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January 25, 2007

Mr. Ken Noble 2273 Reflection Circle Vista, CA 92081

Subject: Crush and deflection testing on the EZ Pads

Dear Ken,

Western Industries contacted Chevron Phillips Chemical Co. LP, requesting assistance in testing the EZ pads for crush and deflection in extreme climate conditions.

This letter contains the results of that study.

Background and Sample Description: I.

The general purpose of the study was to determine the amount of deflection the EZ Pads would exhibit over the course of a 1000 hour test under extreme climate conditions while subjected to a nominal weight load of 200 pounds per square foot.

Two tests were performed to observe part deflection.

The first was conducted in a hot room at \$40°F. The sample was a full 4x4 foot pad on which 3200 lbs, was loaded evenly over the surface of the pad. This weight generated 200 lbs. per square foot.

The second test was held in a cold room at -20°F. The sample was a 2x2 foot section of a pad on which 800 lbs. was loaded evenly, generating 200 lbs. per square foot.

A third test was performed on a 1x1 foot corner section to try and determine the amount of force necessary to produce a catastrophic structural failure. A compression molding press at ambient temperature was used for this test.

u. Results and Conclusions:

Starting the with the hot room 140 F test:

Due to complications encountered with the weight system used, the last accurate reading recorded for this test was at 250 hours. After discussion with Western Industries, and considering the minimal deflection observed up to that point, it was decided to conclude the test at the 250 hour point. Data collected is shown in table I.

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Table I. Final Data Collected During the Hot Room Study at 140°F

Deformation from the initial measurement to one hour after the weight was applied	2.5481" to 2.5034" = 0.0447" deformation
Deformation from the 1 hr. measurement to the 17 hr. measurement at ambient temperature	e 2.5034" to 2.5006" = 0.0028" deformation
Deformation from the 17 hr. measurement to the 250 hr. measurement at 140°F	
Total deformation between initial measureme and last good reading at 250 hrs	t 2.5481" to 2.4860" = 0.0621" Total deformation

2. Cold room testing at -20°F.

The cold room testing was able to successfully run for the full 1000 hours. Data from this testing is contained in Table || | |

Table II. Final Data Collected During the Cold Room Study at 20°F

Deformation from the initial measurement to one hour after the weight was applied	3.0646" to 3.0411" = 0.0235" deformation
Deformation from the 1 hr. measurement to the 250 hr. measurement at -20°F	e 3.0411" to 3.0709" = - 0.0298" deformation
Deformation from the 250 hr. measurement to the 500 hr. measurement at -20°F	3.0709" to 3.0520" = 0.0189" deformation
Deformation from the 500 hr. measurement to the 1000 hr. measurement at -20°F	3.0520" to 3.0393" = 0.0127" deformation
Total deformation between initial measureme and the last reading at 1000 hrs.	t 3.0646" to 3.0393" = 0.0253" Total deformation

3. Results of trying to create a catastrophic failure or crush using a compression molding press.

To obtain data, it was decided to use a 1'x1' cutout from the corner of the part. This section was placed in a press used to make compression plaques for lab testing. The press was left at ambien temperature and force was slowly applied with the intent of applying increasing pressure until significant deformation was observed.

With the exception of some minor deformation at the very beginning of the test until the part "settled into a load bearing posture", no significant deformation was noticed through the first several thousand pounds of force. By 5000 lbs. there was minor deformation observed but nothing that would be considered significant. Force was increased, attempting to reach a crush force. At 10,000 lbs. it was noticed that due to minor uneven deformation of the park the press platens were not staying parallel. While catastrophic failure had still NOT

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occurred, it was discovered that the press had bound up. Manual force was required to realign the platens so the press could be opened. Fear of equipment damage vetoed a repeat of the test. Conclusion was, quoting the technicians that performed the test. That base is one tough part!!

Attached to this letter are pictures showing the testing in process for the cold room study, and a picture of the part deformation resulting from the attempted crush study.

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If I can be of further assistance, please do not hesitate to contact me.

Regards,

Tom Morton

Attachment