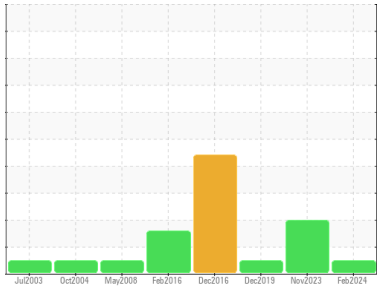
OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL

Area
[450267839]
Machine Id
Hose Reel - Stbd Utilities Loading (Hyd Power Unit) (S/N Sample Tag XX-00002)
Component
Hydraulic System
Fluid
SAE 10W (--- LTR)

DIAGNOSIS

Recommendation
Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear
All component wear rates are normal.

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

Fluid Condition
Viscosity of sample indicates oil is within ISO 22 range, advise investigate. 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		**PC0076417**	PC	PC
Sample Date		Client Info		**16 Feb 2024**	20 Nov 2023	22 Dec 2019
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**NORMAL**	ABNORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Water		WC Method	>0.05	**NEG**	NEG	NEG

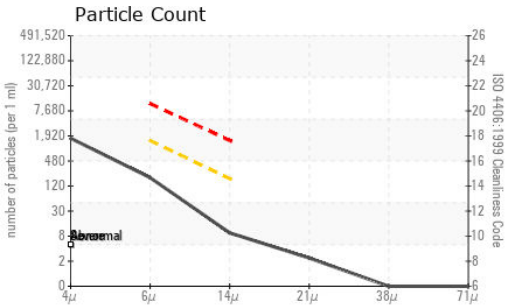
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	**0**	<1	0
Chromium	ppm	ASTM D5185(m)	>10	**0**	0	0
Nickel	ppm	ASTM D5185(m)	>10	**0**	<1	0
Titanium	ppm	ASTM D5185(m)		**0**	0	0
Silver	ppm	ASTM D5185(m)		**0**	<1	0
Aluminum	ppm	ASTM D5185(m)	>10	**<1**	0	0
Lead	ppm	ASTM D5185(m)	>20	**<1**	<1	0
Copper	ppm	ASTM D5185(m)	>20	**<1**	<1	<1
Tin	ppm	ASTM D5185(m)	>10	**0**	0	0
Antimony	ppm	ASTM D5185(m)		**0**	0	<1
Vanadium	ppm	ASTM D5185(m)		**0**	0	0
Beryllium	ppm	ASTM D5185(m)		**0**	0	0
Cadmium	ppm	ASTM D5185(m)		**0**	0	0

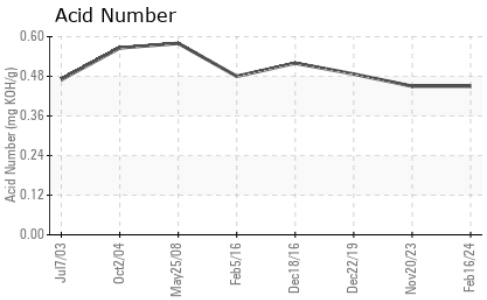
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		**0**	<1	<1
Barium	ppm	ASTM D5185(m)		**0**	<1	0
Molybdenum	ppm	ASTM D5185(m)		**0**	0	0
Manganese	ppm	ASTM D5185(m)		**0**	0	0
Magnesium	ppm	ASTM D5185(m)		**0**	0	5
Calcium	ppm	ASTM D5185(m)		**49**	49	75
Phosphorus	ppm	ASTM D5185(m)		**336**	327	296
Zinc	ppm	ASTM D5185(m)		**415**	419	378
Sulfur	ppm	ASTM D5185(m)		**798**	754	727
Lithium	ppm	ASTM D5185(m)		**<1**	<1	<1

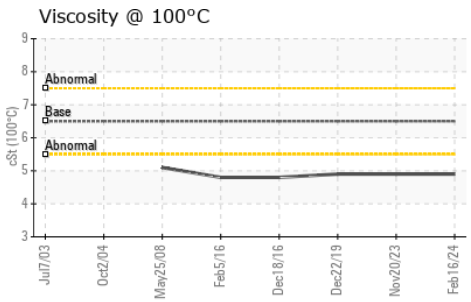
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>15	**0**	0	0
Sodium	ppm	ASTM D5185(m)		**0**	<1	0
Potassium	ppm	ASTM D5185(m)	>20	**<1**	0	<1

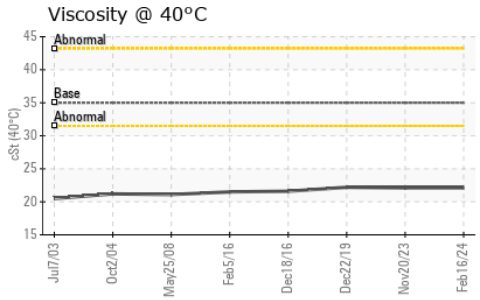
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**1476**	21538	1370
Particles >6µm		ASTM D7647	>1300	**168**	▲ 5864	156
Particles >14µm		ASTM D7647	>160	**8**	▲ 480	11
Particles >21µm		ASTM D7647	>40	**2**	▲ 136	4
Particles >38µm		ASTM D7647	>10	**0**	● 19	0
Particles >71µm		ASTM D7647	>3	**0**	2	0
Oil Cleanliness		ISO 4406 (c)	>--/17/14	**18/15/10**	▲ 22/20/16	18/14/11

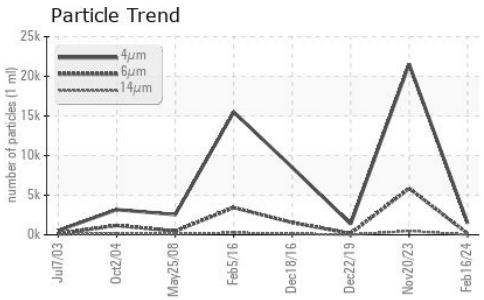
OIL ANALYSIS REPORT







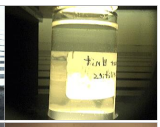
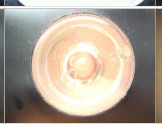




FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*		**0.45**	0.45	0.487

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	**NONE**	NONE	NONE
Precipitate	scalar	Visual*	NONE	**NONE**	NONE	NONE
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
Free Water	scalar	Visual*		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	35.0	**22.1**	22.1	22.2
Visc @ 100°C	cSt	ASTM D7279(m)	6.5	**4.9**	4.9	4.9
Viscosity Index (VI)	Scale	ASTM D2270*	141	**152**	152	151

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

ISO 17025:2017 Accredited Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0076417 **Received** : 12 Mar 2024
Lab Number : 02621429 **Tested** : 13 Mar 2024
Unique Number : 5746548 **Diagnosed** : 13 Mar 2024 - Kevin Marson
Test Package : MAR 2 (Additional Tests: KV100, VI)

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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