



# OIL ANALYSIS REPORT

WEAR	<b>ABNORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>ABNORMAL</b>

Area  
**Starchhouse**  
Machine Id  
**paramax L-51-5MG-03 Mixer for Wet Starch Mixing Box**  
Component  
**Gear Reducer**  
Fluid  
**PETRO CANADA ENDURATEX EP 150 (--- GAL)**

## RECOMMENDATION

We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0872193</b>	WC0872194	WC0755982
Sample Date		Client Info		<b>12 May 2024</b>	15 Nov 2023	19 Apr 2023
Machine Age	yrs	Client Info		<b>2</b>	2	2
Oil Age	yrs	Client Info		<b>0</b>	2	2
Filter Age	yrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changd</b>	N/A	N/A
Filter Changed		Client Info		<b>N/A</b>	N/A	N/A
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

## WEAR

Iron ppm levels are abnormal. A sharp increase in the iron level is noted. The low ferrous density (PQ) index indicates the wear metal levels are due to corrosion.

PQ		ASTM D8184*		<b>23</b>	0	0
Iron	ppm	ASTM D5185(m)	>150	<b>▲ 149</b>	61	40
Chromium	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	<1	0
Nickel	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	<1	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>25	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185(m)	>100	<b>0</b>	<1	0
Copper	ppm	ASTM D5185(m)	>50	<b>1</b>	2	2
Tin	ppm	ASTM D5185(m)	>10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0
White Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

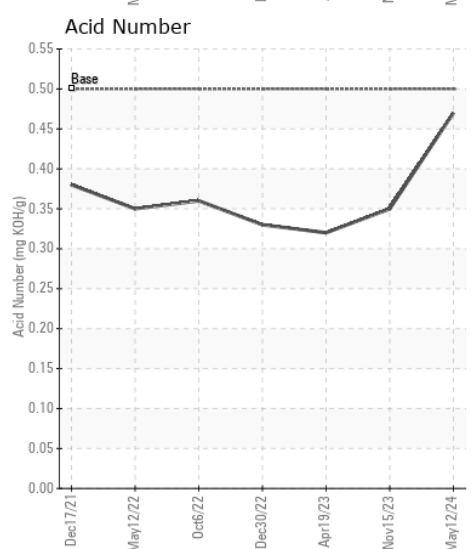
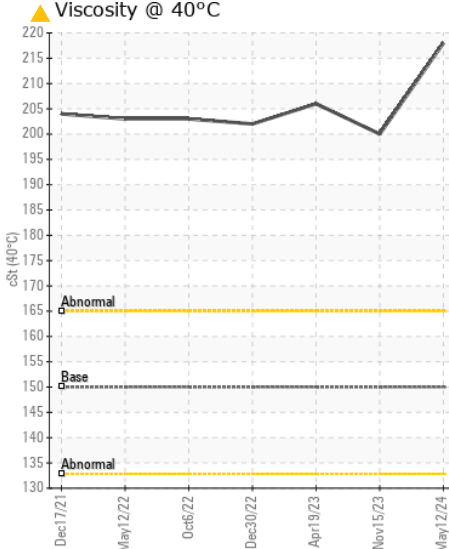
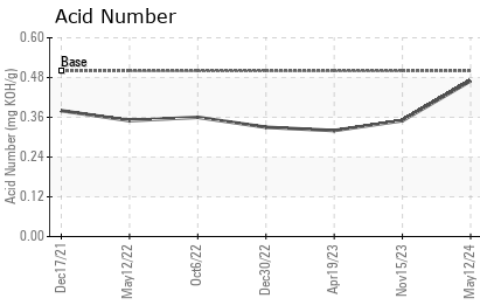
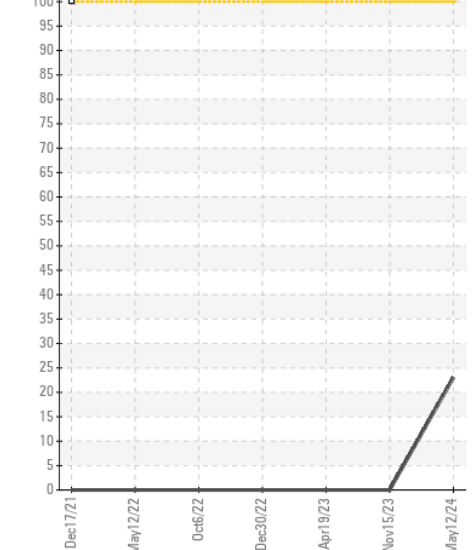
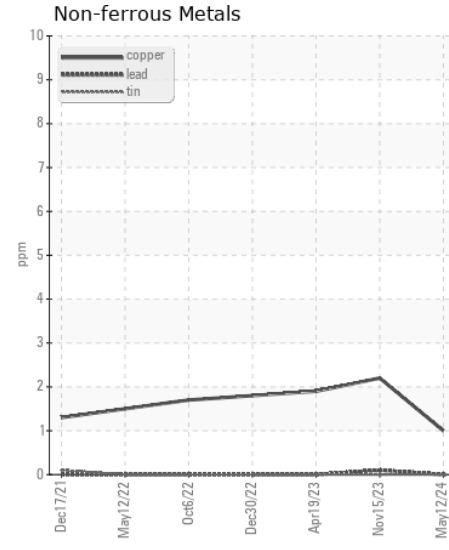
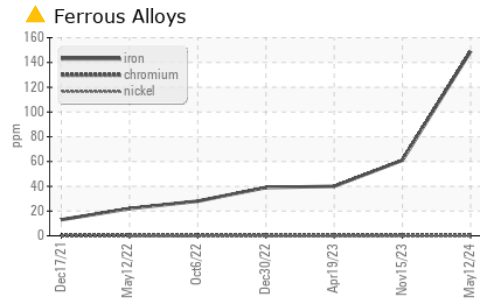
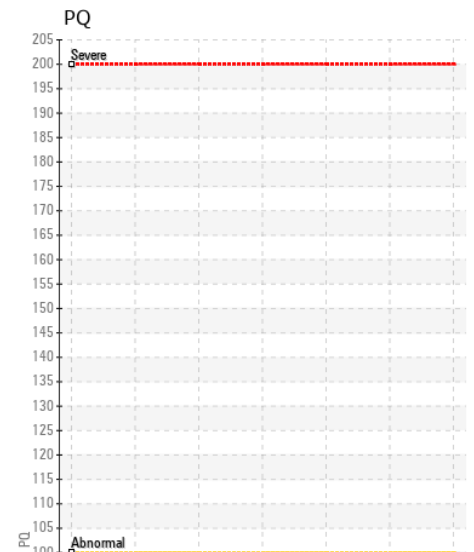
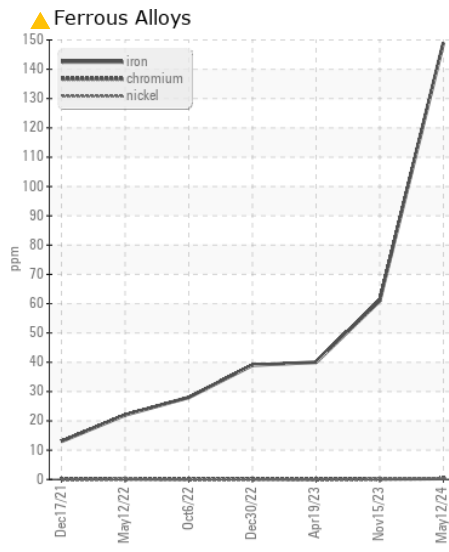
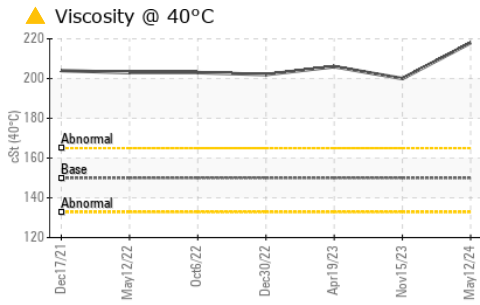
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>50	<b>6</b>	13	14
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	0	<1
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Silt	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	Visual*	NONE	<b>NONE</b>	NONE	NONE
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

## FLUID CONDITION

Viscosity of sample indicates oil is within ISO 220 range, advise investigate. The AN level is acceptable for this fluid. The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Sodium	ppm	ASTM D5185(m)		<b>3</b>	<1	0
Boron	ppm	ASTM D5185(m)	55	<b>29</b>	6	7
Barium	ppm	ASTM D5185(m)	0	<b>1</b>	1	<1
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	0	<b>2</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	2	<b>2</b>	1	<1
Calcium	ppm	ASTM D5185(m)	6	<b>9</b>	8	7
Phosphorus	ppm	ASTM D5185(m)	250	<b>228</b>	222	261
Zinc	ppm	ASTM D5185(m)	3	<b>21</b>	20	18
Sulfur	ppm	ASTM D5185(m)	7500	<b>6779</b>	12136	12348
Acid Number (AN)	mg KOH/g	ASTM D974*	0.5	<b>0.47</b>	0.35	0.32
Visc @ 40°C	cSt	ASTM D7279(m)	150.0	<b>▲ 218</b>	200	206



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0872193 **Received** : 16 May 2024  
**Lab Number** : 02636182 **Tested** : 21 May 2024  
**Unique Number** : 5785344 **Diagnosed** : 21 May 2024 - Kevin Marson  
**Test Package** : IND 2 ( Additional Tests: TAN Man )

**Ingredient Canada Corporation**  
 1100 Green Valley Road  
 London, ON  
 CA N6N 1E3  
 Contact: Mike O'neil  
 mike.oneil@ingredient.com  
 T: (226)979-7229  
 F: (519)680-4416

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.