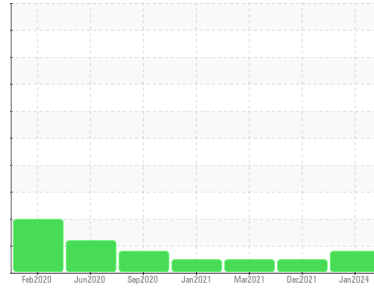




Machine Id
OR638

Component
Hydraulic System

Fluid
PETRO CANADA HYDREX MV 46 (30 LTR)



DIAGNOSIS

Recommendation

The filter change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the oil.

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.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PC0080942	PC0058569	PC0039925
Sample Date	Client Info	12 Jan 2024	06 Dec 2021	30 Mar 2021
Machine Age	hrs	14211	15532	14658
Oil Age	hrs	500	0	0
Oil Changed	Client Info	Changed	Not Changd	Changed
Sample Status		ATTENTION	NORMAL	NORMAL

CONTAMINATION

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

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185(m) >20	<1	19	20
Chromium	ppm ASTM D5185(m) >10	0	3	3
Nickel	ppm ASTM D5185(m) >10	0	<1	<1
Titanium	ppm ASTM D5185(m)	0	0	<1
Silver	ppm ASTM D5185(m)	0	0	<1
Aluminum	ppm ASTM D5185(m) >10	<1	2	3
Lead	ppm ASTM D5185(m) >10	<1	2	2
Copper	ppm ASTM D5185(m) >75	<1	3	3
Tin	ppm ASTM D5185(m) >10	0	0	0
Antimony	ppm ASTM D5185(m)	0	<1	<1
Vanadium	ppm ASTM D5185(m)	0	0	0
Beryllium	ppm ASTM D5185(m)	0	0	0
Cadmium	ppm ASTM D5185(m)	0	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m) 0	0	<1	<1
Barium	ppm ASTM D5185(m) 0	0	0	0
Molybdenum	ppm ASTM D5185(m) 0	0	<1	<1
Manganese	ppm ASTM D5185(m) 1	0	<1	<1
Magnesium	ppm ASTM D5185(m) 0	1	2	2
Calcium	ppm ASTM D5185(m) 50	1	14	18
Phosphorus	ppm ASTM D5185(m) 330	602	635	571
Zinc	ppm ASTM D5185(m) 430	14	21	26
Sulfur	ppm ASTM D5185(m) 760	1454	1400	1397
Lithium	ppm ASTM D5185(m)	<1	<1	<1

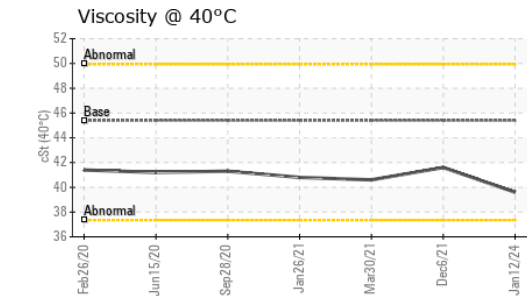
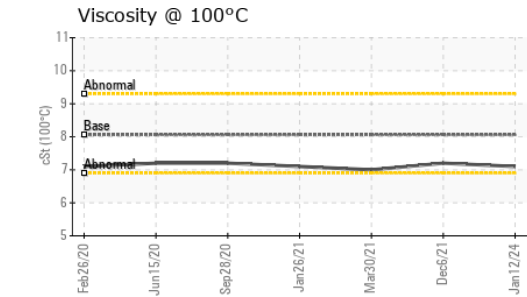
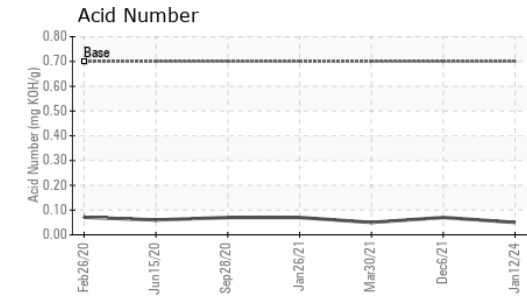
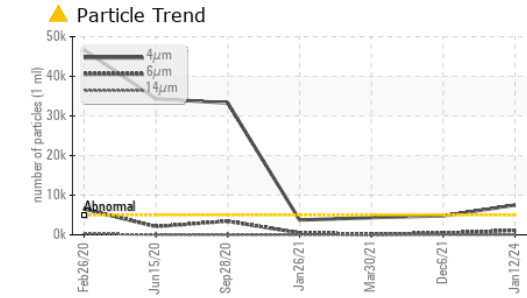
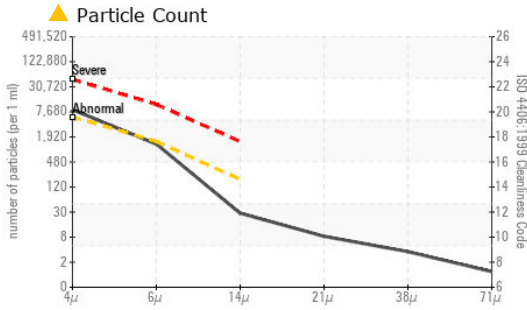
CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >20	0	6	7
Sodium	ppm ASTM D5185(m)	0	<1	1
Potassium	ppm ASTM D5185(m) >20	<1	2	<1

FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	▲ 7510	4796	4340
Particles >6µm	ASTM D7647 >1300	1134	414	136
Particles >14µm	ASTM D7647 >160	25	27	4
Particles >21µm	ASTM D7647 >40	7	7	1
Particles >38µm	ASTM D7647 >10	3	0	0
Particles >71µm	ASTM D7647 >3	1	0	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	▲ 20/17/12	19/16/12	19/14/9

OIL ANALYSIS REPORT

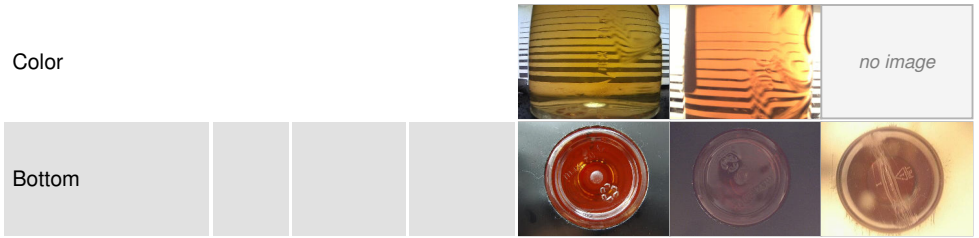


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.70	0.05	0.07	0.05

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	VLITE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	45.4	39.6	41.6	40.6
Visc @ 100°C	cSt	ASTM D7279(m)	8.06	7.1	7.2	7.0
Viscosity Index (VI)	Scale	ASTM D2270*	151	142	136	133

SAMPLE IMAGES



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Green Infrastructure and Partners Inc (GPI) - 286 - Shoring & Foundations
Sample No. : PC0080942 **Received** : 26 Jan 2024 151 Ram Forest Rd, Stouffville, ON CA L4A 2G8
Lab Number : **02611598** **Diagnosed** : 30 Jan 2024
Unique Number : 5720693 **Diagnostician** : Bill Quesnel
Test Package : IND 2 (Additional Tests: KV100, VI)

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.

Contact: Shannon Abbott
 sabbott@gipi.com
 T: (905)750-5900
 F: