CONST

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
PIERCE 0487
Component
Diesel Engine
Fluid
CHEVRON DELO 400 XLE 10W30 (--- QTS)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

The aluminum level is abnormal. All other component wear rates are normal.

CONTAMINATION

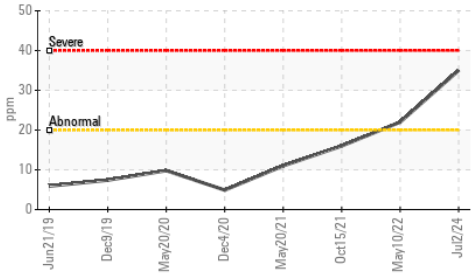
There is no indication of any contamination in the oil.

FLUID CONDITION

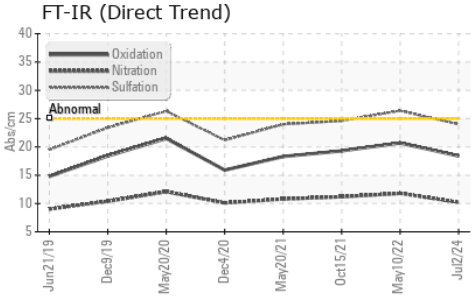
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0921201	WC0701518	WC0616997
Sample Date		Client Info		02 Jul 2024	10 May 2022	15 Oct 2021
Machine Age	hrs	Client Info		2707	1952	1824
Oil Age	hrs	Client Info		755	687	559
Filter Age	hrs	Client Info		755	265	137
Oil Changed		Client Info		Changed	Changed	Not Changd
Filter Changed		Client Info		Changed	Changed	Not Changd
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>100	35	25	21
Chromium	ppm	ASTM D5185m	>20	6	2	2
Nickel	ppm	ASTM D5185m	>4	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	2	2
Silver	ppm	ASTM D5185m	>3	<1	0	<1
Aluminum	ppm	ASTM D5185m	>20	▲ 35	22	16
Lead	ppm	ASTM D5185m	>40	<1	1	<1
Copper	ppm	ASTM D5185m	>330	22	35	39
Tin	ppm	ASTM D5185m	>15	2	2	2
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	7	5	4
Potassium	ppm	ASTM D5185m	>20	28	28	29
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	0.7	0.7	0.6
Nitration	Abs/cm	*ASTM D7624	>20	10.2	11.8	11.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.0	26.4	24.6
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
Sodium	ppm	ASTM D5185m		10	13	8
Boron	ppm	ASTM D5185m		31	22	23
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		15	25	27
Manganese	ppm	ASTM D5185m		1	1	<1
Magnesium	ppm	ASTM D5185m		819	752	716
Calcium	ppm	ASTM D5185m	2900	1554	1470	1430
Phosphorus	ppm	ASTM D5185m	1100	727	746	738
Zinc	ppm	ASTM D5185m	1200	964	863	859
Sulfur	ppm	ASTM D5185m	4000	3213	2702	2485
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.4	20.7	19.3
Base Number (BN)	mg KOH/g	ASTM D2896	10.3	5.6	6.4	---
Visc @ 100°C	cSt	ASTM D445	11.9	11.6	12.3	12.2

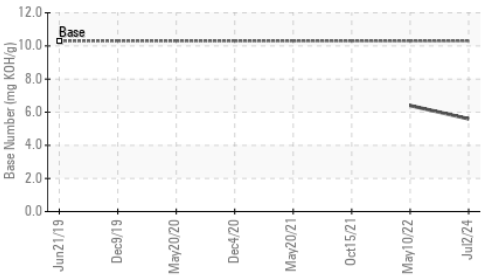
Aluminum (ppm)



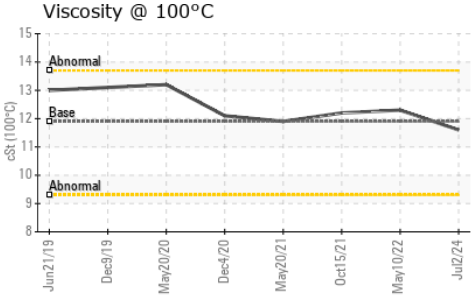
FT-IR (Direct Trend)



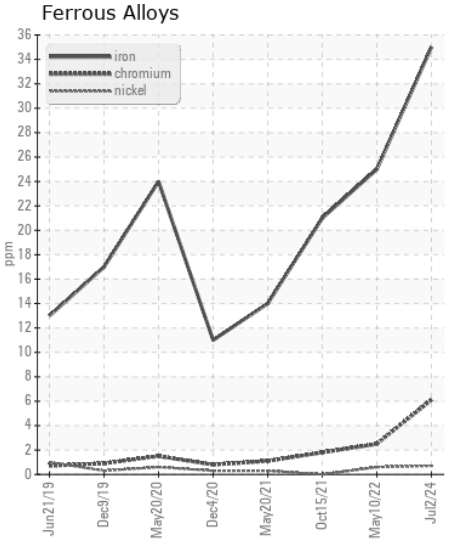
Base Number



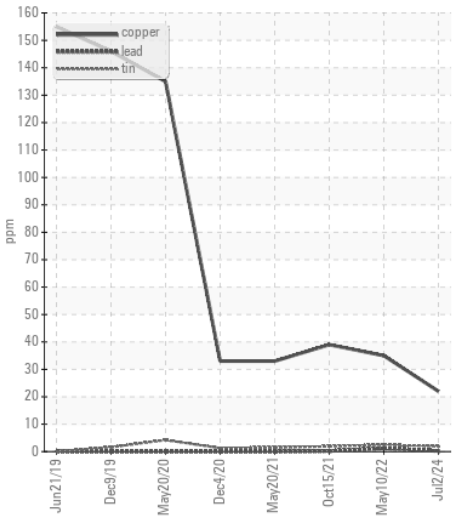
Viscosity @ 100°C



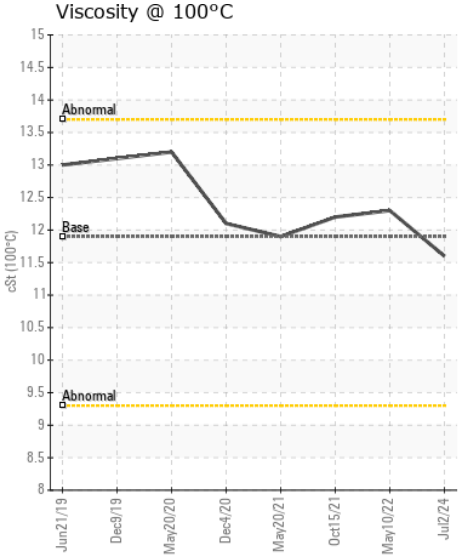
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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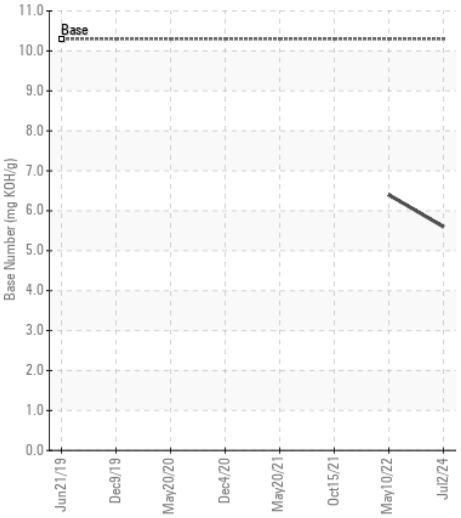

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0921201
Lab Number : 06228208
Unique Number : 11111701
Test Package : CONST (Additional Tests: TBN)

Received : 03 Jul 2024
Tested : 08 Jul 2024
Diagnosed : 08 Jul 2024 - Jonathan Hester

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)

TOWN OF CARY
420 JAMES JACKSON AVENUE
CARY, NC
US 27513
Contact: BRANDON PASINSKI
brandon.pasinski@carync.gov
T: (919)469-4098
F: (919)380-6420