



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Machine Id
EAST WINCH
 Component
Hydraulic System
 Fluid
PETRO CANADA HYDREX AW 46 (250 LTR)

RECOMMENDATION

Check seals and/or filters for points of contaminant entry. We advise that you check for the source of water entry. We advise that you follow the water drain-off procedure for this component. We advise that you use off-line filtration with water adsorbent filters to attempt to remove the water from this oil. 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. Confirm the source of the lubricant being utilized for top-up/fill. Resample in 30-45 days to monitor this situation. Please specify the component make and model with your next sample.

WEAR

All component wear rates are normal.

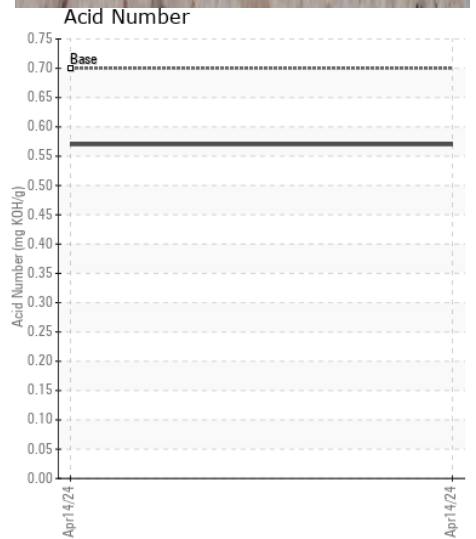
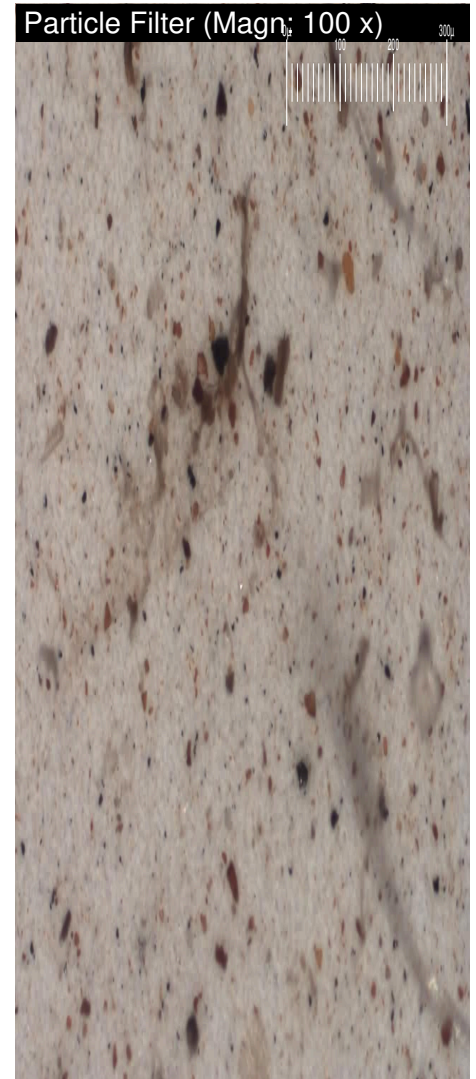
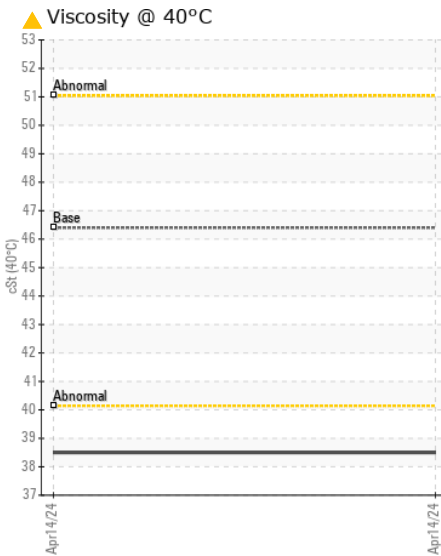
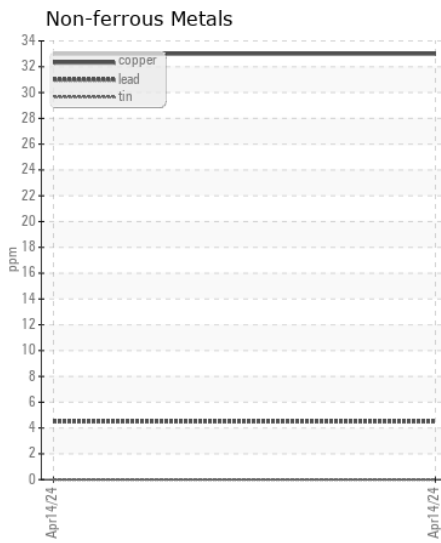
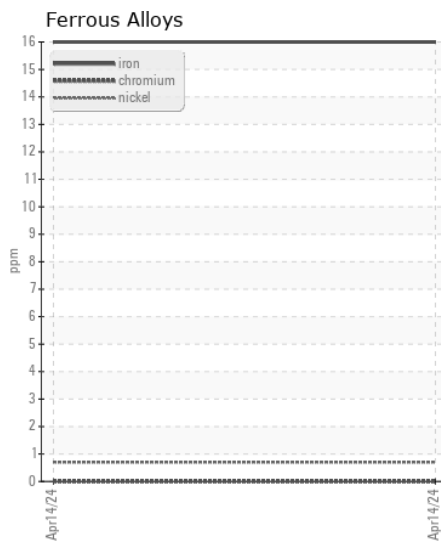
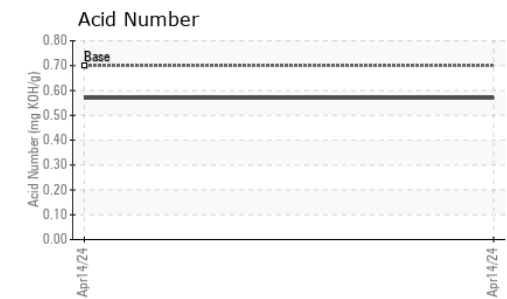
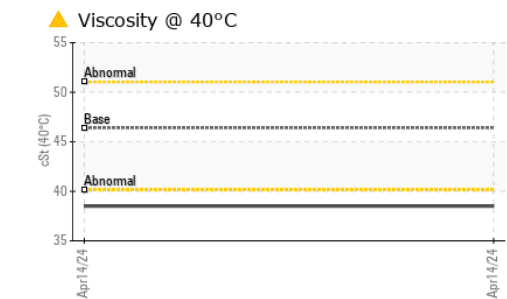
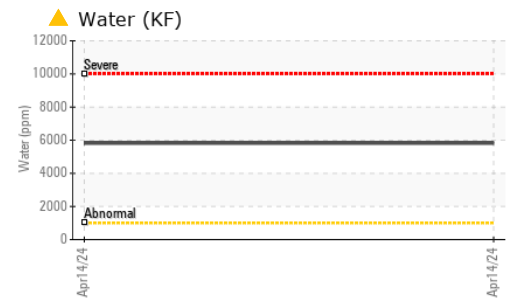
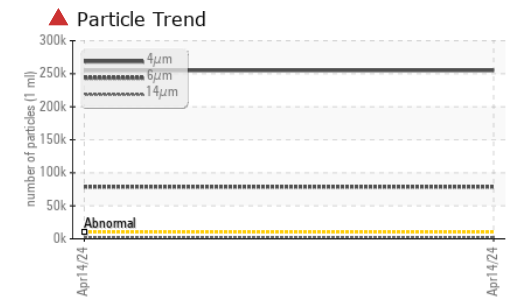
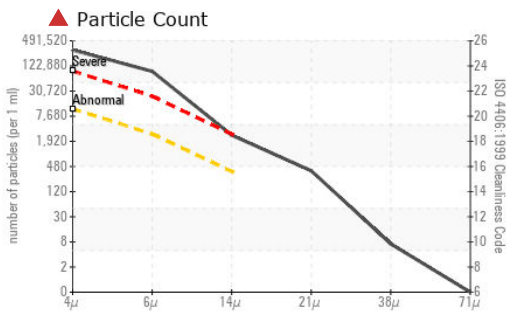
CONTAMINATION

There is a high amount of particulates (2 to 100 microns in size) present in the oil. There is a moderate concentration of water present in the oil. Free water present. The system cleanliness code is much higher than the acceptable limit for the target ISO 4406 cleanliness code.

FLUID CONDITION

Viscosity of sample indicates oil is within SAE 10W range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The AN level is acceptable for this fluid.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PH0000674	---	---
Sample Date		Client Info		14 Apr 2024	---	---
Machine Age	yrs	Client Info		20	---	---
Oil Age	yrs	Client Info		0	---	---
Filter Age	yrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				SEVERE	---	---
Iron	ppm	ASTM D5185(m)	>20	16	---	---
Chromium	ppm	ASTM D5185(m)	>10	0	---	---
Nickel	ppm	ASTM D5185(m)	>10	<1	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)		0	---	---
Aluminum	ppm	ASTM D5185(m)	>10	<1	---	---
Lead	ppm	ASTM D5185(m)	>10	4	---	---
Copper	ppm	ASTM D5185(m)	>75	33	---	---
Tin	ppm	ASTM D5185(m)	>10	0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---
Silicon	ppm	ASTM D5185(m)	>20	3	---	---
Potassium	ppm	ASTM D5185(m)	>20	2	---	---
Water	%	ASTM D6304*	>0.1	▲ 0.581	---	---
ppm Water	ppm	ASTM D6304*	>1000	▲ 5820	---	---
Particles >4µm		ASTM D7647	>10000	▲ 254924	---	---
Particles >6µm		ASTM D7647	>2500	▲ 78784	---	---
Particles >14µm		ASTM D7647	>320	▲ 2360	---	---
Particles >21µm		ASTM D7647	>80	▲ 334	---	---
Particles >38µm		ASTM D7647	>20	6	---	---
Particles >71µm		ASTM D7647	>4	0	---	---
Oil Cleanliness		ISO 4406 (c)	>20/18/15	▲ 25/23/18	---	---
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	▲ LAYRD	---	---
Odor	scalar	Visual*	NORML	NORML	---	---
Emulsified Water	scalar	Visual*	>0.1	▲ 1%	---	---
Sodium	ppm	ASTM D5185(m)		2	---	---
Boron	ppm	ASTM D5185(m)	0	32	---	---
Barium	ppm	ASTM D5185(m)	0	0	---	---
Molybdenum	ppm	ASTM D5185(m)	0	14	---	---
Manganese	ppm	ASTM D5185(m)	0	0	---	---
Magnesium	ppm	ASTM D5185(m)	0	138	---	---
Calcium	ppm	ASTM D5185(m)	50	348	---	---
Phosphorus	ppm	ASTM D5185(m)	330	407	---	---
Zinc	ppm	ASTM D5185(m)	430	410	---	---
Sulfur	ppm	ASTM D5185(m)	760	1552	---	---
Acid Number (AN)	mg KOH/g	ASTM D974*	0.70	0.57	---	---
Visc @ 40°C	cSt	ASTM D7279(m)	46.4	▲ 38.5	---	---



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PH0000674 **Received** : 01 May 2024
Lab Number : 02632581 **Tested** : 03 May 2024
Unique Number : 5773734 **Diagnosed** : 03 May 2024 - Kevin Marson
Test Package : PLANT (Additional Tests: KF, PrtFilter)

HIGHLINE PRODUCE LTD.
 2646 DIVISION RD
 KINGSVILLE, ON
 CA N9Y 2E5
 Contact: J Ramsay

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.

T:
F: