

Job Stamp 04-0120F4 SFOBB SAS

Const. Calendar:	695 & 696		
Project Work Day No.:	905 & 906		
Date	11/07/2008 and 11/08/2008		
Inspectors	Start	20:40	Stop 24:00
Hours		00:00	02:30
		05:30	10:30
Shift Hours		07:00	14:30
		20:00	24:00
		00:00	02:30
		05:30	11:30

**ASSISTANT RESIDENT ENGINEER'S CONTRACTOR – ABFJV, Subs Conco and CMC-RS**

**Weather:** Clear with mild temperature from 21:00 (Friday) to 02:30 (Saturday), and overcast with cool temperatures from 5:30 to 10:30 Saturday, no wind – Hi 68°F Low 51°F (per weather.com forecast)

**Description of Operations @ W2 Cap Beam:**

**ABF**

- Foreman Nigel Lohse directed Conco during the concrete placement regarding the sequence of placing concrete and curing operations.
- A crew was dedicated to watch the forms for any leaks/blow-outs during concrete placement.
- ABF surveyors shot the top of the forms to monitor deflection which was about 1/2" to 3/4" worst case.

**Conco**

- Placed approximately 1,650m<sup>3</sup> of Self Consolidating Concrete SCC (Mix design No. 161790) in the pour 4 limits to an elevation of 53.587m.

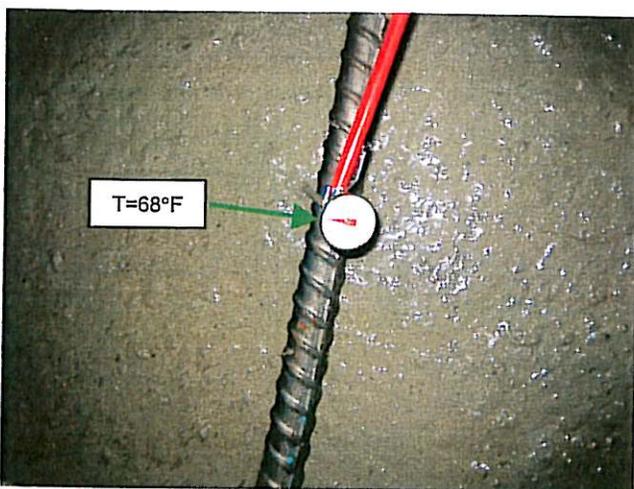
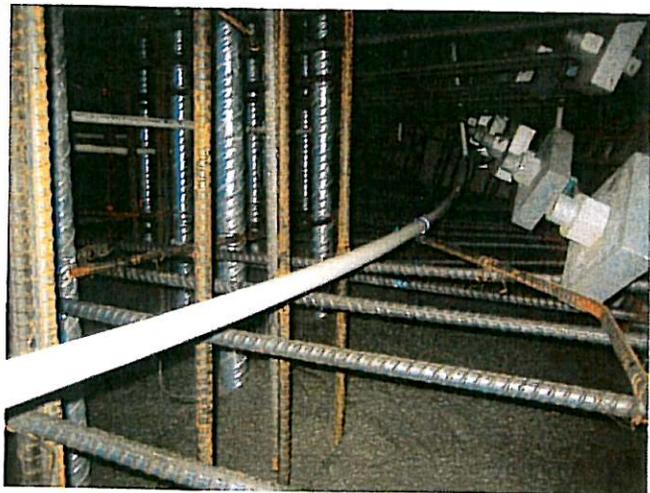
Time (military)	Comments
21:00	Arrived onsite and all three concrete pumps were mobilized. Went to the top of the W2 cap beam and began last minute inspection.
22:20	First truck arrives and flow tests begin, at this time I tried to calibrate the infrared temperature guns with mercury thermometers. The infrared guns were reading 5°F lower than the mercury thermometers. It was decided that the infrared guns wouldn't be used.
22:30	Approximate time of first concrete placement at the forms starting in the southwest corner of the cap beam. Two pumps were operational at this time located on the west and south sides of the pour 4 area. Pamela Gagnier, Seong-Hyeok Song and myself watched concrete placement at the forms.
22:40	I notified the ironworkers to fix CBT-19 which was supposed to be fixed on Wednesday. Mark Macdonald was aware of this issue and assisted the RS foreman Tim Greenlee with fixing the profile of this duct. It was difficult to see if this was fixed adequately but from the lighting available it looked "OK".
02:30	I left the jobsite to take a break so that I wouldn't work 12hrs straight.
05:30	Arrived back on the jobsite to observe concrete placement at the forms. Pamela, Seong and myself were watching the concrete placement at the forms with Art Pannu providing intermittent inspection. Three pumps were operating at this time.
07:00	Aaron Prchlik, Massoud Modanlou, and myself were watching the concrete placement at the forms.
10:30	Concrete placement was completed and I left the jobsite. Curing compound wasn't sprayed on any portion of the concrete and curing mats were not placed yet. See Massoud and Ron Matins diary for details regarding this operation.

**Additional Notes/Comments:**

1. My diary is for the concrete placement that I observed.
2. The lighting was adequate most of the time for inspection and safety. However it was very difficult to see near the column cages regardless of the lighting.
3. Overall the placement of concrete went well as the flow looked consistent with no segregation. No vibration to "awake" the SCC was done to my knowledge while I was in the field. The SCC at the end of the pour appeared to look too "wet" at times.
4. ABF and Conco were told to be cautious of the ducts/trumpets while placing concrete.



EA	04-0120F4
Co-Rte-KP (PM)	SF-080-13.2/13.9 (8.2/8.7)
Structure Rep.	Rick Morrow

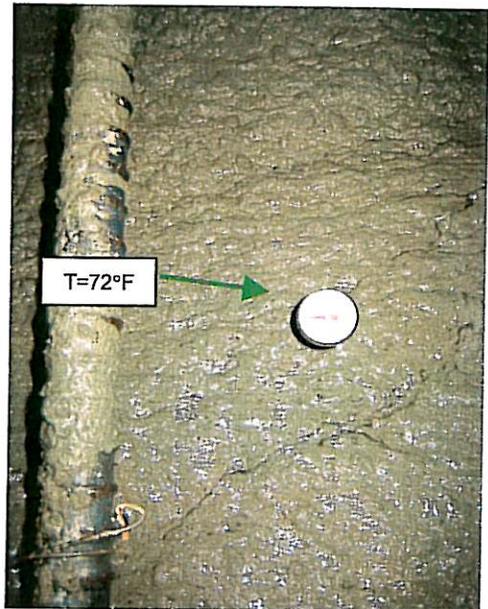


File Name:	Nov-07and08-2008 W2 Cap 013
Date:	11-08-08
By Int:	M Bruce

Description: SCC placement near the W2E deviation saddle as there appeared to be a minor "valley" in this area. ABF foreman Nigel Lohse was notified of this issue. He agreed to place approximately three trucks (discharge time of 20-30min) in one spot then move the hose to a different location.

File Name:	Nov-07and08-2008 W2 Cap 014
Date:	11-08-08
By Int:	M Bruce

Description: SCC temperature of 68°F taken at the location seen in photo 13.



File Name:	Nov-07and08-2008 W2 Cap 019
Date:	11-08-08
By Int:	M Bruce

Description: Flow test done at 01:20am Saturday morning as this diameter was on the "high side" of 28-30inches. This patty looked similar to the "wet" loads observed up top.

File Name:	Nov-07and08-2008 W2 Cap 024
Date:	11-08-08
By Int:	M Bruce

Description: SCC temperature of 72°F taken close to the hose approximately 2m away. The temperature of the SCC was taken 6 times as the range was 68°F to 72°F and the estimated average was 70°F of the concrete placed at the forms. This was well below the allowed temperature of the initial concrete of 80°F per the TCP.

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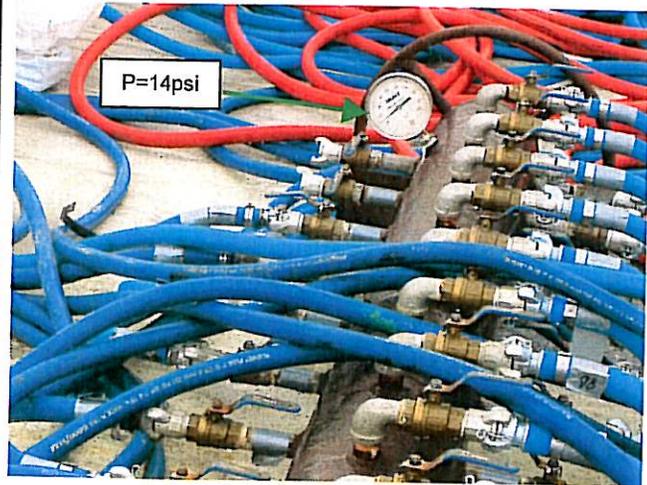


File Name:	Nov-07and08-2008 W2 Cap 029
Date:	11-08-08
By Int:	M Bruce

Description: Photo taken at 7:00am Saturday morning as three pumps were operating at once. I recommended to ABF foreman Nigel Lohse to place SCC in the middle of the W2E column cages as it is difficult to have the flow come from the outside-in.

File Name:	Nov-07and08-2008 W2 Cap 035
Date:	11-08-08
By Int:	M Bruce

Description: ABF and Conco were advised to ensure that concrete was evenly placed in the sloped portion of the west wall. I also told them that I don't want concrete being placed on or close to the edge of the forms. This was said to prevent concrete from falling over the edge like a waterfall. Mark MacDonald is seen in the photo assisting the Conco laborers with the placement of SCC in this area.



File Name:	Nov-06-2008 W2 Cap 036
Date:	11-08-08
By Int:	M Bruce

Description: One of the final loads of SCC being placed around the Macalloy rods and CBT-2 and CBT-6 ducts. Nigel and Mark were informed to try and not leave portions of these PT components exposed if possible. They complied with the request.

File Name:	Nov-06-2008 W2 Cap 038
Date:	11-08-08
By Int:	M Bruce

Description: The pressure of the water-cooling system at the manifolds was 14psi and the temperature was around 50°F at the end of concrete placement. It appear that the PVC pipes had water running through them during the pour.