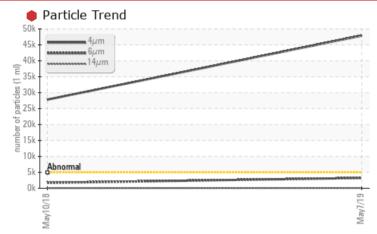


CAMPHPU1

Component Hydraulic System Fluid PETRO CANADA HYDREX MV 36 (220 LTR)

COMPONENT CONDITION SUMMARY



RECOMMENDATION

Check seals and/or filters for points of contaminant entry. 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. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation.

PROBLEMATIC TE	ST RESULTS				
Sample Status			SEVERE	ABNORMAL	
Particles >4µm	ASTM D7647	>5000	• 47891	<u> </u>	
Particles >6µm	ASTM D7647	>1300	🔺 3218	1 710	
Oil Cleanliness	ISO 4406 (c)	>19/17/14	2 3/19/13	▲ 22/18/12	

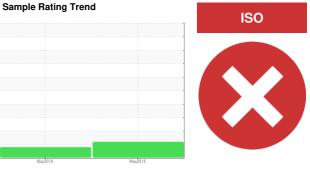
Customer Id: PET412PET Sample No.: WC119389 Lab Number: 02285270 Test Package: IND 2



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

To change component or sample information: Gloria Gonzalez +1 (289)291-4643 x4643 <u>gloria.gonzalez@wearcheck.com</u>



RECOMMENDED ACTIONS							
Action	Status	Date	Done By	Description			
Change Filter	MISSED	Dec 09 2019	?	We recommend you service the filters on this component.			
Resample	MISSED	Dec 09 2019	?	Resample in 30-45 days to monitor this situation.			
Check Breathers	MISSED	Dec 09 2019	?	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 Seals	MISSED	Dec 09 2019	?	Check seals and/or filters for points of contaminant entry.			

HISTORICAL DIAGNOSIS



10 May 2018 Diag: Kevin Marson

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 $>4\mu m$ are abnormally high. Particles $>6\mu m$ are notably high. The AN level is acceptable for this fluid. The condition of the sample is suitable for further service.





OIL ANALYSIS REPORT

Sample Rating Trend

ISO

CAMPHPU1

Component Hydraulic System Fluid PETRO CANADA HYDREX MV 36 (220 LTR)

DIAGNOSIS

Recommendation

Check seals and/or filters for points of contaminant entry. 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. We recommend you service the filters on this component. Resample in 30-45 days to monitor this situation.

Wear

All component wear rates are normal.

Contamination

Particles >4 μ m are severely high. Particles >6 μ m are abnormally high.

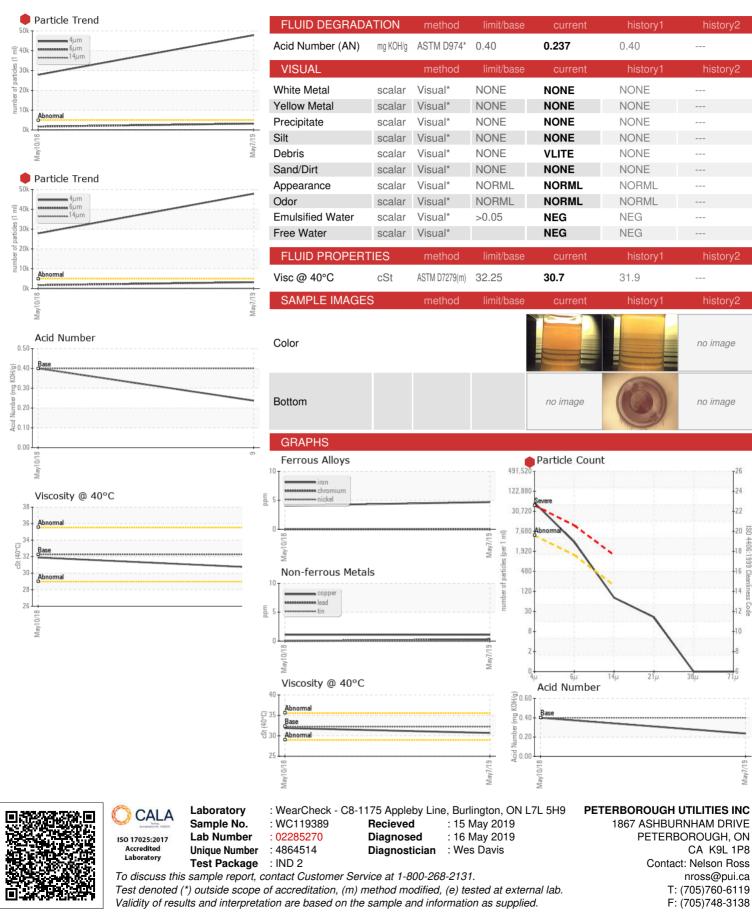
Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

			May2018	May2019		
SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC119389	WC984131	
Sample Date		Client Info		07 May 2019	10 May 2018	
Machine Age	hrs	Client Info		192415	186019	
Oil Age	hrs	Client Info		69971	0	
Oil Changed		Client Info		N/A	N/A	
Sample Status				SEVERE	ABNORMAL	
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	5	4	
Chromium	ppm	ASTM D5185(m)	>20	0	0	
Nickel	ppm	ASTM D5185(m)	>20	0	<1	
Titanium	ppm	ASTM D5185(m)		0	0	
Silver	ppm	ASTM D5185(m)		0	0	
Aluminum	ppm	ASTM D5185(m)	>20	0	<1	
Lead	ppm	ASTM D5185(m)	>20	۲ ۲	0	
Copper	ppm	ASTM D5185(m)		1	1	
Tin	ppm	ASTM D5185(m)	>20	0	0	
Antimony		ASTM D5185(m)	>20	۰ <1	<1	
Vanadium	ppm			0	0	
	ppm	ASTM D5185(m)				
Beryllium	ppm	ASTM D5185(m)		0	0	
Cadmium	ppm	ASTM D5185(m)		<1	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	0	<1	
Barium	ppm	ASTM D5185(m)	0	0	0	
Molybdenum	ppm	ASTM D5185(m)	0	<1	<1	
Manganese	ppm	ASTM D5185(m)	1	<1	0	
Magnesium	ppm	ASTM D5185(m)	0	1	<1	
Calcium	ppm	ASTM D5185(m)	135	122	128	
Phosphorus	ppm	ASTM D5185(m)	236	231	240	
Zinc	ppm	ASTM D5185(m)	317	305	318	
Sulfur	ppm	ASTM D5185(m)	561	573	575	
Lithium	ppm	ASTM D5185(m)		0	<1	
CONTAMINANTS	5	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	<1	<1	
Sodium	ppm	ASTM D5185(m)		0	0	
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	
FLUID CLEANLI	NESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	4 7891	A 27829	
Particles >6µm		ASTM D7647	>1300	<u> </u>	1 710	
Particles >14µm		ASTM D7647	>160	69	35	
Particles >21µm		ASTM D7647	>40	18	8	
Particles >38µm		ASTM D7647	>10	0	0	
Particles >71μm		ASTM D7647	>3	0	0	
Oil Cleanliness		ISO 4406 (c)	>19/17/14	• 23/19/13	22/18/12	
				· •		
:21:08) Rev: 1				Contact/Locat	ion: Nelson Ros	s - PET412PE



OIL ANALYSIS REPORT



Contact/Location: Nelson Ross - PET412PET

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