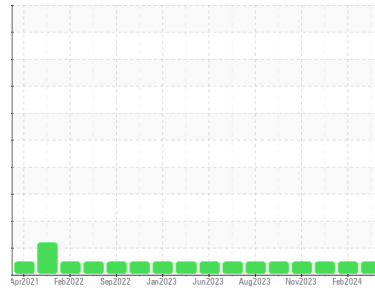




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id

3096

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		WC0945946	WC0906924	WC0863279
Sample Date	Client Info		07 Jul 2024	24 Feb 2024	19 Dec 2023
Machine Age	mls	Client Info	480640	432966	412305
Oil Age	mls	Client Info	432966	397385	397385
Oil Changed	Client Info		Changed	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
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	13	21	8
Chromium	ppm	ASTM D5185m	>20	<1	<1	0
Nickel	ppm	ASTM D5185m	>4	0	<1	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	5	10	4
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	<1	6	3
Tin	ppm	ASTM D5185m	>15	<1	1	<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		6	19	37
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	<1	3
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		773	778	826
Calcium	ppm	ASTM D5185m	2900	1510	1368	1462
Phosphorus	ppm	ASTM D5185m	1100	827	776	775
Zinc	ppm	ASTM D5185m	1200	892	876	905
Sulfur	ppm	ASTM D5185m	4000	3594	2972	3205

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	8	16	8
Sodium	ppm	ASTM D5185m		3	5	2
Potassium	ppm	ASTM D5185m	>20	4	19	6

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	0.4	0.5	0.3
Nitration	Abs/cm	*ASTM D7624	>20	9.7	10.5	9.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.5	24.7	20.4

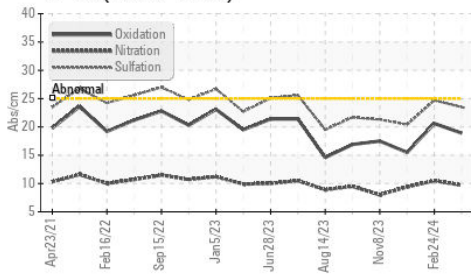
FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.9	20.6	15.5
Base Number (BN)	mg KOH/g	ASTM D2896	10.3	5.6	5.2	6.6

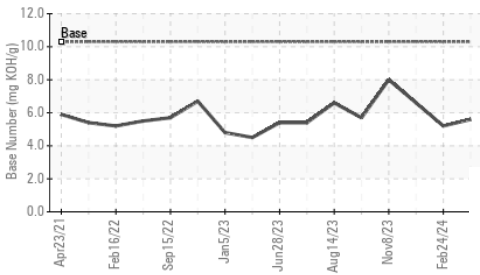


OIL ANALYSIS REPORT

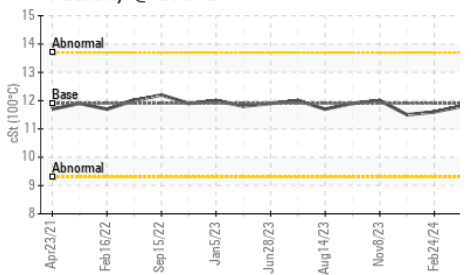
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

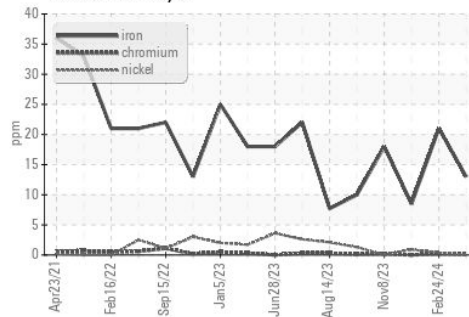


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

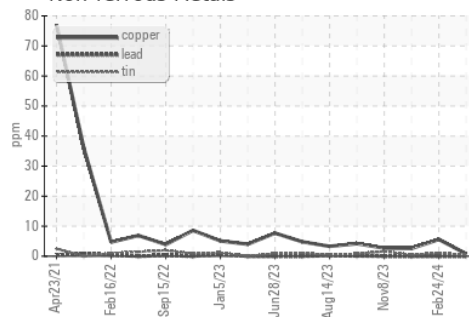
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	11.9	11.8	11.6

GRAPHS

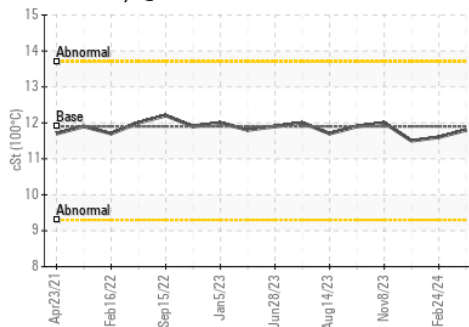
Ferrous Alloys



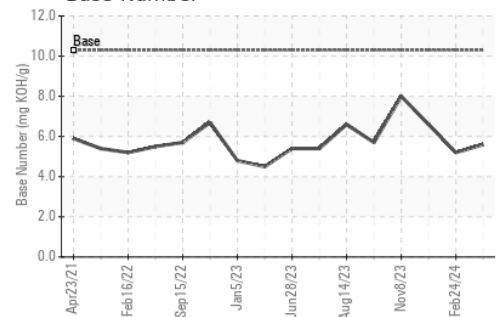
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0945946
Lab Number : 06237412
Unique Number : 11126246
Test Package : FLEET
Received : 15 Jul 2024
Tested : 17 Jul 2024
Diagnosed : 17 Jul 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)