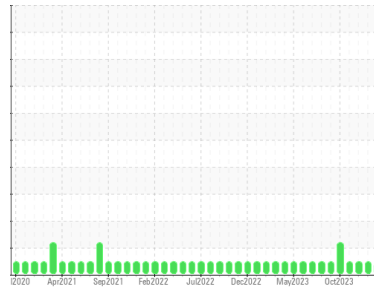




OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Area
OKLAHOMA
 Machine Id
2017 MACK 7136

Component
Diesel Engine
 Fluid
MYSTIK JT-8 SYN SUPER HD 15W40 (--- QTS)

DIAGNOSIS

● Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Fuel content negligible. There is no indication of any contamination in the oil.

● Fluid Condition

The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0857186	WC0791753	WC0838581
Sample Date	Client Info		01 Apr 2024	02 Jan 2024	15 Dec 2023
Machine Age	hrs	Client Info	8179	8117	8111
Oil Age	hrs	Client Info	338	50	274
Oil Changed	Client Info		Not Chngd	Changed	Not Chngd
Sample Status			ATTENTION	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
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 >120	8	4	56
Chromium	ppm	ASTM D5185m >20	<1	<1	2
Nickel	ppm	ASTM D5185m >5	3	2	23
Titanium	ppm	ASTM D5185m >2	<1	<1	<1
Silver	ppm	ASTM D5185m >2	<1	0	0
Aluminum	ppm	ASTM D5185m >20	2	1	5
Lead	ppm	ASTM D5185m >40	<1	<1	5
Copper	ppm	ASTM D5185m >330	5	<1	10
Tin	ppm	ASTM D5185m >15	<1	<1	1
Vanadium	ppm	ASTM D5185m	<1	0	<1
Cadmium	ppm	ASTM D5185m	<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	7	3	24
Barium	ppm	ASTM D5185m	<1	10	0
Molybdenum	ppm	ASTM D5185m	57	54	13
Manganese	ppm	ASTM D5185m	<1	0	1
Magnesium	ppm	ASTM D5185m	879	822	318
Calcium	ppm	ASTM D5185m	1101	1011	1679
Phosphorus	ppm	ASTM D5185m	997	1055	878
Zinc	ppm	ASTM D5185m	1207	1115	1202
Sulfur	ppm	ASTM D5185m	3142	3309	2866

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	6	4	11
Sodium	ppm	ASTM D5185m	3	0	15
Potassium	ppm	ASTM D5185m >20	2	2	4
Fuel	%	ASTM D3524 >3.0	1.1	<1.0	<1.0

INFRA-RED

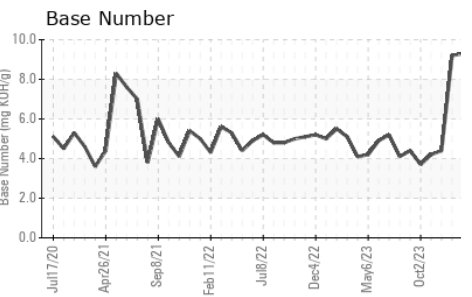
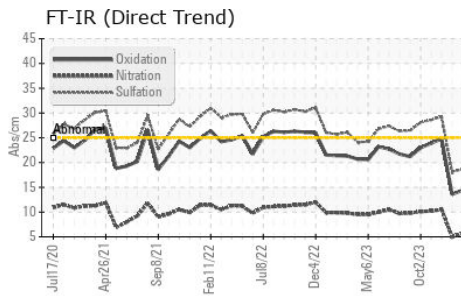
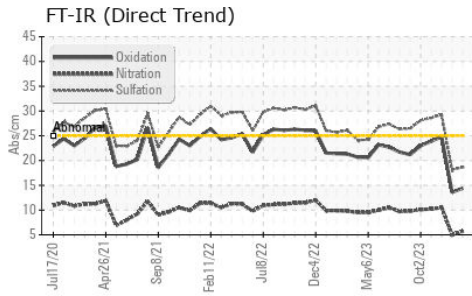
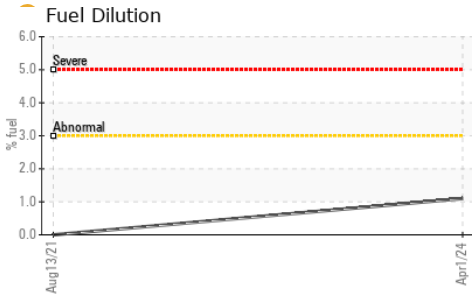
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >4	0.2	0.1	1.3
Nitration	Abs/cm	*ASTM D7624 >20	5.7	5.0	10.5
Sulfation	Abs/.1mm	*ASTM D7415 >30	18.6	18.2	29.3

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	14.4	13.6	24.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.3	9.2	4.4



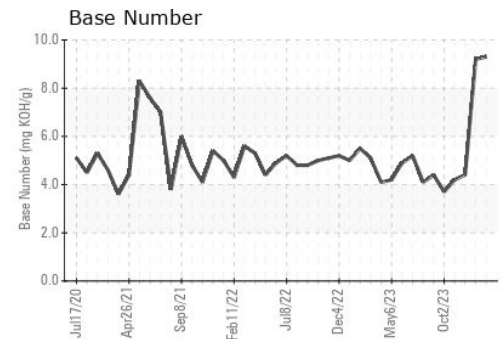
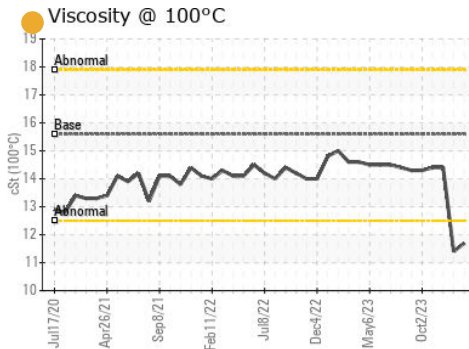
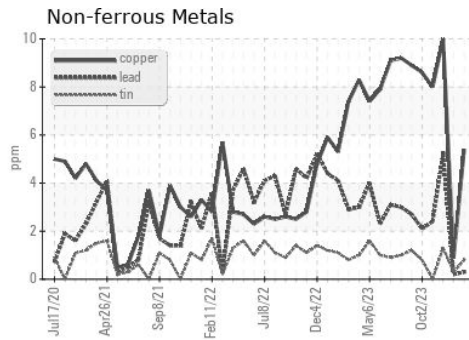
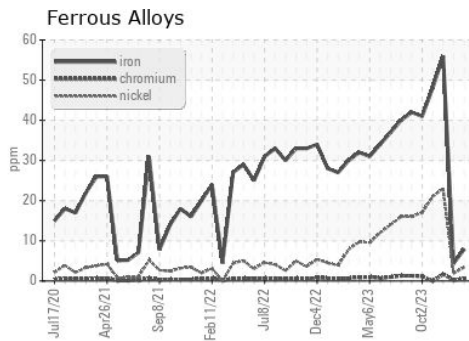
OIL ANALYSIS REPORT



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	15.6	11.7	11.4

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0857186 **Received** : 22 Apr 2024
Lab Number : 06156609 **Tested** : 25 Apr 2024
Unique Number : 10992032 **Diagnosed** : 25 Apr 2024 - Don Baldrige
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

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)

LIBERTY DISPOSAL
 6401 S EASTERN AVE
 OKLAHOMA CITY, OK
 US 73149
 Contact: CARRIE MARSHALL
 c.marshall@ldi89.com

T:
F: