

# **OIL ANALYSIS REPORT**



Component Diesel Engine

PETRO CANADA 10W30 (--- GAL)

# Sample Rating Trend



# Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

## Contamination

There is no indication of any contamination in the

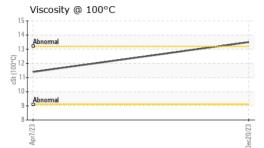
# **Fluid Condition**

Viscosity of sample indicates oil is within SAE 40 range, advise investigate. The condition of the oil is acceptable for the time in service.

			Apr2023	Dec2023		
SAMPLE INFORM	MOITAN	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0888423	LH0270803	
Sample Date		Client Info		20 Dec 2023	07 Apr 2023	
Machine Age	hrs	Client Info		0	2897	
Oil Age	hrs	Client Info		0	0	
Oil Changed		Client Info		Changed	Changed	
Sample Status				NORMAL	NORMAL	
CONTAMINATION		method	limit/base	current	history1	history2
Fuel		WC Method	>6.0	<1.0	1	
Water		WC Method	>0.2	NEG	NEG	
Glycol		WC Method		NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	21	15	
Chromium	ppm	ASTM D5185(m)	>20	2	2	
Nickel	ppm	ASTM D5185(m)	>2	<1	0	
Titanium	ppm	ASTM D5185(m)		0	0	
Silver	ppm	ASTM D5185(m)	>2	0	0	
Aluminum	ppm	ASTM D5185(m)	>25	8	3	
Lead	ppm	ASTM D5185(m)	>40	0	0	
Copper	ppm	ASTM D5185(m)	>330	1	1	
Tin	ppm	ASTM D5185(m)	>15	0	0	
Antimony	ppm	ASTM D5185(m)		0	0	
Vanadium	ppm	ASTM D5185(m)		0	0	
Beryllium	ppm	ASTM D5185(m)		0	0	
Cadmium	ppm	ASTM D5185(m)		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		1	9	
Barium	ppm	ASTM D5185(m)		0	0	
Molybdenum	ppm	ASTM D5185(m)		59	61	
Manganese	ppm	ASTM D5185(m)		0	<1	
Magnesium	ppm	ASTM D5185(m)		981	989	
Calcium	ppm	ASTM D5185(m)		1082	1119	
Phosphorus	ppm	ASTM D5185(m)		1018	1109	
Zinc	ppm	ASTM D5185(m)		1220	1239	
Sulfur	ppm	ASTM D5185(m)		2622	2571	
Lithium	ppm	ASTM D5185(m)		<1	<1	
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	19	4	
Sodium	ppm	ASTM D5185(m)		2	2	
Potassium	ppm	ASTM D5185(m)	>20	3	<1	
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0.2	0.1	
Nitration	Abs/cm	ASTM D7624*	>20	8.1	8.6	
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.8	19.2	



# **OIL ANALYSIS REPORT**



FLUID DEGRADA	NOITA	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.5	16.0		
VISUAL		method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	NONE			
Yellow Metal	scalar	Visual*	NONE	NONE			
Precipitate	scalar	Visual*	NONE	NONE			
Silt	scalar	Visual*	NONE	NONE			
Debris	scalar	Visual*	NONE	VLITE			
Sand/Dirt	scalar	Visual*	NONE	NONE			
Appearance	scalar	Visual*	NORML	NORML			
Odor	scalar	Visual*	NORML	NORML	NORML		
<b>Emulsified Water</b>	scalar	Visual*	>0.2	NEG	NEG		
Free Water	scalar	Visual*		NEG	NEG		
FLUID PROPERT	ΓIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)		13.5	11.4		
GRAPHS							
Iron (ppm)				Lead (ppm)			
250 Severe			100	Severe			
i							
E 150 Abnormal			E 40	Abnormal		-	
50			20				
23			23	53		- 53	
Арт7/23			Dec20/23	Apr7/23		Dec20/23	
Aluminum (ppm)	Chromium (ppm)						
40 Severe			50	Severe			
Abnormal 20			= 30 E 20	Abnormal		-	
10			10				
/23			0 +	723		/23 -	
Apr7/25			Dec20/23	Арт/23		Dec20/23	
Copper (ppm)				Silicon (ppm)			
400 Severemal			80	Severe			
300+			60				
E 200			E 40	Abnormal			
100			20	-			
- Land 19 19 19 19 19 19 19 19 19 19 19 19 19			23	23		23	
Apr7/23			Dec20/23	Apr7/23		Dec20/23	
Viscosity @ 100°C				Soot %			
16			6.0	т			
14				Severe			



CALA ISO 17025:2017 Accredited Laboratory

Laboratory Sample No. Lab Number Unique Number : 5698281 Test Package : MOBCE ( Additional Tests: Visual )

: 02605196

: WC0888423

Recieved Diagnosed

: 27 Dec 2023 : 27 Dec 2023

0.0

Diagnostician : Kevin Marson

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 RONI/IRON SHORE EXCAVATING LTD. 100 MACINTOSH BLVD VAUGHAN, ON CA L4K 4P3

> Contact: Service Team service.team@roni.ca T:

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.

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