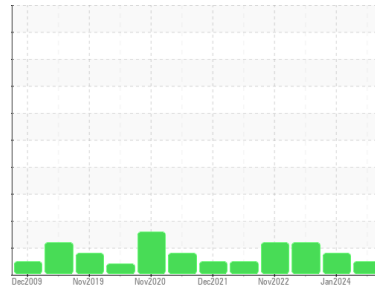




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**SECONDARY CHILL CHAMBER**  
 Machine Id  
**STROETER 9 - SECONDARY (S/N 201609-0102)**  
 Component  
**Gearbox**  
 Fluid  
**PETRO CANADA PURITY FG SYNTH EP GEAR 220 (5 LTR)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

### 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>USP0012472</b>	USP0005340	USP243728
Sample Date	Client Info			<b>06 Jun 2024</b>	28 Jan 2024	27 May 2023
Machine Age	mths	Client Info		<b>0</b>	0	7
Oil Age	mths	Client Info		<b>0</b>	0	7
Oil Changed	Client Info			<b>N/A</b>	N/A	Changed
Sample Status				<b>NORMAL</b>	ATTENTION	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	<b>3</b>	4	19
Chromium	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	>15	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>0</b>	0	0
Lead	ppm	ASTM D5185m	>100	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>200	<b>0</b>	0	0
Tin	ppm	ASTM D5185m	>25	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>&lt;1</b>	2	1
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Calcium	ppm	ASTM D5185m		<b>0</b>	0	0
Phosphorus	ppm	ASTM D5185m		<b>453</b>	427	420
Zinc	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Sulfur	ppm	ASTM D5185m		<b>1139</b>	1115	1231

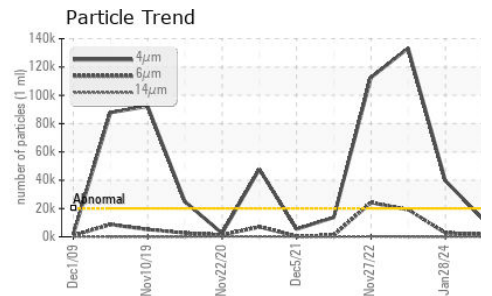
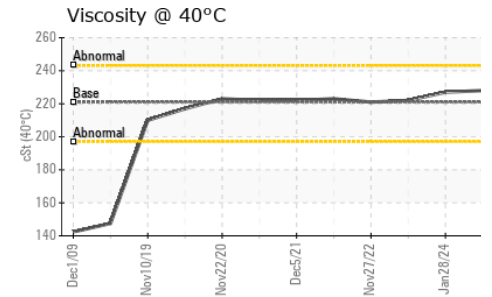
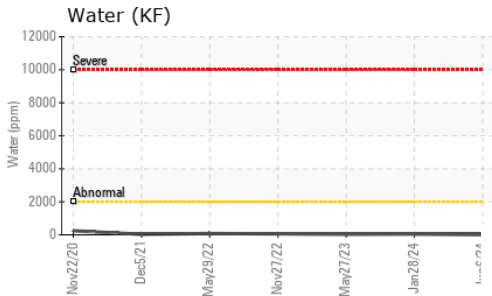
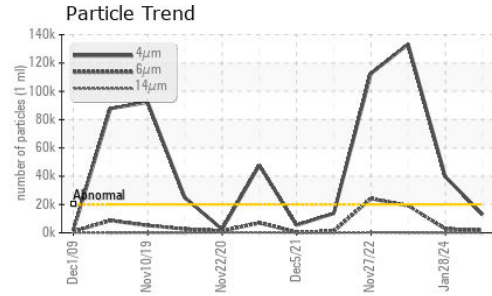
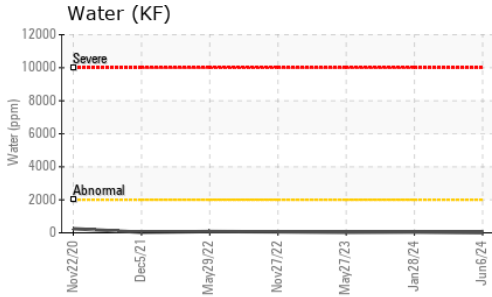
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	<b>2</b>	2	2
Sodium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	0	0
Water	%	ASTM D6304	>0.2	<b>0.001</b>	0.004	0.003
ppm Water	ppm	ASTM D6304	>2000	<b>5</b>	43	25.6

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	<b>12742</b>	● 39667	▲ 133266
Particles >6µm		ASTM D7647	>5000	<b>1849</b>	2721	▲ 19170
Particles >14µm		ASTM D7647	>640	<b>34</b>	28	83
Particles >21µm		ASTM D7647	>160	<b>8</b>	7	12
Particles >38µm		ASTM D7647	>40	<b>1</b>	0	2
Particles >71µm		ASTM D7647	>10	<b>0</b>	0	2
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>21/18/12</b>	● 22/19/12	▲ 24/21/14

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.59	<b>0.54</b>	0.48	0.47



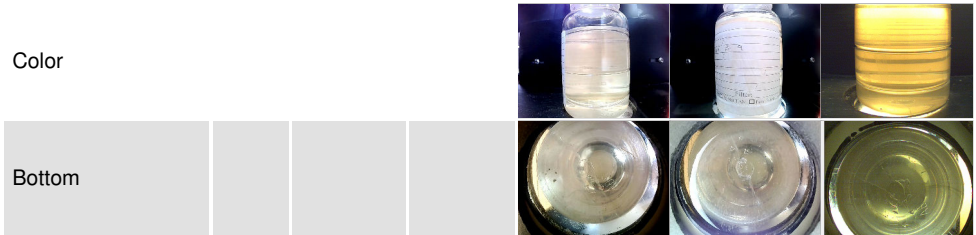
# OIL ANALYSIS REPORT



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	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

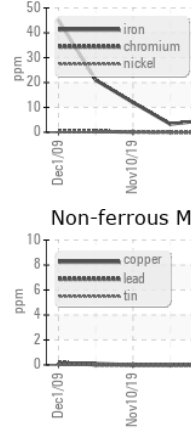
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 221	228	227	222

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

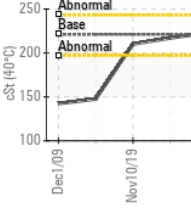


## GRAPHS

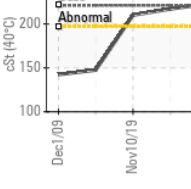
### Ferrous Alloys



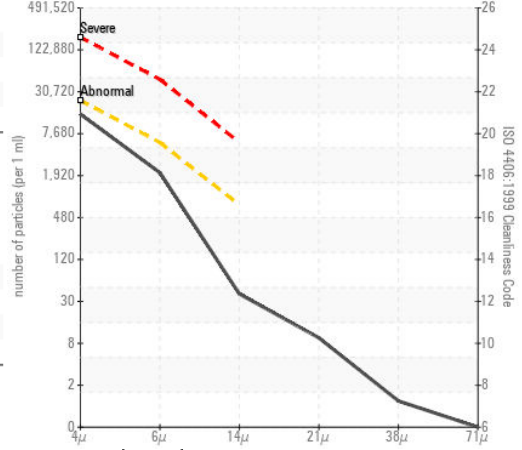
### Non-ferrous Metals



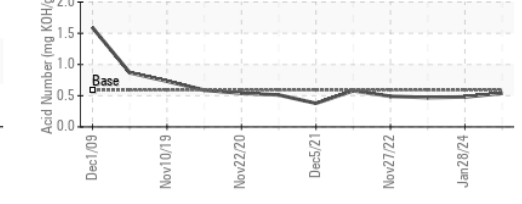
### Viscosity @ 40°C



### Particle Count



### Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
 Sample No. : USP0012472  
 Lab Number : 06202780  
 Unique Number : 11070241  
 Test Package : IND 2

Received : 07 Jun 2024  
 Tested : 10 Jun 2024  
 Diagnosed : 11 Jun 2024 - Doug Bogart

**TYSON - SMART CHICKEN MBA**  
 333 SOUTH 3RD ST  
 TECUMSEH, NE  
 US 68450  
 Contact: DAVE BILLUPS  
 dbillups@smartchicken.com  
 T: (402)786-1000  
 F: (402)335-2502

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)