Daily Diary Report by Bid Item

Contract No.: 04-0120F4
Diary #: 1089 **Const Calendar Day:** 662 **Date:** 28-Mar-2014 **Friday**
Inspector Name: Brignano, Bob **Title:** Transportation Engineer
Inspection Type:
Shift Hours: **Break:** **Over Time:**
Federal ID:
Location:
Reviewer: Schmitt, Alex **Approved Date:** **Status:** Submit

04-0120F4
04-SF-80-13.2/13.9
Self-Anchored
Suspension Bridge

Weather

Temperature **7 AM** **12 PM** **4PM**
Precipitation **Condition** partly cloudy

Working Day ☑ If no, explain:

Diary: Dispute ☐

General Comments

CCO 314, SAMPLING AND TESTING A354 GRADE BD MATERIAL:

ABF Engineer Kelvin Chen is working part time in the field and office on CCO 314.

On site today from VGO are Rob Rutledge and Nick Buck. VGO arrives on site at 0800, take lunch between 1200 and 1300, and leave the site at 1500. They then go to the airport after leaving the site, so that Nick can fly out of the Bay Area this evening.

VGO primarily works today on the program to collect the data, add the calculated channels, and produce plots for the two times a day reports for TR's 12 &13. Also today, VGO installs the displacement transducers at TR 13 after ABF completes work on the jacking beam, jacks, and blocking below the jacks.

Crews at the Pier 7 warehouse area are working an 8-hour shift 0700 through 1530 today, with the work of one ironworker (Jared Garret) and one operator (John Sabatino) on CCO 314 all day and the work of one laborer (Carlos (Pedro) Garcia) for most of the day on CCO 314 (all day after 0800).

First thing in the morning, the ironworker and operator remove the compressor that had been at the test rig work area because it has been sold, and they replace it with a different compressor. Then they move on to work at TR's 12 & 13 on the jacking beams. For previous jacking beam adjustments at other test rigs (TR's 1-11), the jacking beam had been set, checked with the jacking rod through the holes in the jacking beam, the jacking beam removed, the blocking under the stainless steel slide plate adjusted, and the process repeated as many times as necessary to get the rod through the center of the jacking beam holes. Sometimes in the past, the jacking beam has been lifted in place with the jacking rod and the blocking adjusted under the stainless steel slide plate. For today's work, ABF intends a different process where the jacking beam and the stainless steel slide plate are clamped together, lifted together, and the blocking adjusted in place – this avoids installing and removing the jacking beam in the iterative process that is used to adjust the blocking and also gets the stainless steel slide plate out of the way. The ironworker and operator start at TR 13, where they remove the guide angles to gain access to the blocking from the side. Then the jacking beam is clamped to the stainless steel slide plate. For shimming adjustments to the blocking, they do not have all the timber pieces they need, so the laborer is called over to the test rig work area at about 0800 to cut new shims of varying thicknesses. By about 0900, the shimming under the stainless steel slide plate at the jacking beam at TR 13 is complete. Note that in steps to complete this work, the jacking rod is shimmed up in the area between the test rig and the jacking beam, and we decide to leave this shimming in place for the duration of the future jacking steps – this blocking is accessible and can be removed in the future if necessary. After completion of the shimming under the stainless steel slide plate at the jacking beam at TR 13 is complete, the guide angles are

reinstalled and the jacks are installed. The two jacks used are the 400 ton jacks 11A and 11B, which are the jacks recently used at this location for TR 11. Note that the VGO pressure transducer for recording the jacking pressure is already at TR 13 where it was left after the completion of work at TR 11 (TR 11 converted to TR 13). The jacks are in place at TR 13 by 1000. After the morning break, the jacking beam is pulled back tight against the jacks with this work complete about 1040 – the jacking beam had previously been set a few inches to the north to leave a gap between the test rig and the jacking beam to provide room for installing the jacks. With the jacks in place at TR 13, the laborer beings work to add blocking under the jacks – the jacks rest on lugs welded to the end plate and the jacking beam, but the plans also call for blocking under the jacks. The blocking is set so that it does not push the jacks up off the lugs (jacks would react in the non-centered position if they were shifted) and are more like backup or secondary support for the jacks. Also, the blocking under one of the two jacks (the east jack) needs to be compact so that it will not interfere with the VGO displacement transducer setup that clamps to the jacking rod, extends as far away as possible from the jacking rod towards the jacks, and reacts against the end plate. The laborer finishes blocking under the jacks at TR 13 by 1340.

After 1045, while the laborer is starting work on blocking at TR 13, the ironworker and operator start work at the jacking beam, stainless steel slide plate, and blocking at TR 12. They remove the guide angles, clamp the stainless steel slide plate to the jacking beam, and raise the beam/plate together to adjust the blocking. By 1255, the blocking under the slide plate under the jacking beam is complete. Then, the guide angles are reinstalled, the jacks are installed, and the jacking beam pulled tight against the jacks. The two jacks used are the 400 ton jacks 10A and 10B, which are the jacks recently used at this location for TR 10. Note that the VGO pressure transducer for recording the jacking pressure is already at TR 12 where it was left after the completion of work at TR 10 (TR 10 converted to TR 12). By about 1330, work by the ironworker and operator is complete at TR 12.

After 1340, the laborer does some cleanup inside the TR 12 and TR 13 wet chambers – vacuum any debris from inside the test rig wet chambers and wipe down the rods before the end plates are erected. After 1330, the ironworker and operator rotate the jacks at TR's 12 and 13 so that the valves for the hydraulic hoses are properly positioned away from the jacking rod area where hydraulic hoses would interfere with the work to tighten the nut against the end plate during the tensioning steps. The TR's 12 and 13 jacking rod positions are adjusted longitudinally so that the coupler distance from the inside face of the south end plate is correct. The rotations of the rods are also adjusted so that the top strain gauges are on top – the rods rotated slightly during installation of the jacking beams. The rod positions and rotations are ok by 1415. Then, the ironworker installs the nuts and washers on the north end of the jacking beams at TR's 12 & 13. After the afternoon break, the wet chambers are sealed with visqueen, the handholes in the test rigs are covered, and the VGO displacement transducers are covered with visqueen because of forecast rain this weekend. The tools are put away so they are protected from the weather this weekend. The new compressor brought to the test rig work area first thing this morning was located in the low area next to the intentionally plugged DI (the plugged DI is per the approved SWPPP) and has an oil drip pan just off the ground with some older oils, so the compressor is raised and set on blocking so that the drip pan will be above the top of the lake that will form in the area with the forecast rain and intentionally plugged DI.

CT-METS Elijah Turner and Kevin Warring are at the test rigs between about 1330 and 1430, where they are doing pencil lead breaks for the AE sensors on the test rods at TR's 12 & 13. They are doing this before the installation of the end plates on the south end of the test rigs which block access to a significant portion of the length of the rod – these PLB's are to check the ability of the two sensors to locate the position along the length of the rod. They do this work with a temporarily placed (with grease to act as a couplant) AE sensor on the stickout end of the rod – a permanently placed AE sensor would be in the way of the next operation when the end plate is erected.

A 7kW generator – Whisperwatt 7000 – ABF ID 002343 is used for most of the day. An oxyacetylene torch is on idle/standby at the test rig work area. A compressor – IR P185R ABF ID 002078 has been at the test rig work area, but ABF has recently sold it, so first thing this morning the compressor is removed from the test rig work area. A new compressor – IR P185 ABF ID 000002 is brought to the test rig work area right after the other compressor is removed. An Extendable Forklift and a small Hyster 80 are used

at the test rig work area for parts of the day. A Kubota Cart is used for most of the day at the test rig work area.

Note that there is k-rail at this work area. Some of the k-rail is rented and addressed by the rental agreement. Some of the k-rail is ABF's k-rail used on site and paid as rented from ABF on a daily basis. To elevate the k-rail, crane mats and timber blocking (12x12's) are in use. The k-rail quantities are as follows:
10' bought k-rail = 20 pieces
10' ABF k-rail = 4 pieces
20' rented k-rail = 16 pieces
20' ABF k-rail = 19 pieces
Note that this includes three 20' ABF k-rail between the CCO 314 work area and FW Spencer's yard, with that k-rail being in place prior to the CCO work and not related to CCO 314.

The agreed extra work with ABF is as follows:
Engineer Kelvin Chen - 6 hr
Ironworker Jared Garrett - 8 hr
Operator John Sabatino - 8 hr
Laborer Carlos (Pedro) Garcia - 7 hrs
Radio (3 radios) - 23 hrs
Kubota Cart - 7 hrs
Extendable Forklift - 6 hrs
Hyster 80 Forklift - 2 hrs
7 kW Generator - 7 hrs
k-rail: 16 pcs @20' and 4 pcs @10'
Crane Mats (12x12 - 5'x16') - 4 pcs
Crane Mats (12x12 - 5'x7') - 4 pcs
Crane Mats (12x12 - 5'x8') - 11 pcs
See the attached Extra Work Order - Signed with ABF for CCO 314 work