

OIL ANALYSIS REPORT

DOOSAN LCV6WKUB LP 917

Diesel Engine

PETRO CANADA DURON XL SYN BLEND 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Fluid

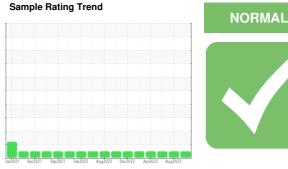
All component wear rates are normal.

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 condition of the oil is suitable for further service.



SAMPLE INFORM	/IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0862972	WC0837189	WC0790981
Sample Date		Client Info		28 Oct 2023	10 Aug 2023	20 May 2023
Machine Age	hrs	Client Info		10810	10089	9472
Oil Age	hrs	Client Info		721	617	512
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	11	11	13
Chromium	ppm	ASTM D5185m	>20	2	2	4
Nickel	ppm	ASTM D5185m	>5	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	2	3
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>30	2	0	0
Tin	ppm	ASTM D5185m	>15	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	1	8	4	11
Barium	ppm	ASTM D5185m	1	0	0	0
Molybdenum	ppm	ASTM D5185m	60	57	61	61
Manganese	ppm	ASTM D5185m	1	<1	0	<1
Magnesium	ppm	ASTM D5185m	1010	939	1020	969
Calcium	ppm	ASTM D5185m	1070	1092	1156	1120
Phosphorus	ppm	ASTM D5185m	1150	1027	1101	1041
Zinc	ppm	ASTM D5185m	1270	1278	1408	1292
Sulfur	ppm	ASTM D5185m	2060	3014	4140	3715
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>15	4	2	4
Sodium	ppm	ASTM D5185m		2	0	2
Potassium	ppm	ASTM D5185m	>20	<1	0	2
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.3	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	6.3	6.1	6.8
Sulfation	Abs/.1mm	*ASTM D7415		17.9	17.9	19.3
	TION					

Abs/.1mm *ASTM D7414 >25

Base Number (BN) mg KOH/g ASTM D2896 9.6

Oxidation

15.6

8.8

14.1

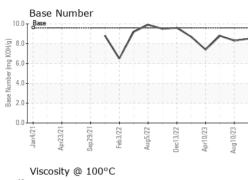
8.3

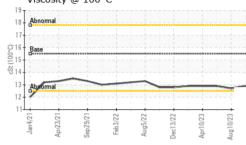
13.6

8.5



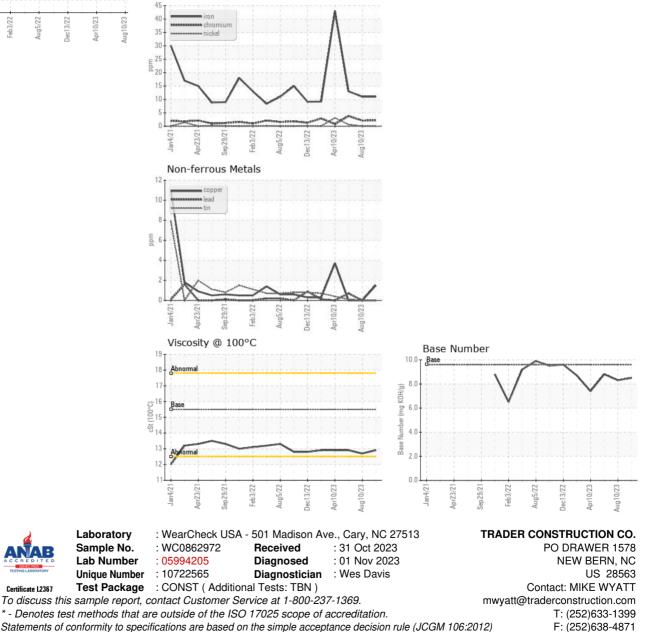
OIL ANALYSIS REPORT

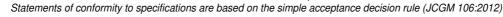




VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.5	12.9	12.7	12.9
GRAPHS						

Ferrous Alloys





Contact/Location: MIKE WYATT - TRANEW