

## **OIL ANALYSIS REPORT**

#### Sample Rating Trend



#### Area FLEET Machine Id 2320679 (S/N V90019A)

#### Component Main Diesel Engine Fluid PETRO CANADA 10W30 (9 QTS)

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

#### Fluid Condition

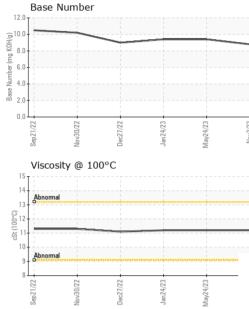
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

		Sep2022	Nov2022 Dec2022	Jan2023 May2023	Nov2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0108138	PCA0098153	PCA0085136
Sample Date		Client Info		02 Nov 2023	24 May 2023	24 Jan 2023
Machine Age	hrs	Client Info		2143	1205	843
Oil Age	hrs	Client Info		938	200	143
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATI	ION	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	2	5	4
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	1	0	<1
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	0	<1	<1
Tin	ppm	ASTM D5185m	>15	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		14	11	12
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		59	63	65
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m		887	855	924
Calcium	ppm	ASTM D5185m		1003	1115	1099
Phosphorus	ppm	ASTM D5185m		961	1043	981
Zinc	ppm	ASTM D5185m		1201	1210	1237
Sulfur	ppm	ASTM D5185m		3049	3390	3468
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	4	3	3
Silicon			>25	4 0	3 0	3 <1
Silicon	ppm	ASTM D5185m	>25 >20			
Silicon Sodium	ppm ppm	ASTM D5185m ASTM D5185m		0	0	<1
Silicon Sodium Potassium INFRA-RED	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	>20	0 0	0 2	<1 0
Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method	>20 limit/base	0 0 current	0 2 history1	<1 0 history2
Silicon Sodium Potassium INFRA-RED	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> *ASTM D7844	>20 limit/base >3	0 0 current 0.2	0 2 history1 0.1	<1 0 history2 0.1
Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7415	>20 limit/base >3 >20	0 0 current 0.2 5.1	0 2 history1 0.1 5.4	<1 0 history2 0.1 5.4
Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m *ASTM D7844 *ASTM D7624 *ASTM D7415	>20 limit/base >3 >20 >30	0 0 current 0.2 5.1 17.0	0 2 history1 0.1 5.4 17.4	<1 0 history2 0.1 5.4 16.9



# **OIL ANALYSIS REPORT**

VISUAL



estive Laboratory	Laboratory Sample No. Lab Number Unique Number Test Package	: PCA010 : <mark>0600140</mark> : 1072976	Receive Diagnos	1 Madison Ave., Cary, NC 27513 eceived : 08 Nov 2023 agnosed : 09 Nov 2023 agnostician : Wes Davis e at 1-800-237-1369. 025 scope of accreditation.					PERDUE FARMS - DILLON 2047 HWY 9 WEST DILLON, SC US 29536 Contact: KEVIN HOOKS kevin.hooks@perdue.com T: (843)841-8069			
		10 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Nov30/22 -	Dec27/22	May24/23	Nov2/23	4.0 0.0 2.0 0.0 8 8 8 2 7 1 2 7 1 2 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Nov30/22	Dec27/22	Jan24/23	May24/23 -	Nov2/23 +
		13 (), 001 (), 12 (), 12 (				Base Mumber (mor KOH(n)	8.0					
		15	ty @ 100	٥C			Base I	Number				
		Sep21/22	Nov30/22	Dec27/22	May24/23	Nov2/23						
		4 2										
		8 -	copper lead tin									
		Non-fe	rrous Me	Dec27/22 tals	May24/23	Nov2/23						
		4 2 0 7 7 7 7		22		23						
	W	10 8 6										
Jan 24/23	May24/23	14	s Alloys iron chromium									
		Visc @ 1 GRAF	PHS	cSt	ASTM D44	5	11.2		11.2		11.2	
				PERTIES		limit/bas		rrent	histo	ry1	histo	ory2
		Emulsifie Free Wa	ed Water ter	scalar scalar	*Visual *Visual	>0.2	NEG		NEG NEG		NEG NEG	
Jan 24/23	May24/23 Nov2/23	Appeara Odor	nce	scalar scalar	*Visual *Visual	NORML NORML	NOR NOR		NORM NORM		NORN	
4 00	m m	Sand/Dir		scalar	*Visual	NONE	NON	E	NONE		NONE	-
		Silt Debris		scalar scalar	*Visual *Visual	NONE NONE	NON NON		NONE		NONE	
		Precipita	te	scalar	*Visual	NONE	NON		NONE		NONE	
		Yellow N		scalar	*Visual	NONE	NON		NONE		NONE	

Ĕ

Submitted By: KEVIN HOOKS

Page 2 of 2