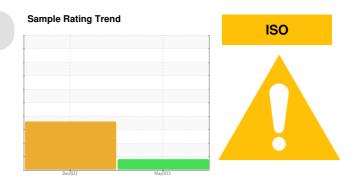


# **PROBLEM SUMMARY**

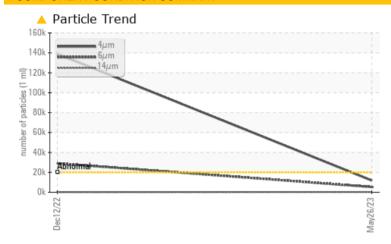
BATCH SYSTEM 3
Machine Id
BS3 HOMO

Component **Gearbox** 

PETRO CANADA ENDURATEX EP 460 (--- LTR)



# **COMPONENT CONDITION SUMMARY**



### RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST	RESULTS				
Sample Status			ATTENTION	ABNORMAL	
Particles >6µm	ASTM D7647	>5000	<u></u> 5294	<b>29062</b>	
Oil Cleanliness	ISO 4406 (c)	>21/19/16	<b>21/20/15</b>	<b>2</b> 4/22/14	

Customer Id: KRAMASIOW
Sample No.: USP248904
Lab Number: 05861896
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

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

# **RECOMMENDED ACTIONS**

Action	Status	Date	Done By	Description	
Other Action (see Note)	DONE	Jun 05 2023	?	No recommended actions	

# HISTORICAL DIAGNOSIS

12 Dec 2022 Diag: Jonathan Hester

### WATER



We advise that you follow the water drain-off procedure for this component, and use off-line filtration to improve the cleanliness of the system fluid. Resample at the next service interval to monitor. All component wear rates are normal. Appearance is hazy. There is a high amount of silt (particulates < 14 microns in size) present in the oil. Free water present. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



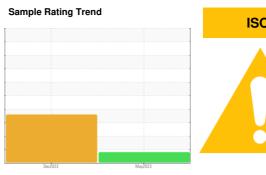


# **OIL ANALYSIS REPORT**

# BATCH SYSTEM 3 **BS3 HOMO**

Gearbox

PETRO CANADA ENDURATEX EP 460 (--- LTR)



Sample Rating Tre	nd	ISO
		$\overline{\Lambda}$
Dec2022	М <del>ау</del> <b>2</b> 023	

# **DIAGNOSIS**

### Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

### Contamination

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

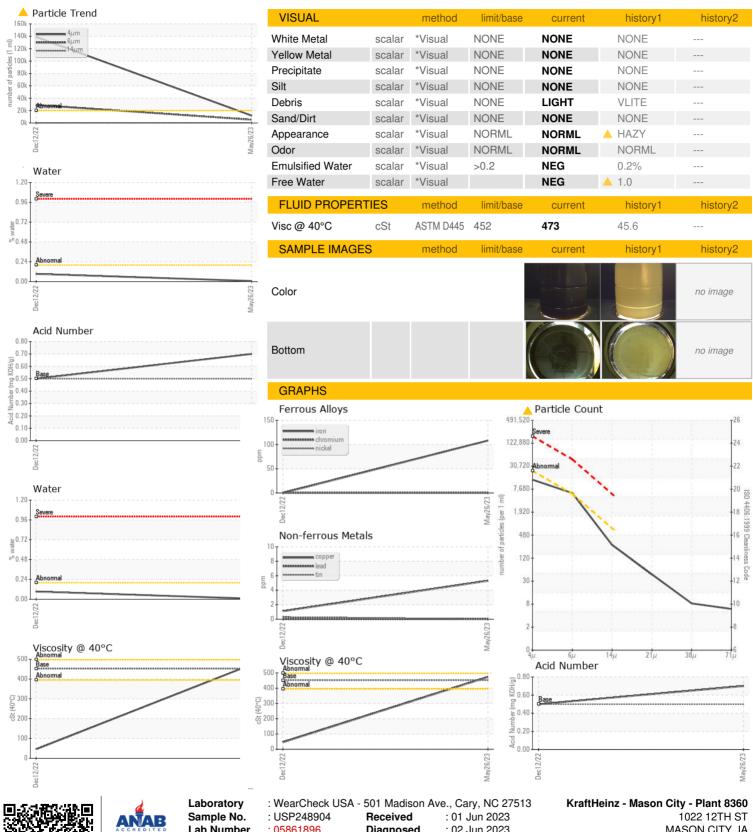
# **Fluid Condition**

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

LIN)			Dec2022	May2023		
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		USP248904	USP234430	
Sample Date		Client Info		26 May 2023	12 Dec 2022	
Machine Age	hrs	Client Info		0	0	
Oil Age	hrs	Client Info		0	0	
Oil Changed		Client Info		N/A	N/A	
Sample Status				ATTENTION	ABNORMAL	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>200	108	0	
Chromium	ppm	ASTM D5185m	>15	0	0	
Nickel	ppm	ASTM D5185m	>15	0	0	
Titanium	ppm	ASTM D5185m		<1	0	
Silver	ppm	ASTM D5185m		0	0	
Aluminum	ppm	ASTM D5185m	>25	<1	<1	
Lead	ppm	ASTM D5185m	>100	0	0	
Copper	ppm	ASTM D5185m	>200	5	1	
Tin	ppm	ASTM D5185m	>25	0	<1	
Vanadium	ppm	ASTM D5185m		0	0	
Cadmium	ppm	ASTM D5185m		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	55	59	0	
Barium	ppm	ASTM D5185m	0	0	0	
Molybdenum	ppm	ASTM D5185m	0	39	7	
Manganese	ppm	ASTM D5185m	0	<1	0	
Magnesium	ppm	ASTM D5185m	2	1	0	
Calcium	ppm	ASTM D5185m	6	2	47	
Phosphorus	ppm	ASTM D5185m	240	347	354	
Zinc	ppm	ASTM D5185m	3	8	446	
Sulfur	ppm	ASTM D5185m	10310	8931	1021	
CONTAMINANTS	;	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>50	8	24	
Sodium	ppm	ASTM D5185m		0	0	
Potassium	ppm	ASTM D5185m	>20	<1	0	
Water	%	ASTM D6304	>0.2	0.007	0.093	
ppm Water	ppm	ASTM D6304	>2000	77.0	930	
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>20000	11802	<b>▲</b> 138900	
Particles >6µm		ASTM D7647	>5000	<b>△</b> 5294	<b>△</b> 29062	
Particles >14µm		ASTM D7647	>640	235	83	
Particles >21µm		ASTM D7647	>160	40	15	
Particles >38µm		ASTM D7647	>40	7	3	
Particles >71µm		ASTM D7647	>10	5	2	
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<u>^</u> 21/20/15	<u>△</u> 24/22/14	
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.5	0.70	0.50	



# **OIL ANALYSIS REPORT**





Certificate L2367

Lab Number **Unique Number** 

Test Package

: 05861896

: IND 2

: 10496361

Diagnosed : 02 Jun 2023 Diagnostician : Doug Bogart

MASON CITY, IA US 50401

Contact: Service Manager

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)

F: (641)421-2936

T: