

ZEIGLER BROS Machine Id VOLVO 50690 (S/N 4V4NC9EHZLN263690) Diesel Engine

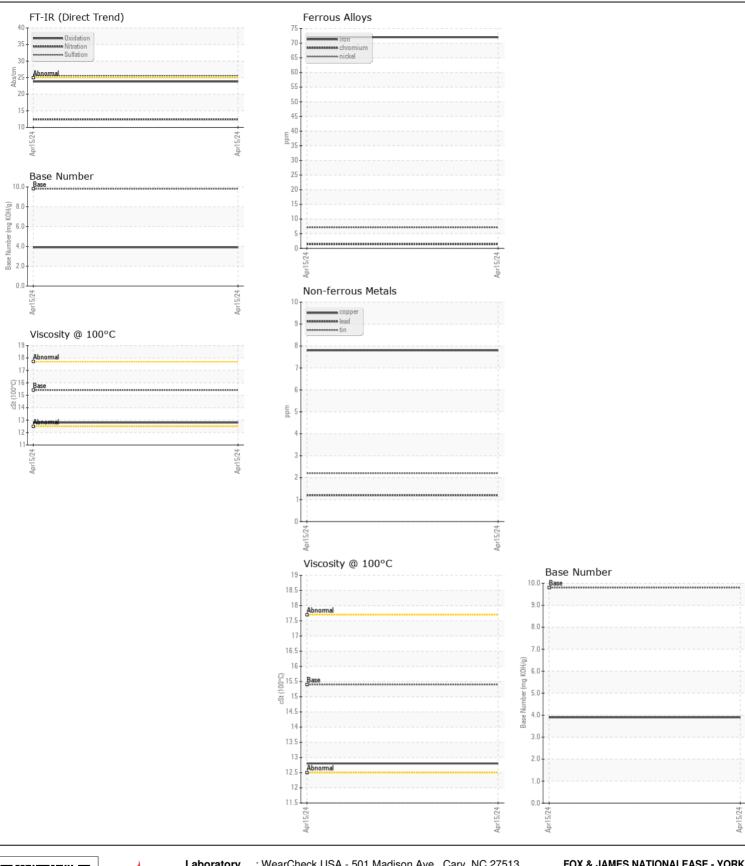
PETRO CANADA DURON SHP 15W40 (--- GAL)

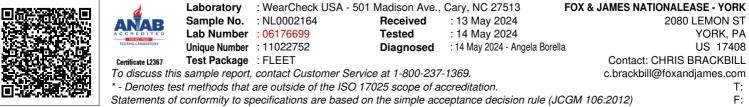
PETRO CANADA DURUN SHP 15W40 (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		NL0002164		
	Sample Date		Client Info		15 Apr 2024		
	Machine Age	mls	Client Info		199392		
	Oil Age	mls	Client Info		0		
	Filter Age	mls	Client Info		0		
	Oil Changed		Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m	>100	72		
	Chromium	ppm	ASTM D5185m	>20	1		
All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>2	7		
	Titanium	ppm	ASTM D5185m		2		
	Silver	ppm	ASTM D5185m	>2	<1		
	Aluminum	ppm	ASTM D5185m	>25	5		
	Lead	ppm	ASTM D5185m	>40	1		
	Copper	ppm	ASTM D5185m	>330	8		
	Tin	ppm	ASTM D5185m	>15	2		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	<u>\</u> 25	13		
CONTAMINATION	Potassium	ppm	ASTM D5185m		26		
There is no indication of any contamination in the oil.	Fuel	ppiii	WC Method		<1.0		
	Water		WC Method		NEG		
	Glycol		WC Method	20.2	NEG		
	Soot %	%	*ASTM D7844	>3	0.7		
	Nitration	Abs/cm	*ASTM D7624	>20	12.4		
	Sulfation	Abs/.1mm	*ASTM D7415		25.6		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m		53		
	Boron	ppm	ASTM D5185m	0	6		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.	Barium	ppm	ASTM D5185m		0		
	Molybdenum	ppm	ASTM D5185m		58		
	Manganese	ppm	ASTM D5185m		2		
	Magnesium	ppm	ASTM D5185m		910		
	Calcium	ppm	ASTM D5185m		1216		
	Phosphorus	ppm	ASTM D5185m	1150	1020		
	Zinc	ppm	ASTM D5185m	1270	1255		
	Sulfur	ppm	ASTM D5185m		2838		
	Oxidation	Abs/.1mm	*ASTM D7414		23.8		
	Base Number (BN)	mg KOH/g	ASTM D2896	9.8	3.9		

Visc @ 100°C cSt

12.8

ASTM D445 15.4





Contact/Location: CHRIS BRACKBILL - FOXYORPA Page 2 of 2