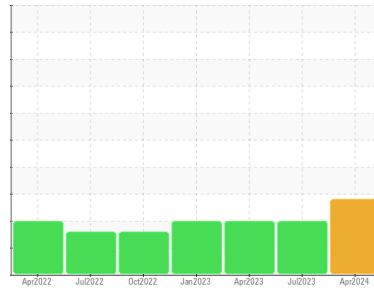




OIL ANALYSIS REPORT

Sample Rating Trend



Area
HYDRAULIC
 Machine Id
B70042 - HYDRAULIC PUMP - MARLEN 2
 Component
Hydraulic Power Pack
 Fluid
PETRO CANADA PURITY FG HYDRAULIC AW 68 (60 GAL)

DIAGNOSIS

- Recommendation**
We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor.
- Wear**
The copper level is abnormal. All other component wear rates are normal.
- Contamination**
There is a high amount of particulates present in the oil.
- 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		WC0872487	WC0814166	WC0755365
Sample Date	Client Info		16 Apr 2024	18 Jul 2023	17 Apr 2023
Machine Age	hrs	Client Info	0	0	0
Oil Age	hrs	Client Info	0	0	0
Oil Changed	Client Info		Not Chngd	Not Chngd	Not Chngd
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.05	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>20	17	11	11
Chromium	ppm	ASTM D5185m	>20	1	<1	<1
Nickel	ppm	ASTM D5185m	>20	1	<1	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	0	0
Lead	ppm	ASTM D5185m	>20	2	1	1
Copper	ppm	ASTM D5185m	>20	61	74	78
Tin	ppm	ASTM D5185m	>20	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	2	0
Molybdenum	ppm	ASTM D5185m		<1	<1	<1
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		3	3	3
Calcium	ppm	ASTM D5185m		9	11	11
Phosphorus	ppm	ASTM D5185m		395	421	419
Zinc	ppm	ASTM D5185m		67	67	70
Sulfur	ppm	ASTM D5185m		512	531	550

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>15	3	3	3
Sodium	ppm	ASTM D5185m		<1	0	0
Potassium	ppm	ASTM D5185m	>20	2	0	<1

FLUID CLEANLINESS

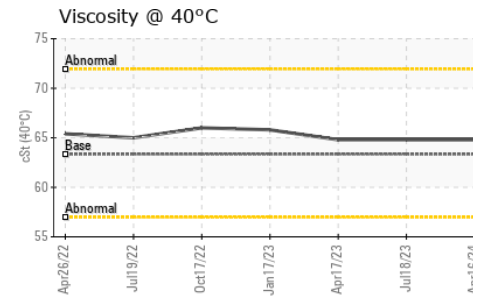
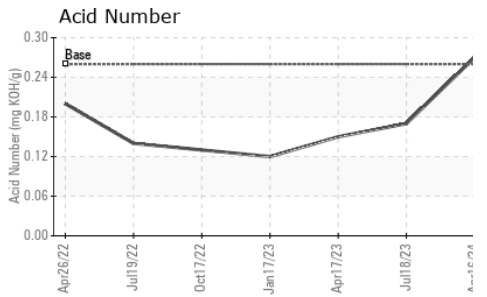
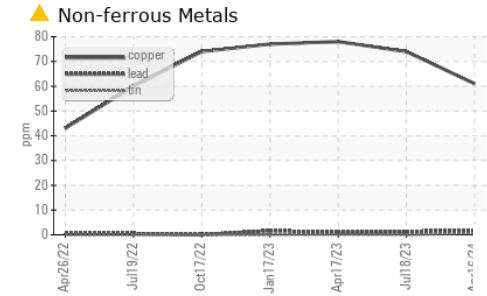
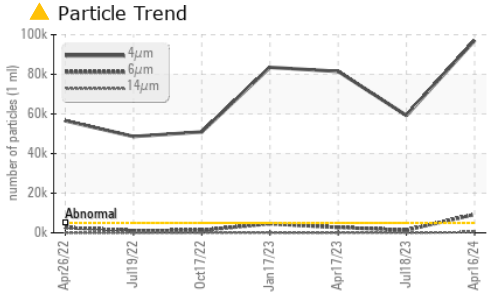
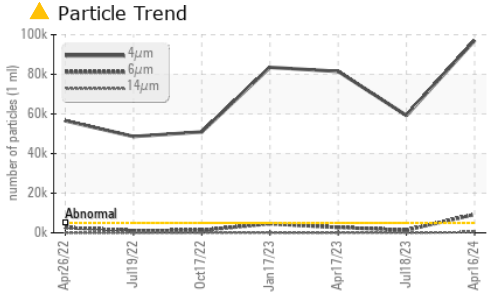
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	97102	59224	81475
Particles >6µm	ASTM D7647	>1300	9253	1329	2724
Particles >14µm	ASTM D7647	>160	381	13	19
Particles >21µm	ASTM D7647	>40	87	4	6
Particles >38µm	ASTM D7647	>10	3	0	0
Particles >71µm	ASTM D7647	>3	1	0	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	24/20/16	23/18/11	24/19/11

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.26	0.27	0.17	0.15



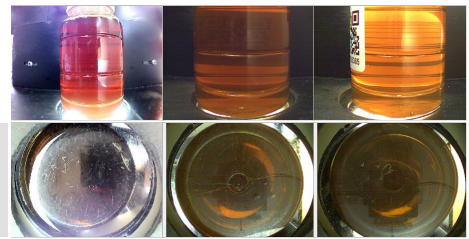
OIL ANALYSIS REPORT



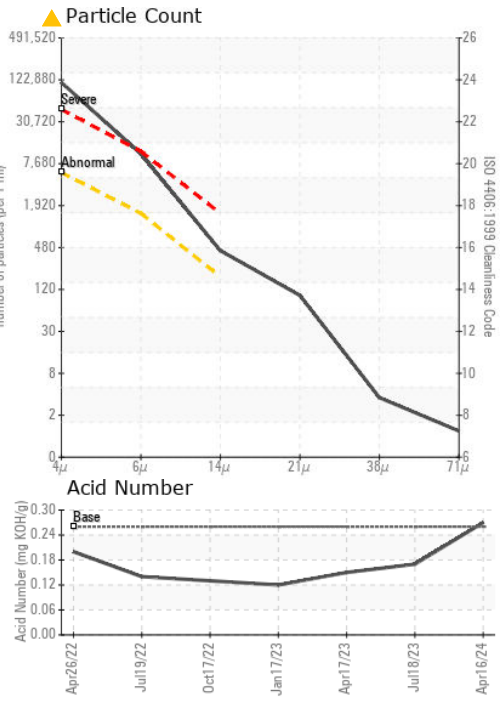
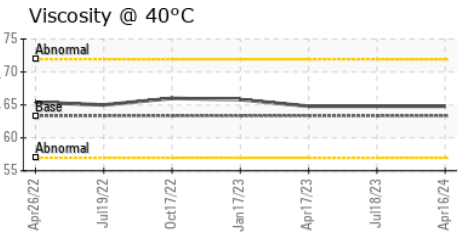
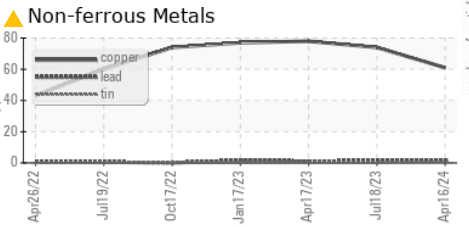
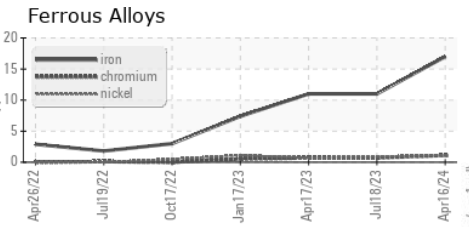
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	63.34	64.8	64.8

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0872487
Lab Number : 06157645
Unique Number : 10993068
Test Package : IND 2
Received : 23 Apr 2024
Tested : 24 Apr 2024
Diagnosed : 25 Apr 2024 - Don Baldrige

PAPILLION FOODS
 10808 S 132ND ST
 OMAHA, NE
 US 68138
 Contact: NEIL ARIANO
 njariano@hormel.com

To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)