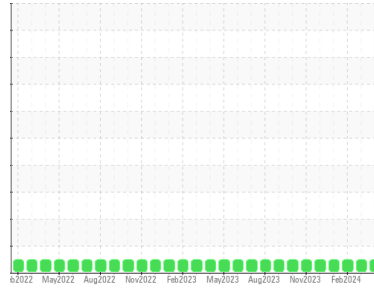




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
OKLAHOMA

Machine Id
6794

Component
Diesel Engine

Fluid
MYSTIK JT-8 SYN SUPER HD 15W40 (--- GAL)

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		WC0899609	WC0899617	WC0899604
Sample Date	Client Info		09 Apr 2024	06 Mar 2024	05 Feb 2024
Machine Age	hrs	Client Info	5695	5532	5387
Oil Age	hrs	Client Info	3558	3395	3250
Oil Changed	Client Info		Not Changed	Not Changed	Not Changed
Sample Status			NORMAL	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
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	63	59	55
Chromium	ppm	ASTM D5185m >20	2	2	2
Nickel	ppm	ASTM D5185m >4	0	0	<1
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m >3	0	0	<1
Aluminum	ppm	ASTM D5185m >20	8	8	9
Lead	ppm	ASTM D5185m >40	34	32	29
Copper	ppm	ASTM D5185m >330	59	55	56
Tin	ppm	ASTM D5185m >15	2	<1	2
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	2	2	3
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	20	19	17
Manganese	ppm	ASTM D5185m	1	<1	<1
Magnesium	ppm	ASTM D5185m	883	867	819
Calcium	ppm	ASTM D5185m	1322	1302	1186
Phosphorus	ppm	ASTM D5185m	1141	1037	1040
Zinc	ppm	ASTM D5185m	1420	1316	1313
Sulfur	ppm	ASTM D5185m	3009	2917	2486

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	12	12	12
Sodium	ppm	ASTM D5185m	22	19	19
Potassium	ppm	ASTM D5185m >20	18	17	19

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	1.6	1.6	1.5
Nitration	Abs/cm	*ASTM D7624 >20	13.8	13.4	12.8
Sulfation	Abs/.1mm	*ASTM D7415 >30	28.5	27.8	27.2

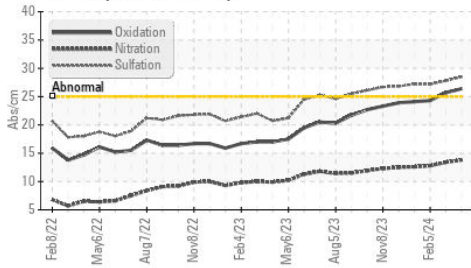
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	26.4	25.7	24.3
Base Number (BN)	mg KOH/g	ASTM D2896	5.8	5.6	5.8

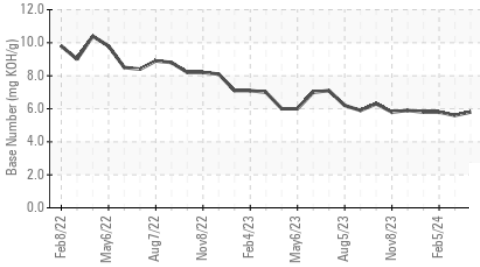


OIL ANALYSIS REPORT

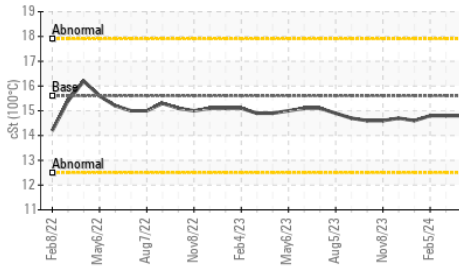
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

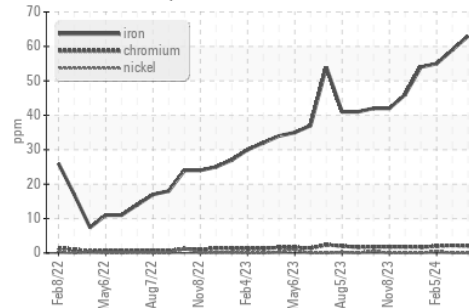


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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

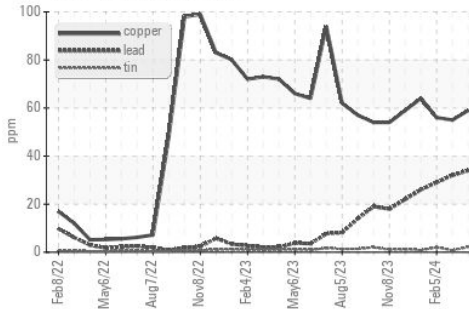
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.6	14.8	14.8

GRAPHS

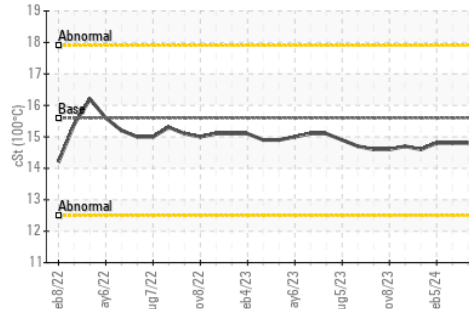
Ferrous Alloys



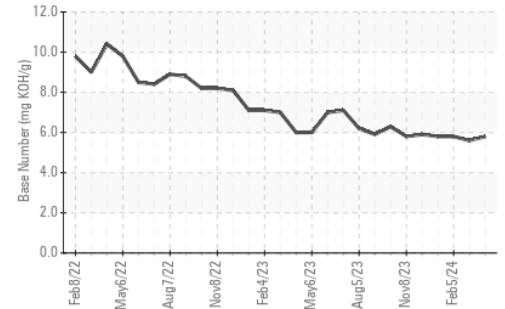
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : WC0899609

Lab Number : 06149394

Unique Number : 10979472

Test Package : FLEET

Received : 15 Apr 2024

Tested : 16 Apr 2024

Diagnosed : 17 Apr 2024 - Don Baldrige

LIBERTY DISPOSAL

6401 S EASTERN AVE

OKLAHOMA CITY, OK

US 73149

Contact: M Rutherford

M.Rutherford@ldi89.com

T:

F:

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)