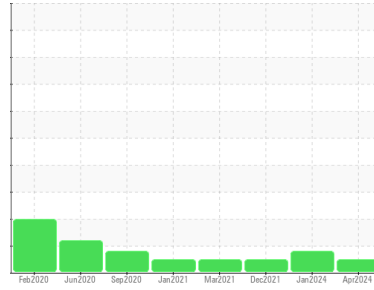


# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id

**OR638**

Component

**Hydraulic System**

Fluid

**PETRO CANADA HYDREX MV 46 (30 LTR)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### 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

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

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>PC0087891</b>	PC0080942	PC0058569
Sample Date	Client Info			<b>16 Apr 2024</b>	12 Jan 2024	06 Dec 2021
Machine Age	hrs	Client Info		<b>18555</b>	14211	15532
Oil Age	hrs	Client Info		<b>0</b>	500	0
Oil Changed	Client Info			<b>Not Changed</b>	Changed	Not Changed
Sample Status				<b>NORMAL</b>	ATTENTION	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.1	<b>NEG</b>	NEG	NEG

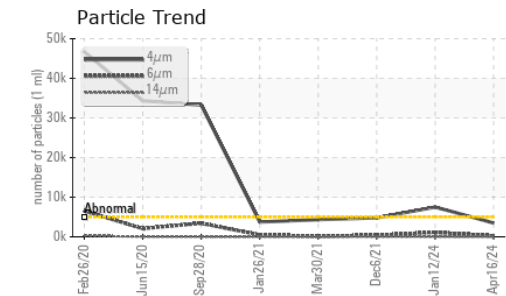
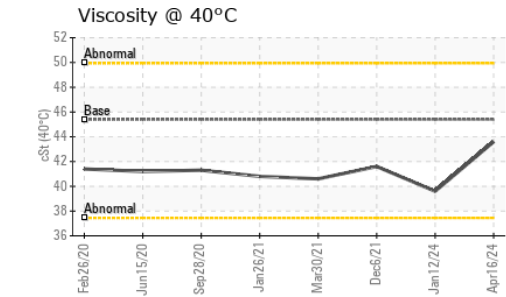
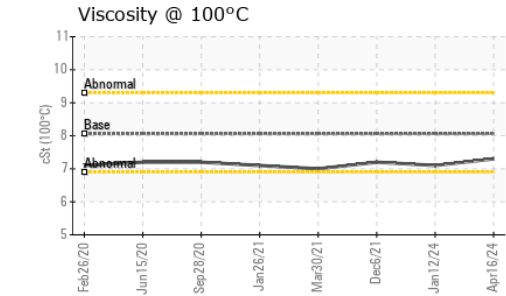
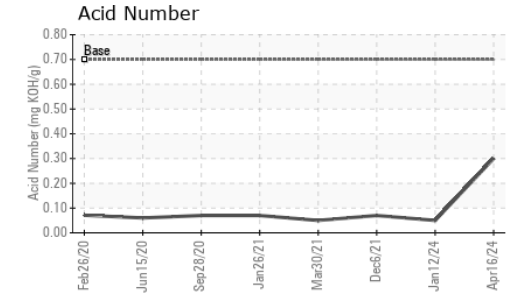
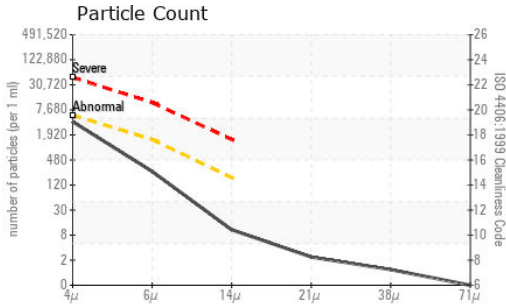
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	<b>6</b>	<1	19
Chromium	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	0	3
Nickel	ppm	ASTM D5185(m)	>10	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	<1	2
Lead	ppm	ASTM D5185(m)	>10	<b>0</b>	<1	2
Copper	ppm	ASTM D5185(m)	>75	<b>2</b>	<1	3
Tin	ppm	ASTM D5185(m)	>10	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)		<b>0</b>	0	<1
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>&lt;1</b>	0	<1
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Manganese	ppm	ASTM D5185(m)	1	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	0	<b>1</b>	1	2
Calcium	ppm	ASTM D5185(m)	50	<b>44</b>	1	14
Phosphorus	ppm	ASTM D5185(m)	330	<b>439</b>	602	635
Zinc	ppm	ASTM D5185(m)	430	<b>284</b>	14	21
Sulfur	ppm	ASTM D5185(m)	760	<b>975</b>	1454	1400
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	0	6
Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	0	<1
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	<1	2

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>3489</b>	7510	4796
Particles >6µm		ASTM D7647	>1300	<b>225</b>	1134	414
Particles >14µm		ASTM D7647	>160	<b>9</b>	25	27
Particles >21µm		ASTM D7647	>40	<b>2</b>	7	7
Particles >38µm		ASTM D7647	>10	<b>1</b>	3	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	1	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>19/15/10</b>	20/17/12	19/16/12

# OIL ANALYSIS REPORT

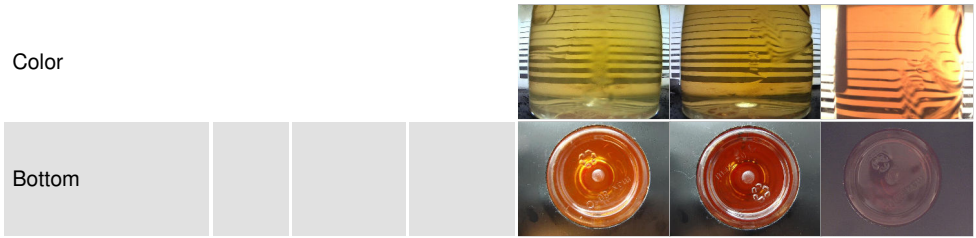


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.70	<b>0.30</b>	0.05	0.07

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	VLITE
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*	>0.1	<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)	45.4	<b>43.6</b>	39.6	41.6
Visc @ 100°C	cSt	ASTM D7279(m)	8.06	<b>7.3</b>	7.1	7.2
Viscosity Index (VI)	Scale	ASTM D2270*	151	<b>130</b>	142	136

## SAMPLE IMAGES



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0087891  
**Lab Number** : 02630935  
**Unique Number** : 5772088  
**Test Package** : IND 2 ( Additional Tests: KV100, VI )

Green Infrastructure and Partners Inc (GIPI) - 286 - Shoring & Foundations  
 151 Ram Forest Rd,  
 Stouffville, ON  
 CA L4A 2G8  
 Contact: Shannon Abbott  
 sabbott@gipi.com  
 T: (905)750-5900  
 F:

*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.*