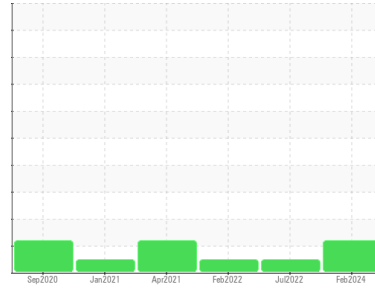




OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id

2129

Component

Diesel Engine

Fluid

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

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Sodium and/or potassium levels are high. Test for glycol is negative.

Fluid Condition

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

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0876654	WC0686097	WC0639584
Sample Date	Client Info		04 Feb 2024	02 Jul 2022	10 Feb 2022
Machine Age	mls	Client Info	466806	312087	265826
Oil Age	mls	Client Info	50000	50000	100000
Oil Changed	Client Info		Changed	Not Changd	Changed
Sample Status			ABNORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	<1.0
Water	WC Method	>0.2	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>100	71	29	50
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	<1	<1
Aluminum	ppm	ASTM D5185m	>20	10	6	10
Lead	ppm	ASTM D5185m	>40	0	1	2
Copper	ppm	ASTM D5185m	>330	6	4	7
Tin	ppm	ASTM D5185m	>15	0	1	1
Antimony	ppm	ASTM D5185m		---	---	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	250	8	15	10
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	73	71	65
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	1160	1137	1192
Calcium	ppm	ASTM D5185m	3000	1185	1004	951
Phosphorus	ppm	ASTM D5185m	1150	1151	1045	1083
Zinc	ppm	ASTM D5185m	1350	1425	1313	1319
Sulfur	ppm	ASTM D5185m	4250	3618	3756	2678

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	15	10	7
Sodium	ppm	ASTM D5185m		37	4	5
Potassium	ppm	ASTM D5185m	>20	▲ 64	16	22
Glycol	%	*ASTM D2982		NEG	NEG	NEG

INFRA-RED

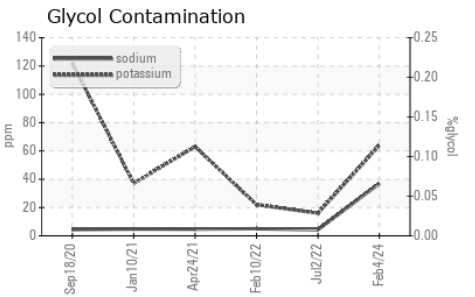
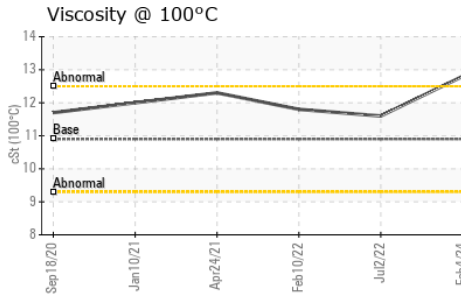
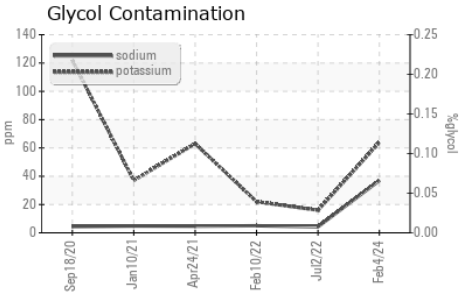
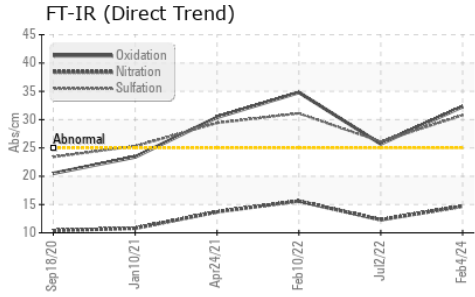
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	1.4	0.7	1
Nitration	Abs/cm	*ASTM D7624	>20	14.7	12.3	15.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	30.8	26.1	31.1

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	32.3	25.7	34.8
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	3.9	5.9	3.3



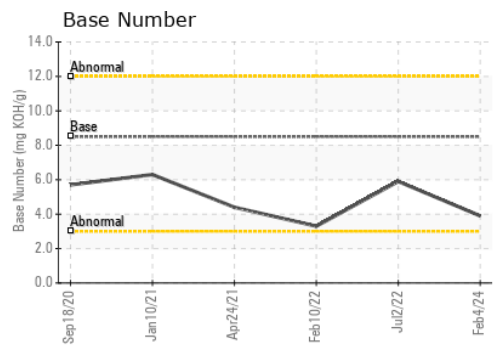
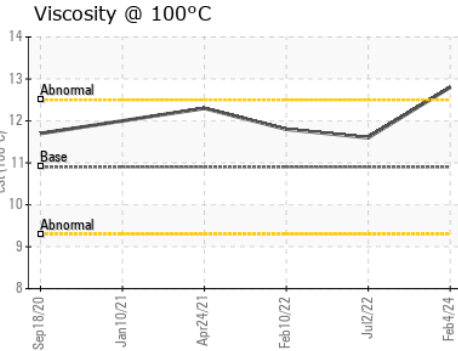
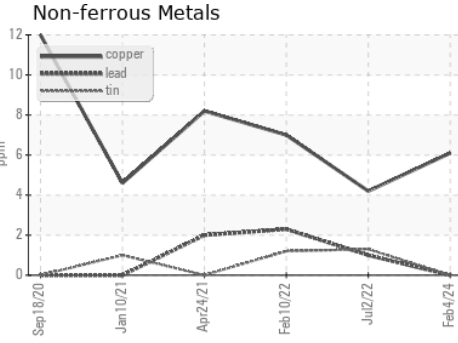
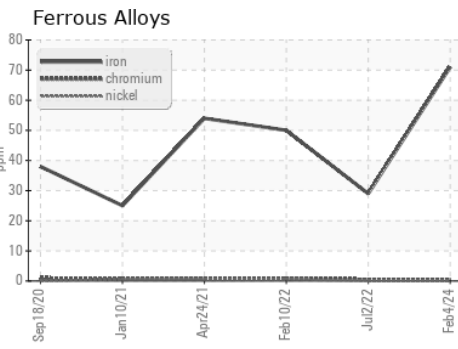
OIL ANALYSIS REPORT



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	12.8	11.6	11.8

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0876654 **Received** : 01 Apr 2024
Lab Number : **06135532** **Tested** : 04 Apr 2024
Unique Number : 10954997 **Diagnosed** : 04 Apr 2024 - Sean Felton
Test Package : FLEET (Additional Tests: Glycol)

MABE TRUCKING
 PO BOX 1081
 EDEN, NC
 US 27289

Certificate L2367 **Contact:** MAINTENANCE
 To discuss this sample report, contact Customer Service at 1-800-237-1369. maintenancemanager@mabetrucking.com
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T:
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (336)635-1791