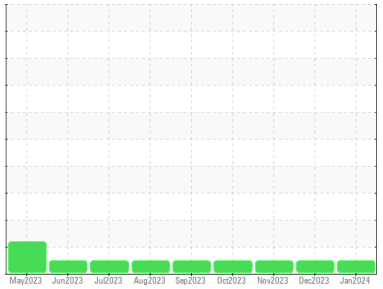
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Area
OKLAHOMA
Machine Id
3592
Component
Diesel Engine
Fluid
MYSTIK JT-8 SYN SUPER HD 15W50 (--- GAL)

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear
All component wear rates are normal.

Contamination
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. 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		**WC0810712**	WC0810709	WCMFA67294
Sample Date		Client Info		**05 Jan 2024**	05 Dec 2023	08 Nov 2023
Machine Age	hrs	Client Info		**1700**	1545	1396
Oil Age	hrs	Client Info		**1377**	1297	1073
Oil Changed		Client Info		**Not Changd**	Not Changd	Not Changd
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	**58**	47	45
Chromium	ppm	ASTM D5185m	>20	**6**	5	5
Nickel	ppm	ASTM D5185m	>4	**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m	>3	**0**	0	0
Aluminum	ppm	ASTM D5185m	>20	**50**	43	40
Lead	ppm	ASTM D5185m	>40	**0**	0	0
Copper	ppm	ASTM D5185m	>330	**2**	2	2
Tin	ppm	ASTM D5185m	>15	**0**	0	<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		**0**	<1	3
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**61**	58	55
Manganese	ppm	ASTM D5185m		**0**	<1	1
Magnesium	ppm	ASTM D5185m		**992**	930	940
Calcium	ppm	ASTM D5185m		**1112**	1030	1025
Phosphorus	ppm	ASTM D5185m		**1036**	1004	953
Zinc	ppm	ASTM D5185m		**1263**	1231	1231
Sulfur	ppm	ASTM D5185m		**3279**	3217	2864

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**4**	4	4
Sodium	ppm	ASTM D5185m		**8**	8	6
Potassium	ppm	ASTM D5185m	>20	**131**	110	104

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	**0.8**	0.7	0.7
Nitration	Abs/cm	*ASTM D7624	>20	**9.4**	8.9	9.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	**21.6**	20.9	20.8

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**17.2**	16.6	16.5
Base Number (BN)	mg KOH/g	ASTM D2896		**7.9**	8.2	8.3

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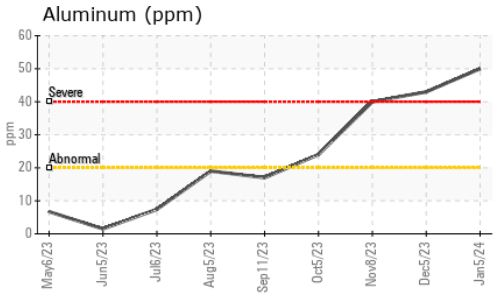
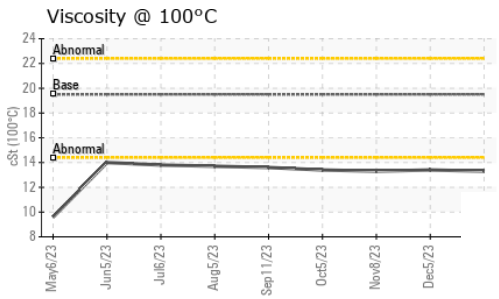
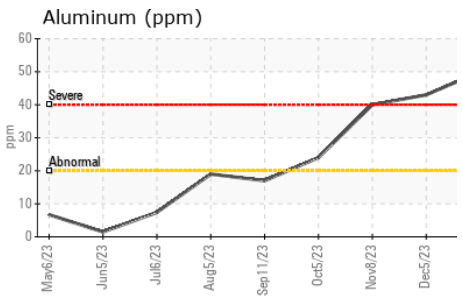


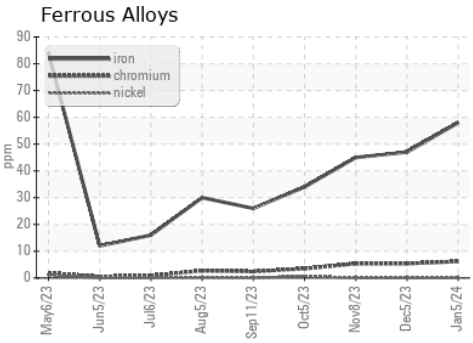


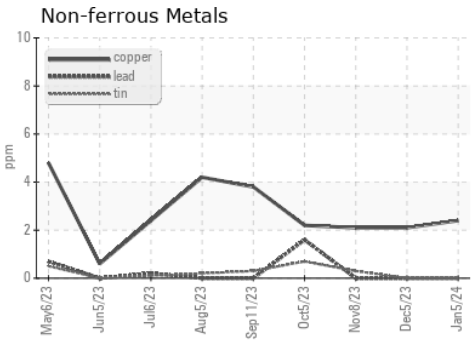


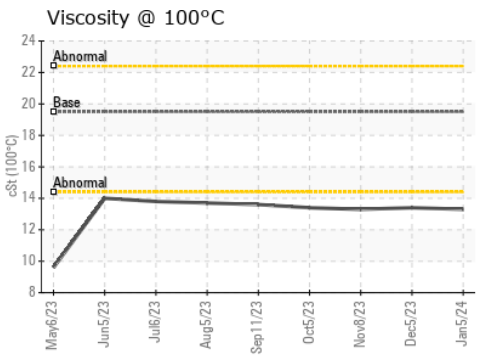
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt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

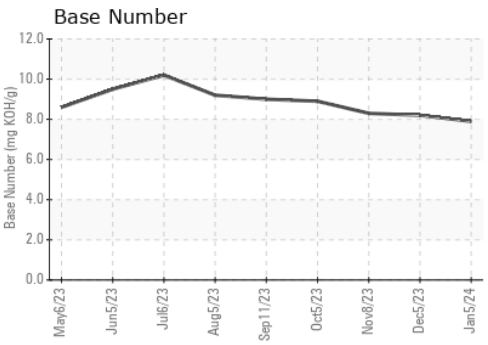
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	19.5	**13.3**	13.4	13.3

GRAPHS









Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0810712 **Recieved** : 10 Jan 2024
Lab Number : 06057224 **Diagnosed** : 11 Jan 2024
Unique Number : 10823173 **Diagnostician** : Wes Davis
Test Package : FLEET

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: Loran Cottle
l.cottle@ldi89.com
T: (910)970-0291
F: x: