Pittsburgh, PA 15206-4489
(412) 365-1000

## MEMORANDUM: <br> 02-124

DATE:
December 3, 2002
TO:
Sequence IIIF Surveillance Panel
FROM:


SUBJECT: Reference Oil 1008-1 Test Target Review
At the March 5, 2002 meeting of the Sequence IIIF Surveillance Panel the panel approved a motion to introduce reference oil 1008 into the LTMS using the final targets for reference oil 1008. When five data points became available the TMC was to generate test targets based upon this data for review, and possible introduction, by the panel. The targets for this oil will also be updated when 10,20 , and 30 data points become available. At this time the TMC has received seven data points on this oil and has generated preliminary test targets based upon this data. These preliminary targets, based on these seven data points, are shown in the following table:

| Parameter | Mean | Standard Deviation |
| :---: | :---: | :---: |
| PVIS | 0.0862815 | 0.0104362 |
| WPD | 4.52 | 0.975 |
| APV | 9.65 | 0.254 |
| PV60 | 4.42956 | 0.185943 |

Any applicable severity adjustments were applied to the data prior to target generation. The data used to generate these targets is shown in Tables $1 \& 2$. Table 2 contains severity-adjusted data with the adjusted parameters shown in italics. The above test targets, as well as the severity-adjusted data used to generate them, the raw test targets, and the final targets for reference oil 1008, are shown in the following figures. Figure 1 shows the PVIS data in transformed units. Figure 2 shows the PVIS data in original units. Figure 3 shows the WPD data in original units. Figure 4 shows the APV data in original units. Figures $5 \& 6$ show the PV60 data in a manner similar to Figures $1 \& 2$ respectively.

These targets are preliminary only at this time. If the panel wishes to implement them into the LTMS, formal action by the panel is required.

## MTK/mtk

Attachments
c: John L. Zalar, TMC
ftp://www.astmtmc.cmu.edu/docs/gas/sequenceiii/memos/mem02-124.pdf
Distribution: Electronic Mail

| TESTKE |  | LTMSAPP | IND | VAL | LTMSDAT | MSTIME | PVIS | PVISTI | APV | WPD | PV60 | ACLW | SACL | CON |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 44914 | A | 7 | 1008-1 | AC | 10/6/2002 | 22:07 | 172.4 | 0.076161 | 9.69 | 4.2 | 102.66 | 12.6 | 12.2 | 3.58 |
| 44917 | A | 4 | 1008-1 | AC | 11/1/2002 | 18:53 | 109.1 | 0.095739 | 9.76 | 4.22 | 68.84 | 10.8 | 10.6 | 3.17 |
| 44907 | B | 2 | 1008-1 | OC | 11/25/2002 | 9:20 | 215.4 | 0.068136 | 9.12 | 3.54 | 110.3 | 84.5 | 60.9 | 3.67 |
| 44883 | G | 5 | 1008-1 | OC | 7/2/2002 | 14:21 | 131.8 | 0.087105 | 9.52 | 5.63 | 85.61 | 129 | 112.8 | 3.73 |
| 44885 | G | 5 | 1008-1 | AC | 7/13/2002 | 8:23 | 124 | 0.089803 | 9.8 | 4.57 | 67.17 | 10.2 | 9.8 | 3.47 |
| 44886 | G | 3 | 1008-1 | AC | 11/2/2002 | 10:52 | 122 | 0.090536 | 9.81 | 3.95 | 80.77 | 12.9 | 13 | 3.76 |
| 44897 | M | 1 | 1008-1 | AC | 10/7/2002 | 5:28 | 131.3 | 0.087271 | 9.82 | 5.71 | 80.79 | 5.8 | 5.6 | 3.31 |


| TESTKEY | LTMSLAB | LTMSAPP | IND | VAL | LTMSDATE | LTMSTIME | PVIS | PVISTI | APV | WPD | PV60 | ACLW | SACLW | OILCON |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 44914 | A | 7 | $1008-1$ | AC | $10 / 6 / 2002$ | $22: 07$ | 172.4 | 0.076161 | 9.69 | 4.66 | 102.66 | 12.6 | 12.2 | 3.58 |
| 44917 | A | 4 | $1008-1$ | AC | $11 / 1 / 2002$ | $18: 53$ | 109.1 | 0.095739 | 9.76 | 4.22 | 68.84 | 10.8 | 10.6 | 3.17 |
| 44907 | B | 2 | $1008-1$ | OC | $11 / 25 / 2002$ | $9: 20$ | 215.4 | 0.068136 | 9.12 | 2.9 | 110.3 | 84.5 | 60.9 | 3.67 |
| 44883 | G | 5 | $1008-1$ | OC | $7 / 2 / 2002$ | $14: 21$ | 107.8 | 0.096326 | 9.52 | 5.63 | 85.61 | 129 | 112.8 | 3.73 |
| 44885 | G | 5 | $1008-1$ | AC | $7 / 13 / 2002$ | $8: 23$ | 124 | 0.089803 | 9.8 | 4.57 | 67.17 | 10.2 | 9.8 | 3.47 |
| 44886 | G | 3 | $1008-1$ | AC | $11 / 2 / 2002$ | $10: 52$ | 122 | 0.090536 | 9.81 | 3.95 | 80.77 | 12.9 | 13 | 3.76 |
| 44897 | M | 1 | $1008-1$ | AC | $10 / 7 / 2002$ | $5: 28$ | 131.3 | 0.087271 | 9.82 | 5.71 | 80.79 | 5.8 | 5.6 | 3.31 |

Figure 1

Data Group


Data Group
Memo 02-124
Figure 3

Data Group

Data Group

Data Group
Memo 02-124
Figure 6

Data Group

