



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
SAMUELRIS
 Machine Id
S30-8136 Fwd Deck Hyd. Machinery Power Pack
 Component
Forward Hydraulic System
 Fluid
PETRO CANADA HYDREX MV 32 (450 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0759190	WC0759206	WC0759163
Sample Date		Client Info		14 Jan 2024	10 Jul 2023	06 Jan 2023
Machine Age	mths	Client Info		457	451	445
Oil Age	mths	Client Info		165	157	151
Filter Age	mths	Client Info		12	6	242
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Not Changed	Not Changed	Not Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>20	2	1	1
Chromium	ppm	ASTM D5185(m)	>10	0	<1	0
Nickel	ppm	ASTM D5185(m)	>10	0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		<1	<1	<1
Aluminum	ppm	ASTM D5185(m)	>10	<1	<1	0
Lead	ppm	ASTM D5185(m)	>20	2	3	2
Copper	ppm	ASTM D5185(m)	>20	18	19	19
Tin	ppm	ASTM D5185(m)	>10	<1	<1	<1
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

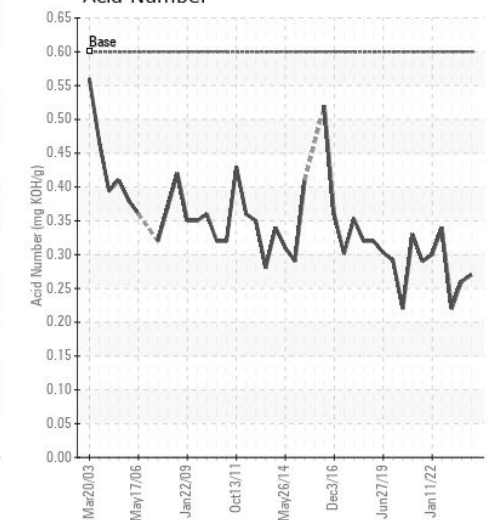
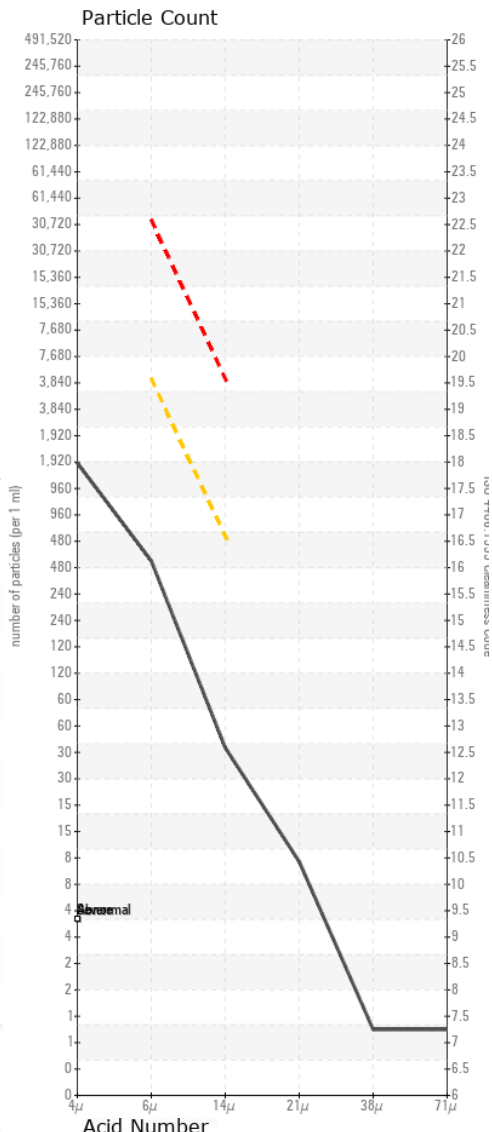
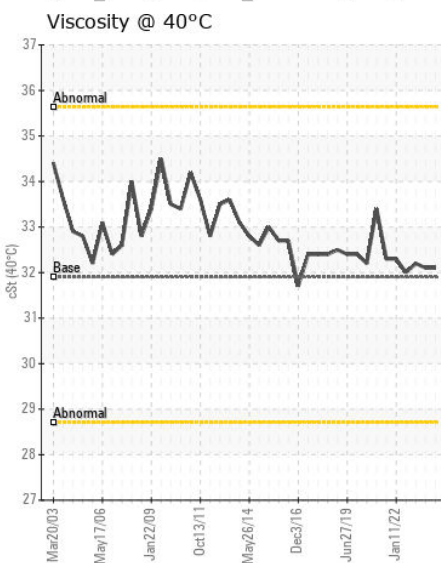
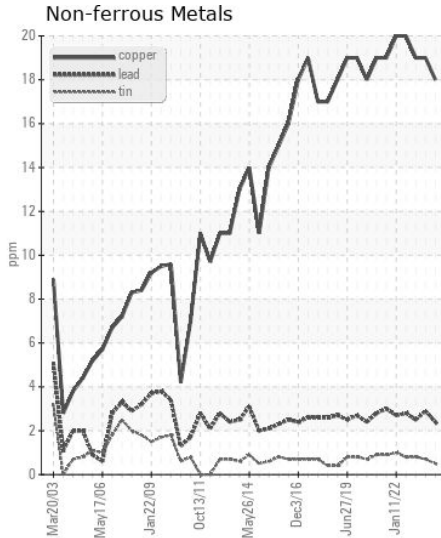
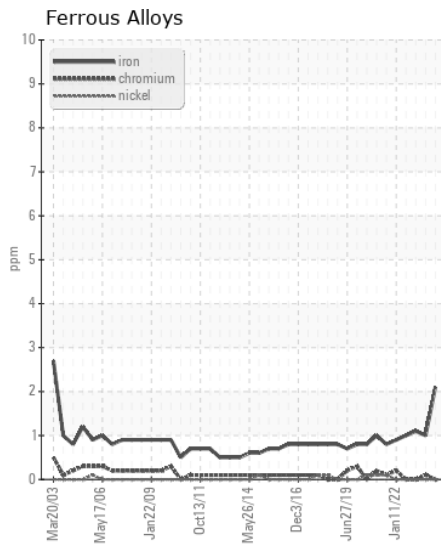
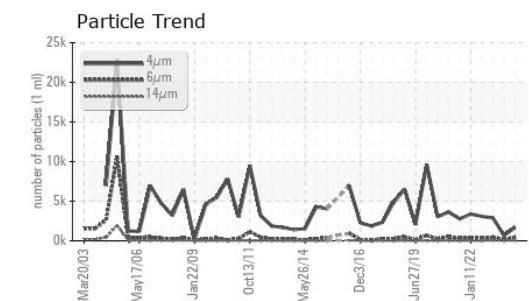
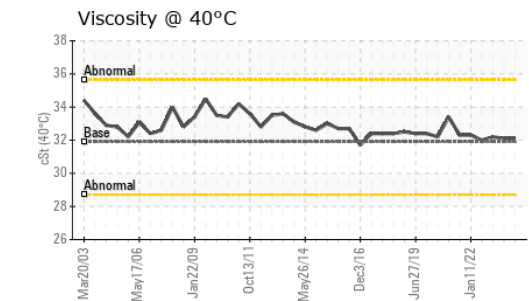
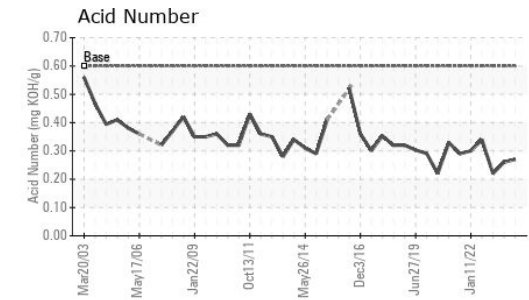
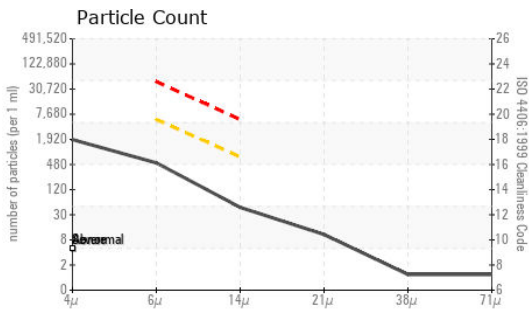
The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Silicon	ppm	ASTM D5185(m)	>15	<1	<1	<1
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Water		WC Method	>0.05	NEG	NEG	NEG
Particles >4µm		ASTM D7647		1659	678	2875
Particles >6µm		ASTM D7647	>5000	461	165	439
Particles >14µm		ASTM D7647	>640	40	19	59
Particles >21µm		ASTM D7647	>160	9	5	18
Particles >38µm		ASTM D7647	>40	1	1	0
Particles >71µm		ASTM D7647	>10	1	0	0
Oil Cleanliness		ISO 4406 (c)	>-/19/16	18/16/12	17/15/11	19/16/13
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*	>0.05	NEG	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)		0	<1	<1
Boron	ppm	ASTM D5185(m)	0	0	<1	<1
Barium	ppm	ASTM D5185(m)	0	<1	<1	<1
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	1	<1
Calcium	ppm	ASTM D5185(m)	50	105	108	111
Phosphorus	ppm	ASTM D5185(m)	330	262	278	275
Zinc	ppm	ASTM D5185(m)	430	329	348	328
Sulfur	ppm	ASTM D5185(m)	760	669	672	659
Acid Number (AN)	mg KOH/g	ASTM D974*	0.60	0.27	0.26	0.22
Visc @ 40°C	cSt	ASTM D7279(m)	31.9	32.1	32.1	32.2



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0759190 **Received** : 16 Jan 2024
Lab Number : 02608982 **Diagnosed** : 17 Jan 2024
Unique Number : 5710068 **Diagnostician** : Wes Davis
Test Package : MAR 2

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.