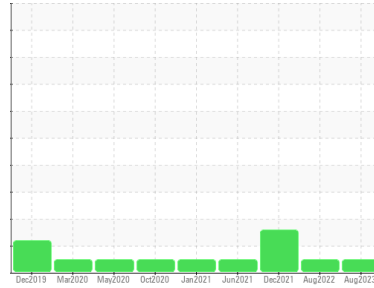




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

2006

Component

Diesel Engine

Fluid

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

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 INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0814845	WC0686110	WC0639593
Sample Date	Client Info		15 Aug 2023	08 Aug 2022	17 Dec 2021
Machine Age	mls	Client Info	580806	480374	412537
Oil Age	mls	Client Info	50000	100000	100000
Oil Changed	Client Info		N/A	Changed	N/A
Sample Status			NORMAL	NORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	<1.0
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	65	42	33
Chromium	ppm	ASTM D5185m >20	<1	<1	<1
Nickel	ppm	ASTM D5185m >4	0	<1	0
Titanium	ppm	ASTM D5185m	<1	0	<1
Silver	ppm	ASTM D5185m >3	0	1	<1
Aluminum	ppm	ASTM D5185m >20	7	5	2
Lead	ppm	ASTM D5185m >40	1	<1	7
Copper	ppm	ASTM D5185m >330	11	8	15
Tin	ppm	ASTM D5185m >15	<1	2	<1
Antimony	ppm	ASTM D5185m	---	---	0
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 250	9	18	39
Barium	ppm	ASTM D5185m 10	0	<1	0
Molybdenum	ppm	ASTM D5185m 100	72	68	27
Manganese	ppm	ASTM D5185m	1	<1	1
Magnesium	ppm	ASTM D5185m 450	1189	1023	370
Calcium	ppm	ASTM D5185m 3000	979	1038	▲ 2042
Phosphorus	ppm	ASTM D5185m 1150	1088	1016	988
Zinc	ppm	ASTM D5185m 1350	1399	1253	1148
Sulfur	ppm	ASTM D5185m 4250	3522	2809	2698

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	11	8	6
Sodium	ppm	ASTM D5185m	8	2	7
Potassium	ppm	ASTM D5185m >20	4	0	11

INFRA-RED

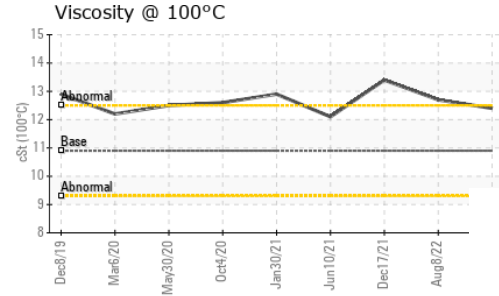
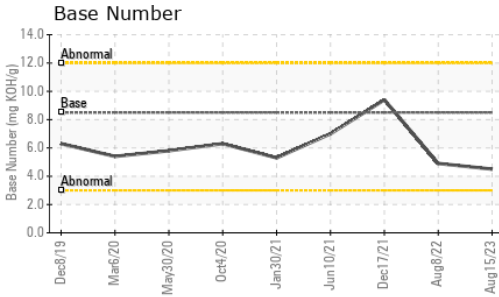
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	1.1	0.9	▲ 3.2
Nitration	Abs/cm	*ASTM D7624 >20	13.8	15.4	9.1
Sulfation	Abs/.1mm	*ASTM D7415 >30	28.9	31.5	24.2

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	29.8	32.7	14.8
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	4.5	4.9	9.4



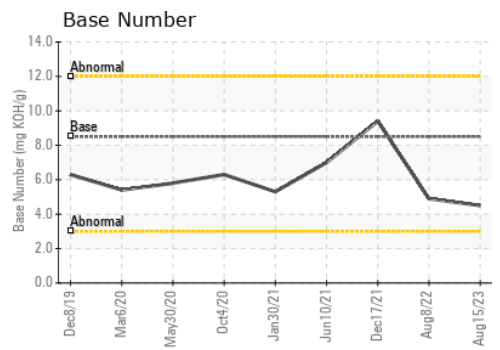
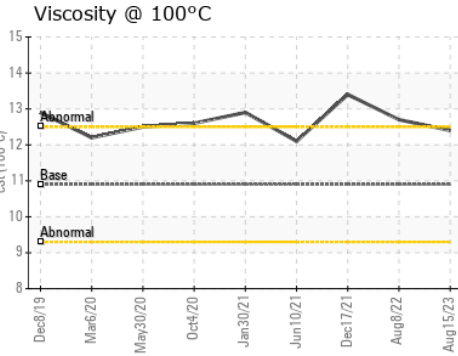
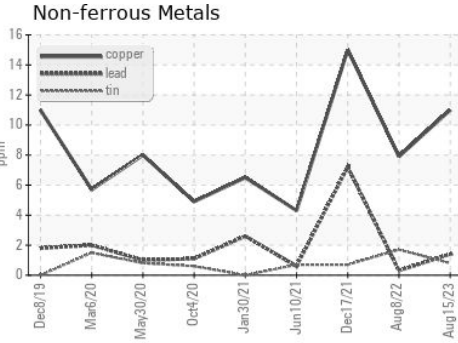
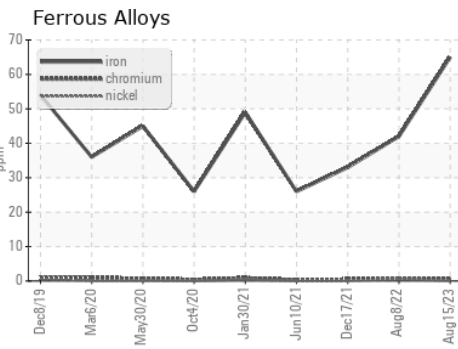
OIL ANALYSIS REPORT



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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	10.9	12.4	12.7 ▲ 13.4

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0814845 **Received** : 21 Aug 2023
Lab Number : 05930212 **Diagnosed** : 23 Aug 2023
Unique Number : 10615483 **Diagnostician** : Jonathan Hester
Test Package : FLEET

MABE TRUCKING
 PO BOX 1081
 EDEN, NC
 US 27289
 Contact: MAINTENANCE
 maintenancemanager@mabetrucking.com
 T:
 F: (336)635-1791

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