

WEAR	
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id **90 PU-6** Component **Diesel Engine** Fluid **PETRO CANADA DURON HP 15W40 (--- GAL)**

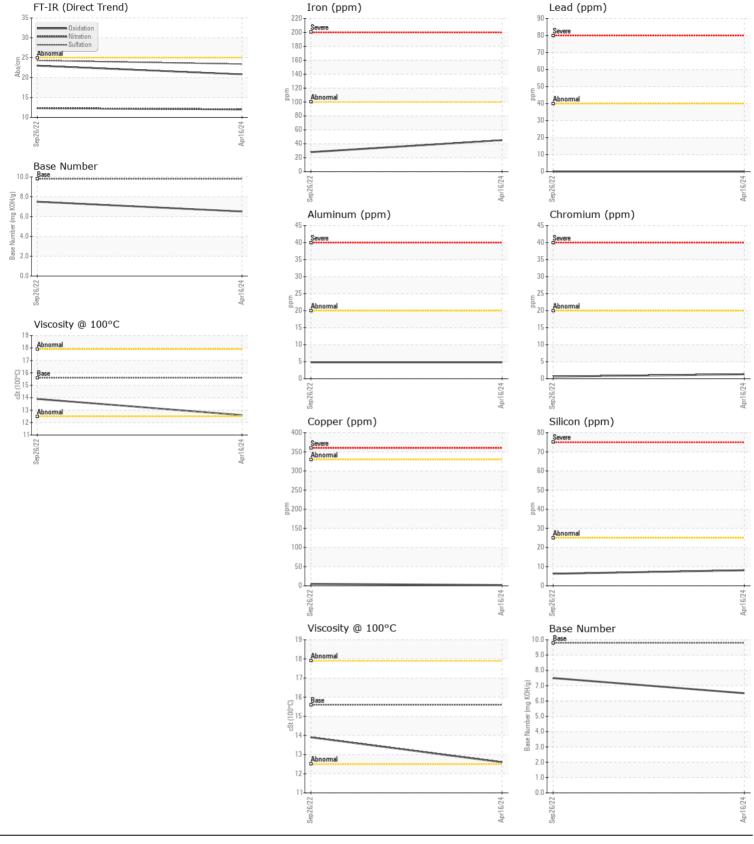
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		KFS0003998	KFS0001547	
	Sample Date		Client Info		16 Apr 2024	26 Sep 2022	
	Machine Age	mls	Client Info		157542	114937	
	Oil Age	mls	Client Info		5000	0	
	Filter Age	mls	Client Info		5000	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185m	>100	45	28	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	1	<1	
	Nickel	ppm	ASTM D5185m	>4	<1	0	
	Titanium	ppm	ASTM D5185m		<1	0	
	Silver	ppm	ASTM D5185m	>3	0	0	
	Aluminum	ppm	ASTM D5185m	>20	5	5	
	Lead	ppm	ASTM D5185m		0	0	
	Copper	ppm	ASTM D5185m	>330	2	5	
	Tin	ppm	ASTM D5185m	>15	<1	<1	
	Vanadium	ppm	ASTM D5185m		0	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	8	6	
	Potassium	ppm	ASTM D5185m	>20	4	4	
There is no indication of any contamination in the oil.	Fuel		WC Method	>5	<1.0	<1.0	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	1.1	0.6	
	Nitration	Abs/cm	*ASTM D7624	>20	12.0	12.3	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	23.4	24.3	
	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	0	
	Boron	ppm	ASTM D5185m		- <1	5	
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	0	
	Molybdenum	ppm	ASTM D5185m		60	63	
	Manganese	ppm	ASTM D5185m		<1	<1	
	Magnesium	ppm	ASTM D5185m		836	846	
	Calcium	ppm	ASTM D5185m		1094	1220	
	Phosphorus	ppm	ASTM D5185m		947	987	
	Zinc	ppm	ASTM D5185m		1120	1224	
	Sulfur	ppm	ASTM D5185m		2710	3118	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	20.8	23.0	
	Base Number (BN)				6.51	7.5	

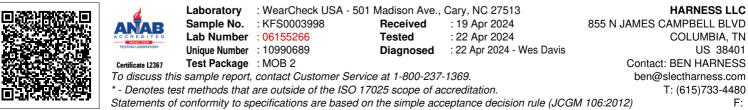
Visc @ 100°C cSt

13.9

12.6

ASTM D445 15.6





Submitted By: BILL ENYART Page 2 of 2