

Machine Id IMT 7D15E 103 Diesel Engine PETRO CANADA 15W40 (--- GAL)

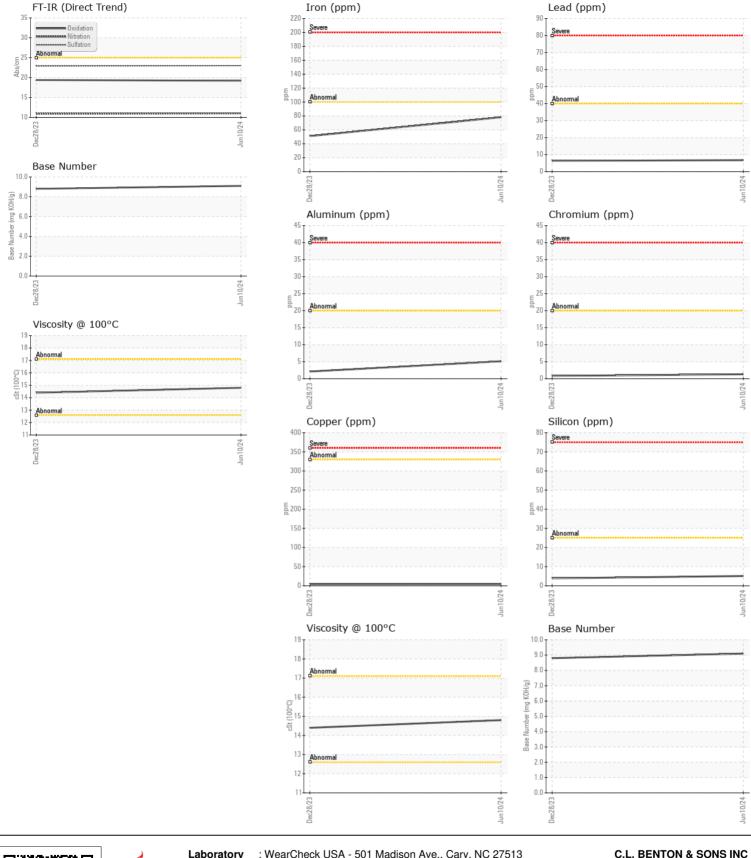
PETRO CANADA 15W40 (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		WC0917224	WC0879008	
	Sample Date		Client Info		10 Jun 2024	28 Dec 2023	
	Machine Age	hrs	Client Info		11550	11332	
	Oil Age	hrs	Client Info		250	219	
	Filter Age	hrs	Client Info		250	219	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185m	>100	78	51	
	Chromium	ppm	ASTM D5185m	>20	1	<1	
All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>4	3	3	
	Titanium	ppm	ASTM D5185m		<1	<1	
	Silver	ppm	ASTM D5185m	>3	0	0	
	Aluminum	ppm	ASTM D5185m		5	2	
	Lead	ppm	ASTM D5185m	>40	7	6	
	Copper	ppm	ASTM D5185m	>330	5	4	
	Tin	ppm	ASTM D5185m	>15	<1	<1	
	Vanadium	ppm	ASTM D5185m		<1	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	5	4	
CONTAMINATION	Potassium	ppm	ASTM D5185m		2	3	
There is no indication of any contamination in the oil.	Fuel	ppiii	WC Method		- <1.0	<1.0	
	Water		WC Method		NEG	NEG	
	Glycol		WC Method	20.2	NEG	NEG	
	Soot %	%	*ASTM D7844	>3	1.6	1.5	
	Nitration	Abs/cm	*ASTM D7624		11.0	10.9	
	Sulfation	Abs/.1mm	*ASTM D7415		23.0	22.9	
	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		ASTM D5185m		5	1	
	Boron	ppm	ASTM D5185m		3	9	
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	10	
	Molybdenum	ppm	ASTM D5185m		67	66	
	Manganese	ppm	ASTM D5185m		07 <1	<1	
	Magnesium	ppm	ASTM D5185m		1051	900	
	Calcium	ppm	ASTM D5185m		1147	1060	
	Phosphorus	ppm	ASTM D5185m			1080	
		ppm			1146		
	Zinc	ppm	ASTM D5185m		1394	1173	
	Sulfur	ppm	ASTM D5185m	. 05	3415	3210	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	19.2	19.4	
	Base Number (BN)	mg KOH/g	ASTM D2896		9.1	8.8	

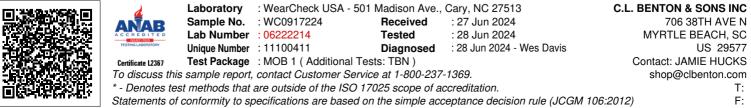
Visc @ 100°C cSt

ASTM D445

14.4

14.8





Contact/Location: JAMIE HUCKS - CLBMYR Page 2 of 2