

## **OIL ANALYSIS REPORT**

Sample Rating Trend

NORMAL

# INTERNATIONAL 1247

Diesel Engine

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

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

## Fluid Condition

The condition of the oil is acceptable for the time in service.

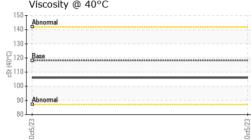
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PC0081520		
Sample Date		Client Info		05 Oct 2023		
Machine Age	kms	Client Info		213749		
Oil Age	kms	Client Info		4347		
Oil Changed		Client Info		Changed		
Sample Status				NORMAL		
CONTAMINAT	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>2.0	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>127	3		
Chromium	ppm	ASTM D5185(m)	>3	0		
Nickel	ppm	ASTM D5185(m)	>30	0		
Titanium	ppm	ASTM D5185(m)	>2	0		
Silver	ppm	ASTM D5185(m)	>2	<1		
Aluminum	ppm		>59	<1		
Lead	ppm	ASTM D5185(m)	>29	0		
Copper	ppm	ASTM D5185(m)	>135	<1		
Tin	ppm	ASTM D5185(m)	>2	0		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	2		
Barium	ppm	ASTM D5185(m)	0	<1		
Molybdenum	ppm	ASTM D5185(m)	60	57		
Manganese	ppm	ASTM D5185(m)	0	0		
Magnesium	ppm	ASTM D5185(m)	1010	926		
Calcium	ppm	ASTM D5185(m)	1070	1013		
Phosphorus	ppm	ASTM D5185(m)	1150	972		
Zinc	ppm	ASTM D5185(m)	1270	1132		
Sulfur	ppm	ASTM D5185(m)	2060	2523		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>18	5		
Sodium	ppm	ASTM D5185(m)		2		
Potassium	ppm	ASTM D5185(m)	>20	0		
INFRA-RED		method	limit/base	current	history1	history2
INFRA-RED						
Soot %	%	ASTM D7844*	>3	0		
	% Abs/cm		>3 >20	0 4.5		
Soot %		ASTM D7844*				



# **OIL ANALYSIS REPORT**

FLUID DEGRADATION method

Abnormal	
Base	
Base	
)	
Abnormal	
µL.	
0ct5/23	



Oxidation	Abs/.1mm	ASTM D7414*	>25	12.9		
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	VLITE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Precipitate	scalar	Visual*	NONE	NONE		
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		
Free Water	scalar	Visual*		NEG		
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	118.2	106		
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	14.4		
Viscosity Index (VI)	Scale	ASTM D2270*	139	139		
GRAPHS						
Iron (ppm)				Lead (ppm)		
T			60	Severe		
Severe			======================================	Abnormal		
Abnormal			튭 20	•		
			0			
0ct5/23			0ct5/23	0ct5/23		0.et5/23 .
0			Oct	Oct		Dot
Aluminum (ppm)				Chromium (pp	om)	
Severe			8	Severe		
1			Ed.4	1		
Abnormal			·····································	Abnormal		
			0			
0ct5/23			0ct5/23	0ct5/23		0ct5/23
0			0	00		10 0
Copper (ppm)				Silicon (ppm)		
Severe			30			
Abnormal			20 E	Abnormal		
			<sup>Ed</sup> 10	-		
<u> </u>			0			
0ct5/23			0ct5/23	0ct5/23 .		0ct5/23
00			00	00		0
Viscosity @ 100°C				Soot %		
Abnormal			6.0	Severe		
Base			<sub>ۇ</sub> ي 4.0 خ	Abnormal		
- Abnormal - Base - Abnormal			<sub>ک</sub> و 4.0 کو 2.0			
Abnormal						
			0ct5/23	0ct5/23		0ct5/23 .
0ct5/23			5	L0.		L0



 
 Accredited Laboratory
 Unique Number
 : 5683241
 Diagnostician
 : Wes Davis

 Test Package
 : MOB 1 (Additional Tests: KV40, VI, Visual)

 To discuss this sample report, contact Customer Service at 1-800-268-2131.

 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.

 Validity of results and interpretation are based on the sample and information as supplied.

Received

Diagnosed

: 22 Nov 2023

: 22 Nov 2023

: PC0081520

: 02598161

567 Oak Park Rd. Brantford, ON CA N3T 5L8 Contact: Doug Hall Djhall@sharpbus.com T: (519)751-3434 F:

CALA

ISO 17025:2017

Laboratory

Sample No.

Lab Number