

Analysis Report

Component Information	Sample Information	
Machine Type: Gasoline Engine	Received: 08/09/2023	
Lubricant: UNKNOWN/5W40	Report: 08/09/2023	
Machine MFG: OTHER	Sample No.: 9625 - 1 - 1 -3	
Machine MOD: 1500 TRX	Analyst/Test: AK / PAT2	
Machine Criticality: Not Specified	Sample Source Rating: Not Specified	
Sump Size: Unknown		

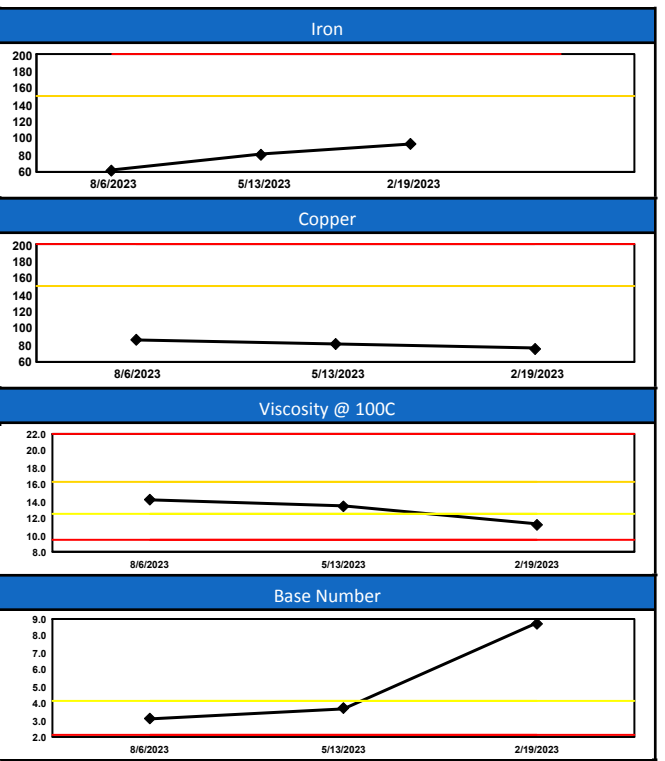
PROBLEMS
Low Base Number

COMMENTS The base number result is low and considered abnormal. Low base number results indicate diminished levels of alkaline reserve additive.

CUSTOMER NOTES

Date Sampled	NEW OIL	8/6/2023	5/13/2023	2/19/2023
Lab No	1333217	4569603	4475194	4340327
Machine / Lube Cond.		N / M	N / M	N / M
Lube Hours		2784	2856	1715
Machine Hours		17807	15023	12167

ELEMENTAL SPECTROSCOPY (ppm) ASTM D5185 Mod (-) indicates below detection limit					
Wear Metals	Iron	-	61	80	93
	Copper	-	86	81	75
	Lead	-	-	-	-
	Aluminum	-	4	2	-
	Tin	-	-	-	-
	Nickel	-	-	-	-
	Chromium	-	-	-	-
	Titanium	-	-	-	-
	Vanadium	-	-	-	-
	Silver	2	-	-	-
Additives	Calcium	2522	1510	1628	1381
	Magnesium	14	224	250	1064
	Phosphorus	856	871	891	813
	Zinc	972	1064	1086	925
	Barium	-	-	-	-
Contaminants	Molybdenum	-	211	174	106
	Silicon	5	9	7	11
	Boron	92	241	361	197
	Lithium	-	-	-	-
	Sodium	-	11	11	12
Potassium	-	-	-	-	



FTIR SPECTROSCOPY (Indexing Numbers) ASTM E2412					
Oxidation	7	108	92	16	
Glycol	0	0	0	0	
Soot	2	3	3	3	
Fuel Dilution	0	0	0	0	

PARTICLE COUNT (particles per ml) ISO 4406:99					
Pore Block Particle Count Alarm Limits Marginal (21/18/15)					
Pore Block ISO Code	16/15/11	13/12/8	17/15/12	18/17/13	
>4 Micron	454	77	800	2319	
>6 Micron	176	29	311	901	
>14 Micron	13	2	23	68	
>25 Micron	6	1	10	30	
>50 Micron	0	0	1	3	
>100 Micron	0	0	0	0	

VISCOSITY (centistokes) ASTM D445 MOD					
Viscosity@100°C	14.2	14.2	13.4	11.2	
BASE NUMBER (mg KOH/g) † - ASTM D4739 ‡ - IWI-390					
Base Number	8.33 †	3.09 †	3.71 ‡	8.72 ‡	

Testing performed by Eurofins TestOil. This test is accredited under accreditation L2221. (e) - Estimated sample date. (*) - Not in scope of ; by Eurofins TestO

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WATER (%) a-ASTM D6304C b-IWI-134* c-Crackle d-IWI-135* e-IWI-370*					
Water		NEG (c)	0.0706 (a)	NEG (c)	
FUEL DILUTION BY GC (%) ASTM D7593					
Fuel Dilution	0	1.6	1.8	2.1	

