



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
Stbd Steering Gear (S/N T2P01047)
 Component
Starboard Steering
 Fluid
PETRO CANADA HYDREX MV 32 (114 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0829981	WC0829978	WC0754149
Sample Date		Client Info		05 Jun 2024	09 Aug 2023	21 Jun 2023
Machine Age	hrs	Client Info		19912	18400	18000
Oil Age	hrs	Client Info		912	18400	18000
Filter Age	hrs	Client Info		912	0	0
Oil Changed		Client Info		Changed	Not Changd	N/A
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>50	<1	2	2
Chromium	ppm	ASTM D5185(m)	>15	0	0	0
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	1	0
Aluminum	ppm	ASTM D5185(m)	>5	<1	<1	0
Lead	ppm	ASTM D5185(m)	>10	0	0	<1
Copper	ppm	ASTM D5185(m)	>50	2	5	4
Tin	ppm	ASTM D5185(m)	>5	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE

CONTAMINATION

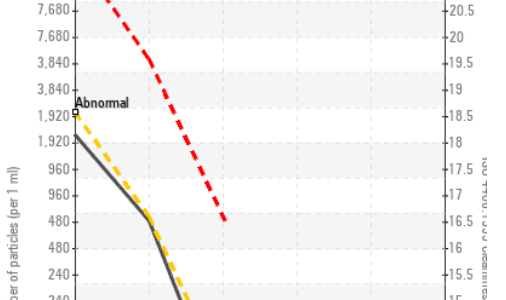
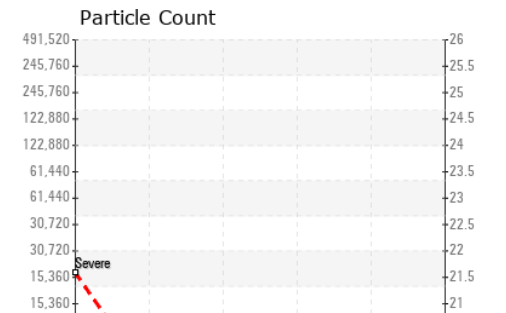
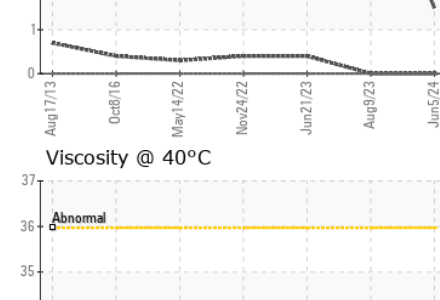
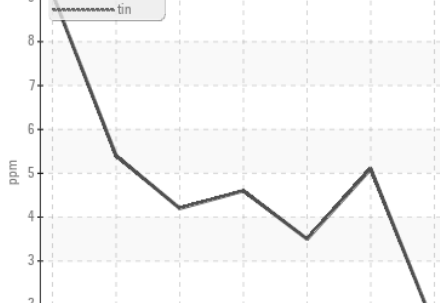
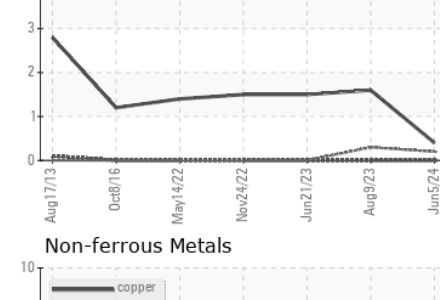
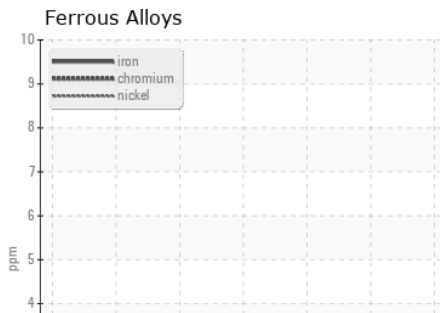
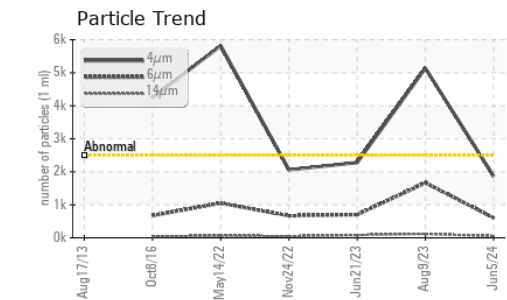
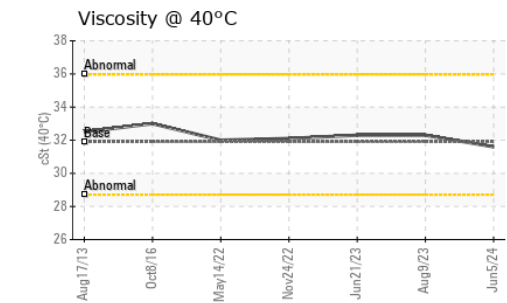
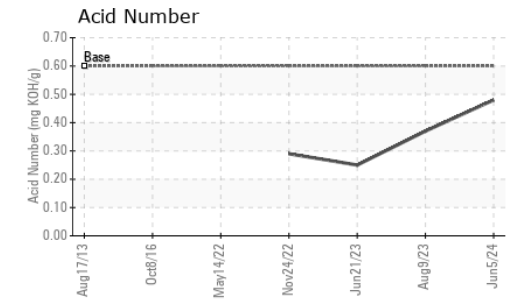
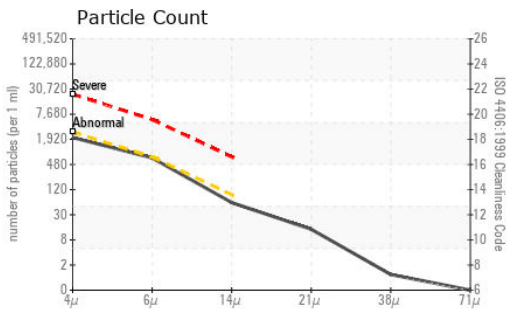
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185(m)	>15	0	<1	1
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Water		WC Method	>0.2	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>2500	1863	▲ 5135	2279
Particles >6µm		ASTM D7647	>640	605	▲ 1665	● 700
Particles >14µm		ASTM D7647	>80	52	● 117	● 83
Particles >21µm		ASTM D7647	>20	12	17	19
Particles >38µm		ASTM D7647	>4	1	1	0
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>18/16/13	18/16/13	▲ 20/18/14	● 18/17/14
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

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

Sodium	ppm	ASTM D5185(m)		0	1	<1
Boron	ppm	ASTM D5185(m)	0	<1	<1	1
Barium	ppm	ASTM D5185(m)	0	<1	4	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)	1	0	0	0
Magnesium	ppm	ASTM D5185(m)	0	1	5	10
Calcium	ppm	ASTM D5185(m)	50	52	68	105
Phosphorus	ppm	ASTM D5185(m)	330	318	361	356
Zinc	ppm	ASTM D5185(m)	430	396	364	420
Sulfur	ppm	ASTM D5185(m)	760	803	1044	1038
Acid Number (AN)	mg KOH/g	ASTM D974*	0.60	0.48	0.37	0.25
Visc @ 40°C	cSt	ASTM D7279(m)	31.9	31.6	32.3	32.3



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0829981
Lab Number : 02643280
Unique Number : 5800819
Test Package : MAR 2 (Additional Tests: PrtCount, TAN Man)

Received : 20 Jun 2024
Tested : 21 Jun 2024
Diagnosed : 21 Jun 2024 - Wes Davis

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.

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