

T13 OIL CONSUMPTION TESTING
INTERTEK AUTOMOTIVE RESEARCH
GARRETT WHITE

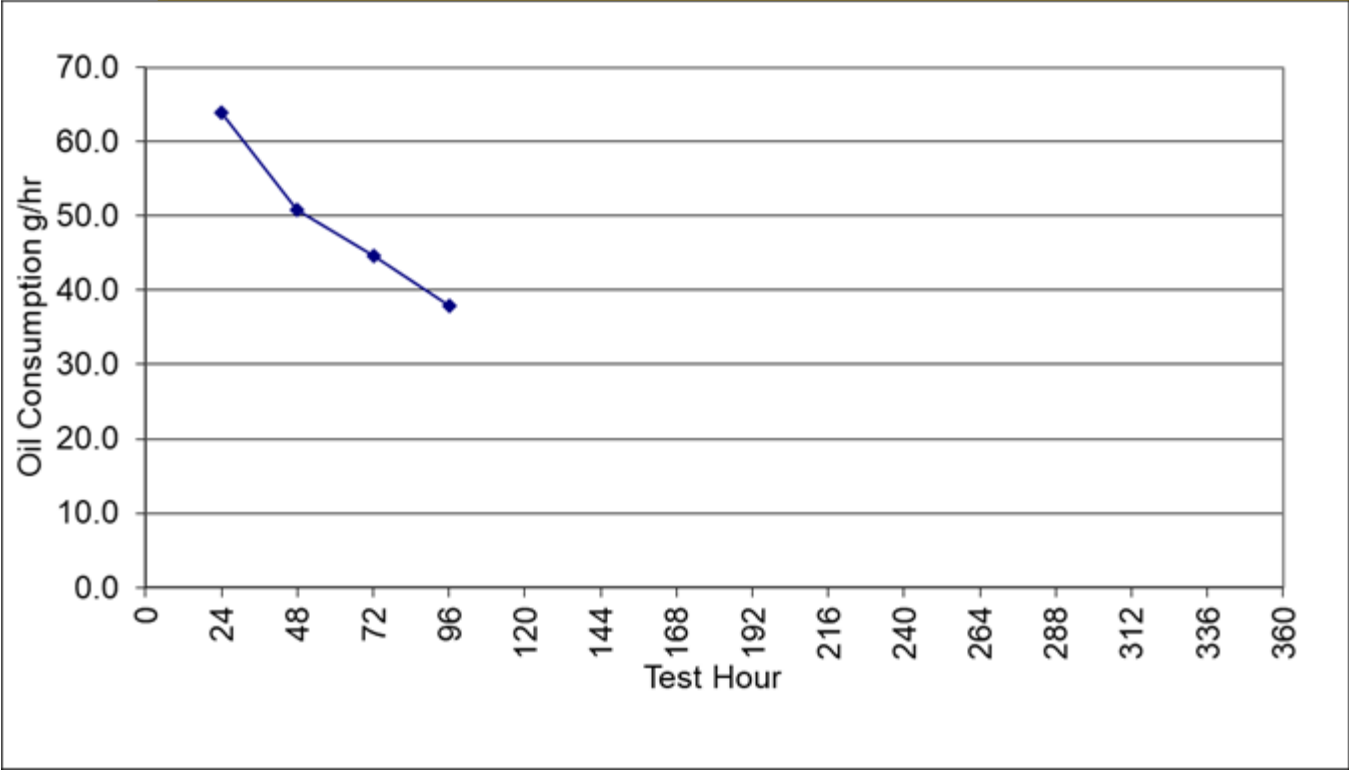
3/19/2024



RUN 1

- Reference oil 823-1
- Kit 939, all original hardware
- 96-hours
- Average OC 24-96 hours = 44.4 g/ hr

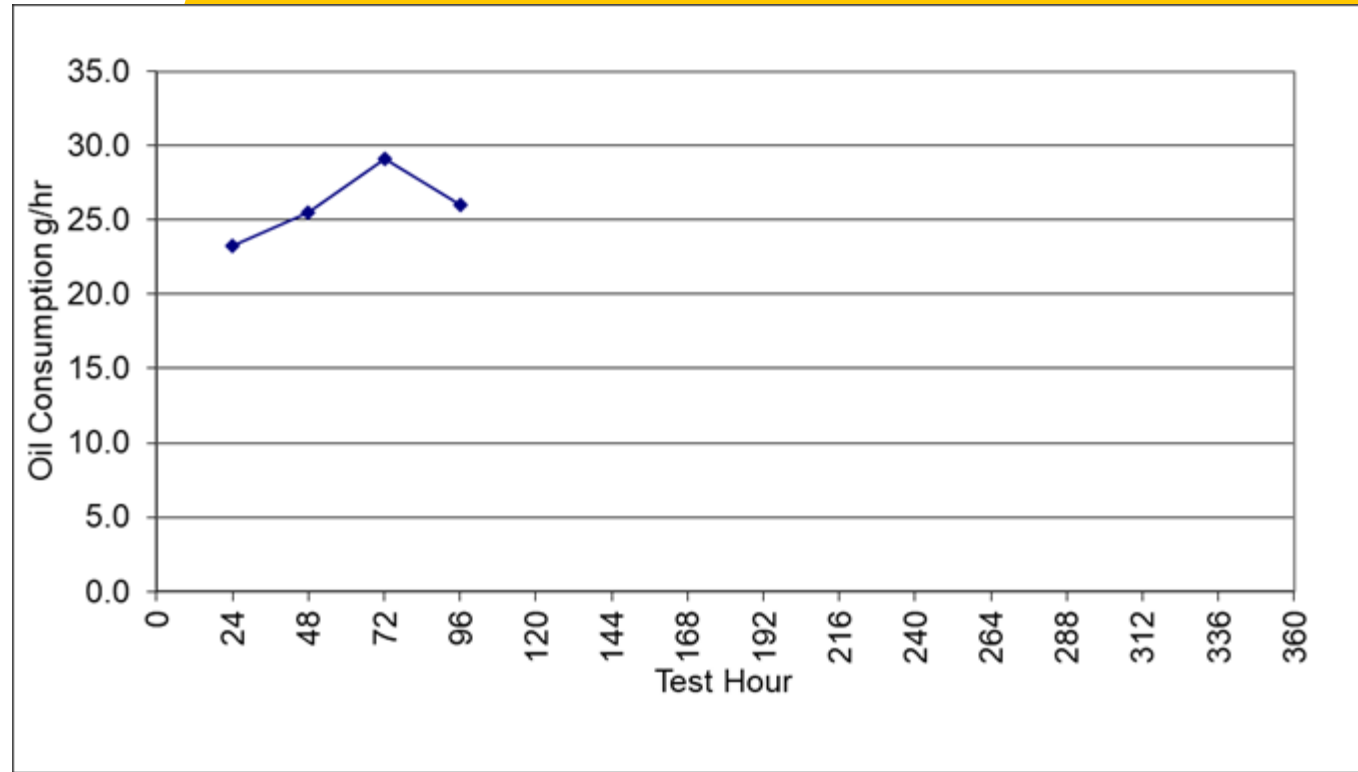
	Run 1	Run 2	Run 3
Pistons	939	939	939
Rings	939	866	939
Liners	939	939	939
OC Avg. (g/hr)	44.4	-	-



RUN 2

- Reference oil 823-1
- Kit 939 liners and pistons, kit 866 piston rings
 - Kit 866 from recent reference on 823-1:
Average oil consumption = 25.3 g/hr
- 96 hours
- Average OC 24-96 hours = 26.9 g/hr.

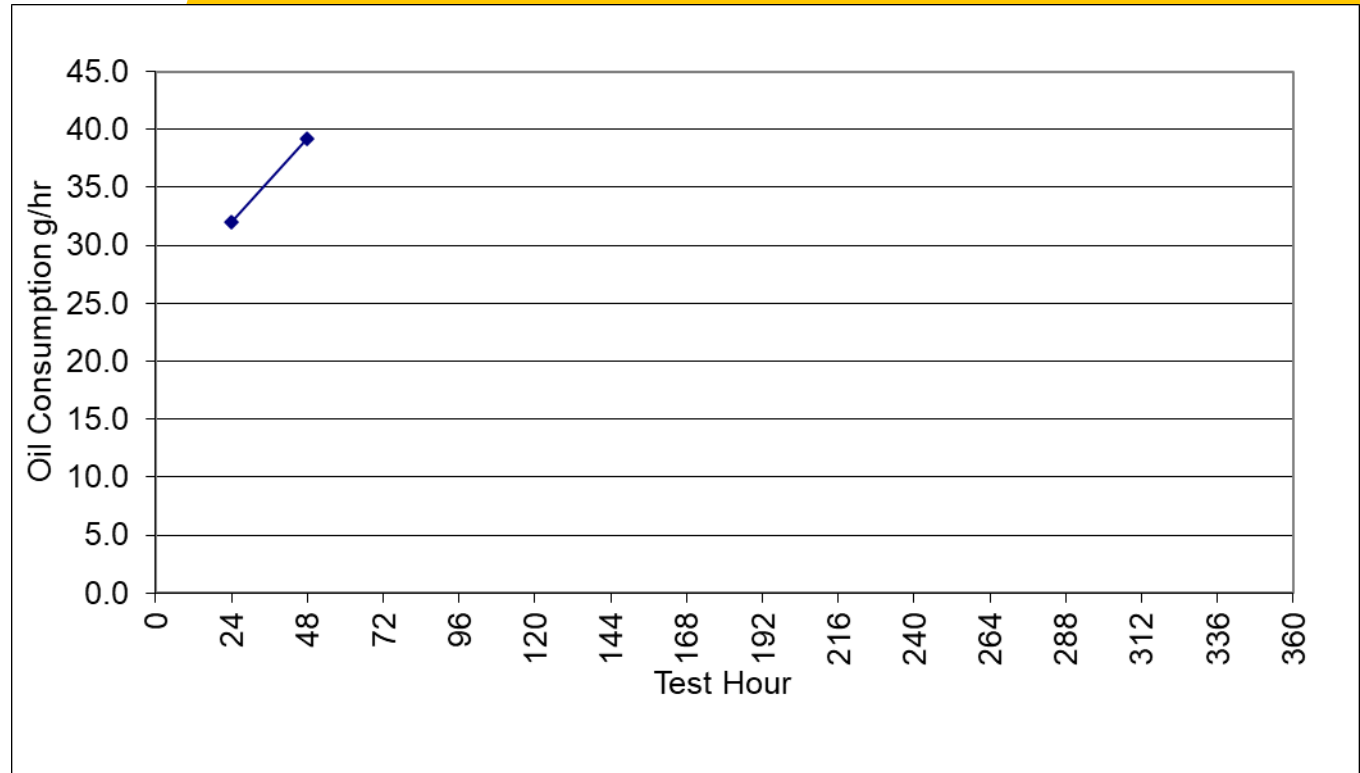
	Run 1	Run 2	Run 3
Pistons	939	939	939
Rings	939	866	939
Liners	939	939	939
OC Avg. (g/hr)	44.4	26.9	-



RUN 3

- Reference oil 823-1
- Repeat of run 1
 - Determine if wear-in of liners in run 1 impacted oil consumption on run 2
- 39 of 96 hours completed
- OC Rate 24-39 hours = 39.2 g/hr.

	Run 1	Run 2	Run 3
Pistons	939	939	939
Rings	939	866	939
Liners	939	939	939
OC Avg. (g/hr)	44.4	26.9	-



KIT 939 TEI KIT INFORMATION



Liners			Pistons			Top Ring		
939 - Original Hardware	1	21334768 050322 09 0311 44809 E3224	1	21170742 1105875 69 8223 000 02	1	000 1017729		
	2	21334768 050322 10 0311 44809 E3224	2	21170742 1105875 69 8223 000 02	2	000 1017729		
	3	21334768 050322 08 0311 44809 E3224	3	21170742 1105875 69 8223 000 02	3	000 1017729		
	4	21334768 050322 09 0311 44809 E3224	4	21170742 1105875 69 8223 000 02	4	000 1017729		
	5	21334768 050322 08 0311 44809 E3224	5	21170742 1105875 69 8223 000 02	5	000 1017729		
	6	21334768 050322 08 0311 44809 E3224	6	21170742 1105875 69 8223 000 02	6	000 1017729		

2nd Ring		Oil Ring	
1	000 1020839	1	0000 959071
2	000 1020839	2	0000 959071
3	000 1020839	3	0000 950338
4	000 1020839	4	0000 974707
5	000 1020839	5	0000 950338
6	0000 998891	6	0000 959071

- All liners are Batch D
- Kit chosen due to consistencies in pistons and ring sets

Mahle Piston Date Codes	
Cyl. No.	Date Code
1	0123 1218
2	0123 1304
3	0123 1305
4	0123 1322
5	0123 1302
6	0123 1302

KIT 866 TEI KIT INFORMATION

Liners			Pistons			Top Ring		
866 - Used Reference	1	Batch C	1	21170742 1104234 69 8223 000 02	1	0000 934711		
	2	Batch C	2	21170742 1104234 69 8223 000 02	2	0000 914893		
	3	Batch C	3	21170742 1104234 69 8223 000 02	3	0000 934730		
	4	Batch C	4	21170742 1104234 69 8223 000 02	4	0000 934711		
	5	Batch C	5	21170742 1104234 69 8223 000 02	5	0000 934730		
	6	Batch C	6	21170742 1104234 69 8223 000 02	6	0000 903045		

2nd Ring		Oil Ring	
1	0000 897134	1	0000 945960
2	0000 909581	2	0000 900345
3	0000 934780	3	0000 930881
4	0000 934780	4	0000 930881
5	0000 934780	5	0000 930881
6	0000 934780	6	0000 930881

- Recent reference on oil 823-1
- Reference 48-192 hour average oil consumption = 25.3 g/hr

Mahle Piston Date Codes		
Cyl. No.	Date Code	
1	0822 1829	
2	0822 1814	
3	0822 0316	
4	0822 0043	
5	0822 1859	
6	0822 1814	

intertek

Total Quality. Assured.