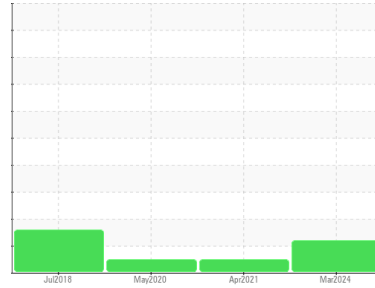




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id
6880

Component
Hydraulic System

Fluid
PETRO CANADA HYDREX AW 46 (322 LTR)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

There is a moderate amount of silt (particulates < 14 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	WC0716446	PP0000054	WC0464137
Sample Date	Client Info	25 Mar 2024	06 Apr 2021	04 May 2020
Machine Age	mths	Client Info	276	240
Oil Age	mths	Client Info	12	24
Oil Changed	Client Info	Changed	Not Changd	Not Changd
Sample Status		ABNORMAL	NORMAL	NORMAL

CONTAMINATION

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	0	<1	<1
Chromium	ppm	ASTM D5185(m)	>20	0	0	<1
Nickel	ppm	ASTM D5185(m)	>20	0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	0	<1	0
Lead	ppm	ASTM D5185(m)	>20	0	0	0
Copper	ppm	ASTM D5185(m)	>20	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>20	0	0	0
Antimony	ppm	ASTM D5185(m)		0	0	<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	0	0
Manganese	ppm	ASTM D5185(m)	0	0	0	0
Magnesium	ppm	ASTM D5185(m)	0	<1	<1	<1
Calcium	ppm	ASTM D5185(m)	50	52	49	49
Phosphorus	ppm	ASTM D5185(m)	330	335	314	324
Zinc	ppm	ASTM D5185(m)	430	429	417	408
Sulfur	ppm	ASTM D5185(m)	760	723	760	754
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

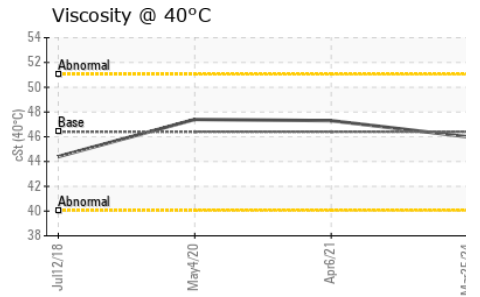
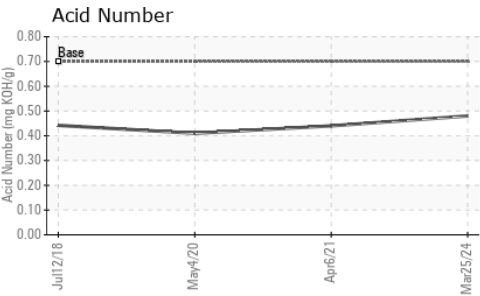
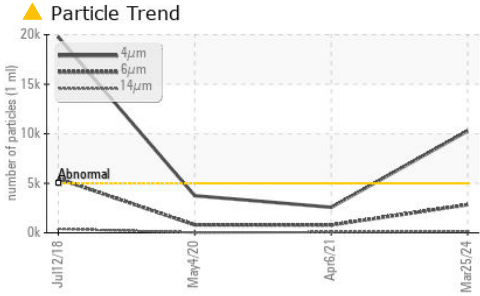
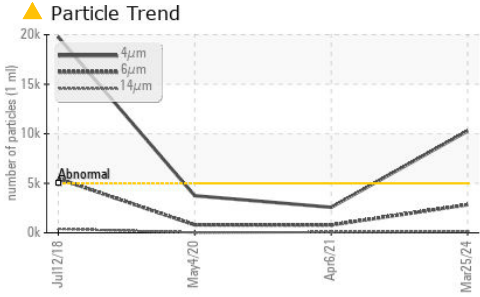
method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185(m)	>15	0	<1	0
Sodium	ppm	ASTM D5185(m)		0	<1	0
Potassium	ppm	ASTM D5185(m)	>20	<1	0	<1

FLUID CLEANLINESS

method	limit/base	current	history1	history2	
Particles >4µm	ASTM D7647	>5000	▲ 10287	2575	3744
Particles >6µm	ASTM D7647	>1300	▲ 2828	784	801
Particles >14µm	ASTM D7647	>160	133	65	28
Particles >21µm	ASTM D7647	>40	22	14	6
Particles >38µm	ASTM D7647	>10	1	0	0
Particles >71µm	ASTM D7647	>3	0	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	▲ 21/19/14	19/17/13	19/17/12



OIL ANALYSIS REPORT

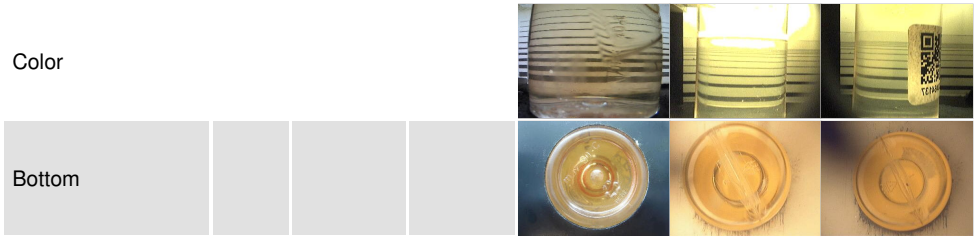


FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.70	0.48	0.44	0.41

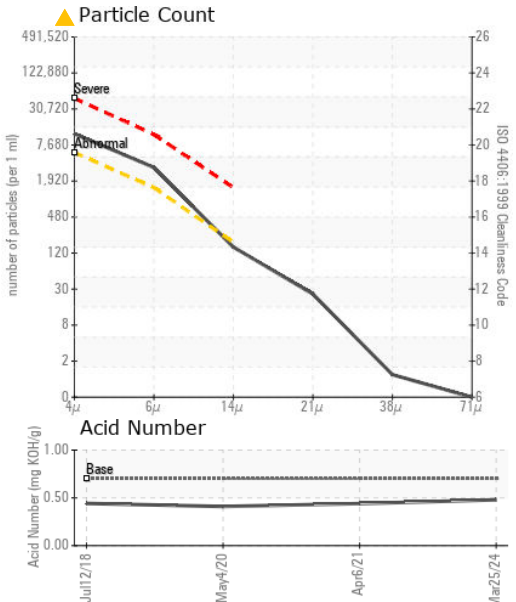
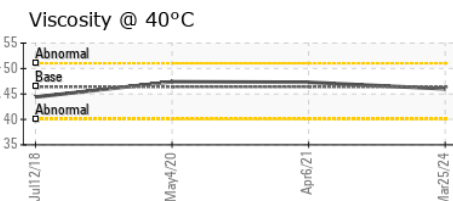
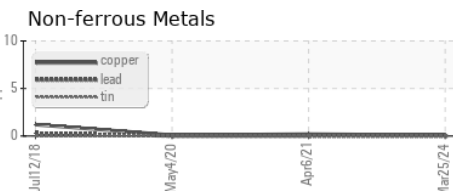
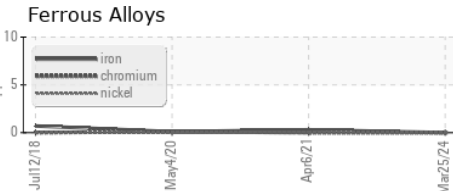
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	VLITE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.05	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)	46.4	46.0	47.3	47.4

SAMPLE IMAGES		method	limit/base	current	history1	history2
---------------	--	--------	------------	---------	----------	----------



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0716446 **Received** : 28 Mar 2024
Lab Number : **02625223** **Tested** : 01 Apr 2024
Unique Number : 5750342 **Diagnosed** : 01 Apr 2024 - Wes Davis
Test Package : IND 2

VIKING-CIVES LTD.
 42626 GREY ROAD #109
 MOUNT FOREST, ON
 CA N0G 2L0
 Contact: Brenda Flaxman
 bflaxman@viking-cives.ca
 T: (519)323-4433
 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.