MOB I WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
CATERPILLAR D5N 109
Component
Diesel Engine
Fluid
PETRO CANADA 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

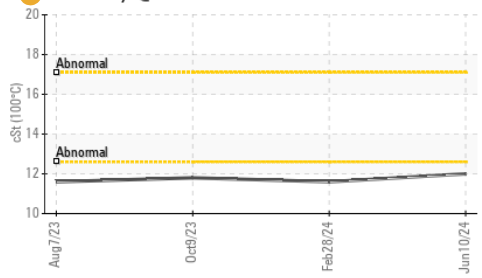
There is no indication of any contamination in the oil.

FLUID CONDITION

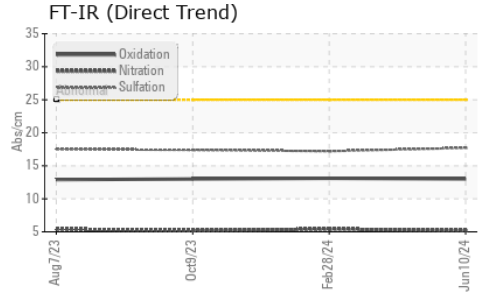
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0917231	WC0906033	WC0822165
Sample Date		Client Info		10 Jun 2024	28 Feb 2024	09 Oct 2023
Machine Age	hrs	Client Info		20951	20657	20316
Oil Age	hrs	Client Info		290	341	273
Filter Age	hrs	Client Info		290	341	273
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				ATTENTION	ATTENTION	ATTENTION
Iron	ppm	ASTM D5185m	>100	4	7	4
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	1	1	0
Lead	ppm	ASTM D5185m	>40	<1	3	<1
Copper	ppm	ASTM D5185m	>330	0	0	1
Tin	ppm	ASTM D5185m	>15	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	3	2	3
Potassium	ppm	ASTM D5185m	>20	<1	0	1
Fuel	%	ASTM D3524	>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	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	5.2	5.4	5.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.7	17.2	17.4
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		2	2	<1
Boron	ppm	ASTM D5185m		5	6	7
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		65	60	65
Manganese	ppm	ASTM D5185m		<1	0	0
Magnesium	ppm	ASTM D5185m		1025	1015	966
Calcium	ppm	ASTM D5185m		1146	1110	1081
Phosphorus	ppm	ASTM D5185m		971	1076	1103
Zinc	ppm	ASTM D5185m		1327	1231	1252
Sulfur	ppm	ASTM D5185m		3839	3313	3453
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.0	13.1	13.0
Base Number (BN)	mg KOH/g	ASTM D2896		9.1	9.0	9.0
Visc @ 100°C	cSt	ASTM D445		12.0	11.6	11.8

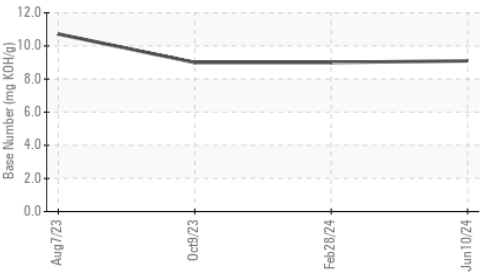
Viscosity @ 100°C



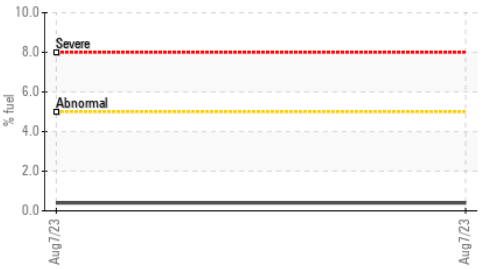
FT-IR (Direct Trend)



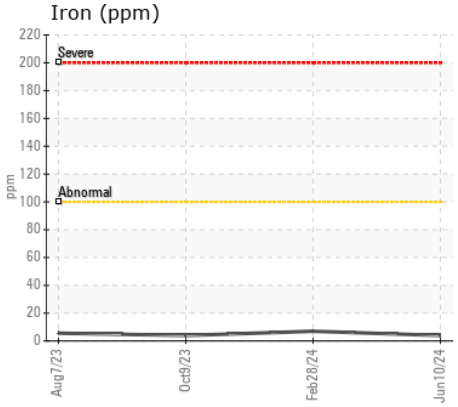
Base Number



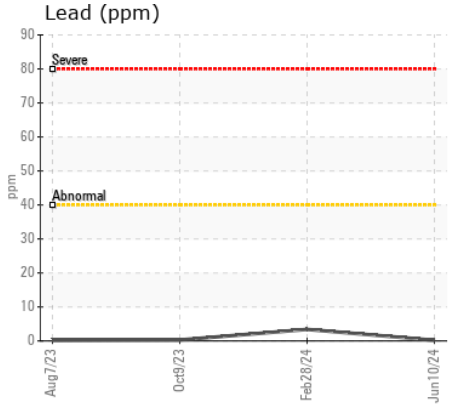
Fuel Dilution



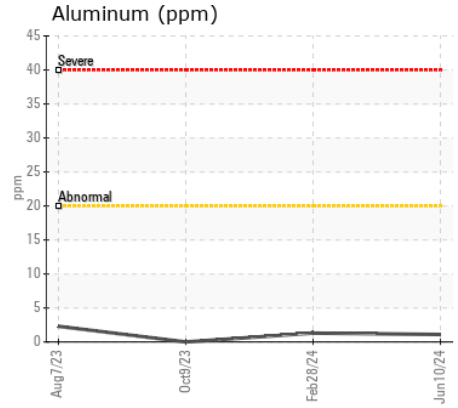
Iron (ppm)



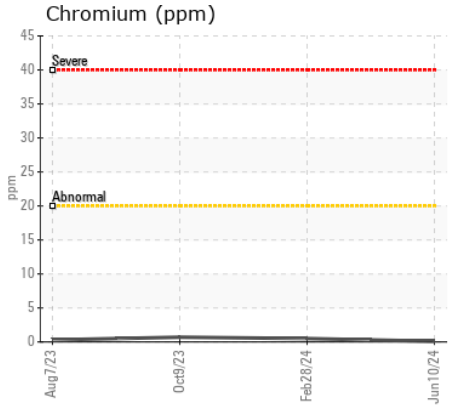
Lead (ppm)



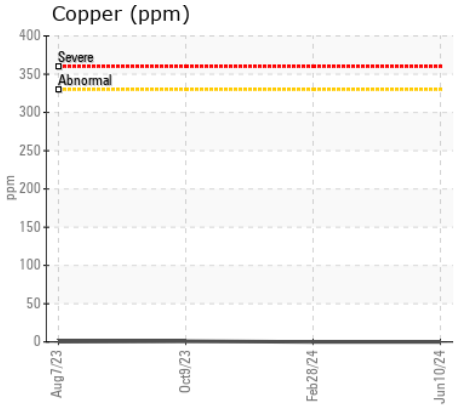
Aluminum (ppm)



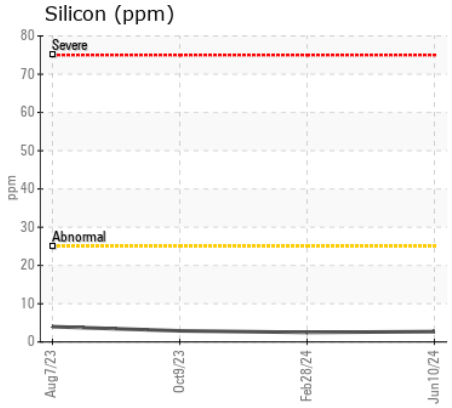
Chromium (ppm)



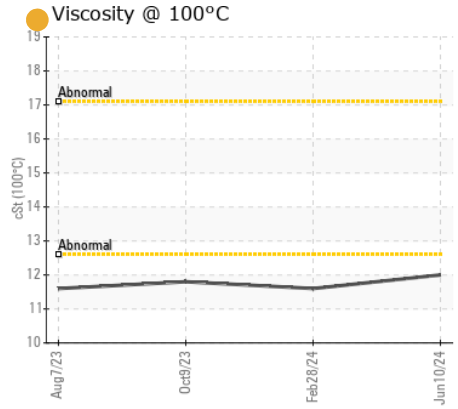
Copper (ppm)



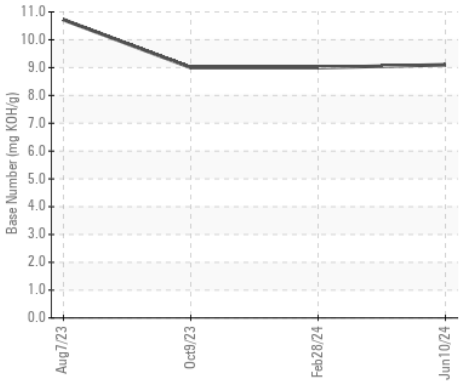
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0917231 **Received** : 27 Jun 2024
Lab Number : 06222130 **Tested** : 28 Jun 2024
Unique Number : 11100327 **Diagnosed** : 28 Jun 2024 - Sean Felton
Test Package : MOB 1 (Additional Tests: FuelDilution, TBN)

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)

C.L. BENTON & SONS INC
706 38TH AVE N
MYRTLE BEACH, SC
US 29577
Contact: JAMIE HUCKS
shop@clbenton.com
T:
F: