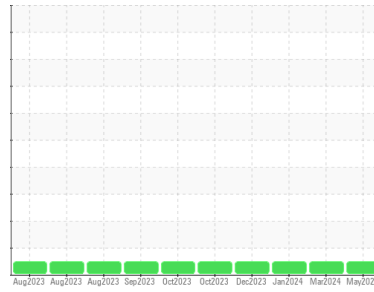




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
627
 Component
Diesel Engine
 Fluid
{not provided} (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample. Please note that this is a corrected copy for laboratory data update for AN. (Customer Sample Comment: add TAN)

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 AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		AK0000004	AK0000013	AK0000104
Sample Date	Client Info		04 May 2024	27 Mar 2024	10 Jan 2024
Machine Age	mls	Client Info	446686	430450	419002
Oil Age	mls	Client Info	38117	21881	10433
Oil Changed	Client Info		Not Chngd	Not Chngd	Not Chngd
Sample Status			NORMAL	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	>90	17	10	6
Chromium	ppm	ASTM D5185m	>20	<1	<1	0
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	1	<1
Lead	ppm	ASTM D5185m	>40	1	<1	<1
Copper	ppm	ASTM D5185m	>330	1	0	<1
Tin	ppm	ASTM D5185m	>15	1	<1	0
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	1	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		67	59	60
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		1002	949	1024
Calcium	ppm	ASTM D5185m		1140	1063	1042
Phosphorus	ppm	ASTM D5185m		1136	1030	1110
Zinc	ppm	ASTM D5185m		1343	1230	1304
Sulfur	ppm	ASTM D5185m		3167	3257	3156

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	4	4	4
Sodium	ppm	ASTM D5185m		2	1	2
Potassium	ppm	ASTM D5185m	>20	1	<1	<1
Fuel	%	ASTM D3524	>3.0	<1.0	<1.0	<1.0

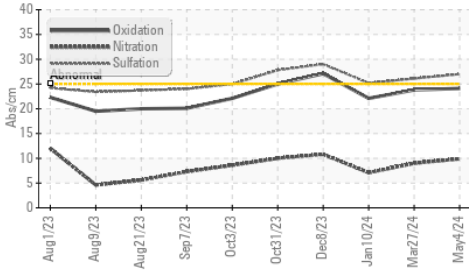
INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>6	0.4	0.3	0.1
Nitration	Abs/cm	*ASTM D7624	>20	9.9	9.0	7.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	27.0	26.1	25.2

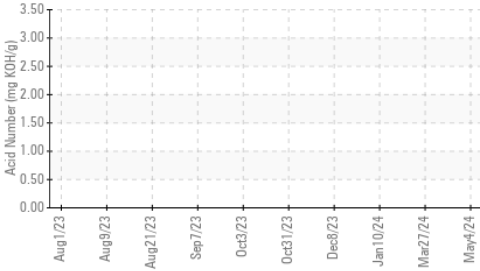
FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	24.1	23.8	22.1
Acid Number (AN)	mg KOH/g	ASTM D8045		3.11	---	---
Base Number (BN)	mg KOH/g	ASTM D2896		6.1	7.7	8.7

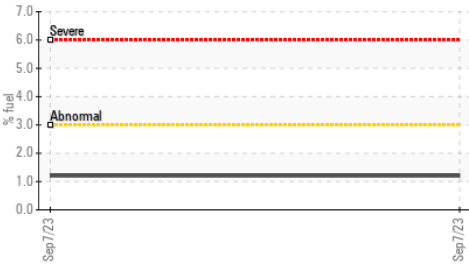
FT-IR (Direct Trend)



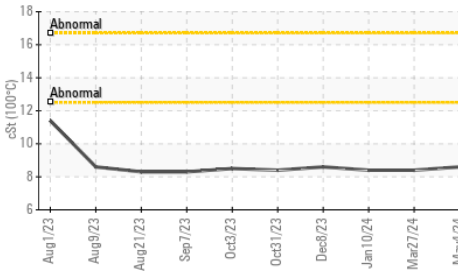
Acid Number



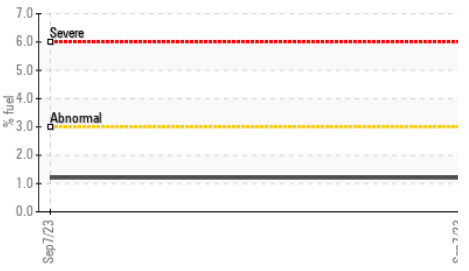
Fuel Dilution



Viscosity @ 100°C



Fuel Dilution

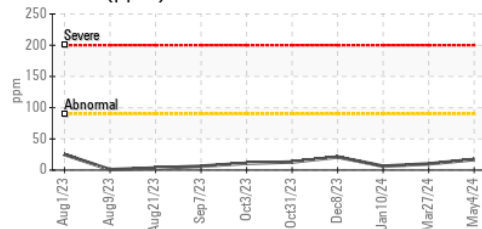


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

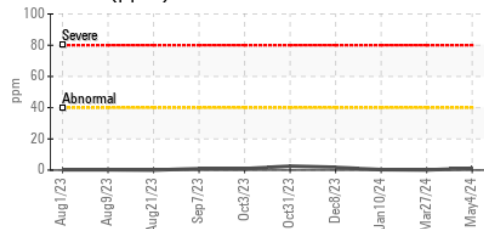
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	8.6	8.4	8.4

GRAPHS

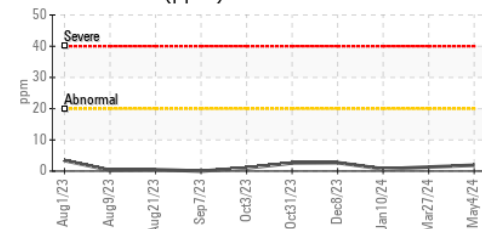
Iron (ppm)



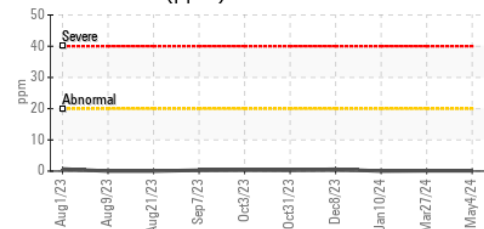
Lead (ppm)



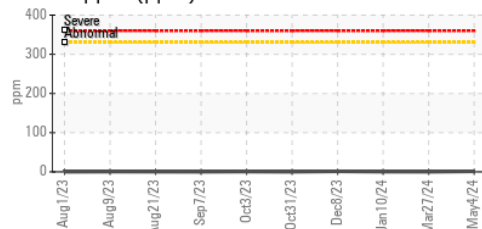
Aluminum (ppm)



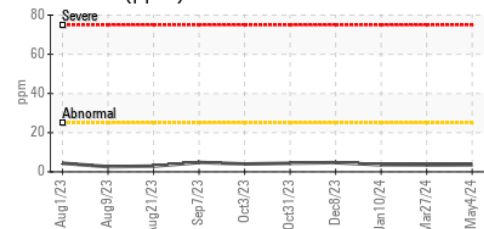
Chromium (ppm)



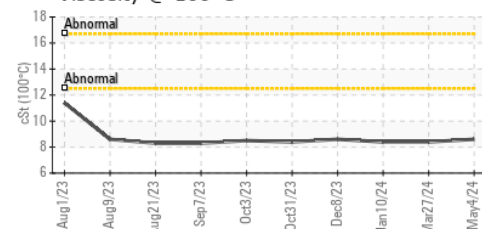
Copper (ppm)



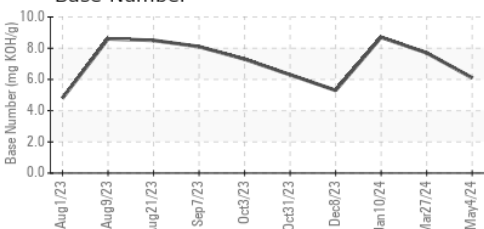
Silicon (ppm)



Viscosity @ 100°C



Base Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : AK0000004
Lab Number : 06182312
Unique Number : 11033638
Test Package : MOB 1 (Additional Tests: FuelDilution, TAN Man, TBN)
Received : 16 May 2024
Tested : 24 May 2024
Diagnosed : 24 May 2024 - Doug Bogart

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 US 47546
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 kenny.fromme@meyerdistributing.com
 T: (812)639-9224
 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)