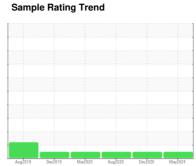


OIL ANALYSIS REPORT







Machine Id 2005

Component

Diesel Engine

DIESEL ENGINE OIL SAE 5W30 (--- QTS)

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

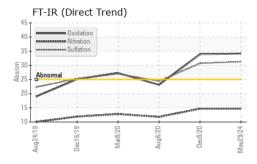
Fluid Condition

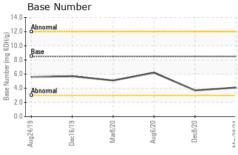
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

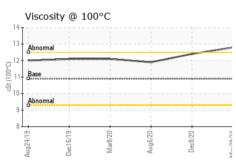
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		HRE0000195	WC0518800	WC0471759
Sample Date		Client Info		29 May 2024	08 Dec 2020	06 Aug 2020
Machine Age	mls	Client Info		556113	226416	176482
Oil Age	mls	Client Info		50000	100000	50000
Oil Changed		Client Info		Changed	Changed	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	N .	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	59	64	32
Chromium	ppm	ASTM D5185m	>20	<1	1	<1
Nickel	ppm	ASTM D5185m	>4	<1	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	<1	0	<1
Aluminum	ppm	ASTM D5185m	>20	12	9	9
Lead	ppm	ASTM D5185m	>40	1	<1	1
Copper	ppm	ASTM D5185m	>330	7	8	5
Tin	ppm	ASTM D5185m	>15	1	0	0
Antimony	ppm	ASTM D5185m			0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	<1	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	15	10	12
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	10 10 100	ACTM DE10Em	100	0=		
	ppm	ASTM D5185m	100	65	66	58
Manganese	ppm	ASTM D5185m	100	1	66 <1	58 <1
Manganese Magnesium	• •		450			
•	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm ppm	ASTM D5185m ASTM D5185m	450	1 1089	<1 1215	<1 1167
Magnesium Calcium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	450 3000	1 1089 935	<1 1215 939 1098 1280	<1 1167 938 928 1201
Magnesium Calcium Phosphorus	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	450 3000 1150	1 1089 935 1086	<1 1215 939 1098	<1 1167 938 928
Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	450 3000 1150 1350	1 1089 935 1086 1335	<1 1215 939 1098 1280	<1 1167 938 928 1201 2399 history2
Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	450 3000 1150 1350 4250	1 1089 935 1086 1335 3400	<1 1215 939 1098 1280 2531	<1 1167 938 928 1201 2399
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	450 3000 1150 1350 4250 limit/base	1 1089 935 1086 1335 3400	<1 1215 939 1098 1280 2531 history1	<1 1167 938 928 1201 2399 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m	450 3000 1150 1350 4250 limit/base	1 1089 935 1086 1335 3400 current	<1 1215 939 1098 1280 2531 history1	<1 1167 938 928 1201 2399 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method ASTM D5185m ASTM D5185m	450 3000 1150 1350 4250 limit/base >25	1 1089 935 1086 1335 3400 current 14	<1 1215 939 1098 1280 2531 history1 12 6	<1 1167 938 928 1201 2399 history2 9
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm	ASTM D5185m	450 3000 1150 1350 4250 limit/base >25 >20	1 1089 935 1086 1335 3400 current 14 6	<1 1215 939 1098 1280 2531 history1 12 6 20	<1 1167 938 928 1201 2399 history2 9 5
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	450 3000 1150 1350 4250 limit/base >25 >20	1 1089 935 1086 1335 3400 current 14 6 8	<1 1215 939 1098 1280 2531 history1 12 6 20 history1	<1 1167 938 928 1201 2399 history2 9 5 19 history2
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m	450 3000 1150 1350 4250 limit/base >25 >20 limit/base >3	1 1089 935 1086 1335 3400 current 14 6 8 current	<1 1215 939 1098 1280 2531 history1 12 6 20 history1 0.8	<1 1167 938 928 1201 2399 history2 9 5 19 history2 0.4
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m	450 3000 1150 1350 4250 Iimit/base >25 >20 Iimit/base >3 >20	1 1089 935 1086 1335 3400 current 14 6 8 current 1.1 14.7	<1 1215 939 1098 1280 2531 history1 12 6 20 history1 0.8 14.7	<1 1167 938 928 1201 2399 history2 9 5 19 history2 0.4 11.8
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7415	450 3000 1150 1350 4250 limit/base >25 >20 limit/base >3 >20 >30	1 1089 935 1086 1335 3400 current 14 6 8 current 1.1 14.7 31.3	<1 1215 939 1098 1280 2531 history1 12 6 20 history1 0.8 14.7 30.7	<1 1167 938 928 1201 2399 history2 9 5 19 history2 0.4 11.8 24.4
Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	ppm	ASTM D5185m Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m Method *ASTM D7844 *ASTM D7624 *ASTM D7415 Method	450 3000 1150 1350 4250 limit/base >25 >20 limit/base >3 >20 >30 limit/base	1 1089 935 1086 1335 3400 current 14 6 8 current 1.1 14.7 31.3	<1 1215 939 1098 1280 2531 history1 12 6 20 history1 0.8 14.7 30.7 history1	<1 1167 938 928 1201 2399 history2 9 5 19 history2 0.4 11.8 24.4 history2



OIL ANALYSIS REPORT



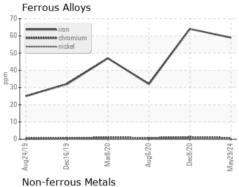


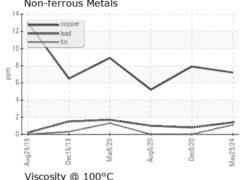


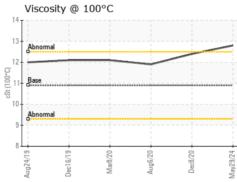
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

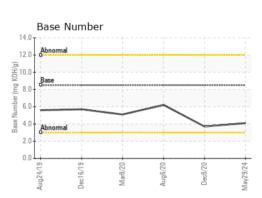
FLUID PROPERTIES		method				history2
Visc @ 100°C	cSt	ASTM D445	10.9	12.8	12.4	11.9

GRAPHS













Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : HRE0000195 Lab Number : 06198589 Unique Number : 11060712

Received : 03 Jun 2024 **Tested** : 04 Jun 2024 Diagnosed

: 05 Jun 2024 - Don Baldridge

MABE TRUCKING PO BOX 1081 EDEN, NC US 27289 Contact: MAINTENANCE

Test Package : FLEET Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

maintenancemanager@mabetrucking.com T:

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Contact/Location: MAINTENANCE ? - MABEDE

F: (336)635-1791