

Machine Id 021 Component **Diesel Engine** PETRO CANADA DURON UHP 10W40 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		DE0000526	DE0000619	
Resample at the next service interval to monitor.	Sample Date		Client Info		11 Jun 2024	17 Nov 2023	
	Machine Age	mls	Client Info		747125	732495	
	Oil Age	mls	Client Info		15000	15000	
	Filter Age	mls	Client Info		15000	15000	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185m	>165	22	19	
WEAR	Chromium	ppm	ASTM D5185m		<1	<1	
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		<1	0	
	Titanium	ppm	ASTM D5185m		<1	0	
	Silver	ppm	ASTM D5185m		<1	0	
	Aluminum	ppm	ASTM D5185m		4	2	
	Lead	ppm	ASTM D5185m	>150	1	<1	
	Copper	ppm	ASTM D5185m	>90	1	<1	
	Tin	ppm	ASTM D5185m	>5	0	0	
	Vanadium	ppm	ASTM D5185m		<1	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
	Ciliaan			. 05	Α	0	
CONTAMINATION	Silicon	ppm	ASTM D5185m		4	3 5	
There is no indication of any contamination in the oil.	Potassium Fuel	ppm	ASTM D5185m WC Method		6	5 <1.0	
·	Water		WC Method		<1.0 NEG	NEG	
	Glycol		WC Method	>0.2	NEG	NEG	
	Soot %	%	*ASTM D7844	>75	1.7	1.4	
	Nitration	Abs/cm	*ASTM D7624	>20	9.0	8.6	
	Sulfation	Abs/.1mm	*ASTM D7415		21.1	20.8	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m		2	6	
I LOID CONDITION	Boron	ppm	ASTM D5185m	2	8	13	
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	<1	
	Molybdenum	ppm	ASTM D5185m		61	60	
	Manganese	ppm	ASTM D5185m		1	<1	
	Magnesium	ppm	ASTM D5185m	1010	1010	870	
	Calcium	ppm	ASTM D5185m	1070	1138	1037	
	Phosphorus	ppm	ASTM D5185m	1150	1101	1026	
	Zinc	ppm	ASTM D5185m	1270	1360	1187	
	Sulfur	ppm	ASTM D5185m	2060	3910	2924	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	14.3	14.3	
	D NI I (DI)	L/OLL:	LOTH DOGO	0.0			

7.7

12.7

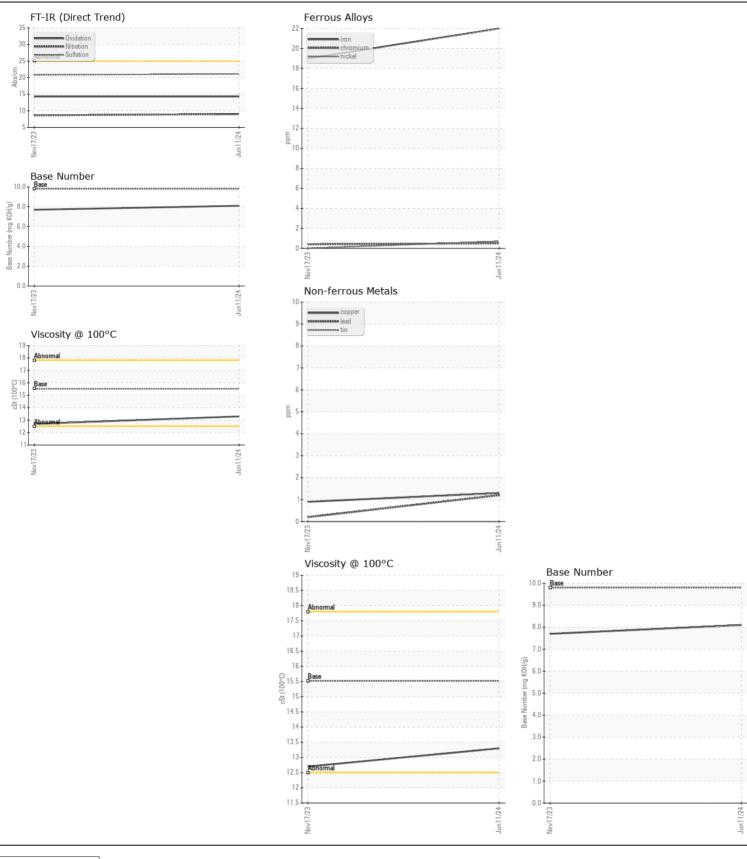
8.1

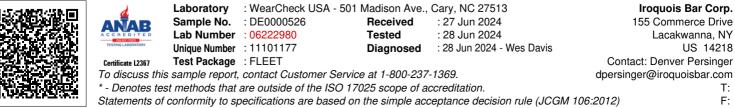
13.3

ASTM D445 15.52

Base Number (BN) mg KOH/g ASTM D2896 9.8

Visc @ 100°C cSt





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