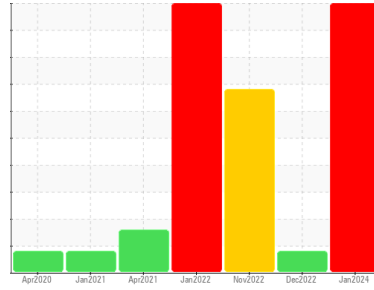




PROBLEM SUMMARY

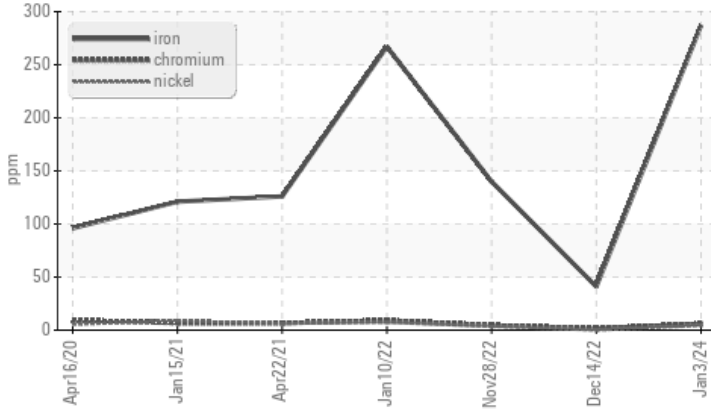
Sample Rating Trend



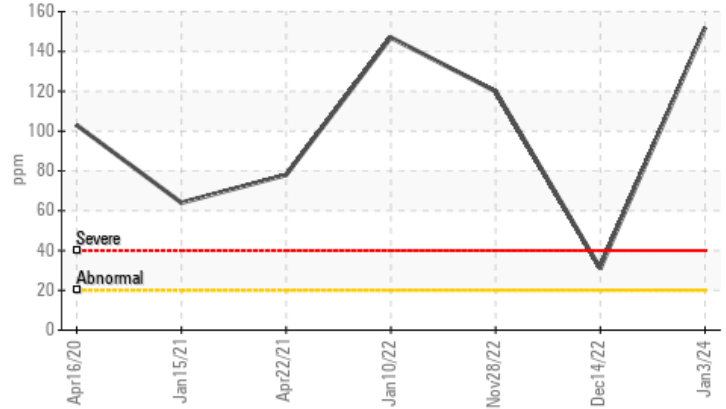
Machine Id
CT-10
 Component
Diesel Engine
 Fluid
CHEVRON DELO 400 MULTIGRADE 15W40 (--- QTS)

COMPONENT CONDITION SUMMARY

Ferrous Alloys



Aluminum (ppm)



RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	ABNORMAL	SEVERE
Iron	ppm	ASTM D5185m	>100	287	41	140
Aluminum	ppm	ASTM D5185m	>20	152	31	120

Customer Id: ASSLAP
 Sample No.: WC0727971
 Lab Number: 06063420
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Don Baldrige +1
don.b505@comcast.net

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Inspect Wear Source	---	---	?	We advise that you inspect for the source(s) of wear.
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.
Resample	---	---	?	We recommend an early resample to monitor this condition.

HISTORICAL DIAGNOSIS

14 Dec 2022 Diag: Don Baldrige

WEAR



No corrective action is recommended at this time. Resample at the next service interval to monitor. The aluminum level has decreased, but is still abnormal. All other component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



28 Nov 2022 Diag: Don Baldrige

WEAR



We recommend that you drain the oil and perform a filter service on this component if not already done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Piston, ring and cylinder wear is indicated. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

view report



10 Jan 2022 Diag: Jonathan Hester

WEAR



Oil and filter change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Piston and cylinder wear is indicated. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

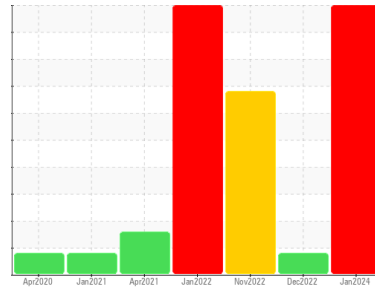
view report





OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
CT-10

Component
Diesel Engine

Fluid
CHEVRON DELO 400 MULTIGRADE 15W40 (--- QTS)

DIAGNOSIS

Recommendation

Oil and filter change at the time of sampling has been noted. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

Wear

Piston, ring and cylinder wear is indicated.

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 oil is no longer serviceable as a result of the abnormal and/or severe wear.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0727971	WC0743945	WC0743934
Sample Date	Client Info		03 Jan 2024	14 Dec 2022	28 Nov 2022
Machine Age	hrs	Client Info	1846	1522	0
Oil Age	hrs	Client Info	250	0	0
Oil Changed	Client Info		Changed	Not Changd	N/A
Sample Status			SEVERE	ABNORMAL	SEVERE

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	287	41	140
Chromium	ppm	ASTM D5185m >20	6	2	5
Nickel	ppm	ASTM D5185m >4	4	0	3
Titanium	ppm	ASTM D5185m	6	6	9
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >20	152	31	120
Lead	ppm	ASTM D5185m >40	<1	<1	<1
Copper	ppm	ASTM D5185m >330	22	6	27
Tin	ppm	ASTM D5185m >15	<1	0	<1
Antimony	ppm	ASTM D5185m	---	---	---
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 151	141	240	131
Barium	ppm	ASTM D5185m 0.4	0	0	<1
Molybdenum	ppm	ASTM D5185m 250	82	79	63
Manganese	ppm	ASTM D5185m	3	<1	2
Magnesium	ppm	ASTM D5185m 0	710	663	656
Calcium	ppm	ASTM D5185m 2046	1482	1480	1545
Phosphorus	ppm	ASTM D5185m 1043	766	712	736
Zinc	ppm	ASTM D5185m 943	881	813	850
Sulfur	ppm	ASTM D5185m 5012	2793	3146	3314

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	20	7	13
Sodium	ppm	ASTM D5185m	2	1	3
Potassium	ppm	ASTM D5185m >20	3	<1	2

INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.4	0.4	0.3
Nitration	Abs/cm	*ASTM D7624 >20	10.6	10.0	10.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	21.8	27.0	22.4

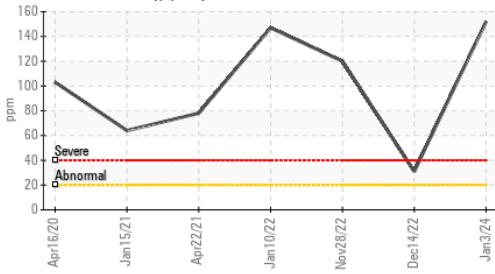
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	18.0	21.3	17.1
Base Number (BN)	mg KOH/g	ASTM D2896 12.5	6.8	9.0	8.6

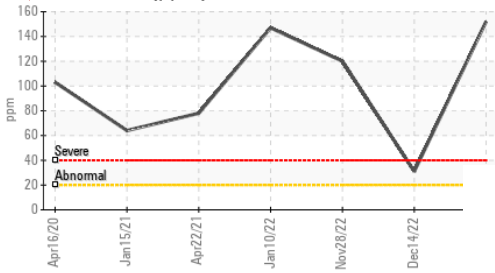


OIL ANALYSIS REPORT

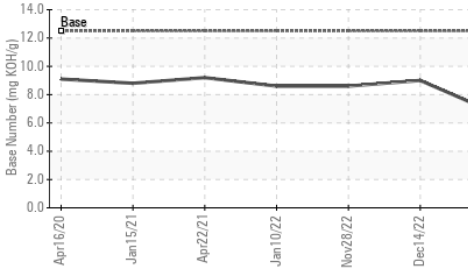
Aluminum (ppm)



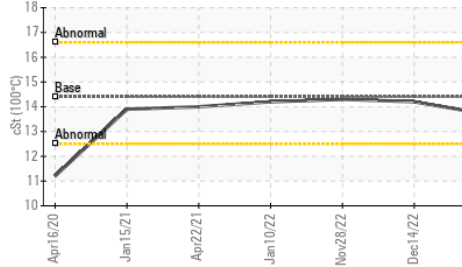
Aluminum (ppm)



Base Number



Viscosity @ 100°C

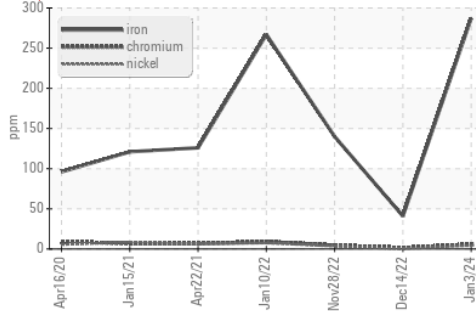


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

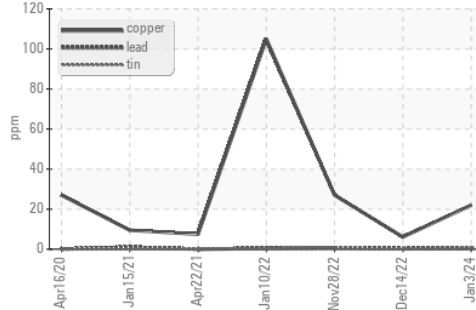
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.4	13.7	14.2

GRAPHS

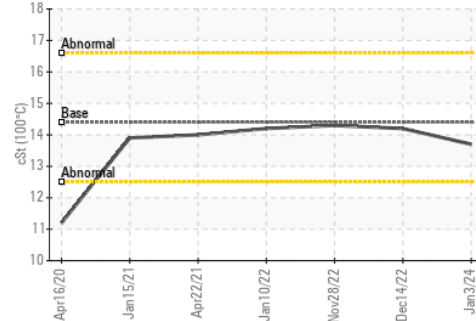
Ferrous Alloys



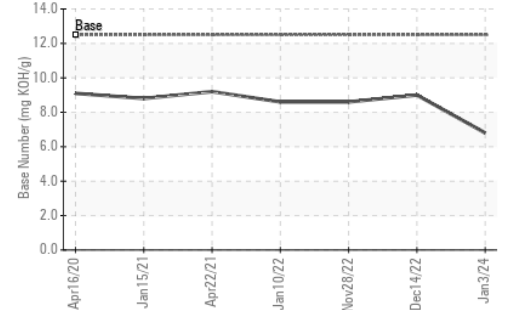
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : WC0727971
 Lab Number : 06063420
 Unique Number : 10834802
 Test Package : FLEET

ASSOCIATED TERMINALS - MOBILE EQUIPMENT

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 US 70068
 Contact: LARRY KNIGHT
 larry@associatedterminals.com
 T: (985)651-0026
 F: (985)651-2099

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)