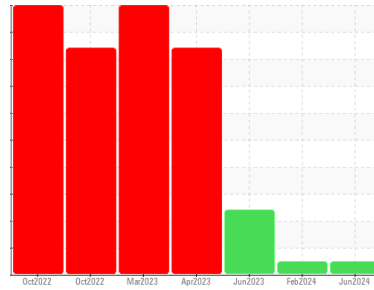




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
72225
 Component
Diesel Engine
 Fluid

CHEVRON DELO 400 MULTIGRADE 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		WC0921157	WC0681120	WC0681169
Sample Date	Client Info		08 Jun 2024	01 Feb 2024	19 Jun 2023
Machine Age	hrs	Client Info	7862	5626	2231
Oil Age	hrs	Client Info	519	0	544
Oil Changed	Client Info		Changed	N/A	Changed
Sample Status			NORMAL	NORMAL	ATTENTION

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	40	85	40
Chromium	ppm	ASTM D5185m >20	2	5	2
Nickel	ppm	ASTM D5185m >4	0	1	<1
Titanium	ppm	ASTM D5185m	16	19	18
Silver	ppm	ASTM D5185m >3	0	<1	0
Aluminum	ppm	ASTM D5185m >20	7	18	17
Lead	ppm	ASTM D5185m >40	8	21	3
Copper	ppm	ASTM D5185m >330	2	3	2
Tin	ppm	ASTM D5185m >15	0	2	1
Vanadium	ppm	ASTM D5185m	<1	<1	0
Cadmium	ppm	ASTM D5185m	0	<1	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	50	43	33
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	34	32	41
Manganese	ppm	ASTM D5185m	<1	2	<1
Magnesium	ppm	ASTM D5185m	805	747	701
Calcium	ppm	ASTM D5185m	1809	1543	1553
Phosphorus	ppm	ASTM D5185m 1360	753	700	719
Zinc	ppm	ASTM D5185m 1480	914	832	835
Sulfur	ppm	ASTM D5185m	3452	3239	3172

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	7	12	7
Sodium	ppm	ASTM D5185m	6	7	95
Potassium	ppm	ASTM D5185m >20	7	29	49

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	1.2	1.8	1.3
Nitration	Abs/cm	*ASTM D7624 >20	13.0	14.9	11.7
Sulfation	Abs/.1mm	*ASTM D7415 >30	29.4	32.2	25.7

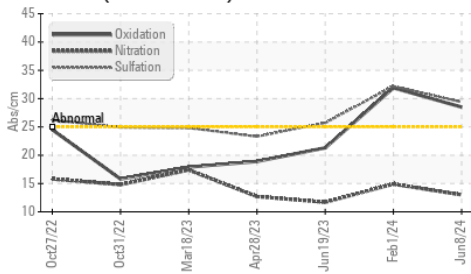
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	28.5	31.9	21.3
Base Number (BN)	mg KOH/g	ASTM D2896 12.2	5.6	5.4	7.0

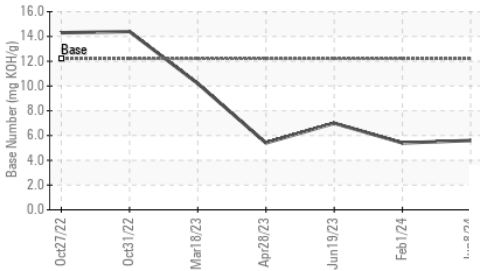


OIL ANALYSIS REPORT

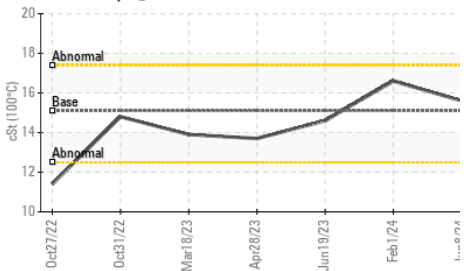
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

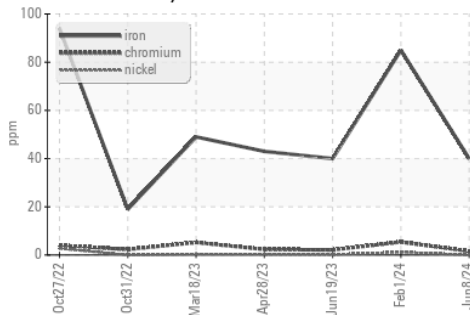


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

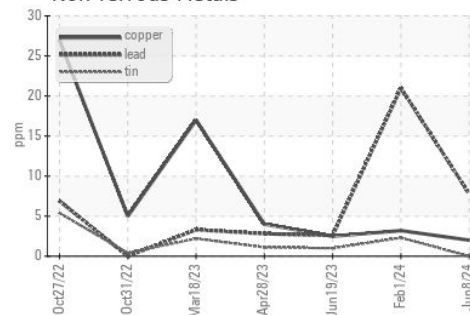
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.1	15.6	16.6

GRAPHS

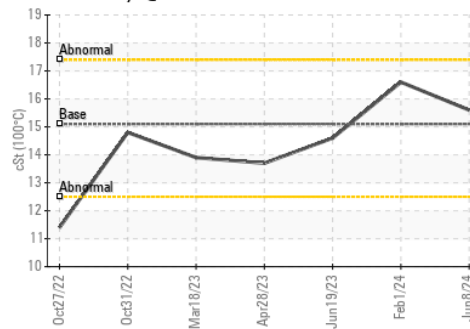
Ferrous Alloys



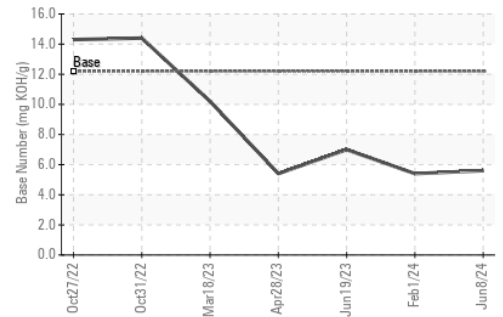
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0921157
Lab Number : 06219167
Unique Number : 11097364
Test Package : FLEET
Received : 24 Jun 2024
Tested : 25 Jun 2024
Diagnosed : 26 Jun 2024 - Don Baldrige

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 P.O. BOX 570
 KOTZEBUE, AK
 US 99752
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 nanalynden@lynden.com
 T: (907)754-5551
 F: (800)418-0974

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)