



WEAR CHECK

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
CT-07
Component
Diesel Engine
Fluid
CHEVRON DELO 400 MULTIGRADE 15W40 (--- QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0759321	WC0759371	WC0346405
Sample Date		Client Info		06 Jun 2024	03 Feb 2023	29 Jan 2020
Machine Age	hrs	Client Info		2575	1827	228
Oil Age	hrs	Client Info		500	277	250
Filter Age	hrs	Client Info		500	1	250
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

Piston, ring and cylinder wear is indicated.

Iron	ppm	ASTM D5185m	>100	▲ 113	▲ 156	191
Chromium	ppm	ASTM D5185m	>20	2	4	14
Nickel	ppm	ASTM D5185m	>4	2	▲ 6	▲ 12
Titanium	ppm	ASTM D5185m		14	12	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	▲ 50	▲ 89	▲ 170
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	15	63	67
Tin	ppm	ASTM D5185m	>15	0	0	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

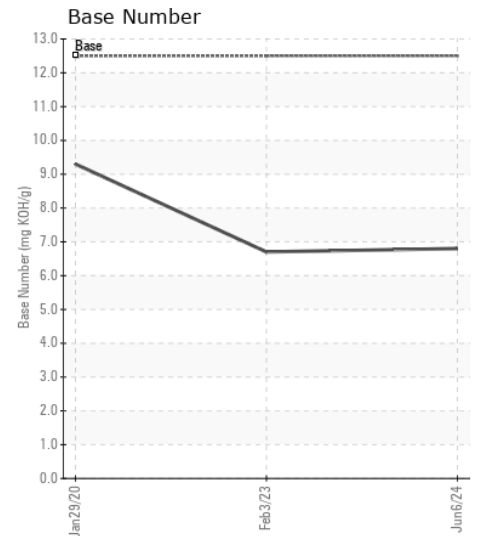
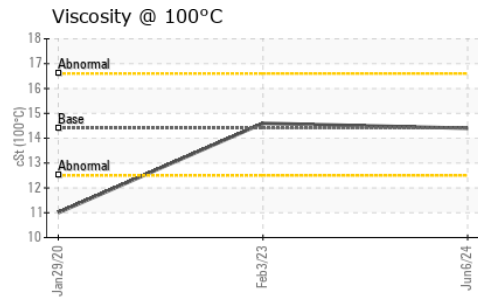
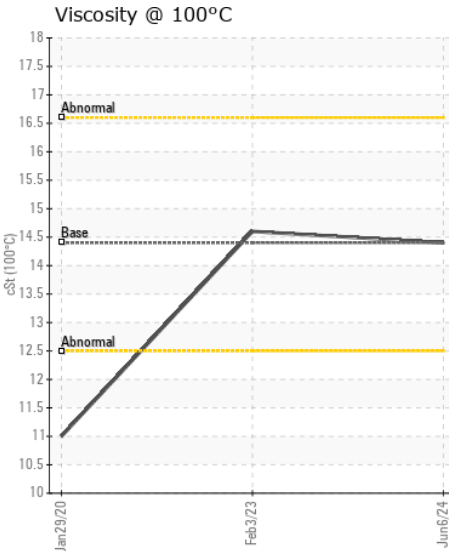
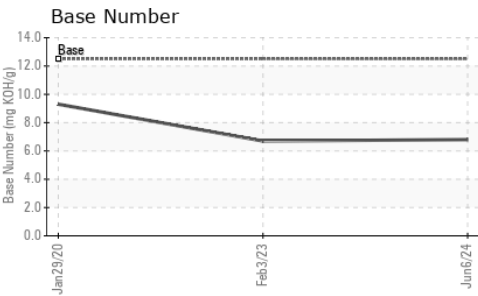
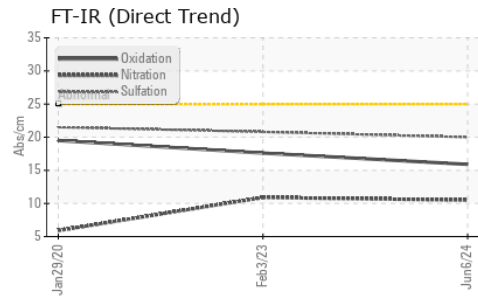
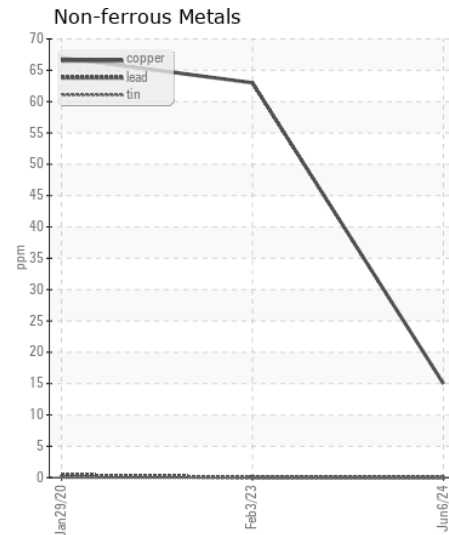
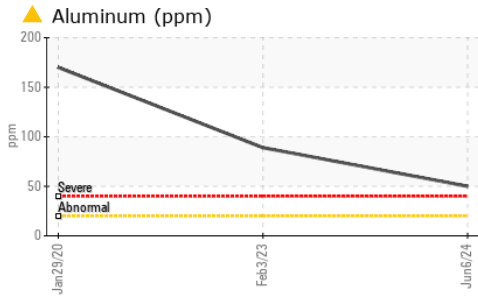
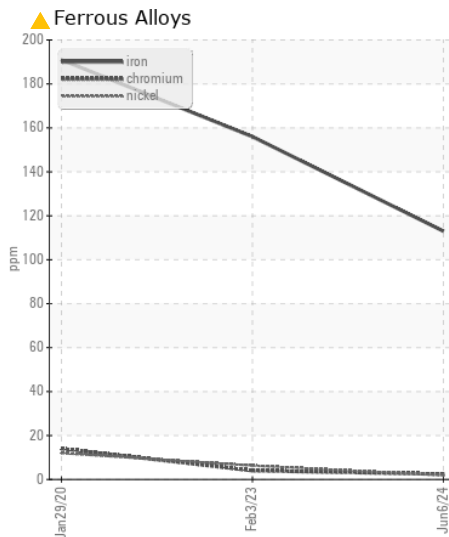
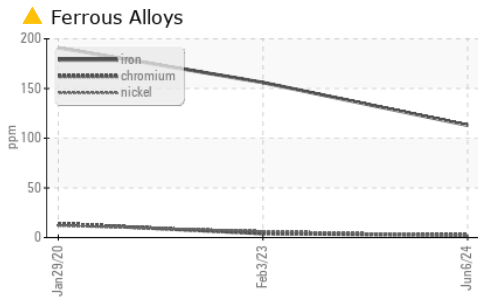
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	11	16	17
Potassium	ppm	ASTM D5185m	>20	5	7	0
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.4	0.2
Nitration	Abs/cm	*ASTM D7624	>20	10.5	10.9	5.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.0	20.8	21.5
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		5	12	13
Boron	ppm	ASTM D5185m	151	38	42	47
Barium	ppm	ASTM D5185m	0.4	0	0	<1
Molybdenum	ppm	ASTM D5185m	250	35	44	40
Manganese	ppm	ASTM D5185m		2	2	4
Magnesium	ppm	ASTM D5185m	0	750	624	484
Calcium	ppm	ASTM D5185m	2046	1548	1557	1746
Phosphorus	ppm	ASTM D5185m	1043	749	739	977
Zinc	ppm	ASTM D5185m	943	856	906	1093
Sulfur	ppm	ASTM D5185m	5012	3357	2849	2853
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.9	17.6	19.5
Base Number (BN)	mg KOH/g	ASTM D2896	12.5	6.8	6.7	9.3
Visc @ 100°C	cSt	ASTM D445	14.4	14.4	14.6	11.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0759321
Lab Number : 06212898
Unique Number : 11085762
Test Package : FLEET

Received : 17 Jun 2024
Tested : 19 Jun 2024
Diagnosed : 19 Jun 2024 - Angela Borella

ASSOCIATED TERMINALS - MOBILE EQUIPMENT

LAPLACE, LA
 US 70068

Contact: LONNIE BECNEL
 lbecnel@associatedterminals.com

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)

T:
 F: (985)651-2099