

#### Machine Id KENWORTH 22-61 Component Diesel Engine Fluid PETRO CANADA DURON UHP 5W40 (--- GAL)

## RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

### **WEAR**

All component wear rates are normal.

## CONTAMINATION

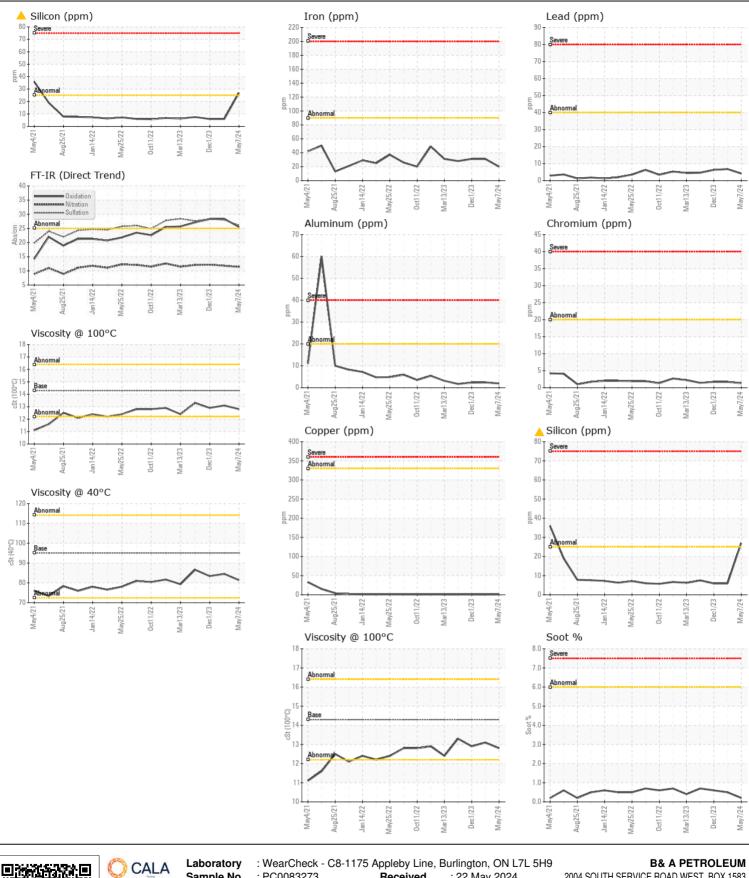
There is a moderate concentration of dirt present in the oil.

# FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0083273	PC0081765	PC0081760
Sample Date		Client Info		07 May 2024	01 Mar 2024	01 Dec 2023
Machine Age	kms	Client Info		580225	549945	510855
Oil Age	kms	Client Info		30282	39908	41535
Filter Age	kms	Client Info		30282	39908	41535
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>90	20	31	31
Chromium		ASTM D5185(m)	>20	1	2	2
Nickel	ppm	ASTM D5185(m)	>2	' <1	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	<1
Aluminum	ppm ppm	ASTM D5185(m)	>20	2	2	2
Lead	ppm	ASTM D5185(m)	>40	4	7	6
Copper	ppm	ASTM D5185(m)	>330	4 <1	<1	<1
Tin	ppm	ASTM D5185(m)	>15	0	<1	<1
Vanadium	ppm	ASTM D5185(m)	210	0	0	0
Vanadiam	ppin					•
Silicon	ppm	ASTM D5185(m)	>25	<b>4</b> 27	6	6
Potassium	ppm	ASTM D5185(m)	>20	1	2	<1
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>6	0.2	0.5	0.6
Nitration	Abs/cm	ASTM D7624*	>20	11.4	11.8	12.2
Sulfation	Abs/.1mm	ASTM D7415*	>30	26.1	28.0	28.3
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185(m)		5	5	5
Boron	ppm	ASTM D5185(m)	65	28	27	22
Barium	ppm	ASTM D5185(m)	0	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	65	62	63	63
Manganese	ppm	ASTM D5185(m)	0	<1	0	0
Magnesium	ppm	ASTM D5185(m)	1160	1179	1221	1230
Calcium	ppm	ASTM D5185(m)	820	930	954	909
Phosphorus	ppm	ASTM D5185(m)	1160	1034	1083	1062
Zinc	ppm	ASTM D5185(m)	1260	1289	1306	1306
Sulfur	ppm	ASTM D5185(m)	3000	2561	2687	2545
Oxidation	Abs/.1mm	ASTM D7414*	>25	25.5	28.4	28.3
Visc @ 40°C	cSt	ASTM D7279(m)	95.1	81.4	84.5	83.4
Visc @ 100°C	cSt	ASTM D7279(m)	14.3	12.8	13.1	12.9
Viscosity Index (VI)	Scale	ASTM D2270*	169	156	155	154
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Contact/Location: DARRYL MEYER - NELSWI



Sample No. : PC0083273 Received 2004 SOUTH SERVICE ROAD WEST, BOX 1583 : 22 May 2024 Lab Number : 02636902 : 22 May 2024 SWIFT CURRENT, SK Tested ISO 17025:2017 Accredited : 22 May 2024 - Kevin Marson CA S9H 5J5 Unique Number : 5786064 Diagnosed Laboratory Test Package : MOB 1 (Additional Tests: KV40, VI) Contact: DARRYL MEYER dmeyer@bapetroleumltd.com To discuss this sample report, contact Customer Service at 1-800-268-2131. 52 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T: (306)773-8890 F: (306)773-8443 Validity of results and interpretation are based on the sample and information as supplied.

Contact/Location: DARRYL MEYER - NELSWI Page 2 of 2