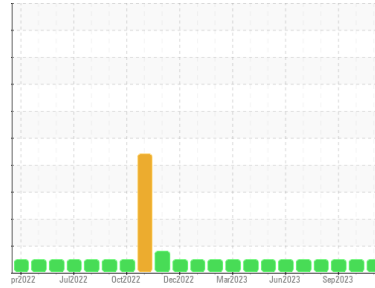




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
OKLAHOMA

Machine Id
5568

Component
Diesel Engine

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

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

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		WCMFA69532	WC0810705	WC0810722
Sample Date	Client Info		08 Nov 2023	05 Oct 2023	11 Sep 2023
Machine Age	hrs	Client Info	3775	3565	3392
Oil Age	hrs	Client Info	2268	2058	1885
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

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	55	51	52
Chromium	ppm	ASTM D5185m >20	4	3	4
Nickel	ppm	ASTM D5185m >4	<1	0	<1
Titanium	ppm	ASTM D5185m	0	0	<1
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >20	30	29	30
Lead	ppm	ASTM D5185m >40	0	0	<1
Copper	ppm	ASTM D5185m >330	3	4	8
Tin	ppm	ASTM D5185m >15	<1	0	<1
Vanadium	ppm	ASTM D5185m	0	0	<1
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	1	0	0
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	52	55	55
Manganese	ppm	ASTM D5185m	1	<1	1
Magnesium	ppm	ASTM D5185m	949	986	1040
Calcium	ppm	ASTM D5185m	1034	1094	1232
Phosphorus	ppm	ASTM D5185m	946	970	1026
Zinc	ppm	ASTM D5185m	1247	1273	1360
Sulfur	ppm	ASTM D5185m	2726	2805	3653

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	5	5	5
Sodium	ppm	ASTM D5185m	11	13	12
Potassium	ppm	ASTM D5185m >20	78	78	74
Glycol	%	*ASTM D2982	NEG	NEG	NEG

INFRA-RED

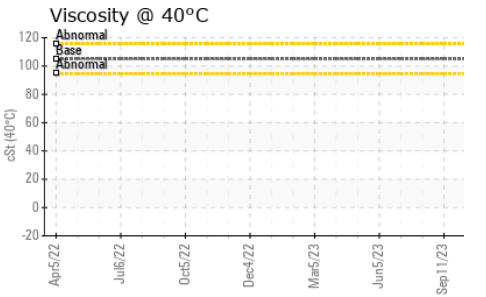
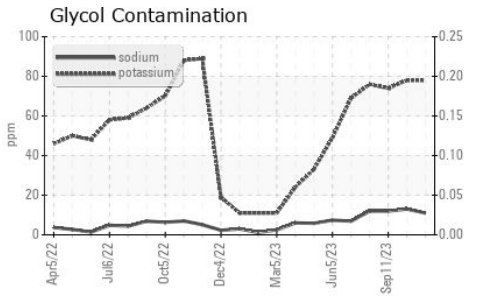
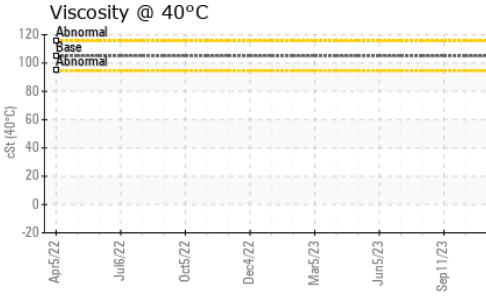
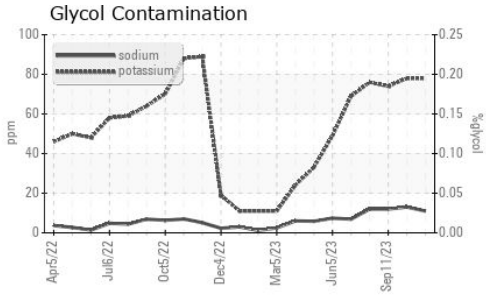
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	1	0.8	0.8
Nitration	Abs/cm	*ASTM D7624 >20	11.5	10.8	10.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	25.7	23.7	22.9

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	21.5	19.7	18.4
Base Number (BN)	mg KOH/g	ASTM D2896	5.9	6.0	6.8



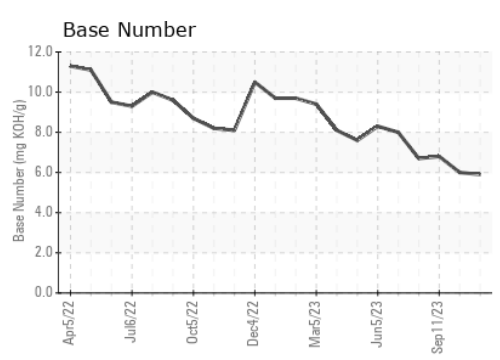
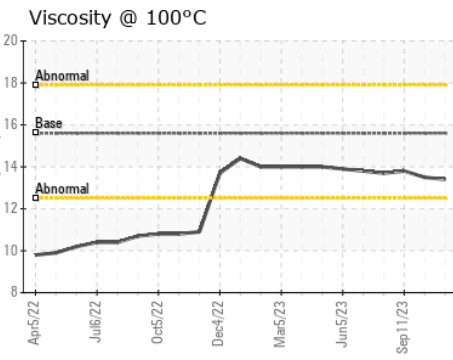
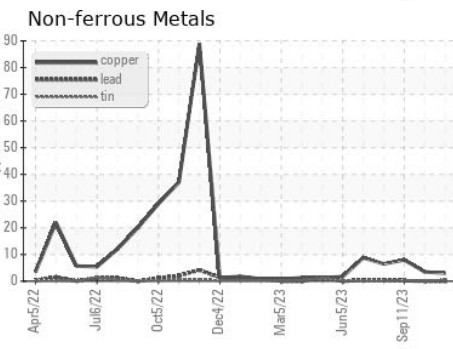
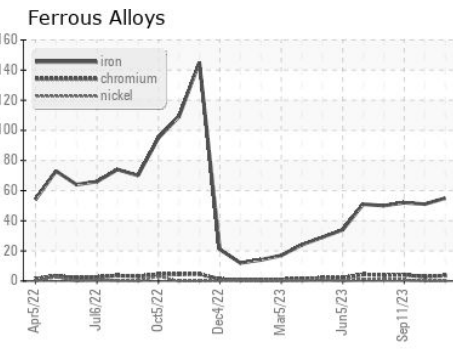
OIL ANALYSIS REPORT



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	13.4	13.5	13.8

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WCMFA69532 **Received** : 15 Nov 2023
Lab Number : 06008860 **Diagnosed** : 16 Nov 2023
Unique Number : 10742622 **Diagnostician** : Sean Felton
Test Package : FLEET (Additional Tests: Glycol, KV40)

LIBERTY DISPOSAL
 6401 S EASTERN AVE
 OKLAHOMA CITY, OK
 US 73149
 Contact: Loran Cottle
 l.cottle@ldi89.com
 T: (910)970-0291
 F: x:

Certificate L2367
 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)