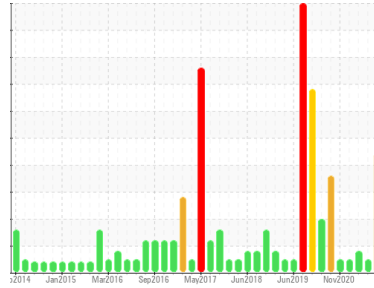




# PROBLEM SUMMARY

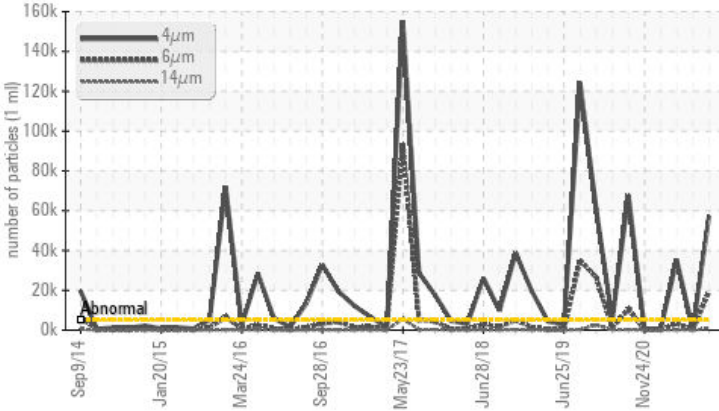
Area  
**1 White Oil/029 #2HTU/P Pump/401B 2 Stage HTU Charge**  
 Machine Id  
**N/A 29P401B (RECIP)**  
 Component  
**Pump**  
 Fluid  
**PETRO CANADA COMPRO COMPRESSOR OIL 150 (150 LTR)**

Sample Rating Trend



## COMPONENT CONDITION SUMMARY

▲ Particle Trend



### RECOMMENDATION

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation.

### PROBLEMATIC TEST RESULTS

Sample Status			SEVERE	NORMAL	ABNORMAL
Particles >4µm	ASTM D7647	>5000	▲ 57394	130	▲ 35285
Particles >6µm	ASTM D7647	>1300	▲ 19285	54	▲ 3352
Particles >14µm	ASTM D7647	>160	▲ 722	8	133
Particles >21µm	ASTM D7647	>40	▲ 86	3	23
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 23/21/17	14/13/10	▲ 22/19/14

Customer Id: PETMIS  
 Sample No.: WC0902163  
 Lab Number: 02621253  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Wes Davis +1 905-569-8600 x223  
[wesd@wearcheck.ca](mailto:wesd@wearcheck.ca)

To change component or sample information:  
 Gloria Gonzalez +1 (289)291-4643 x4643  
[gloria.gonzalez@wearcheck.com](mailto:gloria.gonzalez@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.
Resample	---	---	?	Resample in 30-45 days to monitor this situation.
Check Breathers	---	---	?	The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather.
Check Dirt Access	---	---	?	We advise that you check all areas where contaminants can enter the system.
Filter Fluid	---	---	?	We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid.

## HISTORICAL DIAGNOSIS

### 17 Feb 2023 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 06 Jan 2022 Diag: Wes Davis

ISO



We recommend you service the filters on this component. We recommend an early resample to monitor this condition. All component wear rates are normal. Particles >4µm are abnormally high. Particles >6µm are abnormally high. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 29 Mar 2021 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

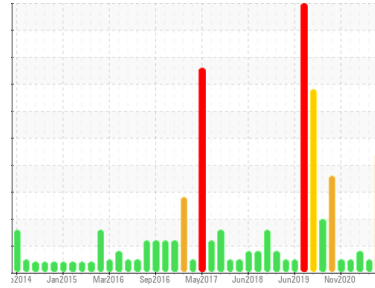
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**1 White Oil/029 #2HTU/P Pump/401B 2 Stage HTU Charge**  
 Machine Id  
**N/A 29P401B (RECIP)**  
 Component  
**Pump**  
 Fluid  
**PETRO CANADA COMPRO COMPRESSOR OIL 150 (150 LTR)**

## DIAGNOSIS

### ▲ Recommendation

We advise that you check all areas where contaminants can enter the system. We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. The air breather requires service. If unrated, we recommend that you replace with a suitable micron rated and/or desiccant air breather. If rated, we recommend that you service/replace the breather. Resample in 30-45 days to monitor this situation.

### Wear

All component wear rates are normal.

### ▲ Contamination

There is a high amount of particulates (2 to 100 microns in size) present in the oil.

### Fluid Condition

The AN level is acceptable for this fluid. The oil is still serviceable provided that the contaminant(s) can be reduced to acceptable levels.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0902163</b>	WC0783262	WC0568059
Sample Date	Client Info		<b>25 Feb 2024</b>	17 Feb 2023	06 Jan 2022
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>SEVERE</b>	NORMAL	ABNORMAL

## CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>.1	<b>NEG</b>	NEG	NEG

## WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>90	<b>&lt;1</b>	<1	4
Chromium	ppm	ASTM D5185(m)	>5	<b>0</b>	0	<1
Nickel	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	>3	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)	>3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>7	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>12	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m)	>30	<b>3</b>	2	<1
Tin	ppm	ASTM D5185(m)	>9	<b>0</b>	2	<1
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)		<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	70	<b>&lt;1</b>	0	0
Calcium	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Phosphorus	ppm	ASTM D5185(m)	60	<b>&lt;1</b>	1	3
Zinc	ppm	ASTM D5185(m)	2	<b>1</b>	2	1
Sulfur	ppm	ASTM D5185(m)	5300	<b>3305</b>	3166	3179
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

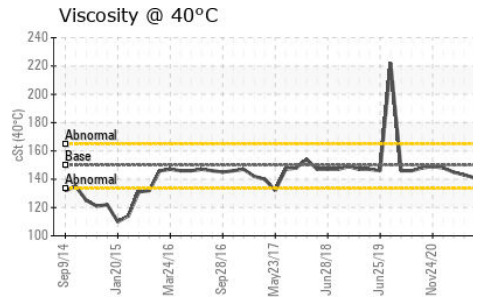
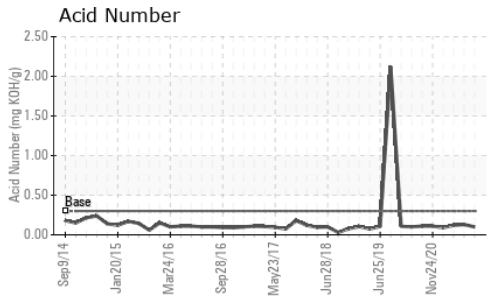
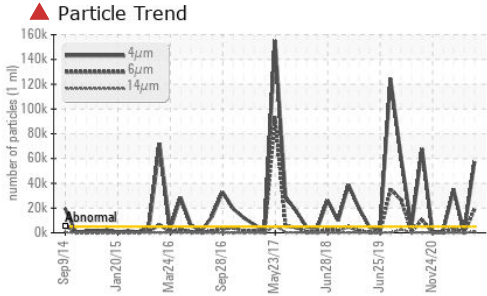
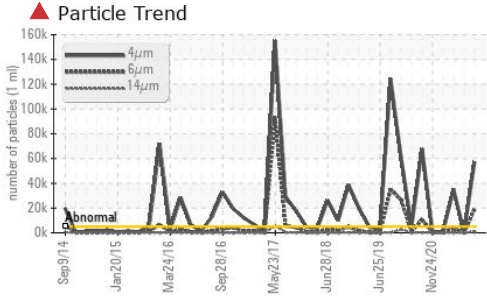
## CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>60	<b>4</b>	0	<1
Sodium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	<1	<1

## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>▲ 57394</b>	130	▲ 35285
Particles >6µm	ASTM D7647	>1300	<b>▲ 19285</b>	54	▲ 3352
Particles >14µm	ASTM D7647	>160	<b>▲ 722</b>	8	133
Particles >21µm	ASTM D7647	>40	<b>▲ 86</b>	3	23
Particles >38µm	ASTM D7647	>10	<b>4</b>	0	1
Particles >71µm	ASTM D7647	>3	<b>2</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>▲ 23/21/17</b>	14/13/10	▲ 22/19/14

# OIL ANALYSIS REPORT

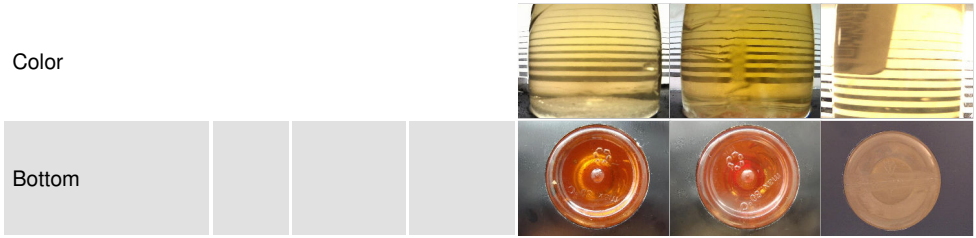


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.3	<b>0.10</b>	0.13	0.12

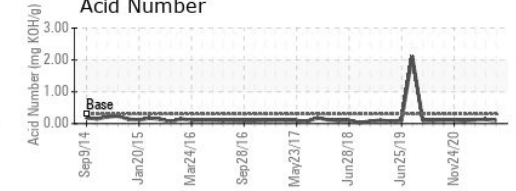
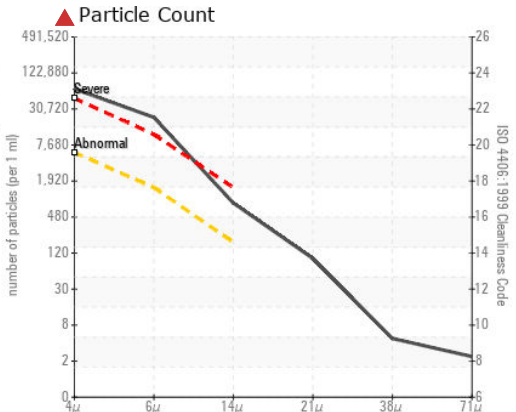
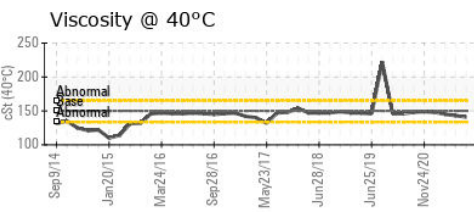
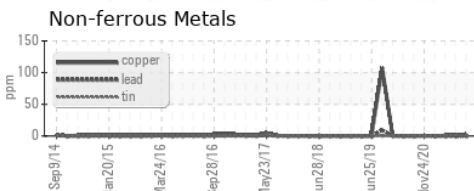
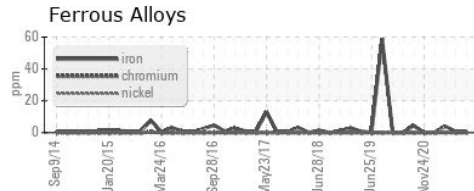
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	Visual*	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	Visual*	>.1	<b>NEG</b>	NEG	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	150	<b>141</b>	143	145

SAMPLE IMAGES		method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0902163 **Received** : 11 Mar 2024  
**Lab Number** : **02621253** **Tested** : 12 Mar 2024  
**Unique Number** : 5746372 **Diagnosed** : 12 Mar 2024 - Wes Davis  
**Test Package** : IND 2 ( Additional Tests: TAN Man )

**Petro Canada Lubricants Inc.**  
 385 Southdown Road  
 Mississauga, ON  
 CA L5J 2Y3  
 Contact: Kyle Blezard  
 kyle.blezard@HFSinclair.com  
 T: (905)403-6768  
 F: (905)822-6025

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.