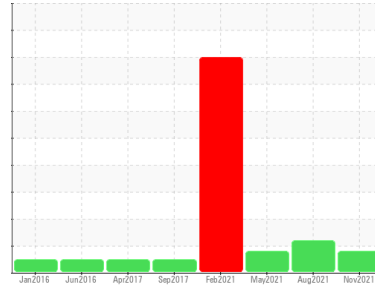




# PROBLEM SUMMARY

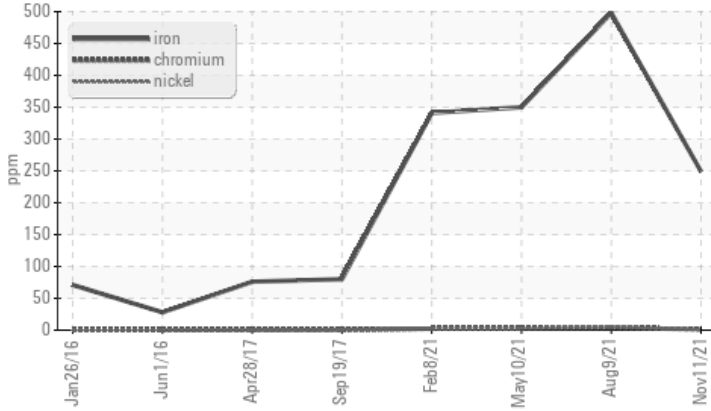
Area  
**DEX**  
 Machine Id  
**A48T22A - F MIXER BOX NORTH DRIVE GEARBOX**  
 Component  
**Gearbox**  
 Fluid  
**PETRO CANADA PURITY FG SYNTH EP GEAR 220 (--- GAL)**

Sample Rating Trend



## COMPONENT CONDITION SUMMARY

### ▲ Ferrous Alloys



## RECOMMENDATION

No corrective action is recommended at this time.  
 Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status	Iron	Chromium	Nickel
ASTM D5185m >200	<b>ABNORMAL</b> ▲ 249	<b>ABNORMAL</b> ▲ 498	<b>ABNORMAL</b> ▲ 350

Customer Id: INGBED  
 Sample No.: WC0607423  
 Lab Number: 05404752  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Doug Bogart +1 (800)237-1369 x4016  
[dougb@wearcheckusa.com](mailto:dougb@wearcheckusa.com)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

*There are no recommended actions for this sample.*

## HISTORICAL DIAGNOSIS

### 09 Aug 2021 Diag: Jonathan Hester

#### WEAR



We suspect abnormal contamination may be due to sampling method. No corrective action is recommended at this time. We recommend an early resample to monitor this condition. Gear wear is indicated. Moderate concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 10 May 2021 Diag: Don Baldrige

#### WEAR



No corrective action is recommended at this time. Resample at the next service interval to monitor. Gear wear is indicated. The water content is negligible. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



### 08 Feb 2021 Diag: Jonathan Hester

#### DEGRADATION



We advise that you check for a possible overheat condition. We advise that you check for the source of water entry. 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. All component wear rates are normal. There is a high concentration of water present in the oil. Moderate concentration of visible dirt/debris present in the oil. The AN level is above the recommended limit. The oil viscosity is higher than normal. The oil is no longer serviceable.

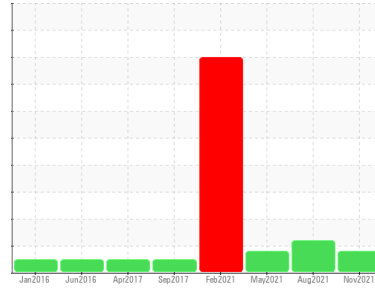
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



**WEAR**



Area  
**DEX**  
 Machine Id  
**A48T22A - F MIXER BOX NORTH DRIVE GEARBOX**  
 Component  
**Gearbox**  
 Fluid  
**PETRO CANADA PURITY FG SYNTH EP GEAR 220 (--- GAL)**

## DIAGNOSIS

### Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

Gear wear is indicated.

### Contamination

The water content is negligible. There is no indication of any contamination 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		<b>WC0607423</b>	WC0608479	WC0573958
Sample Date	Client Info		<b>11 Nov 2021</b>	09 Aug 2021	10 May 2021
Machine Age	hrs	Client Info	<b>0</b>	0	0
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	<b>▲ 249</b>	▲ 498	▲ 350
Chromium	ppm	ASTM D5185m >15	<b>1</b>	4	2
Nickel	ppm	ASTM D5185m >15	<b>&lt;1</b>	5	3
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>&lt;1</b>	<1	<1
Lead	ppm	ASTM D5185m >100	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m >200	<b>&lt;1</b>	1	1
Tin	ppm	ASTM D5185m >25	<b>0</b>	<1	<1
Antimony	ppm	ASTM D5185m	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>1</b>	2	1
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>&lt;1</b>	2	2
Manganese	ppm	ASTM D5185m	<b>2</b>	5	4
Magnesium	ppm	ASTM D5185m	<b>0</b>	0	0
Calcium	ppm	ASTM D5185m	<b>0</b>	0	<1
Phosphorus	ppm	ASTM D5185m	<b>291</b>	363	384
Zinc	ppm	ASTM D5185m	<b>0</b>	0	0
Sulfur	ppm	ASTM D5185m	<b>963</b>	1056	887

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	<b>1</b>	3	2
Sodium	ppm	ASTM D5185m	<b>0</b>	0	0
Potassium	ppm	ASTM D5185m >20	<b>0</b>	0	<1

## FLUID DEGRADATION

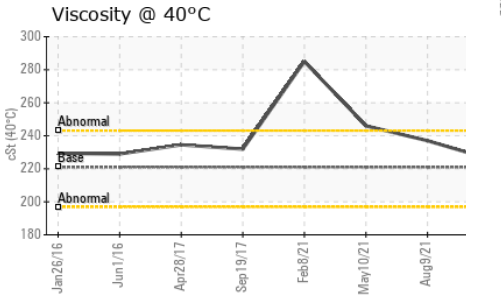
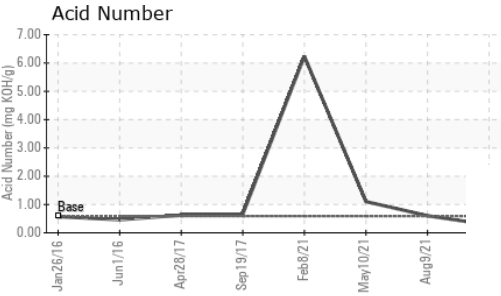
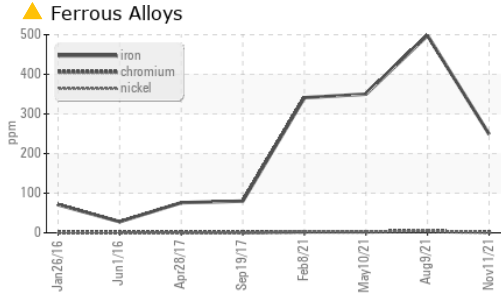
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.59	<b>0.275</b>	0.605	1.103

## VISUAL

	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual NONE	<b>VLITE</b>	▲ MODER	LIGHT
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 >0.2	<b>NEG</b>	0.2%	NEG
Free Water	scalar	*Visual	<b>NEG</b>	NEG	NEG



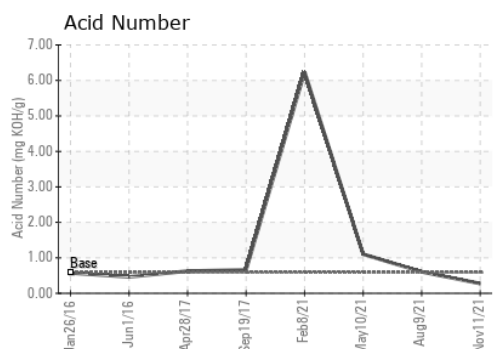
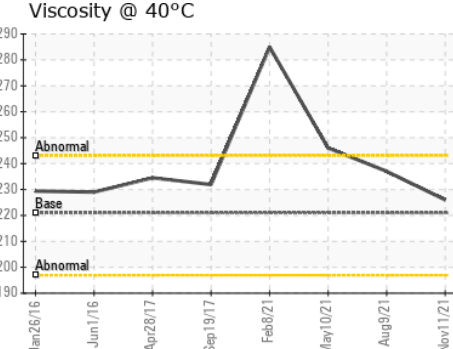
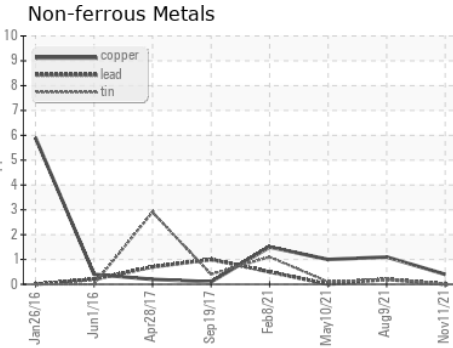
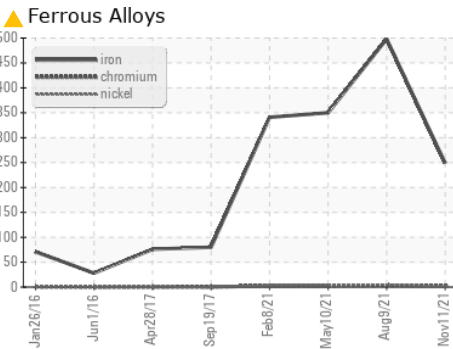
# OIL ANALYSIS REPORT



FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	221	226	237

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	
Bottom				no image	

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0607423  
**Lab Number** : 05404752  
**Unique Number** : 9748915  
**Test Package** : IND 2  
**Received** : 18 Nov 2021  
**Diagnosed** : 19 Nov 2021  
**Diagnostician** : Doug Bogart

**INGREDION - BEDFORD PARK**  
 6400 SOUTH ARCHER ROAD  
 BEDFORD PARK, IL  
 US 60501  
 Contact: Ricardo Gutierrez  
 Ricardo.Gutierrez@ingredion.com  
 T: (219)805-1307  
 F:

Certificate L2367  
 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)