COAST SIDE PINION SCORING
Unit of Measure: % Scoring
Gear Batch P2DA01

Reference Oil	Mean	Standard Deviation
117	23.0	5.49

B. Acceptance Criteria

1. New Test Stand

- A minimum of four (4) operationally valid calibration tests, with no stand Shewhart severity alarms, must be conducted. Three (3) tests must be conducted on reference oil 114, 115, 116, 117 or subsequent approved reblends. All three tests must be completed on the same reference oil. The remaining one (1) calibration test must be conducted on discrimination reference oil 112, 113, 119 or subsequent approved reblends. The end of test coast side pinion scoring value of the discrimination oil must be a minimum of twice the average value of the preceding three (3) acceptable reference oil tests. If a second discrimination oil test is needed, the test, if acceptable, will count as one (1) of the 15 non-reference oil tests. In the event that neither discrimination oil test meets the above requirement, a complete new calibration sequence must be performed. The results from tests conducted on discrimination oils are not charted.

- All operationally valid calibration test results must be charted to determine if the test stand is currently "in control" as defined by the control charts from the Lubricant Test Monitoring System.

2. Existing Test Stand

- The test stand must have been an ASTM TMC calibrated test stand prior to LTMS introduction or previously accepted into the system by meeting LTMS calibration requirements.

- A test stand must complete three (3) operationally valid calibration tests, with no stand Shewhart severity alarms, on reference oil 114, 115, 116, or subsequent approved reblends. All three tests must be completed on the same reference oil. Every six months or fourth calibration sequence, an additional test must be conducted on discrimination reference oil 112, 113, 119 or subsequent approved reblends. The end of test coast side pinion scoring value of the discrimination oil must be a minimum of twice the average value of the preceding three (3) acceptable reference oil tests. If a second discrimination oil test is needed, the test, if acceptable, will count as one (1) of the 15 non-reference oil tests. In the event that neither discrimination oil test meets the above requirement, a complete new calibration sequence must be performed. The results from tests conducted on discrimination oils are not charted.

3. Reference Oil Assignment

Once test stands have been accepted into the system, the TMC will assign reference oils for continuing calibration according to the following reference oil mix:

Gear Batch	Oil Assignments
P8L123	Assign either three 116, three 115, or three 114 oils (or subsequent reblend). Every 6 months or fourth calibration sequence, also assign one discrimination oil 112.
P8L119	Assign three 116 oils (or subsequent reblend). Every 6 months or fourth calibration sequence, also assign one discrimination oil 112 or 113.
P8L205	Assign either three 116, three 115, or three 114 oils (or subsequent reblend). Every 6 months or fourth calibration sequence, also assign one discrimination oil 112.
P8L737	Assign either three 115 or three 114 oils (or subsequent reblend). Every 6 months or fourth calibration sequence, also assign one discrimination oil 112.
P8L327	Assign either three 116 or three 115 oils (or subsequent reblend). Every 6 months or fourth calibration sequence, also assign one discrimination oil 112.
P8L604	Assign either three 116 or three 115 oils (or subsequent reblend). Every 6 months or fourth calibration sequence, also assign one discrimination oil 112.
P4L806	Assign three 116 oils (or subsequent reblend). Every 6 months or fourth calibration sequence, also assign one discrimination oil 112, 113 or subsequent reblends.
P8T025A	Assign three 116 or 117 oils (or subsequent reblend) or see the test procedure for alternate single test calibration requirements. Every 6 months or fourth calibration sequence, also assign one discrimination oil 112, 113 or subsequent reblends.
P8AD078X	Assign three 116 or 117 oils (or subsequent reblend) or see the test procedure for alternate single test calibration requirements. Every 6 months or fourth calibration sequence, also assign one discrimination oil 112, 113, 119 or subsequent reblends.
P8AD132	Assign three 116 or 117 oils (or subsequent reblend) or see the test procedure for alternate single test calibration requirements. Every 6 months or fourth calibration sequence, also assign one discrimination oil 112, 113, 119 or subsequent reblends.
P2DA01	Assign three 117 oils (or subsequent reblend) or see the test procedure for alternate single test calibration requirements. Every 6 months or fourth calibration sequence, also assign one discrimination oil 119 or subsequent reblends.

Note: See Sections 1 & 2 above for more details on oil assignments.

4. Control Charts

In Section 1, the construction of the control charts that constitute the Lubricant Test Monitoring System is outlined. The constants used for the construction of the control charts for the L-42, and the response necessary in the case of control chart limit alarms, are depicted below.

L-42 Reference Oil Targets (continued)						
Oil	Gear Batch	N	Effective Dates		Coast Side Pinion Scoring	
			From[1]	To[2]	$\overline{X}$	s
116-1	P8L123[7]	--	3-1-09	***	22.9	4.81
	P8L205[7]	--	3-1-09	***	22.9	4.81
	P8L327[7]	--	3-1-09	***	22.9	4.81
	P8L604[7]	--	3-1-09	***	22.9	4.81
	P4L806[7]	--	3-1-09	***	25.1	5.49
	P8L119	10	3-22-09	***	23.0	5.49[8]
	P8T025A	10	4-17-12	***	23.0[9]	5.49[9]
	P8AD078X	10	3-7-15	***	23.0[9]	5.49[9]
117	P8T025A	10	5-29-14	***	23.0[10]	5.49[10]
	P8AD078X	10	3-7-15	***	23.0[9,10]	5.49[9,10]
	P8AD132 (Pinion ID's C1L446, C1L637)	10	11-9-17	***	23.0[9,10]	5.49[9,10]
	P2DA01	10	10-30-23	***	23.0[9,10]	5.49[9,10]

1 Effective for all tests completed on or after this date	6 Targets based on gear batch P8L604
2 ***currently in effect	7 Targets based on oil 116
3 Targets based on oil 114	8 Standard deviation based on gear batch P4L806
4 Targets based on oil 114-1	9 Carried over from previous hardware batch
5 Targets based on gear batch P8L327	10 Target based on 116/116-1. A +6% correction factor is used with this oil to maintain parity with 116/116-1