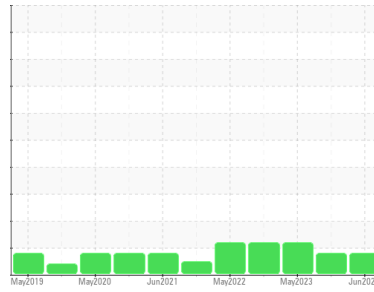




OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area
SECONDARY CHILL CHAMBER
 Machine Id
STROETER 13 - SECONDARY (S/N 201901-0014)
 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 a moderate amount of silt (particulates < 6 microns in size) 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		USP0012471	USP0005342	USP243729
Sample Date	Client Info		06 Jun 2024	04 Dec 2023	27 May 2023
Machine Age	mths	Client Info	0	0	17
Oil Age	mths	Client Info	0	0	12
Oil Changed	Client Info		N/A	N/A	Changed
Sample Status			ATTENTION	ATTENTION	ABNORMAL

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	8	6	22
Chromium	ppm	ASTM D5185m >15	<1	0	0
Nickel	ppm	ASTM D5185m >15	0	0	0
Titanium	ppm	ASTM D5185m	<1	<1	<1
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >25	2	0	0
Lead	ppm	ASTM D5185m >100	0	0	0
Copper	ppm	ASTM D5185m >200	0	0	0
Tin	ppm	ASTM D5185m >25	<1	0	0
Vanadium	ppm	ASTM D5185m	0	0	<1
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	0	0
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	0	0	<1
Magnesium	ppm	ASTM D5185m	1	0	0
Calcium	ppm	ASTM D5185m	0	0	0
Phosphorus	ppm	ASTM D5185m	455	431	443
Zinc	ppm	ASTM D5185m	<1	0	0
Sulfur	ppm	ASTM D5185m	1099	1002	1215

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	2	2	3
Sodium	ppm	ASTM D5185m	0	0	<1
Potassium	ppm	ASTM D5185m >20	<1	0	0
Water	%	ASTM D6304 >0.2	0.001	0.005	0.008
ppm Water	ppm	ASTM D6304 >2000	9	57	82.8

FLUID CLEANLINESS

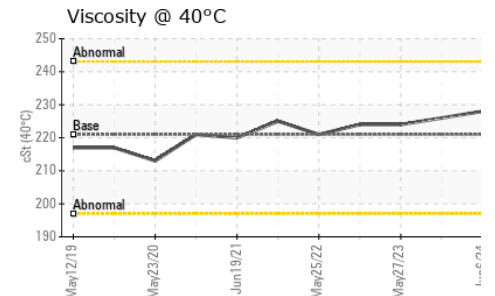
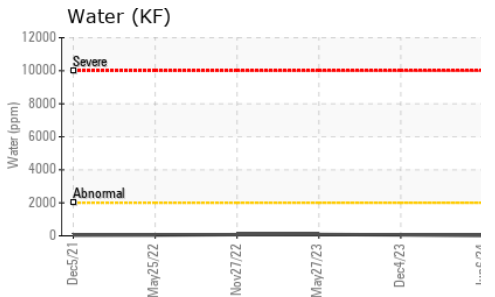
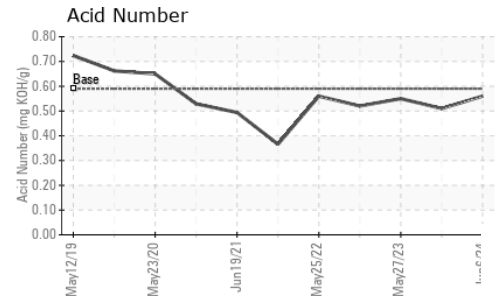
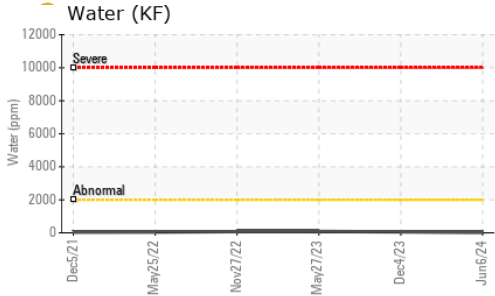
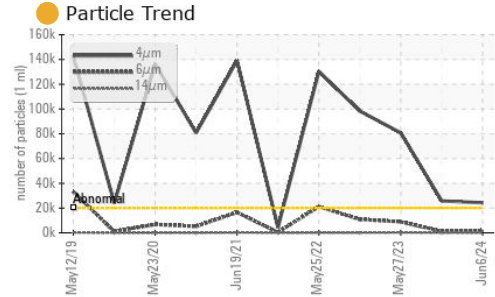
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	24264	25767	80768
Particles >6µm	ASTM D7647	>5000	1939	1183	8907
Particles >14µm	ASTM D7647	>640	19	10	200
Particles >21µm	ASTM D7647	>160	3	2	40
Particles >38µm	ASTM D7647	>40	0	0	2
Particles >71µm	ASTM D7647	>10	0	0	0
Oil Cleanliness	ISO 4406 (c)	>21/19/16	22/18/11	22/17/10	24/20/15

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.59	0.56	0.51	0.55



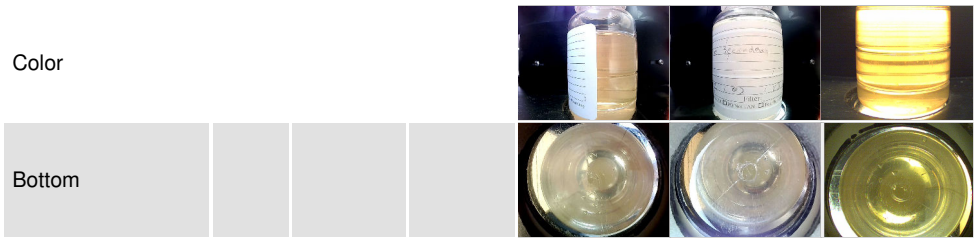
OIL ANALYSIS REPORT



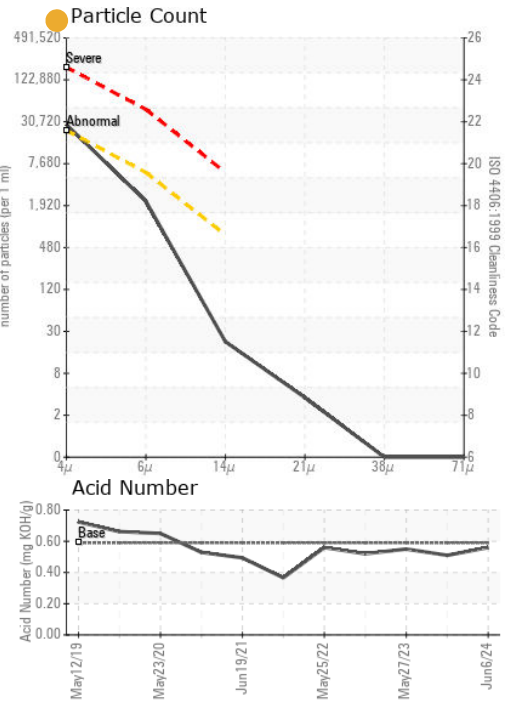
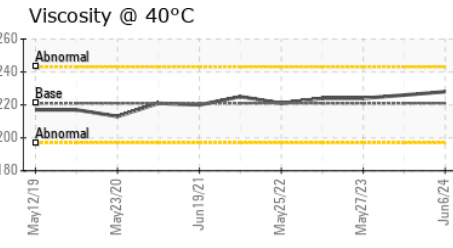
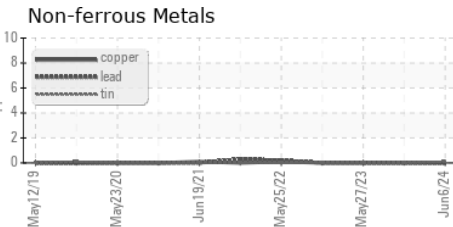
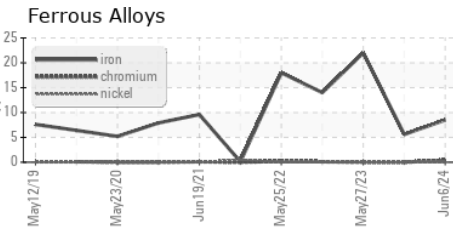
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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	226

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



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : USP0012471 **Received** : 07 Jun 2024
Lab Number : 06202781 **Tested** : 11 Jun 2024
Unique Number : 11070242 **Diagnosed** : 11 Jun 2024 - Doug Bogart
Test Package : IND 2

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)