

## **OIL ANALYSIS REPORT**

#### Area ORIN CONTRACTORS Machine Id 378 Component

### Diesel Engine

PETRO CANADA 10W30 (--- 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.

1																												
1																												
1																												
1																												
1																												
1																												
1.00																												
1																												
+																												
1																												
1																												
1																												
1																												
T																												
1																												
														4														
1																												

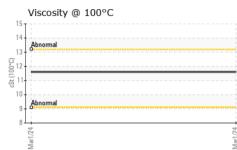
Sample Rating Trend



				Mar2024	la i ata and	kister 0
SAMPLE INFORM		method	limit/base		history1	history2
Sample Number		Client Info		WC0899551		
Sample Date		Client Info		01 Mar 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINATION	J	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	35		
Chromium	ppm	ASTM D5185(m)	>20	6		
Nickel	ppm	ASTM D5185(m)	>4	<1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)	>3	0		
Aluminum	ppm	ASTM D5185(m)	>20	6		
Lead	ppm	ASTM D5185(m)	>40	2		
Copper	ppm	ASTM D5185(m)	>330	2		
Tin	ppm	ASTM D5185(m)	>15	<1		
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)		11		
Barium	ppm	ASTM D5185(m)		0		
Molybdenum	ppm	ASTM D5185(m)		58		
Manganese	ppm	ASTM D5185(m)		0		
Magnesium	ppm	ASTM D5185(m)		918		
Calcium	ppm	ASTM D5185(m)		1218		
Phosphorus	ppm	ASTM D5185(m)		1010		
Zinc	ppm	ASTM D5185(m)		1191		
Sulfur	ppm	ASTM D5185(m)		2601		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	24		
Sodium	ppm	ASTM D5185(m)		2		
Potassium	ppm	ASTM D5185(m)	>20	1		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0.5		
Nitration	Abs/cm	ASTM D7624*	>20	8.5		
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.3		



# **OIL ANALYSIS REPORT**



		FLUID DEGRAI	DATION	method	limit/base	current	history1	history2
		Oxidation	Abs/.1mm	ASTM D7414*	>25	14.5		
		VISUAL		method	limit/base	current	history1	history2
		White Metal	scalar	Visual*	NONE	NONE		
		Yellow Metal	scalar	Visual*	NONE	NONE		
		Precipitate	scalar	Visual*	NONE	NONE		
	Mar1/24 -	Silt	scalar	Visual*	NONE	NONE		
	Mar	Debris	scalar	Visual*	NONE	NONE		
		Sand/Dirt	scalar	Visual*	NONE	NONE		
		Appearance	scalar	Visual*	NORML	NORML		
		Odor Emulsified Water	scalar scalar	Visual* Visual*	NORML >0.2	NORML NEG		
		Free Water	scalar	Visual*	>0.2	NEG		
		FLUID PROPER	RTIES	method	limit/base	current	history1	history2
		Visc @ 100°C	cSt	ASTM D7279(m)	in the baco	11.6		
		GRAPHS	001	Norm Dr2ro(m)		11.0		
		Iron (ppm)				Lead (ppm)		
		250 Severe			100	Severe		
		- 150 -			E 60			
		E 100 - Abnormal			- 40 20	Abnormal		
		0			0			
		Mar1/24			Mar1/24	Mar1/24		
			`		M		>	2
		Aluminum (ppm	)		50		pm)	
		40 - Severe			40	Severe		
		E 30 Abnormal			트 <sup>30</sup> 문 <sub>20</sub>	Abnormal		
		10						
		0				4		
		Mar1/24			Mar1/24	Mar1/24		100 E
		Copper (ppm)				Silicon (ppm)		
		400 Severe			80	1		
		300 -			60 E se			
		톱 200 -			톱 40	Abnormal		
		100			20			
		Mar1/24			Mar1/24	Mar1/24		e E
		Mar			Mar	Mar		- M
		Viscosity @ 100	°C			Soot %		
		<sup>16</sup>			6.0	Severe		
		G14 Abnormal			e4.0 م	Abnormal		
		E 12 83 10			<sup>هو</sup> 4.0 50 2.0			
		Abnormal			0.0			
		Mar1/24			Mar1/24	Mar1/24 -		101
5 17025:2017 Lal		: WearCheck - C8-11 : WC0899551 : 02621036	Rece Teste	ived :1 d :1	ngton, ON L7L 1 Mar 2024 1 Mar 2024	. 5H9 <b>Roni/if</b>		CAVATING LTE INTOSH BLVI VAUGHAN, OI
Laboratory Tes o discuss this san	mple report,	: MOBCE ( Additiona contact Customer Se	l Tests: Vis <i>rvice at 1-8</i>	sual) 300-268-213				CA L4K 4P Service Tear: team@roni.c
		e of accreditation, (m) tation are based on th						T

Report Id: RONVAU [WCAMIS] 02621036 (Generated: 03/11/2024 13:27:07) Rev: 1

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

Contact/Location: Service Team - RONVAU Page 2 of 2

F: