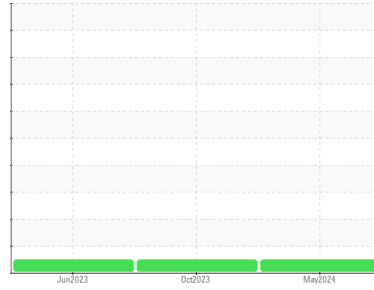




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

3995

Component

Diesel Engine

Fluid

CHEVRON DELO 400 XLE 10W30 (--- QTS)

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

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			WC0909937	WC0754183	WC0754171
Sample Date	Client Info			13 May 2024	31 Oct 2023	06 Jun 2023
Machine Age	mls	Client Info		76379	39201	1161
Oil Age	mls	Client Info		37163	39201	9657
Oil Changed	Client Info			Changed	Changed	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	43	27	21
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	1	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	<1	<1	0
Aluminum	ppm	ASTM D5185m	>20	13	15	13
Lead	ppm	ASTM D5185m	>40	<1	<1	<1
Copper	ppm	ASTM D5185m	>330	6	8	10
Tin	ppm	ASTM D5185m	>15	2	2	1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		16	13	45
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		2	2	1
Manganese	ppm	ASTM D5185m		<1	2	2
Magnesium	ppm	ASTM D5185m		774	759	794
Calcium	ppm	ASTM D5185m	2900	1502	1408	1439
Phosphorus	ppm	ASTM D5185m	1100	905	733	717
Zinc	ppm	ASTM D5185m	1200	935	855	845
Sulfur	ppm	ASTM D5185m	4000	3427	2945	3484

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	13	9	8
Sodium	ppm	ASTM D5185m		<1	3	4
Potassium	ppm	ASTM D5185m	>20	27	43	39

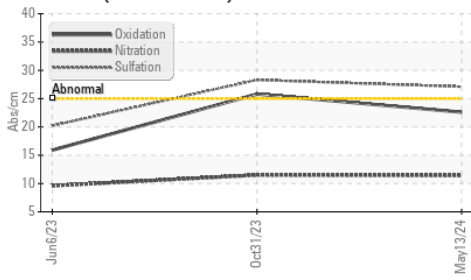
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.6	0.8	0.2
Nitration	Abs/cm	*ASTM D7624	>20	11.4	11.5	9.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	27.1	28.3	20.2

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.6	25.8	15.9
Base Number (BN)	mg KOH/g	ASTM D2896	10.3	4.3	4.5	6.2

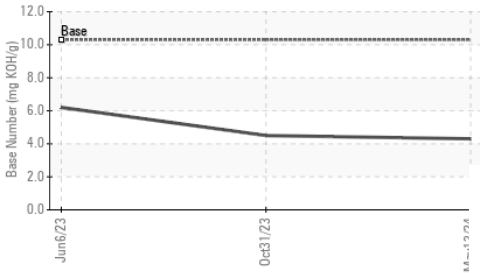


OIL ANALYSIS REPORT

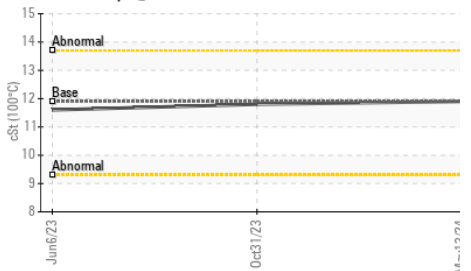
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

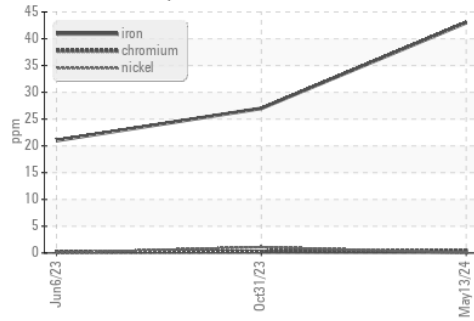


PARAMETER	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

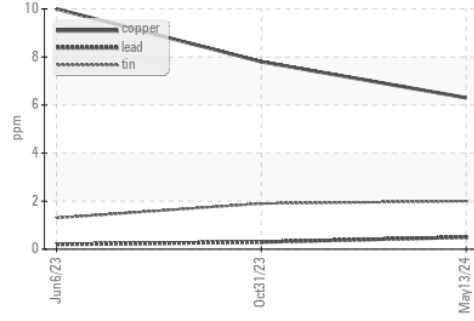
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	11.9	11.8	11.6

GRAPHS

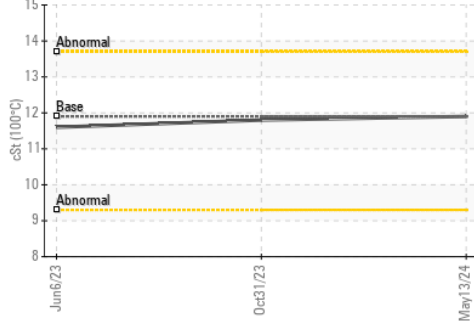
Ferrous Alloys



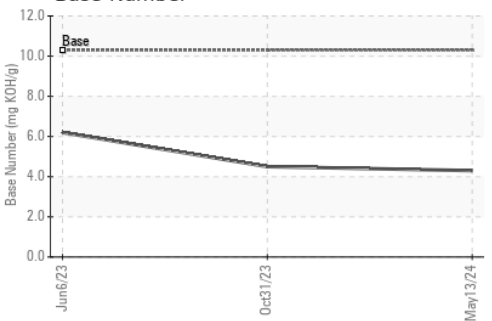
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0909937
Lab Number : 06202210
Unique Number : 11069671
Test Package : FLEET
Received : 06 Jun 2024
Tested : 10 Jun 2024
Diagnosed : 10 Jun 2024 - Wes Davis

LTI/MILKY WAY - SUNNYSIDE
 333 MIDVALE RD
 SUNNYSIDE, WA
 US 98944
 Contact: Barbara Kluever
 bkluever@lynden.com
 T: (509)839-5844
 F: (509)839-6556

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)