



# OIL ANALYSIS REPORT

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

Area  
**SAMUELRIS**  
Machine Id  
**S30-2241 Port Reduction Gear**  
Component  
**Port Reduction Gear**  
Fluid  
**PETRO CANADA ENDURATEX EP 100 (560 LTR)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0899939</b>	WC0869816	WC0759192
Sample Date		Client Info		<b>12 Jun 2024</b>	29 Mar 2024	16 Nov 2023
Machine Age	hrs	Client Info		<b>78470</b>	77962	77455
Oil Age	hrs	Client Info		<b>5374</b>	4866	4359
Filter Age	hrs	Client Info		<b>4773</b>	4265	3758
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>150	<b>1</b>	1	1
Chromium	ppm	ASTM D5185(m)	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m)	>10	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Silver	ppm	ASTM D5185(m)		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>25	<b>&lt;1</b>	0	0
Lead	ppm	ASTM D5185(m)	>100	<b>1</b>	1	2
Copper	ppm	ASTM D5185(m)	>50	<b>1</b>	1	1
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

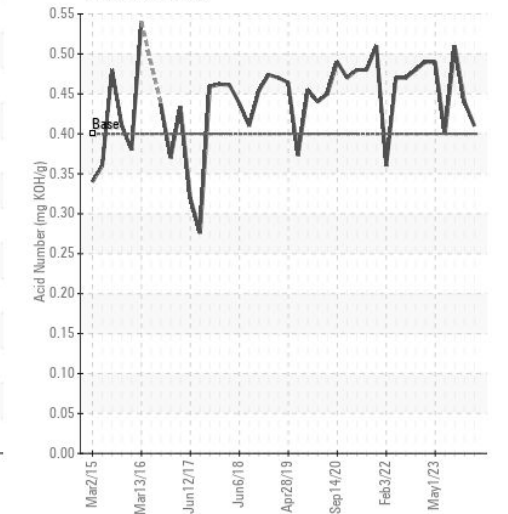
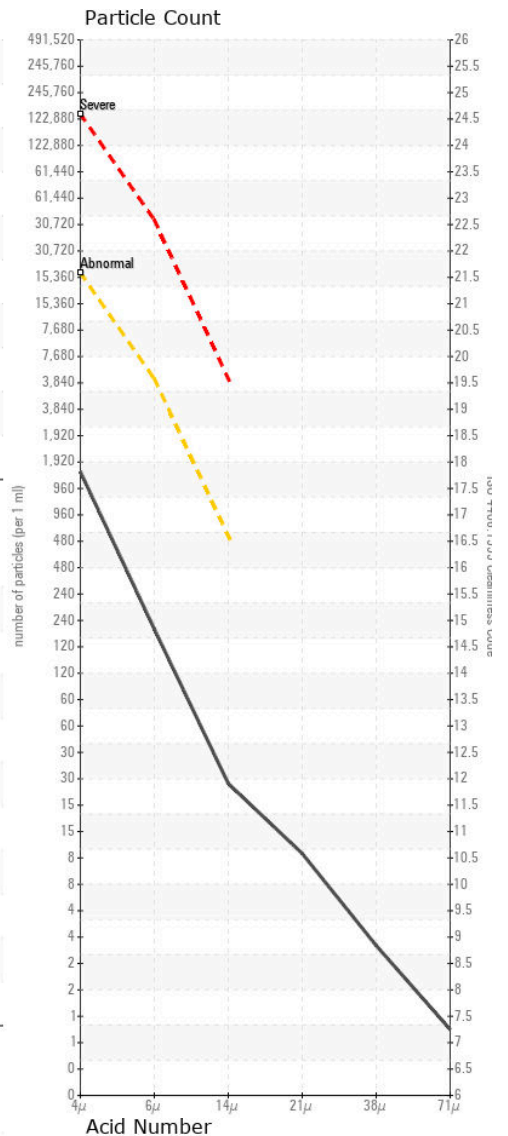
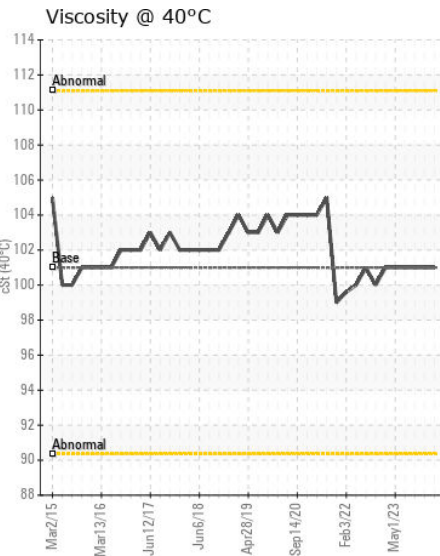
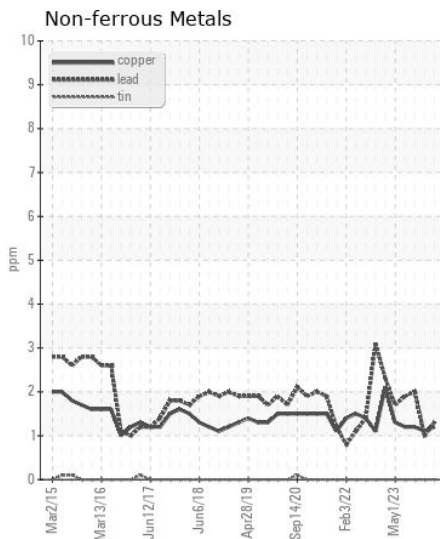
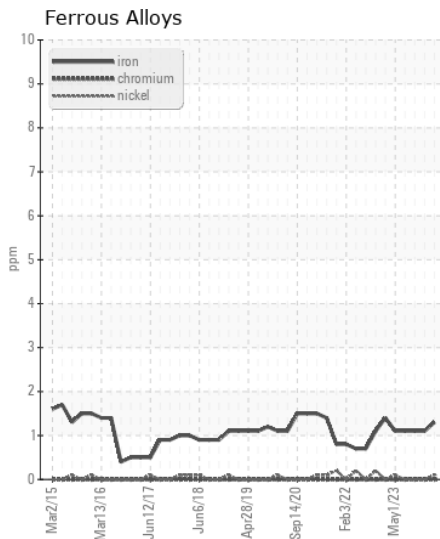
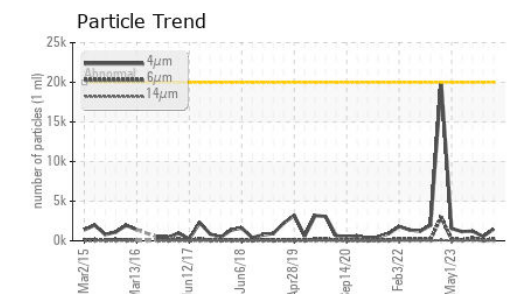
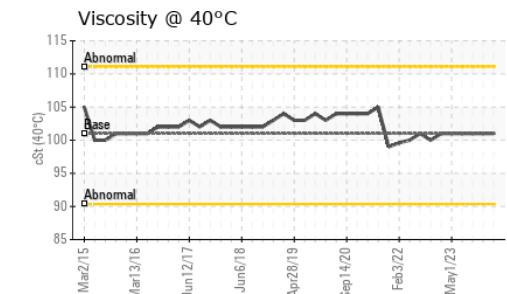
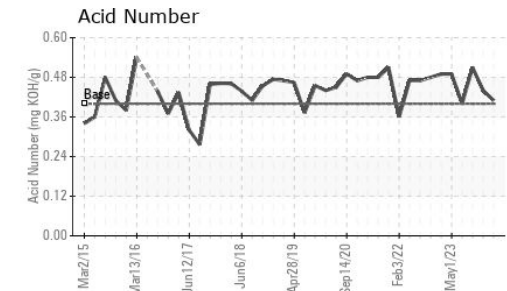
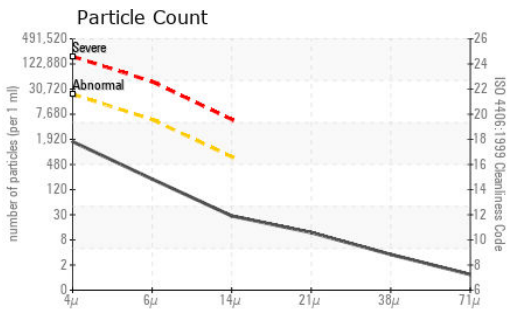
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185(m)	>50	<b>&lt;1</b>	0	<1
Potassium	ppm	ASTM D5185(m)	>20	<b>1</b>	0	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>20000	<b>1482</b>	557	1209
Particles >6µm		ASTM D7647	>5000	<b>189</b>	70	338
Particles >14µm		ASTM D7647	>640	<b>25</b>	6	47
Particles >21µm		ASTM D7647	>160	<b>10</b>	2	17
Particles >38µm		ASTM D7647	>40	<b>3</b>	0	4
Particles >71µm		ASTM D7647	>10	<b>1</b>	0	2
Oil Cleanliness		ISO 4406 (c)	>21/19/16	<b>18/15/12</b>	16/13/10	17/16/13
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>	VLITE	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

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

Sodium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1
Boron	ppm	ASTM D5185(m)	50	<b>55</b>	60	59
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	<1	<1
Molybdenum	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m)	0	<b>0</b>	<1	0
Calcium	ppm	ASTM D5185(m)	0	<b>2</b>	2	8
Phosphorus	ppm	ASTM D5185(m)	270	<b>237</b>	245	253
Zinc	ppm	ASTM D5185(m)	0	<b>2</b>	2	4
Sulfur	ppm	ASTM D5185(m)	4500	<b>3391</b>	3416	3626
Acid Number (AN)	mg KOH/g	ASTM D974*	0.4	<b>0.41</b>	0.44	0.51
Visc @ 40°C	cSt	ASTM D7279(m)	101	<b>101</b>	101	101



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0899939  
**Lab Number** : 02645476  
**Unique Number** : 5803015  
**Test Package** : MAR 2

**Received** : 04 Jul 2024  
**Tested** : 08 Jul 2024  
**Diagnosed** : 08 Jul 2024 - Wes Davis

**CANADIAN COAST GUARD**  
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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.