MOB II WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
WCLSNC
Machine Id
QC230801DE
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

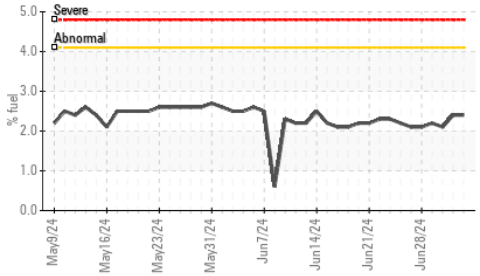
There is no indication of any contamination in the oil.

FLUID CONDITION

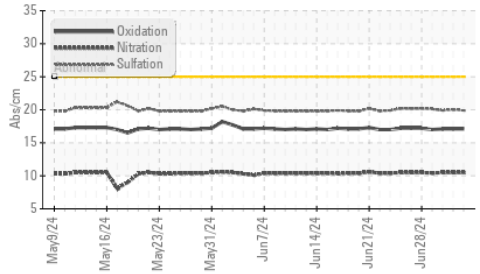
The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		**WC0961137**	WC0961135	WC0961134
Sample Date		Client Info		**05 Jul 2024**	03 Jul 2024	02 Jul 2024
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Filter Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Filter Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**NORMAL**	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>11	**10**	7	8
Chromium	ppm	ASTM D5185m	>3	**<1**	<1	<1
Nickel	ppm	ASTM D5185m	>2	**<1**	<1	<1
Titanium	ppm	ASTM D5185m	>2	**0**	0	0
Silver	ppm	ASTM D5185m	>2	**<1**	<1	<1
Aluminum	ppm	ASTM D5185m	>5	**3**	2	2
Lead	ppm	ASTM D5185m	>2	**<1**	0	0
Copper	ppm	ASTM D5185m	>7	**5**	3	3
Tin	ppm	ASTM D5185m	>2	**0**	<1	<1
Vanadium	ppm	ASTM D5185m		**<1**	0	0
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silicon	ppm	ASTM D5185m	>14	**7**	4	5
Potassium	ppm	ASTM D5185m	>20	**2**	3	2
Fuel	%	ASTM D3524	>4.1	**2.4**	2.4	2.1
Water	%	ASTM D6304	>0.2	**NEG**	NEG	NEG
Glycol	%	*ASTM D2982		**NEG**	NEG	NEG
Soot %	%	*ASTM D7844	>0.3	**0.1**	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>10.8	**10.5**	10.5	10.5
Sulfation	Abs/.1mm	*ASTM D7415	>20.8	**19.9**	20.0	19.9
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	>13	**10**	8	9
Boron	ppm	ASTM D5185m	0	**2**	9	9
Barium	ppm	ASTM D5185m	0	**0**	0	0
Molybdenum	ppm	ASTM D5185m	60	**53**	50	54
Manganese	ppm	ASTM D5185m	0	**<1**	<1	<1
Magnesium	ppm	ASTM D5185m	1010	**561**	586	566
Calcium	ppm	ASTM D5185m	1070	**1711**	1557	1561
Phosphorus	ppm	ASTM D5185m	1150	**754**	740	720
Zinc	ppm	ASTM D5185m	1270	**983**	984	952
Sulfur	ppm	ASTM D5185m	2060	**2787**	2876	2855
Oxidation	Abs/.1mm	*ASTM D7414	>17.9	**17.1**	17.1	17.1
Acid Number (AN)	mg KOH/g	ASTM D8045	3.2	**0.67**	0.74	0.55
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	**7.06**	7.59	7.02
Visc @ 40°C	cSt	ASTM D445	113.9	**98.18**	99.0	97.1
Visc @ 100°C	cSt	ASTM D445	15.4	**13.4**	13.4	13.3
Viscosity Index (VI)	Scale	ASTM D2270	142	**135**	134	136

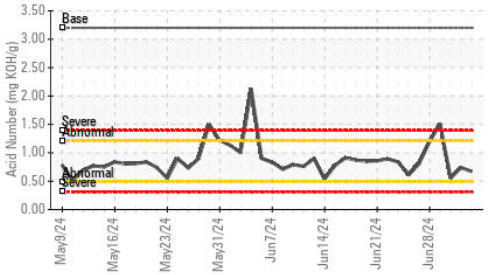
Fuel Dilution



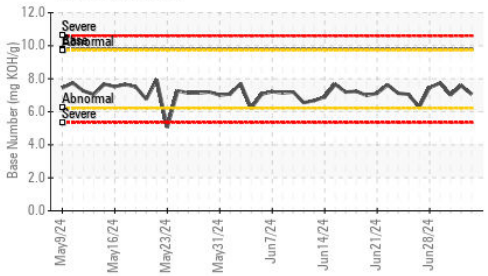
FT-IR (Direct Trend)



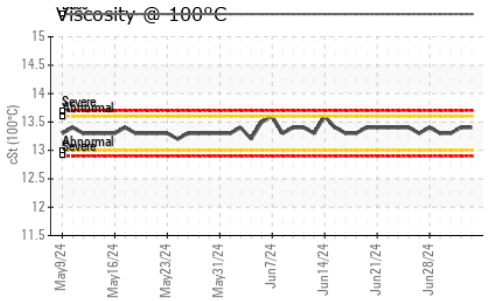
Acid Number



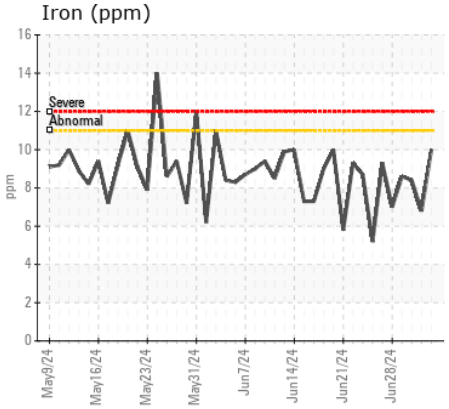
Base Number



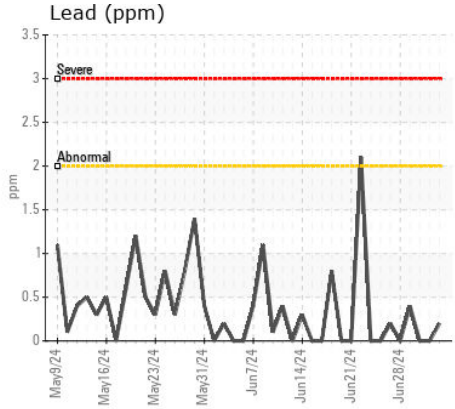
Viscosity @ 100°C



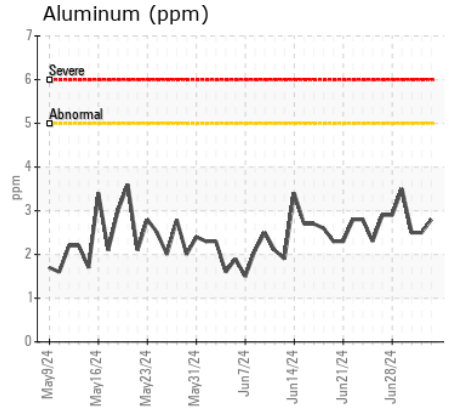
Iron (ppm)



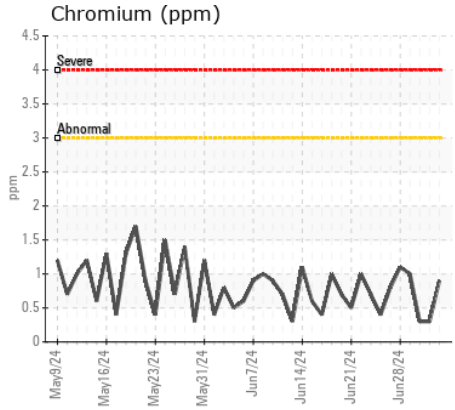
Lead (ppm)



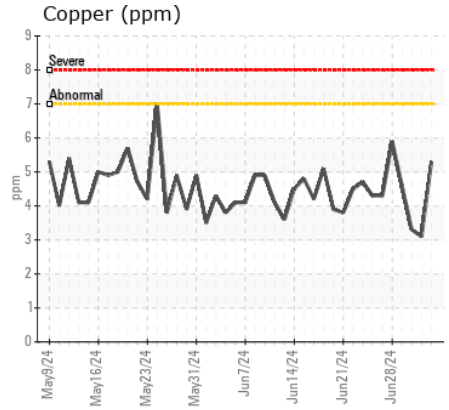
Aluminum (ppm)



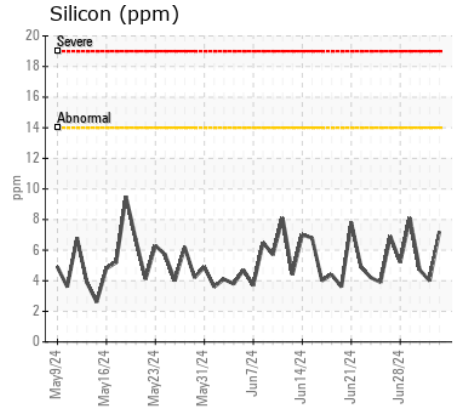
Chromium (ppm)



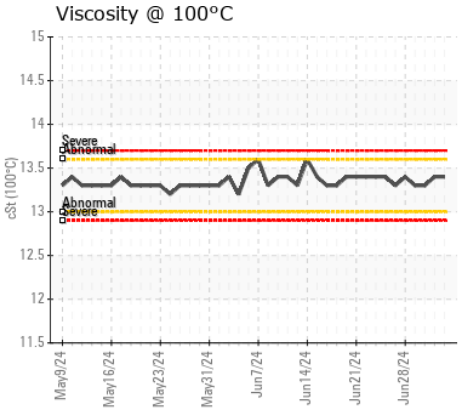
Copper (ppm)



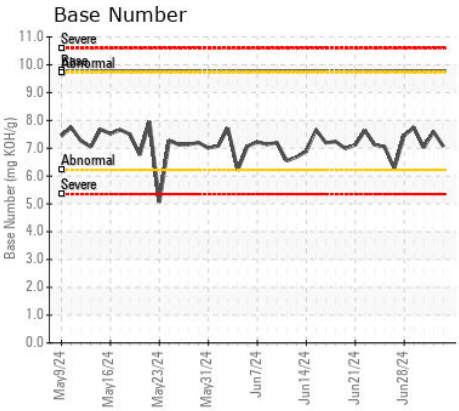
Silicon (ppm)



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0961137
Lab Number : 06228843
Unique Number : 11112336
Test Package : MOB 2 (Additional Tests: FuelDilution, Glycol, KF, KV40, PercentFuel, VI)

Received : 05 Jul 2024
Tested : 10 Jul 2024
Diagnosed : 10 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)

WEARCHECK LUBRICATION SERVICES QA ACCOUNT
501 Madison Ave
Cary, NC
US 27513
Contact: WCLS CARY NC
T: (919)379-4102
F: (919)379-4050