	0	0	0	0
72	7/29/2004 4:59:18 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
72	7/29/2004 5:29:21 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
71	7/29/2004 5:59:22 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
70	7/29/2004 6:29:24 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
70	7/29/2004 6:59:26 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
70	7/29/2004 7:29:28 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
70	7/29/2004 7:59:29 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
69	7/29/2004 8:29:32 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
69	7/29/2004 8:59:33 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
68	7/29/2004 9:29:34 PM	no	-1	0	0.000	0	0	-1	0	0	0	0
68	7/29/2004 9:59:36 PM	no	97	0	0.000	0	0	83	0	0	0	0
68	7/29/2004 10:29:37 PM	no	95	0	0.000	0	0	82	0	0	0	0
68	7/29/2004 10:59:40 PM	no	97	0	0.000	0	0	81	0	0	0	0
67	7/29/2004 11:29:42 PM	no	95	0	0.000	0	0	82	0	0	0	0
67	7/29/2004 11:59:45 PM		68	0	0.000	0	0	71	0	0	0	0

Clow Water Systems Company
Environmental Work Instruction
CWP–EWI–012-02-F03
Inspection of Melting Stacks

CLOW WATER SYSTEMS COMPANY

Issue Date: 05/20/07
Rev. Date: 01/29/08

Week starting _____

Return completed form to Environmental Department weekly

Hot Blast	M	T	W	TH	F	SAT	SUN
Visible emissions (Y or N) If **YES**, report to EHS immediately							
Person contacted							
Date contacted							
Time contacted							
Condition of unit (S or U)							
Area cleanliness (S or U)							

Cupola	M	T	W	TH	F	SAT	SUN
Visible emissions (Y or N) If **YES**, report to EHS immediately							
Person contacted							
Date contacted							
Time contacted							
Water pressure to scrubber							
Condition of scrubber (S or U)							
Area cleanliness (S or U)							
Is injection dust operational? Directly after start-up (Y or N)							
1:00 am (Y or N)							
4:00 am (Y or N)							
7:00 am (Y or N)							
10:00 am (Y or N)							
1:00 pm (Y or N)							
After melt-out (Y or N)							
If **NO**, report to EHS immediately Person contacted							
Date contacted							
Time contacted							
Verify hopper full at start-up							
Bags of reagent added throughout day							
Bags of reagent needed to refill hopper at end of day							
Total number of bags of reagent used							
Injection System Feed Rate (lb/min)							
Total number of super sacks collected							

Lime Silos Are there visible emissions? If yes, contact EHS immediately	M	T	W	TH	F	SAT	SUN
Bin Vent Lime Silo No. 1 F003 (Y or N)							
Bin Vent Lime Silo No. 2 Z022 (Y or N)							

Inspected by							
Date							
Time							
Department Head							

Y = Yes N = No S = Satisfactory U = Unsatisfactory

Job Plan Details // EM-1 - Daily PM Clean and cycle venturi

Organization:	CLOW	**Site:**	CLOW OH		
Duration:	02:00	**Priority:**	7	**Interruptable?:**	
Supervisor:		**Crew:**			
Labor Group:		**Owner:**		**Group Owner:**	

Job Plan Tasks

Task ID	Description	Duration	Meter Name
1	Close Venturi	00:00	
2	Lockout emission fans per lockout proceedure and ***venturi operator***	00:00	
10	Open last door on horizonal duct before venturi ***Clean any buildup in horizonal duct - primarily around the elbow***	00:00	
30	Inspect and clean all scrubber pit spray nozzles	00:00	
40	Remove access door on back of elbow above venturi	00:00	
50	Remove build up residue on the fixed and moveable ***plates of the throat and sides of the venturi. Remove the side plate directly above the water manifold for better access if required to fully clean the throat area.***	00:00	
60	Start scrubber pump and inspect the water flow ***across the plates noting which of the water distribution nossles are plugged or restricted.*** ***Wiyh the pump clean any build up on the inside of the elbow by pulling it toward you and letting it fall into the venturi.***	00:00	
70	Stop scrubber pumps and lockout	00:00	
80	Clean all plugged or restricted nozzles by ***unscrewing manifold caps and running T handled rod in each nozzle till clean. reinstall caps.***	00:00	
90	Unlock scrubber pump and start. Verify even ***distribution of water flow through the throat opening. If even repeat cleaning.*** ***If required remove 2 end caps from distribution manifold and flush lines. Makesure everyone is cleared from the area before flushing. Reinstall caps and check for even flow. Repeat if required.***	00:00	
110	Unlock venturi operator, operate doors using ***switch on electrical panel. Verify doors have full range of motion. Watch lined etched on shaft to determine full range. Return operator to 8" make when complete. If full range is not acheived follow work instruction for cleaning elbow from below.***	00:00	
120	Clean all pressure transducers monitoring lines ***By blowing them out with nitrogen from the emission control room, or by rodding them out.***	00:00	
130	Replace all doors and remove lockouts	00:00	
140	Lubricate operation mechanism of venturi	00:00	

Job Plan Details // EM-5 - Clean ring jet tower and scrubber pits

Organization: CLOW
Site: CLOW OH
Duration: 06:30
Priority: 7
Interruptable?: N
Supervisor:
Crew:
Labor Group:
Owner:
Group Owner:

Job Plan Tasks

Task ID	Description	Duration	Meter Name
1	Lock out ring jet system per lockout prceedure	15:00	
10	Inspect and clean ring jet cooling tower floor	45:00	
20	Inspect and clean ring jet nozzel floor	10:00	
30	Drain, Inspect and clean pack bed lower tank ***refill tanks when complete***	30:00	
44	Clean demister floor,screens and Chevron filters	30:00	
45	Verify demister drain is free flowing , clean if ***needed***	10:00	
46	Unlock water pumps to demisters, turn on and verify ***demister nozzles are clean.***	10:00	
50	Inspect and clean ring jet nozzle's ***From top side clean each nozzel cone completely, From the bottom side clean each nozzel cone completely***	15:00	
60	Clean scrubber water pits ***Every attempt should be made to power wash material from sides of pit. This material should be all in a fluid form, vacuumed out and taken to the WWTP Grinder pit. Any material that are solids shall be placed in drums and labeled.*** ***NO MATERIAL SHALL BE PLACED IN THE WWTP GRINDER PIT WITHOUT PHYSICAL OBSERVATION AND APPROVAL FROM ENVIRONMENTAL DEPARTMENT PERSONEL!***	01:30	
70	Clean up surrounding area and wash down	30:00	
80	Fill tanks and towers with water	30:00	
90	Start system & leave running(during winter months)	30:00	

Labor

Task ID	Craft	Skill Level	Vendor	Contract	Labor	Qty	Hours	Rate	Line Cost
	CLEANUP					4.00	06:30	14.76	383.76
	MECHA					1.00	02:00	17.59	35.18

Total Planned Labor: 418.94

Tuesday, September 02, 2008