

## **OIL ANALYSIS REPORT**

Sample Rating Trend



#### Area [1333370] Machine Id COMBO #3 Component

Hydraulic System

### PETRO CANADA PURITY FG AW HYDRAULIC 32 (5 GAL)

#### DIAGNOSIS

#### Recommendation

Confirm the source of the lubricant being utilized for top-up/fill. 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

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

#### Fluid Condition

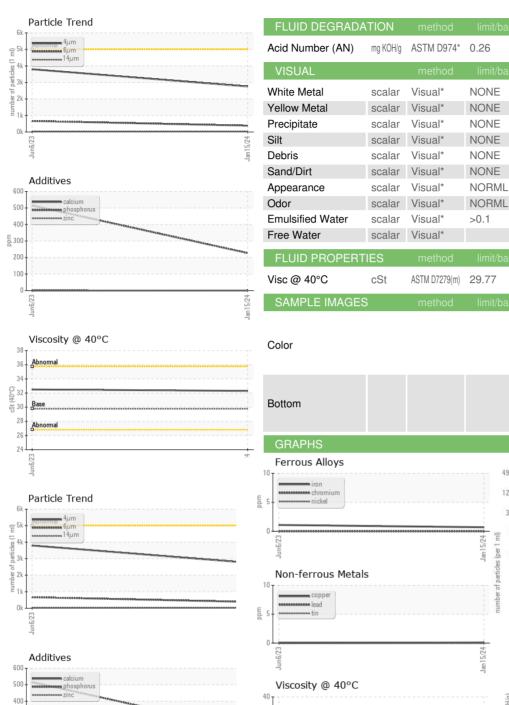
Additive levels indicate the addition of a different brand, or type of oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

LIC 32 (3 GAL)			Jun2023	Jan2024		
SAMPLE INFORM	<b>IATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0898884	WC0808198	
Sample Date		Client Info		15 Jan 2024	06 Jun 2023	
Machine Age	hrs	Client Info		0	0	
Oil Age	hrs	Client Info		0	0	
Oil Changed		Client Info		N/A	N/A	
Sample Status				NORMAL	NORMAL	
CONTAMINATION	N	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	<1	1	
Chromium	ppm	ASTM D5185(m)	>10	0	0	
Nickel	ppm	ASTM D5185(m)	>10	0	0	
Titanium	ppm	ASTM D5185(m)		0	0	
Silver	ppm	ASTM D5185(m)		0	0	
Aluminum	ppm	ASTM D5185(m)	>10	<1	0	
Lead	ppm	ASTM D5185(m)	>10	0	0	
Copper		ASTM D5185(m)	>75	<1	0	
Tin	ppm	ASTM D5185(m) ASTM D5185(m)	>10	0	0	
	ppm		>10	0	0	
Antimony	ppm	ASTM D5185(m)				
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)		0	0	
Barium	ppm	ASTM D5185(m)		0	0	
Molybdenum	ppm	ASTM D5185(m)		0	0	
Manganese	ppm	ASTM D5185(m)		0	0	
Magnesium	ppm	ASTM D5185(m)		<1	0	
Calcium						
	ppm	ASTM D5185(m)		<1	0	
		. /		<1 227	0 515	
Phosphorus	ppm	ASTM D5185(m) ASTM D5185(m)				
Phosphorus	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		227 1	515 2	
Phosphorus Zinc	ppm	ASTM D5185(m) ASTM D5185(m)		227	515	
Phosphorus Zinc Sulfur	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	227 1 200	515 2 479	
Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	limit/base	227 1 200 <1	515 2 479 <1	
Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) <b>method</b> ASTM D5185(m)		227 1 200 <1 current <1	515 2 479 <1 history1 3	   history2
Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method		227 1 200 <1 current	515 2 479 <1 history1	   history2 
Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20	227 1 200 <1 <u>current</u> <1 2	515 2 479 <1 history1 3 <1	  history2 
Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20 >20	227 1 200 <1 current 2 0 current	515 2 479 <1 history1 3 <1 0 history1	  history2  
Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	>20 >20 limit/base >5000	227 1 200 <1 current 2 0 current 2755	515 2 479 <1 history1 3 <1 0 history1 3798	  history2   history2
Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	>20 >20 limit/base >5000 >1300	227 1 200 <1 current 2 0 current 2755 383	515 2 479 <1 history1 3 <1 0 history1 3798 667	  history2   history2  history2
Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	>20 >20 limit/base >5000 >1300 >160	227 1 200 <1 current 2 0 current 2755 383 25	515 2 479 <1 history1 3 <1 0 history1 3798 667 35	  history2  history2 history2
Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>20 >20 limit/base >5000 >1300 >160 >40	227 1 200 <1 current 21 2 0 current 2755 383 25 7	515 2 479 <1 history1 3 <1 0 history1 3798 667 35 10	  history2  history2  history2  history2
Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>20 >20 limit/base >5000 >1300 >160 >40 >10	227 1 200 <1 current <1 2 0 current 2755 383 25 7 2	515 2 479 <1 <b>history1</b> 3 <1 0 <b>history1</b> 3798 667 35 10 10	  history2   history2  history2  
Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	>20 >20 limit/base >5000 >1300 >160 >40 >10	227 1 200 <1 current 21 2 0 current 2755 383 25 7	515 2 479 <1 history1 3 <1 0 history1 3798 667 35 10	  history2  history2  history2  

David af O



# **OIL ANALYSIS REPORT**



() 35 () 35

·30· Base

25

: IND 2

Laboratory

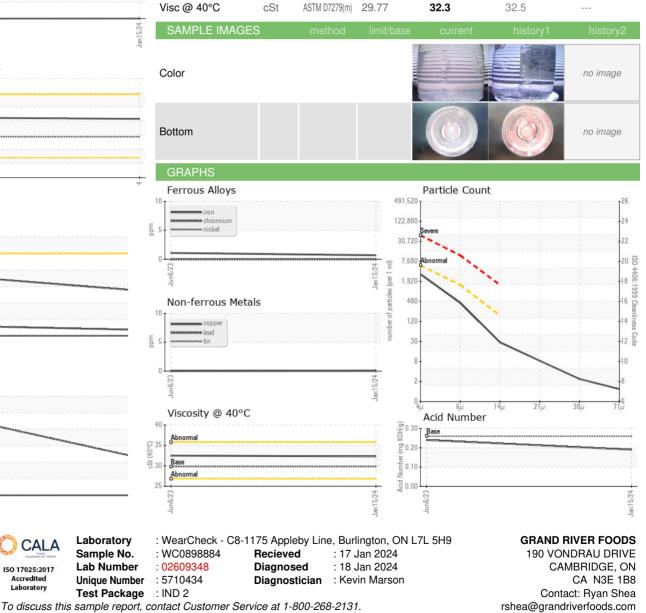
Sample No.

Lab Number

Unique Number

Test Package

Abnorma



0.19

NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

NEG

NEG

0.24

NONE

NONE

NONE

NONE

NONE

NONE

NORML

NORML

NEG

NEG

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.

T: (519)653-3577 F:

CALA

ISO 17025:2017 Accredited

Laboratory

E 300

100