STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

Form HC-10A (Rev. 6/80)

Job Stamp
04-0120F4
SFOBB SAS

Const. Calendar Day No. 692
Project Work Day No. 902
Date 10/12/2008

Shift Hours Start 0.00 Stop 24.00
Inspector Shift 7:00 AM to 3:30 PM

ASSISTANT RESIDENT ENGINEER'S

CONTRACTOR – ABFJV

e

EQUIPMENT AND/OR LABOR:

Equip. #	NO. MEN	DESCRIPTION (Of Equipment or Labor)	HOURS - ITEM NO. #38 Str. Concrete, Bridge	# 48 Bar Reinforcement Steel								IDLE OR DOWN	REMARKS Name	Contractor
1	1	Gen. Foreman											Terry Cronk	ABF E2
2	1	Pile Driver	12										Tony Crieghton	ABF
3	1	Pile Driver	12										George Mcneil	ABF
4	1	Laborer	8										Jose Molina	ABF
5	1	Laborer											Rigiberto Campos	ABF
6	1	Pile Driver J/M	8										Audre Hudson	ABF
7	1	Pile Driver/Welder											Henry Wheat	ABF
8	1	Elevator Operator	12										Howard Schroyer	ABF
9	1	Pile Driver Foreman	12										Nigel Lohse	ABF
10	1	Pile Driver	8										Aaron Gilpatrick	ABF
11	1	Pile Driver	8										Andrew Adams	ABF
12	1	Pile Driver	8										Kurt Chaission	ABF
13	1	Pile Driver	8										Jesse Johnasen	ABF
14	1	Crane Operator	8										Scott Jefferey	ABF
15	1	Operator Apprentice/oiler	12										Ross Scott	ABF
16	1	Pile Driver	8										Abasi Delley	ABF
17	1	Pile Driver	12										Kenneth Reynolds	ABF
18	1	Labor	8										Joseph Ruiz	ABF
		Iron workers											Tim Greenlee etc	ABF/RSC
	1	Manitower 4100 W											Crane	ABF
	1	1st Man Lift S-125												Hertz Rental
	1	Lincoln Vantage Welding M/C 768-50-4005										8		ABF
	1	Lincoln Vantage Welding M/C 768-50-4009										8		ABF
	1	Lincoln Vantage Welding M/C 768-30-4032										8		Hertz Rental
	1	Lincoln Vantage Welding M/C 768-30-4014	8											Hertz Rental, deck
	1	MQ Power Generator 220	24											ABF Main power
	1	MQ Whisper Watt 7000 549-07-5006												ABF deck

REC'D '08 DEC 03 #007808

	1	MQ Whisper Watt 7000 549-20-4007												ABF
	1	MQ Whisper Watt 7000 549-20-4044										8		ABF
	1	Ingersoll Rand Air compressor 20-2183										8		ABF central
	1	Ingersoll Rand Air Compressor 006-18-4293										8		ABF
	1	Ingersoll Rand Air Compressor 185R										8		ABF Deck
	1	Ingersoll Rand Air Compressor 006-18-4297										8		ABF
	1	Ingersoll Rand Flood Lights 536-40-6831	12											ABF power
	1	Genie 541-4000N Flood Lights 536-40-7044	12											ABF
	1	Genie 541-4000N Flood Lights 536-40-4839	12											ABF
	1	Genie 541-4000N Flood Lights 536-40-4843	12											ABF
	1	Genie 541-4000N Flood	12											ABF
	1	Genie 541-4000N Flood	12											ABF deck power
	1	Forklift Hertz Rental 544D-10	12											ABF
	1	Pickup	12											ABF
	1	Elevator	24											ABF

Weather: Clear sunny but misty morning, wind low to high, High 63F Low 50F.

Description of Operation:

The ABF is working in normal mode.
Iron workers resumed work today for Pour 5.
ABF is installing the Vertical PT rods.
ABF is installing the Thermal Control Piping.
ABF is sealing the joints at formwork.

ABF is cleaning up on the top and at the ground level.
The cooling water was being supplied at 750 GPM.
The chiller was cooling from 50 degree to 43 degrees at 320 GPM.
The inlet temperature at top was 48 degrees and the outlet temperature was at 52 degrees.

The Chiller stopped working at about 3 PM but was repaired and functioning back by 5 PM.

ABF surveyors are checking the locations of Longitudinal ducts on the east face after the Pour-4.

There are 12 hours shifts as follows

Day shift
Nigel
Kenny
Scott

Night shift
Tony
George
Howard

All others will be working regular hours.

The temperature readings for the concrete taken this morning at 7 AM show that the concrete continues to cool after it peaked out yesterday. See attached charts.

Additional Work at or outside of the W2 Site:

a) The contractor continues to erect trusses for Temporary Towers A & B on E-Line.
b) Attended concrete meeting at 8 AM.

- There was no word from Schwager on Anchor Head Testing Results. Venkatesh Iyer was in England.
- CT has to send letter on Continuity Tendon Plate Cover
- The Pour-4 was generally considered good.
- ABF has sent a letter regarding Lane Closures for upcoming pour at E2.
- Jim Davidson mentioned that their QC guy Charles thinks to perform all testing at the Plant instead of at the Job site. Gil said you can do preliminary testing there, but we need to check it the job site.
- The Thermal Control Plan may end Friday.
- Pour 5 work has started.
- E2 Accesss Plan was discussed including conrete truck capapcity of 7 CY vs. 9 YD, use of lane closures and then use of car pool lane, keeping a count of trucks and pay the Toll.
- There were no outstanding RFIs.
- Submittal 515 R4 and R5 for Falsework for Placing Boom support calculations was discussed.
- Schedule: No change.
- On E2, last panel of Fromwork will be placed soon. It was scheduled to be placed yesterday.
- Cap Beam Forms arrived on Pier 7 yesterday. Leo is working on it.
- SCC slope was questioned by Gil.
- Gil suggested that all vertical rods be capped for safety reasons. ABF's safety guy thinks it is not necessary as there are larger bars. CT will get its safety guy review this.
- ABF has not received its concrete cylinder breaks yet. Charles was not in the meeting.
- Gil mentioned that some truck drivers were washing the concrete truck with water going inside the pump hopper. Jim mentioned that CONCO was made aware of this.

c) Received remaining COCs for concrete poured on Friday/Saturday.

Lalit Mathur, P.E. Trans Engineer (D)/Asst. Struct. Rep

Readings of Wednesday 11/12/08 8 AM.

Placement: W2 Pour 4 - SCC, Center of Pour (Bottom, Mid-height, Top)

Placed on: 07-NOV-2008 - 10:00 PM Start **Concrete Mix:** SCC with Orca aggregates (see the 7-10-07 thermal plan)

Hour	Air Temperature, °C	Center Temperature, °C	Bottom Surface Temperature, °C	Top Surface Temperature, °C	Measured Maximum Temp. Difference, °C	Elapsed (Clock) Time, days	Calculated Concrete Age, days: Surface Sensor	Calculated Concrete Age, days: 2nd Surface Sensor	Estimated In-Place Compressive Strength, psi: Surface Sensor	Estimated In-Place Compressive Strength, psi: 2nd Surface Sensor	Calculated Temperature Difference Limit (from the Estimated Compressive Strength), °C: Surface Sensor	Calculated Temperature Difference Limit (from the Estimated Compressive Strength), °C: 2nd Surface Sensor	Combined Temp. Diff. Limit, °C
0	14	14	14	17	0.0	0.0	0.0	0.0	0	0	9.80	9.80	9.80
1	13	14	21	13	1.0	0.0	0.0	0.0	94	81	9.80	9.80	9.80
2	13	14	20	13	1.0	0.1	0.1	0.1	203	150	9.80	9.80	9.80
3	13	14	20	13	1.0	0.1	0.1	0.1	307	219	9.80	9.80	9.80
4	13	15	20	12	3.0	0.2	0.1	0.1	410	284	9.80	9.80	9.80
5	12	22	20	12	10.0	0.2	0.2	0.1	512	346	9.90	9.80	9.80
6	13	22	20	12	10.0	0.3	0.2	0.1	612	408	10.71	9.80	9.80
7	13	23	20	12	11.0	0.3	0.3	0.2	711	469	11.46	9.80	9.80
8	13	23	20	13	10.0	0.3	0.3	0.2	808	532	12.21	10.06	10.06
9	13	23	20	15	8.0	0.4	0.3	0.2	904	602	12.91	10.63	10.63
10	14	23	21	20	3.0	0.4	0.4	0.3	1000	689	13.59	11.31	11.31
11	14	23	21	21	2.0	0.5	0.4	0.3	1098	788	14.26	12.07	12.07
12	15	23	21	21	2.0	0.5	0.5	0.3	1194	889	14.89	12.81	12.81
13	15	23	22	21	2.0	0.5	0.5	0.4	1291	989	15.51	13.51	13.51
14	15	23	23	22	1.0	0.6	0.5	0.4	1391	1089	16.12	14.20	14.20
15	16	24	25	22	2.0	0.6	0.6	0.5	1496	1190	16.74	14.86	14.86
16	15	25	26	22	3.0	0.7	0.6	0.5	1605	1289	17.37	15.49	15.49
17	14	26	29	22	4.0	0.7	0.7	0.5	1721	1387	18.01	16.09	16.09
18	13	28	31	22	6.0	0.8	0.7	0.6	1844	1483	18.67	16.67	16.67
19	13	32	33	22	10.0	0.8	0.8	0.6	1973	1577	19.34	17.22	17.22
20	12	36	34	22	14.0	0.8	0.9	0.7	2105	1671	19.99	17.74	17.74
21	12	39	35	23	16.0	0.9	0.9	0.7	2238	1764	20.62	18.25	18.25
22	12	41	35	24	17.0	0.9	1.0	0.7	2369	1861	21.22	18.76	18.76
23	12	43	36	26	17.0	1.0	1.1	0.8	2498	1961	21.80	19.28	19.28
24	13	45	36	28	17.0	1.0	1.1	0.8	2626	2068	22.35	19.81	19.81
25	13	46	36	32	14.0	1.0	1.2	0.9	2751	2164	22.87	20.37	20.37
26	13	47	37	36	11.0	1.1	1.3	1.0	2875	2313	23.38	20.97	20.97
27	13	49	37	40	12.0	1.1	1.3	1.0	2997	2453	23.88	21.60	21.60
28	13	50	38	41	12.0	1.2	1.4	1.1	3117	2596	24.33	22.23	22.23
29	13	51	38	43	13.0	1.2	1.5	1.2	3235	2744	24.77	22.85	22.85
30	12	51	38	45	13.0	1.3	1.6	1.3	3351	2893	25.20	23.45	23.45
31	12	52	38	46	14.0	1.3	1.6	1.4	3463	3042	25.61	24.04	24.04
32	13	53	39	47	14.0	1.3	1.7	1.5	3574	3189	26.01	24.60	24.60
33	13	53	39	48	14.0	1.4	1.8	1.5	3683	3334	26.39	25.14	25.14
34	14	54	39	49	15.0	1.4	1.8	1.6	3789	3478	26.76	25.66	25.66
35	14	54	39	50	15.0	1.5	1.9	1.7	3893	3619	27.11	26.17	26.17
36	15	54	39	50	15.0	1.5	2.0	1.8	3993	3757	27.45	26.65	26.65
37	15	54	40	50	14.0	1.5	2.1	1.9	4092	3890	27.78	27.10	27.10
38	15	55	40	51	15.0	1.6	2.1	2.0	4190	4020	28.10	27.54	27.54
39	17	55	40	51	15.0	1.6	2.2	2.1	4285	4146	28.41	27.96	27.96
40	17	55	40	51	15.0	1.7	2.3	2.2	4377	4268	28.71	28.36	28.36
41	20	55	40	51	15.0	1.7	2.4	2.3	4467	4386	29.00	28.74	28.74
42	16	55	40	51	15.0	1.8	2.4	2.4	4554	4500	29.27	29.10	29.10
43	15	55	40	51	15.0	1.8	2.5	2.5	4639	4609	29.54	29.45	29.45
44	15	55	40	51	15.0	1.8	2.6	2.6	4721	4715	29.80	29.78	29.78
45	13	55	40	50	15.0	1.9	2.7	2.7	4801	4816	30.05	30.09	30.05
46	13	55	40	50	15.0	1.9	2.8	2.8	4879	4913	30.29	30.39	30.29
47	13	55	40	50	15.0	2.0	2.8	2.9	4955	5006	30.52	30.68	30.52
48	13	55	40	49	15.0	2.0	2.9	3.0	5029	5096	30.75	30.95	30.75
49	13	55	40	49	15.0	2.0	3.0	3.1	5101	5181	30.97	31.21	30.97
50	13	55	40	49	15.0	2.1	3.1	3.2	5171	5264	31.18	31.46	31.18
51	13	55	40	48	15.0	2.1	3.1	3.3	5239	5343	31.38	31.70	31.38
52	12	54	40	48	14.0	2.2	3.2	3.3	5306	5419	31.58	31.92	31.58
53	12	54	40	48	14.0	2.2	3.3	3.4	5370	5493	31.77	32.14	31.77
54	12	54	40	47	14.0	2.3	3.4	3.5	5432	5563	31.96	32.35	31.96
55	12	54	40	47	14.0	2.3	3.4	3.6	5493	5631	32.14	32.55	32.14
56	12	54	40	46	14.0	2.3	3.5	3.7	5553	5695	32.32	32.74	32.32
57	12	54	40	46	14.0	2.4	3.6	3.8	5611	5757	32.49	32.92	32.49
58	13	54	40	46	14.0	2.4	3.7	3.9	5667	5818	32.65	33.09	32.65
59	14	53	40	46	13.0	2.5	3.7	4.0	5722	5876	32.81	33.26	32.81
60	14	53	40	45	13.0	2.5	3.8	4.0	5775	5932	32.97	33.42	32.97
61	14	53	40	45	13.0	2.5	3.9	4.1	5827	5986	33.12	33.58	33.12
62	14	53	39	44	14.0	2.6	4.0	4.2	5877	6037	33.26	33.72	33.26
63	15	53	39	44	14.0	2.6	4.0	4.3	5925	6087	33.40	33.87	33.40
64	15	52	39	44	13.0	2.7	4.1	4.4	5972	6135	33.54	34.00	33.54
65	15	52	39	43	13.0	2.7	4.2	4.5	6018	6182	33.67	34.14	33.67
66	14	52	39	43	13.0	2.8	4.3	4.5	6062	6226	33.80	34.26	33.80
67	13	51	39	43	12.0	2.8	4.3	4.6	6106	6270	33.92	34.38	33.92
68	13	51	39	42	12.0	2.8	4.4	4.7	6148	6311	34.04	34.50	34.04
69	13	51	39	42	12.0	2.9	4.5	4.8	6189	6351	34.16	34.61	34.16
70	13	51	39	41	12.0	2.9	4.6	4.9	6230	6390	34.27	34.72	34.27
71	13	51	39	41	12.0	3.0	4.6	4.9	6269	6427	34.38	34.83	34.38
72	13	50	39	41	11.0	3.0	4.7	5.0	6307	6463	34.49	34.93	34.49

Do Not Modify These

Coefficient	SCC
A	0991 821747
B	0.396693924
C	3518.561948
D	0.027312979

a	1.01E-16
b	-3.58E-14
c	4.93E-10
d	-3.48E-06
e	1.81E-02
f	9.41E+00

Placement: W2 Pour 4 - SCC, Center of Pour (Bottom, Mid-height, Top)

Placed on: 07-NOV-2008 - 10:00 PM Start **Concrete Mix:** SCC with Orca aggregates (see the 7-10-07 thermal plan)

Hour	Air Temperature, °C	Center Temperature, °C	Bottom Surface Temperature, °C	Top Surface Temperature, °C	Measured Maximum Temp. Difference, °C	Elapsed (Clock) Time, days	Calculated Concrete Age, days		Estimated In-Place Compressive Strength, psi		Calculated Temperature Difference Limit (from the Estimated Compressive Strength), °C		Combined Temp. Diff. Limit, °C
							Surface Sensor	2nd Surface Sensor	Surface Sensor	2nd Surface Sensor	Surface Sensor	2nd Surface Sensor	
73	14	50	38	40	12.0	3.0	4.8	5.1	6344	6498	34.59	35.02	34.59
74	13	50	38	40	12.0	3.1	4.8	5.2	6380	6532	34.69	35.12	34.69
75	14	50	38	40	12.0	3.1	4.9	5.3	6415	6565	34.79	35.21	34.79
76	14	49	38	40	11.0	3.2	5.0	5.3	6446	6597	34.89	35.30	34.89
77	13	49	38	39	11.0	3.2	5.1	5.4	6481	6627	34.98	35.38	34.98
78	13	49	38	39	11.0	3.3	5.1	5.5	6514	6657	35.07	35.46	35.07
79	13	49	38	39	11.0	3.3	5.2	5.5	6545	6686	35.15	35.54	35.15
80	13	49	38	38	11.0	3.3	5.3	5.6	6576	6714	35.24	35.62	35.24
81	13	48	38	38	10.0	3.4	5.4	5.7	6606	6741	35.32	35.69	35.32
82	14	48	37	37	11.0	3.4	5.4	5.8	6635	6767	35.40	35.76	35.40
83	14	48	37	37	11.0	3.5	5.5	5.8	6663	6792	35.48	35.83	35.48
84	15	48	37	37	11.0	3.5	5.6	5.9	6691	6817	35.55	35.90	35.55
85	15	47	37	36	11.0	3.5	5.6	6.0	6718	6841	35.63	35.96	35.63
86	15	47	37	36	11.0	3.6	5.7	6.0	6744	6863	35.70	36.02	35.70
87	15	47	37	36	11.0	3.6	5.8	6.1	6769	6886	35.77	36.09	35.77
88	16	47	37	36	11.0	3.7	5.8	6.2	6795	6908	35.84	36.14	35.84
89	15	46	37	36	10.0	3.7	5.9	6.2	6819	6929	35.90	36.20	35.90
90	15	46	37	35	11.0	3.8	6.0	6.3	6843	6950	35.97	36.26	35.97
91	15	46	36	35	11.0	3.8	6.1	6.4	6866	6970	36.03	36.31	36.03
92	15	46	36	35	11.0	3.8	6.1	6.4	6889	6990	36.09	36.37	36.09
93	15	46	36	35	11.0	3.9	6.2	6.5	6911	7009	36.15	36.42	36.15
94	15	46	36	34	12.0	3.9	6.3	6.6	6932	7028	36.21	36.47	36.21
95	15	46	36	34	12.0	4.0	6.3	6.6	6953	7046	36.27	36.52	36.27
96	14	45	36	34	11.0	4.0	6.4	6.7	6974	7064	36.32	36.56	36.32
97	14	45	36	33	12.0	4.0	6.5	6.8	6994	7081	36.38	36.61	36.38
98	14	45	36	33	12.0	4.1	6.5	6.8	7014	7098	36.43	36.65	36.43
99	14	45	36	33	12.0	4.1	6.6	6.9	7033	7114	36.48	36.70	36.48
100	14	44	36	33	11.0	4.2	6.7	7.0	7052	7130	36.53	36.74	36.53
101	13	44	36	32	12.0	4.2	6.7	7.0	7071	7145	36.58	36.78	36.58
102	14	44	36	32	12.0	4.3	6.8	7.1	7089	7161	36.63	36.82	36.63
103	14	44	35	32	12.0	4.3	6.9	7.1	7107	7175	36.68	36.86	36.68
104	13.76923077				0.0	4.3	6.9	7.2	7124	7190	36.72	36.90	36.72
105					0.0	4.4	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
106					0.0	4.4	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
107					0.0	4.5	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
108					0.0	4.5	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
109					0.0	4.5	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
110					0.0	4.6	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
111					0.0	4.6	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
112					0.0	4.7	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
113					0.0	4.7	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
114					0.0	4.8	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
115					0.0	4.8	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
116					0.0	4.8	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
117					0.0	4.9	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
118					0.0	4.9	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
119					0.0	5.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
120					0.0	5.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
121					0.0	5.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
122					0.0	5.1	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
123					0.0	5.1	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
124					0.0	5.2	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
125					0.0	5.2	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
126					0.0	5.3	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
127					0.0	5.3	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
128					0.0	5.3	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
129					0.0	5.4	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
130					0.0	5.4	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
131					0.0	5.5	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
132					0.0	5.5	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
133					0.0	5.5	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
134					0.0	5.6	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
135					0.0	5.6	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
136					0.0	5.7	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
137					0.0	5.7	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
138					0.0	5.8	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
139					0.0	5.8	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
140					0.0	5.8	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
141					0.0	5.9	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
142					0.0	5.9	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
143					0.0	6.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
144					0.0	6.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
145					0.0	6.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

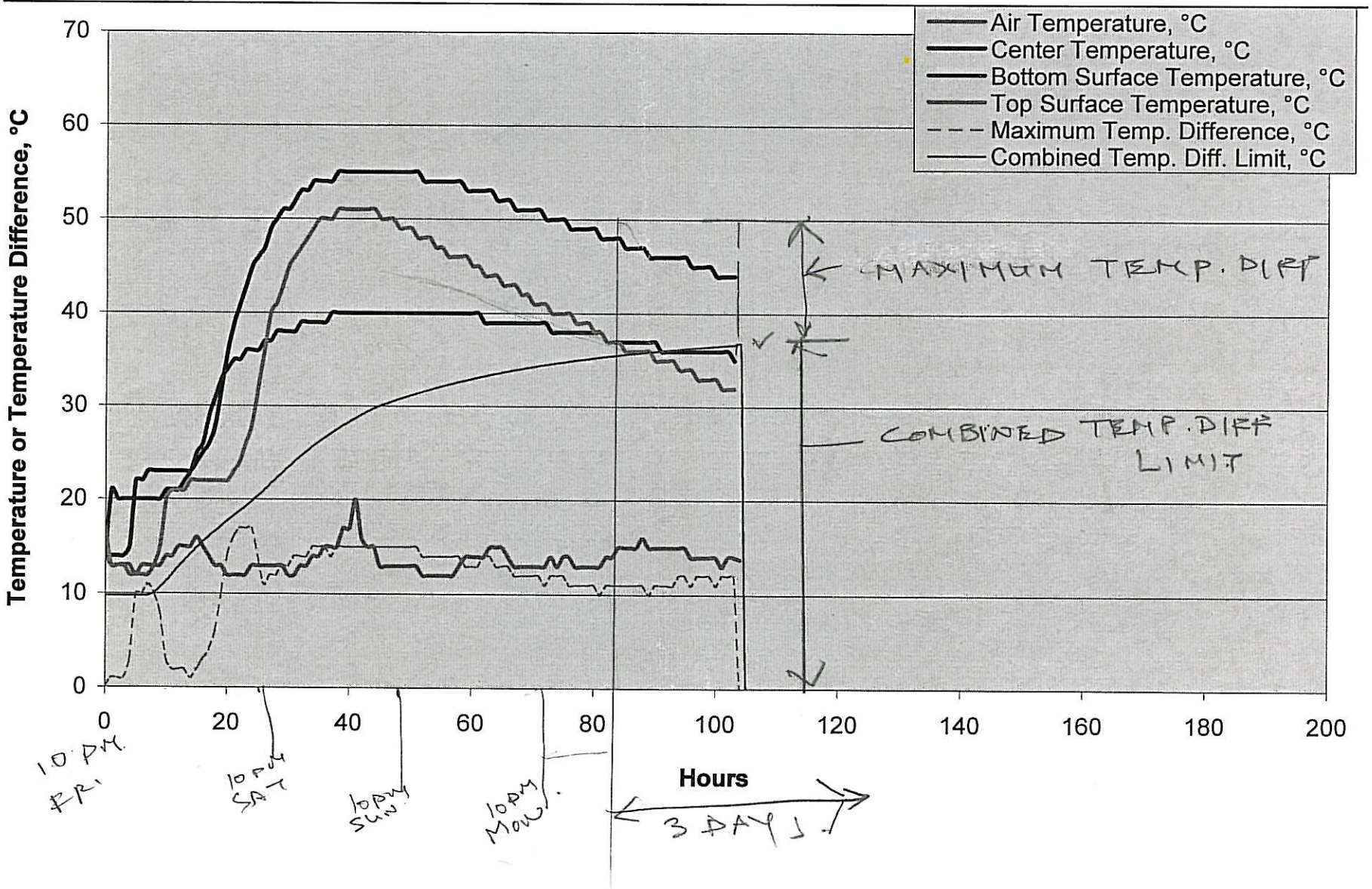
4892 →

Do Not Modify These

Coefficient	SCC				

Placement: W2 Pour 4 - SCC, Center of Pour (Bottom, Mid-height, Top)

Placed on: 07-NOV-2008 - 10:00 PM Start **Concrete Mix:** SCC with Orca aggregates (see the 7-10-07 thermal plan)



Placement: W2 Pour 4 - SCC, Mid-height sensors (Center, South Face, West Face)

Placed on: 07-NOV-2008 - 10:00 PM Start **Concrete Mix:** SCC with Orca aggregates (see the 7-10-07 thermal plan)

Hour	Air Temperature, °C	Center Temperature, °C	South Surface Temperature, °C	West Surface Temperature, °C	Measured Maximum Temp. Difference, °C	Elapsed (Clock) Time, days	Calculated Concrete Age, days		Estimated In-Place Compressive Strength, psi		Calculated Temperature Difference Limit (from the Estimated Compressive Strength), °C		Combined Temp. Diff. Limit, °C
							Surface Sensor	2nd Surface Sensor	Surface Sensor	2nd Surface Sensor	Surface Sensor	2nd Surface Sensor	
0	14	14	14	15	0.0	0.0	0.0	0.0	0	0	9.80	9.80	9.80
1	13	14	14	15	0.0	0.0	0.0	0.0	75	81	9.80	9.80	9.80
2	13	14	14	15	0.0	0.1	0.1	0.1	150	161	9.80	9.80	9.80
3	13	14	14	15	0.0	0.1	0.1	0.1	224	240	9.80	9.80	9.80
4	13	15	20	14	1.0	0.2	0.1	0.1	313	315	9.80	9.80	9.80
5	12	22	21	18	4.0	0.2	0.2	0.1	418	398	9.80	9.80	9.80
6	13	22	22	21	1.0	0.3	0.2	0.2	527	497	10.02	9.80	9.80
7	13	23	22	21	2.0	0.3	0.2	0.2	637	602	10.90	10.63	10.63
8	13	23	21	21	2.0	0.3	0.3	0.3	742	706	11.72	11.44	11.44
9	13	23	21	22	2.0	0.4	0.3	0.3	844	810	12.48	12.23	12.23
10	14	23	21	22	2.0	0.4	0.4	0.3	944	915	13.20	13.00	13.00
11	14	23	21	22	2.0	0.5	0.4	0.4	1042	1019	13.88	13.72	13.72
12	15	23	22	23	1.0	0.5	0.4	0.4	1142	1123	14.56	14.43	14.43
13	15	23	22	23	1.0	0.5	0.5	0.5	1242	1228	15.20	15.11	15.11
14	15	23	22	23	1.0	0.6	0.5	0.5	1340	1331	15.81	15.76	15.76
15	16	24	23	24	1.0	0.6	0.6	0.6	1439	1435	16.41	16.38	16.38
16	15	25	24	26	1.0	0.7	0.6	0.6	1541	1543	17.01	17.02	17.01
17	14	26	26	28	0.0	0.7	0.7	0.7	1647	1658	17.61	17.67	17.61
18	13	28	29	32	-1.0	0.8	0.7	0.7	1762	1783	18.24	18.35	18.24
19	13	32	32	37	0.0	0.8	0.8	0.8	1887	1923	18.89	19.08	18.89
20	12	36	35	41	1.0	0.8	0.8	0.9	2021	2078	19.57	19.85	19.57
21	12	39	37	44	2.0	0.9	0.9	0.9	2161	2241	20.26	20.64	20.26
22	12	41	38	46	3.0	0.9	1.0	1.0	2304	2409	20.93	21.41	20.93
23	12	43	40	48	3.0	1.0	1.0	1.1	2448	2579	21.58	22.15	21.58
24	13	45	40	50	5.0	1.0	1.1	1.2	2591	2750	22.20	22.87	22.20
25	13	46	41	51	5.0	1.0	1.2	1.3	2732	2920	22.80	23.56	22.80
26	13	47	42	53	5.0	1.1	1.3	1.4	2873	3088	23.37	24.22	23.37
27	13	49	43	54	6.0	1.1	1.3	1.5	3013	3255	23.92	24.85	23.92
28	13	50	44	55	6.0	1.2	1.4	1.6	3151	3419	24.46	25.45	24.46
29	13	51	44	56	7.0	1.2	1.5	1.7	3287	3580	24.97	26.03	24.97
30	12	51	45	57	6.0	1.3	1.6	1.8	3421	3737	25.46	26.58	25.46
31	12	52	45	57	7.0	1.3	1.7	1.9	3551	3889	25.93	27.10	25.93
32	13	53	46	58	7.0	1.3	1.8	2.0	3679	4036	26.38	27.59	26.38
33	13	53	46	59	7.0	1.4	1.9	2.1	3804	4180	26.81	28.07	26.81
34	14	54	46	59	8.0	1.4	1.9	2.3	3925	4320	27.22	28.52	27.22
35	14	54	46	59	8.0	1.5	2.0	2.4	4042	4453	27.61	28.95	27.61
36	15	54	47	60	7.0	1.5	2.1	2.5	4157	4583	27.99	29.36	27.99
37	15	54	47	60	7.0	1.5	2.2	2.6	4269	4708	28.36	29.76	28.36
38	15	55	47	60	8.0	1.6	2.3	2.7	4378	4828	28.71	30.13	28.71
39	17	55	47	60	8.0	1.6	2.4	2.8	4483	4943	29.05	30.48	29.05
40	17	55	47	60	8.0	1.7	2.5	2.9	4585	5054	29.37	30.82	29.37
41	20	55	47	60	8.0	1.7	2.6	3.0	4683	5160	29.68	31.14	29.68
42	16	55	47	60	8.0	1.8	2.7	3.2	4779	5262	29.98	31.45	29.98
43	15	55	47	61	8.0	1.8	2.7	3.3	4871	5360	30.26	31.75	30.26
44	15	55	47	60	8.0	1.8	2.8	3.4	4960	5455	30.54	32.03	30.54
45	13	55	47	60	8.0	1.9	2.9	3.5	5046	5545	30.80	32.29	30.80
46	13	55	46	60	9.0	1.9	3.0	3.6	5129	5631	31.05	32.55	31.05
47	13	55	46	60	9.0	2.0	3.1	3.7	5209	5714	31.29	32.79	31.29
48	13	55	46	60	9.0	2.0	3.2	3.8	5286	5794	31.52	33.02	31.52
49	13	55	46	60	9.0	2.0	3.3	4.0	5360	5871	31.75	33.25	31.75
50	13	55	46	60	9.0	2.1	3.4	4.1	5432	5945	31.96	33.46	31.96
51	13	55	46	60	9.0	2.1	3.4	4.2	5502	6016	32.17	33.66	32.17
52	12	54	45	60	9.0	2.2	3.5	4.3	5570	6084	32.37	33.86	32.37
53	12	54	45	59	9.0	2.2	3.6	4.4	5634	6149	32.56	34.04	32.56
54	12	54	44	59	10.0	2.3	3.7	4.5	5696	6211	32.74	34.22	32.74
55	12	54	44	59	10.0	2.3	3.8	4.6	5755	6271	32.91	34.39	32.91
56	12	54	44	59	10.0	2.3	3.9	4.7	5813	6328	33.08	34.55	33.08
57	12	54	43	59	11.0	2.4	3.9	4.9	5868	6383	33.24	34.70	33.24
58	13	54	43	58	11.0	2.4	4.0	5.0	5922	6436	33.39	34.85	33.39
59	14	53	43	58	10.0	2.5	4.1	5.1	5973	6487	33.54	34.99	33.54
60	14	53	43	57	10.0	2.5	4.2	5.2	6024	6535	33.69	35.13	33.69
61	14	53	43	57	10.0	2.5	4.3	5.3	6073	6582	33.82	35.25	33.82
62	14	53	43	57	10.0	2.6	4.4	5.4	6120	6627	33.96	35.38	33.96
63	15	53	42	57	11.0	2.6	4.4	5.5	6166	6670	34.09	35.50	34.09
64	15	52	42	56	10.0	2.7	4.5	5.6	6210	6711	34.21	35.61	34.21
65	15	52	42	56	10.0	2.7	4.6	5.7	6253	6751	34.34	35.72	34.34
66	14	52	42	56	10.0	2.8	4.7	5.8	6294	6789	34.45	35.82	34.45
67	13	51	41	55	10.0	2.8	4.8	5.9	6334	6826	34.57	35.92	34.57
68	13	51	41	55	10.0	2.8	4.8	6.0	6373	6861	34.67	36.02	34.67
69	13	51	41	55	10.0	2.9	4.9	6.1	6410	6895	34.78	36.11	34.78
70	13	51	40	55	11.0	2.9	5.0	6.2	6447	6929	34.88	36.20	34.88
71	13	51	40	54	11.0	3.0	5.1	6.3	6481	6960	34.98	36.29	34.98
72	13	50	40	54	10.0	3.0	5.1	6.4	6515	6991	35.07	36.37	35.07

Do Not Modify These

Coefficient	SCC
A	6061.821747
B	0.396693924
C	3618.561948
D	0.027312979

a	1.01E-18
b	-3.58E-14
c	4.93E-10
d	-3.48E-06
e	1.61E-02
f	9.41E-00

Placement: W2 Pour 4 - SCC, Mid-height sensors (Center, South Face, West Face)

Placed on: 07-NOV-2006 - 10:00 PM Start **Concrete Mix:** SCC with Orca aggregates (see the 7-10-07 thermal plan)

49.73

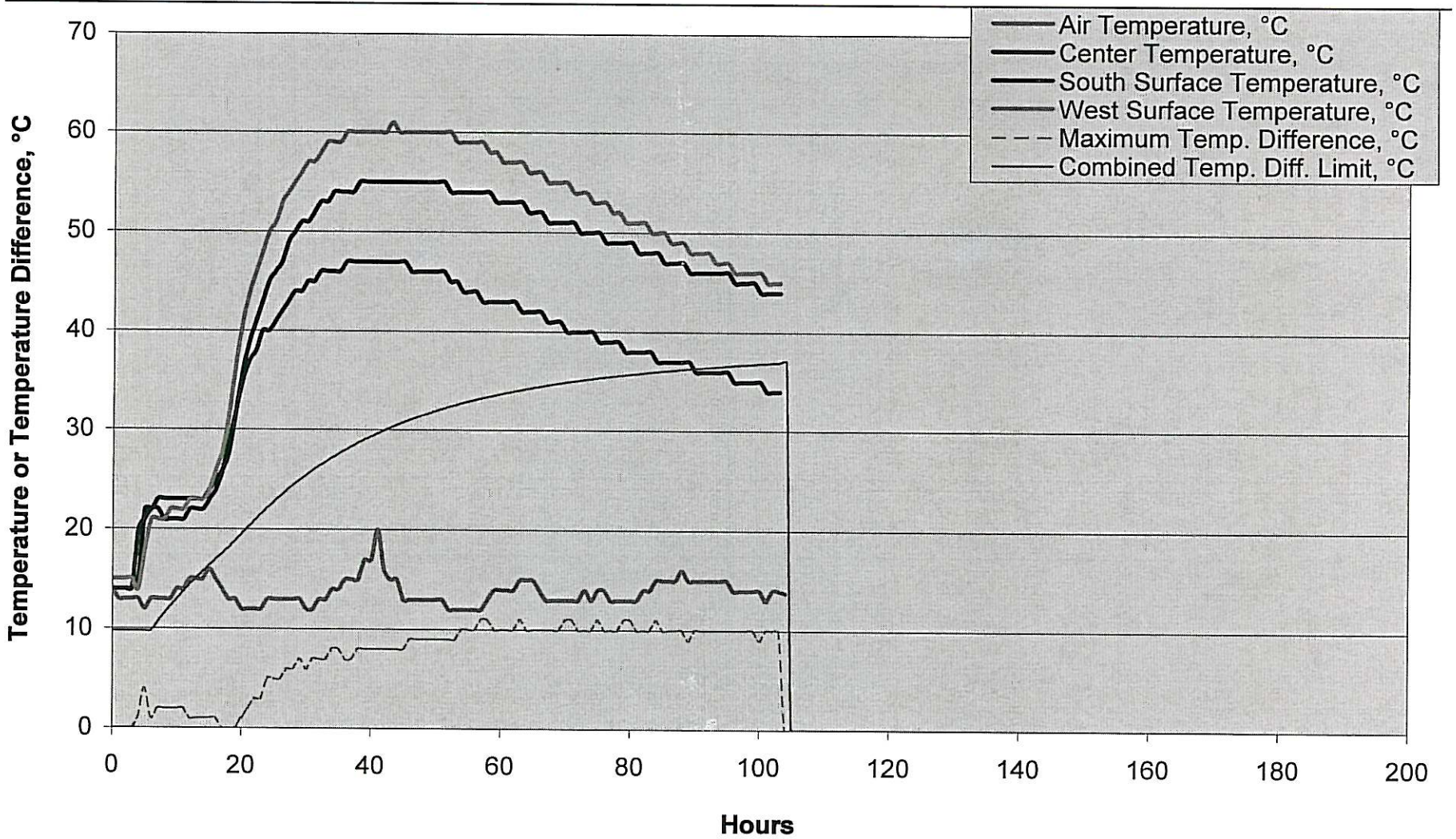
Hour	Air Temperature, °C	Center Temperature, °C	South Surface Temperature, °C	West Surface Temperature, °C	Measured Maximum Temp. Difference, °C	Elapsed (Clock) Time, days	Calculated Concrete Age, days: Surface Sensor	Calculated Concrete Age, days: 2nd Surface Sensor	Estimated In-Place Compressive Strength, psi: Surface Sensor	Estimated In-Place Compressive Strength, psi: 2nd Surface Sensor	Calculated Temperature Difference Limit (from the Estimated Compressive Strength), °C: Surface Sensor	Calculated Temperature Difference Limit (from the Estimated Compressive Strength), °C: 2nd Surface Sensor	Combined Temp. Diff. Limit, °C
73	14	50	40	54	10.0	3.0	5.2	6.6	6549	7021	35.16	36.45	35.16
74	13	50	40	53	10.0	3.1	5.3	6.7	6581	7049	35.25	36.52	35.25
75	14	50	39	53	11.0	3.1	5.4	6.8	6612	7077	35.34	36.60	35.34
76	14	49	39	53	10.0	3.2	5.4	6.9	6642	7103	35.42	36.67	35.42
77	13	49	39	52	10.0	3.2	5.5	7.0	6672	7129	35.50	36.73	35.50
78	13	49	39	52	10.0	3.3	5.6	7.1	6700	7154	35.58	36.80	35.58
79	13	49	38	51	11.0	3.3	5.7	7.1	6728	7178	35.66	36.86	35.66
80	13	49	38	51	11.0	3.3	5.7	7.2	6755	7201	35.73	36.92	35.73
81	13	48	38	51	10.0	3.4	5.8	7.3	6781	7223	35.80	36.98	35.80
82	14	48	38	51	10.0	3.4	5.9	7.4	6806	7245	35.87	37.04	35.87
83	14	48	38	50	10.0	3.5	5.9	7.5	6831	7266	35.94	37.09	35.94
84	15	48	37	50	11.0	3.5	6.0	7.6	6855	7286	36.00	37.15	36.00
85	15	47	37	50	10.0	3.5	6.1	7.7	6879	7306	36.07	37.20	36.07
86	15	47	37	49	10.0	3.6	6.2	7.8	6901	7325	36.13	37.25	36.13
87	15	47	37	49	10.0	3.6	6.2	7.9	6924	7344	36.19	37.30	36.19
88	16	47	37	49	10.0	3.7	6.3	8.0	6945	7362	36.25	37.34	36.25
89	15	46	37	48	9.0	3.7	6.4	8.1	6967	7379	36.30	37.39	36.30
90	15	46	36	48	10.0	3.8	6.4	8.2	6987	7396	36.36	37.43	36.36
91	15	46	36	48	10.0	3.8	6.5	8.3	7007	7413	36.41	37.48	36.41
92	15	46	36	48	10.0	3.8	6.6	8.4	7027	7429	36.46	37.52	36.46
93	15	46	36	47	10.0	3.9	6.6	8.5	7046	7445	36.51	37.56	36.51
94	15	46	36	47	10.0	3.9	6.7	8.5	7065	7460	36.56	37.60	36.56
95	15	46	36	47	10.0	4.0	6.8	8.6	7083	7475	36.61	37.64	36.61
96	14	45	35	46	10.0	4.0	6.8	8.7	7101	7489	36.66	37.67	36.66
97	14	45	35	46	10.0	4.0	6.9	8.8	7118	7503	36.71	37.71	36.71
98	14	45	35	46	10.0	4.1	7.0	8.9	7135	7517	36.75	37.74	36.75
99	14	45	35	46	10.0	4.1	7.0	9.0	7152	7530	36.79	37.78	36.79
100	14	44	35	46	9.0	4.2	7.1	9.1	7168	7544	36.84	37.81	36.84
101	13	44	34	45	10.0	4.2	7.2	9.2	7184	7556	36.88	37.84	36.88
102	14	44	34	45	10.0	4.3	7.2	9.2	7199	7569	36.92	37.88	36.92
103	14	44	34	45	10.0	4.3	7.3	9.3	7214	7581	36.96	37.91	36.96
104	13.8				0.0	4.3	7.4	9.4	7229	7593	37.00	37.94	37.00
105					0.0	4.4	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
106					0.0	4.4	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
107					0.0	4.5	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
108					0.0	4.5	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
109					0.0	4.5	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
110					0.0	4.6	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
111					0.0	4.6	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
112					0.0	4.7	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
113					0.0	4.7	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
114					0.0	4.8	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
115					0.0	4.8	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
116					0.0	4.8	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
117					0.0	4.9	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
118					0.0	4.9	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
119					0.0	5.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
120					0.0	5.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
121					0.0	5.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
122					0.0	5.1	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
123					0.0	5.1	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
124					0.0	5.2	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
125					0.0	5.2	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
126					0.0	5.3	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
127					0.0	5.3	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
128					0.0	5.3	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
129					0.0	5.4	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
130					0.0	5.4	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
131					0.0	5.5	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
132					0.0	5.5	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
133					0.0	5.5	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
134					0.0	5.6	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
135					0.0	5.6	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
136					0.0	5.7	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
137					0.0	5.7	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
138					0.0	5.8	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
139					0.0	5.8	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
140					0.0	5.8	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
141					0.0	5.9	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
142					0.0	5.9	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
143					0.0	6.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
144					0.0	6.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
145					0.0	6.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Do Not Modify These

Coefficient	SCC			

Placement: W2 Pour 4 - SCC, Mid-height sensors (Center, South Face, West Face)

Placed on: 07-NOV-2008 - 10:00 PM Start **Concrete Mix:** SCC with Orca aggregates (see the 7-10-07 thermal plan)



Placement: W2 Pour 4 - SCC, Mid-height sensors (Center, East Face, West Face)

Placed on: 07-NOV-2008 - 10:00 PM Start **Concrete Mix:** SCC with Orca aggregates (see the 7-10-07 thermal plan)

Hour	Air Temperature, °C	Center Temperature, °C	East Surface Temperature, °C	West Surface Temperature, °C	Measured Maximum Temp. Difference, °C	Elapsed (Clock) Time, days	Calculated Concrete Age, days		Estimated In-Place Compressive Strength, psi		Calculated Temperature Difference Limit (from the Estimated Compressive Strength), °C		Combined Temp. Diff. Limit, °C
							Surface Sensor	2nd Surface Sensor	Surface Sensor	2nd Surface Sensor	Surface Sensor	2nd Surface Sensor	
0	14	14	14	15	0.0	0.0	0.0	0.0	0	0	9.80	9.80	9.80
1	13	14	14	15	0.0	0.0	0.0	0.0	75	81	9.80	9.80	9.80
2	13	14	13	15	1.0	0.1	0.1	0.1	147	161	9.80	9.80	9.80
3	13	14	13	15	1.0	0.1	0.1	0.1	216	240	9.80	9.80	9.80
4	13	15	13	14	2.0	0.2	0.1	0.1	284	315	9.80	9.80	9.80
5	12	22	13	18	9.0	0.2	0.1	0.1	351	398	9.80	9.80	9.80
6	13	22	13	21	9.0	0.3	0.2	0.2	418	497	9.80	9.80	9.80
7	13	23	22	21	2.0	0.3	0.2	0.2	507	602	9.85	10.63	9.85
8	13	23	22	21	2.0	0.3	0.2	0.3	617	706	10.75	11.44	10.75
9	13	23	22	22	1.0	0.4	0.3	0.3	725	810	11.59	12.23	11.59
10	14	23	22	22	1.0	0.4	0.3	0.3	832	915	12.39	13.00	12.39
11	14	23	22	22	1.0	0.5	0.4	0.4	937	1019	13.15	13.72	13.15
12	15	23	23	23	0.0	0.5	0.4	0.4	1042	1123	13.88	14.43	13.88
13	15	23	23	23	0.0	0.5	0.4	0.5	1149	1228	14.59	15.11	14.59
14	15	23	23	23	0.0	0.6	0.5	0.5	1253	1331	15.27	15.76	15.27
15	16	24	23	24	1.0	0.6	0.5	0.6	1356	1435	15.91	16.38	15.91
16	15	25	24	26	1.0	0.7	0.6	0.6	1459	1543	16.53	17.02	16.53
17	14	26	25	28	1.0	0.7	0.6	0.7	1565	1658	17.14	17.67	17.14
18	13	28	27	32	1.0	0.8	0.7	0.7	1675	1783	17.76	18.35	17.76
19	13	32	30	37	2.0	0.8	0.7	0.8	1793	1923	18.40	19.08	18.40
20	12	36	33	41	3.0	0.8	0.8	0.9	1921	2078	19.07	19.85	19.07
21	12	39	37	44	2.0	0.9	0.8	0.9	2060	2241	19.77	20.64	19.77
22	12	41	40	46	1.0	0.9	0.9	1.0	2209	2409	20.49	21.41	20.49
23	12	43	43	48	0.0	1.0	1.0	1.1	2365	2579	21.21	22.15	21.21
24	13	45	45	50	0.0	1.0	1.1	1.2	2525	2750	21.92	22.87	21.92
25	13	46	46	51	0.0	1.0	1.2	1.3	2686	2920	22.60	23.56	22.60
26	13	47	47	53	0.0	1.1	1.3	1.4	2845	3088	23.26	24.22	23.26
27	13	49	49	54	0.0	1.1	1.3	1.5	3003	3255	23.89	24.85	23.89
28	13	50	50	55	0.0	1.2	1.4	1.6	3161	3419	24.49	25.45	24.49
29	13	51	51	56	0.0	1.2	1.5	1.7	3316	3580	25.08	26.03	25.08
30	12	51	52	57	-1.0	1.3	1.6	1.8	3469	3737	25.63	26.58	25.63
31	12	52	53	57	-1.0	1.3	1.7	1.9	3619	3889	26.17	27.10	26.17
32	13	53	53	58	0.0	1.3	1.8	2.0	3765	4036	26.68	27.59	26.68
33	13	53	53	59	0.0	1.4	1.9	2.1	3906	4180	27.16	28.07	27.16
34	14	54	54	59	0.0	1.4	2.0	2.3	4042	4320	27.61	28.52	27.61
35	14	54	54	59	0.0	1.5	2.1	2.4	4175	4453	28.05	28.95	28.05
36	15	54	54	60	0.0	1.5	2.2	2.5	4303	4583	28.47	29.36	28.47
37	15	54	54	60	0.0	1.5	2.3	2.6	4427	4708	28.87	29.76	28.87
38	15	55	54	60	1.0	1.6	2.4	2.7	4545	4828	29.25	30.13	29.25
39	17	55	54	60	1.0	1.6	2.5	2.8	4659	4943	29.61	30.48	29.61
40	17	55	54	60	1.0	1.7	2.6	2.9	4770	5054	29.95	30.82	29.95
41	20	55	54	60	1.0	1.7	2.7	3.0	4876	5160	30.28	31.14	30.28
42	16	55	54	60	1.0	1.8	2.9	3.2	4978	5262	30.59	31.45	30.59
43	15	55	54	61	1.0	1.8	3.0	3.3	5076	5360	30.89	31.75	30.89
44	15	55	54	60	1.0	1.8	3.1	3.4	5171	5455	31.18	32.03	31.18
45	13	55	54	60	1.0	1.9	3.2	3.5	5262	5545	31.45	32.29	31.45
46	13	55	54	60	1.0	1.9	3.3	3.6	5351	5631	31.72	32.55	31.72
47	13	55	54	60	1.0	2.0	3.4	3.7	5435	5714	31.97	32.79	31.97
48	13	55	53	60	2.0	2.0	3.5	3.8	5517	5794	32.21	33.02	32.21
49	13	55	53	60	2.0	2.0	3.6	4.0	5594	5871	32.44	33.25	32.44
50	13	55	53	60	2.0	2.1	3.7	4.1	5669	5945	32.66	33.46	32.66
51	13	55	53	60	2.0	2.1	3.8	4.2	5741	6016	32.87	33.66	32.87
52	12	54	52	60	2.0	2.2	3.9	4.3	5810	6084	33.07	33.86	33.07
53	12	54	52	59	2.0	2.2	4.0	4.4	5877	6149	33.26	34.04	33.26
54	12	54	51	59	3.0	2.3	4.1	4.5	5940	6211	33.44	34.22	33.44
55	12	54	51	59	3.0	2.3	4.2	4.6	6000	6271	33.62	34.39	33.62
56	12	54	51	59	3.0	2.3	4.3	4.7	6059	6328	33.79	34.55	33.79
57	12	54	51	59	3.0	2.4	4.3	4.9	6116	6383	33.95	34.70	33.95
58	13	54	50	58	4.0	2.4	4.4	5.0	6170	6436	34.10	34.85	34.10
59	14	53	50	58	3.0	2.5	4.5	5.1	6222	6487	34.25	34.99	34.25
60	14	53	50	57	3.0	2.5	4.6	5.2	6273	6535	34.39	35.13	34.39
61	14	53	50	57	3.0	2.5	4.7	5.3	6321	6582	34.53	35.25	34.53
62	14	53	49	57	4.0	2.6	4.8	5.4	6368	6627	34.66	35.38	34.66
63	15	53	49	57	4.0	2.6	4.9	5.5	6413	6670	34.79	35.50	34.79
64	15	52	49	56	3.0	2.7	5.0	5.6	6457	6711	34.91	35.61	34.91
65	15	52	48	56	4.0	2.7	5.1	5.7	6499	6751	35.02	35.72	35.02
66	14	52	48	56	4.0	2.8	5.2	5.8	6539	6789	35.14	35.82	35.14
67	13	51	48	55	3.0	2.8	5.3	5.9	6578	6826	35.24	35.92	35.24
68	13	51	48	55	3.0	2.8	5.4	6.0	6616	6861	35.35	36.02	35.35
69	13	51	47	55	4.0	2.9	5.5	6.1	6652	6895	35.45	36.11	35.45
70	13	51	47	55	4.0	2.9	5.6	6.2	6687	6929	35.54	36.20	35.54
71	13	51	47	54	4.0	3.0	5.6	6.3	6721	6960	35.64	36.29	35.64
72	13	50	46	54	4.0	3.0	5.7	6.4	6754	6991	35.73	36.37	35.73

Do Not Modify These

Coefficient	SCC
A	6061.621747
B	0.396633924
C	3518.501648
D	0.027312979

a	1.01E-18
b	-3.58E-14
c	4.93E-10
d	-3.48E-06
e	1.61E-02
f	9.41E+00

Placement: W2 Pour 4 - SCC, Mid-height sensors (Center, East Face, West Face)

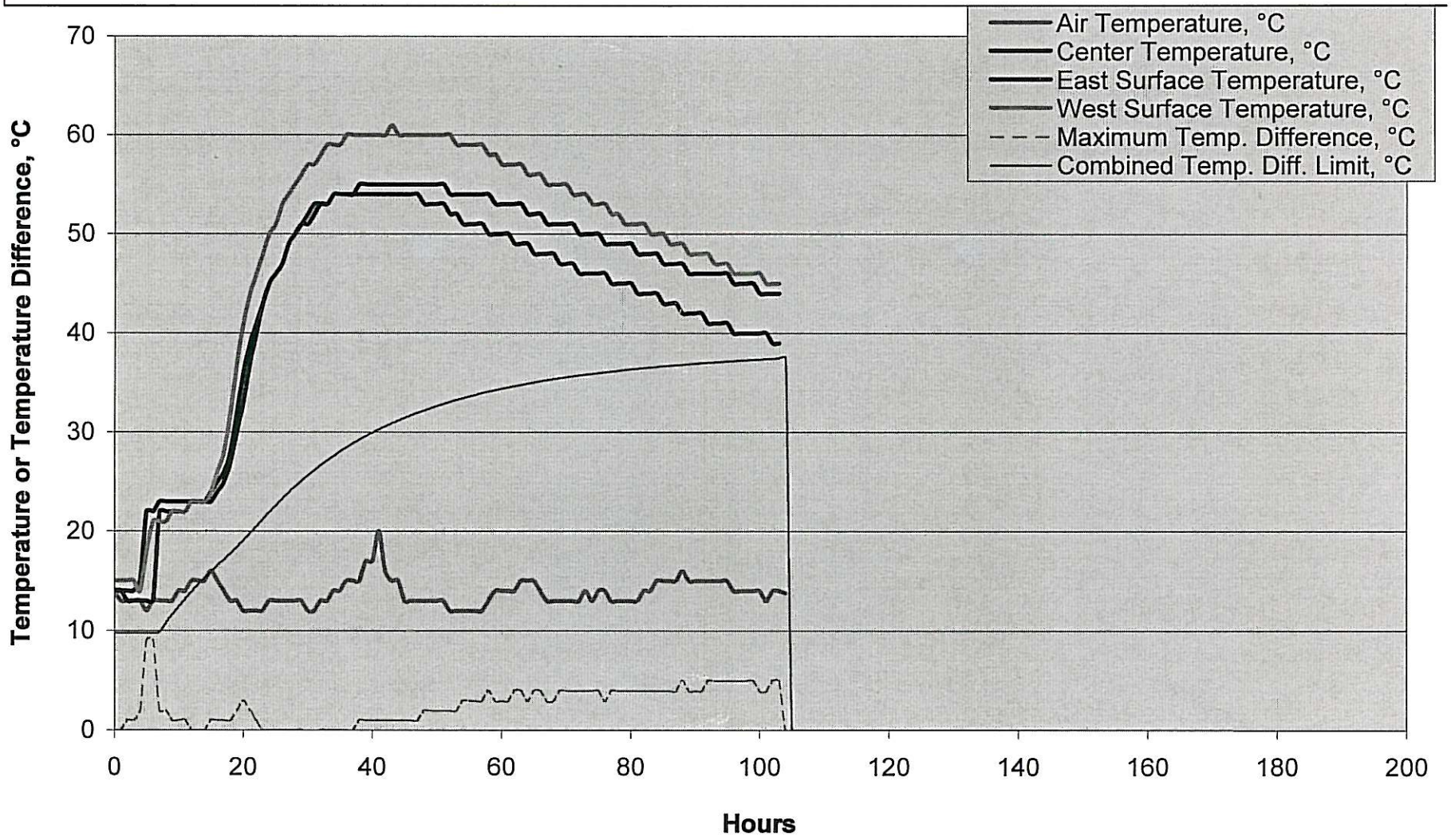
Placed on: 07-NOV-2006 - 10:00 PM Start **Concrete Mix:** SCC with Orca aggregates (see the 7-10-07 thermal plan)

Hour	Air Temperature, °C	Center Temperature, °C	East Surface Temperature, °C	West Surface Temperature, °C	Measured Maximum Temp. Difference, °C	Elapsed (Clock) Time, days	Calculated Concrete Age, days: Surface Sensor	Calculated Concrete Age, days: 2nd Surface Sensor	Estimated In-Place Compressive Strength, psi: Surface Sensor	Estimated In-Place Compressive Strength, psi: 2nd Surface Sensor	Calculated Temperature Difference Limit (from the Estimated Compressive Strength), °C: Surface Sensor	Calculated Temperature Difference Limit (from the Estimated Compressive Strength), °C: 2nd Surface Sensor	Combined Temp. Diff. Limit, °C
73	14	50	46	54	4.0	3.0	5.8	6.6	6785	7021	35.81	36.45	35.81
74	13	50	46	53	4.0	3.1	5.9	6.7	6816	7049	35.90	36.52	35.90
75	14	50	46	53	4.0	3.1	6.0	6.8	6846	7077	35.98	36.60	35.98
76	14	49	46	53	3.0	3.2	6.1	6.9	6875	7103	36.06	36.67	36.06
77	13	49	45	52	4.0	3.2	6.2	7.0	6903	7129	36.13	36.73	36.13
78	13	49	45	52	4.0	3.3	6.2	7.1	6930	7154	36.20	36.80	36.20
79	13	49	45	51	4.0	3.3	6.3	7.1	6956	7178	36.27	36.86	36.27
80	13	49	45	51	4.0	3.3	6.4	7.2	6982	7201	36.34	36.92	36.34
81	13	48	44	51	4.0	3.4	6.5	7.3	7007	7223	36.41	36.98	36.41
82	14	48	44	51	4.0	3.4	6.6	7.4	7031	7245	36.47	37.04	36.47
83	14	48	44	50	4.0	3.5	6.7	7.5	7054	7266	36.54	37.09	36.54
84	15	48	44	50	4.0	3.5	6.8	7.6	7077	7286	36.60	37.15	36.60
85	15	47	43	50	4.0	3.5	6.8	7.7	7099	7306	36.65	37.20	36.65
86	15	47	43	49	4.0	3.6	6.9	7.8	7120	7325	36.71	37.25	36.71
87	15	47	43	49	4.0	3.6	7.0	7.9	7140	7344	36.76	37.30	36.76
88	16	47	42	49	5.0	3.7	7.1	8.0	7160	7362	36.82	37.34	36.82
89	15	46	42	48	4.0	3.7	7.2	8.1	7180	7379	36.87	37.39	36.87
90	15	46	42	48	4.0	3.8	7.2	8.2	7199	7396	36.92	37.43	36.92
91	15	46	42	48	4.0	3.8	7.3	8.3	7217	7413	36.97	37.48	36.97
92	15	46	41	48	5.0	3.8	7.4	8.4	7235	7429	37.01	37.52	37.01
93	15	46	41	47	5.0	3.9	7.5	8.5	7252	7445	37.06	37.56	37.06
94	15	46	41	47	5.0	3.9	7.6	8.5	7269	7460	37.10	37.60	37.10
95	15	46	41	47	5.0	4.0	7.6	8.6	7286	7475	37.15	37.64	37.15
96	14	45	40	46	5.0	4.0	7.7	8.7	7302	7489	37.19	37.67	37.19
97	14	45	40	46	5.0	4.0	7.8	8.8	7318	7503	37.23	37.71	37.23
98	14	45	40	46	5.0	4.1	7.9	8.9	7333	7517	37.27	37.74	37.27
99	14	45	40	46	5.0	4.1	7.9	9.0	7348	7530	37.31	37.78	37.31
100	14	44	40	46	4.0	4.2	8.0	9.1	7363	7544	37.35	37.81	37.35
101	13	44	40	45	4.0	4.2	8.1	9.2	7377	7556	37.38	37.84	37.38
102	14	44	39	45	5.0	4.3	8.2	9.2	7391	7569	37.42	37.88	37.42
103	14	44	39	45	5.0	4.3	8.2	9.3	7405	7581	37.46	37.91	37.46
104	13.6				0.0	4.3	8.3	9.4	7418	7593	37.49	37.94	37.49
105					0.0	4.4	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
106					0.0	4.4	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
107					0.0	4.5	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
108					0.0	4.5	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
109					0.0	4.5	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
110					0.0	4.6	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
111					0.0	4.6	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
112					0.0	4.7	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
113					0.0	4.7	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
114					0.0	4.8	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
115					0.0	4.8	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
116					0.0	4.8	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
117					0.0	4.9	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
118					0.0	4.9	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
119					0.0	5.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
120					0.0	5.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
121					0.0	5.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
122					0.0	5.1	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
123					0.0	5.1	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
124					0.0	5.2	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
125					0.0	5.2	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
126					0.0	5.3	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
127					0.0	5.3	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
128					0.0	5.3	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
129					0.0	5.4	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
130					0.0	5.4	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
131					0.0	5.5	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
132					0.0	5.5	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
133					0.0	5.5	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
134					0.0	5.6	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
135					0.0	5.6	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
136					0.0	5.7	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
137					0.0	5.7	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
138					0.0	5.8	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
139					0.0	5.8	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
140					0.0	5.8	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
141					0.0	5.9	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
142					0.0	5.9	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
143					0.0	6.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
144					0.0	6.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
145					0.0	6.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

5031

Do Not Modify These

Coefficient	SCC			

Placement: W2 Pour 4 - SCC, Mid-height sensors (Center, East Face, West Face)

Placed on: 07-NOV-2008 - 10:00 PM Start **Concrete Mix:** SCC with Orca aggregates (see the 7-10-07 thermal plan)