

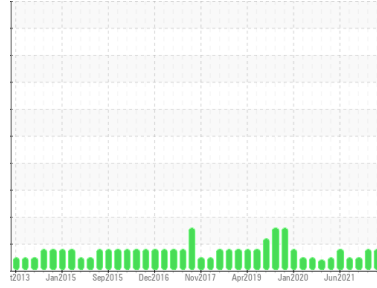
PROBLEM SUMMARY

Sample Rating Trend

VISCOSITY

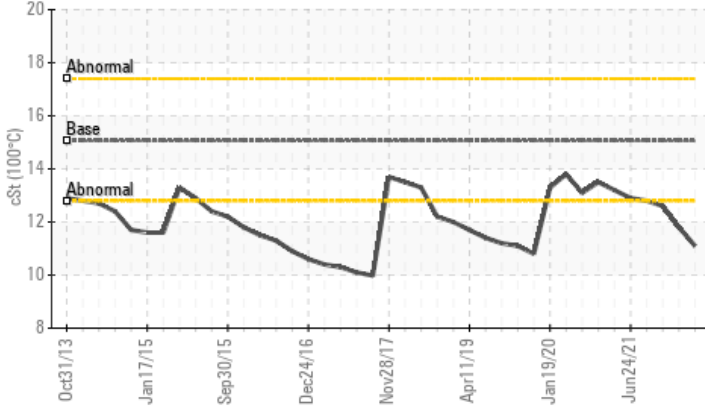


Area
Cranes [450159533]
 Machine Id
Crane - Mid Ship Distribution Gearbox (S/N Sample Tag MA-04002-S11)
 Component
Gearbox
 Fluid
PETRO CANADA TRAXON 80W90 (6 LTR)

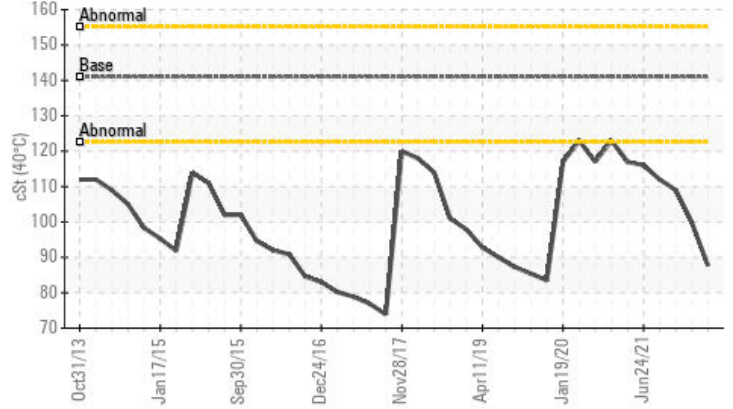


COMPONENT CONDITION SUMMARY

▲ Viscosity @ 100°C



▲ Viscosity @ 40°C



RECOMMENDATION

Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	NORMAL
Visc @ 40°C	cSt	ASTM D7279(m)	141.0	▲ 87.7	▲ 99.8	109
Visc @ 100°C	cSt	ASTM D7279(m)	15.06	▲ 11.1	▲ 11.8	12.6

Customer Id: TERHAM
 Sample No.: PC0052192
 Lab Number: 02568261
 Test Package: MAR 2



To manage this report scan the QR code

To discuss the diagnosis or test data:
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Kevin.Marson@wearcheck.com

To change component or sample information:
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gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

02 May 2023 Diag: Kevin Marson

VISCOSITY



Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. Viscosity of sample indicates oil is within SAE 75W90 range, advise investigate. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



05 Oct 2021 Diag: Kevin Marson

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



02 Aug 2021 Diag: Kevin Marson

NORMAL

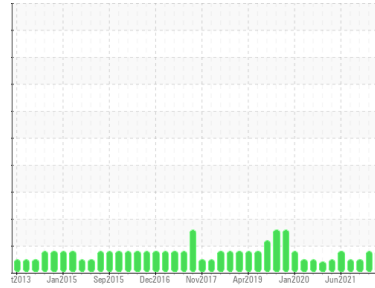


Resample at the next service interval to monitor. All component wear rates are normal. The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



Area
Cranes [450159533]
 Machine Id
Crane - Mid Ship Distribution Gearbox (S/N Sample Tag MA-04002-S11)
 Component
Gearbox
 Fluid
PETRO CANADA TRAXON 80W90 (6 LTR)



DIAGNOSIS

- Recommendation**
Resample at the next service interval to monitor.
- 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 SAE 80 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	history 1	history 2
Sample Number	Client Info	PC0052192	PC0052677	PC416841
Sample Date	Client Info	14 Jun 2023	02 May 2023	05 Oct 2021
Machine Age	hrs	0	0	0
Oil Age	hrs	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ABNORMAL	ABNORMAL	NORMAL

WEAR METALS

method	limit/base	current	history 1	history 2
PQ	ASTM D8184*	0	0	0
Iron	ppm ASTM D5185(m) >150	8	7	8
Chromium	ppm ASTM D5185(m) >10	0	0	0
Nickel	ppm ASTM D5185(m) >10	0	<1	<1
Titanium	ppm ASTM D5185(m)	0	0	0
Silver	ppm ASTM D5185(m)	0	0	<1
Aluminum	ppm ASTM D5185(m) >5	<1	<1	<1
Lead	ppm ASTM D5185(m) >65	<1	<1	0
Copper	ppm ASTM D5185(m) >80	<1	<1	<1
Tin	ppm ASTM D5185(m) >8	0	<1	0
Antimony	ppm ASTM D5185(m) >5	0	<1	0
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	history 1	history 2
Boron	ppm ASTM D5185(m) 243	210	217	238
Barium	ppm ASTM D5185(m) 1	2	1	1
Molybdenum	ppm ASTM D5185(m)	0	0	0
Manganese	ppm ASTM D5185(m)	0	0	<1
Magnesium	ppm ASTM D5185(m) 2	1	1	2
Calcium	ppm ASTM D5185(m) 6	15	12	32
Phosphorus	ppm ASTM D5185(m) 987	865	932	946
Zinc	ppm ASTM D5185(m) 1	42	34	31
Sulfur	ppm ASTM D5185(m) 21530	16443	18252	16883
Lithium	ppm ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

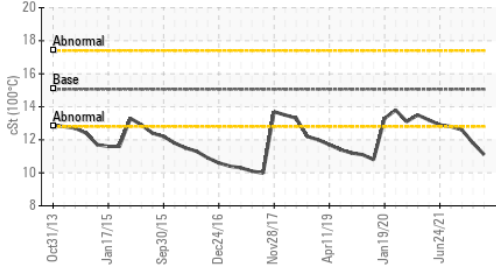
method	limit/base	current	history 1	history 2
Silicon	ppm ASTM D5185(m) >20	2	3	2
Sodium	ppm ASTM D5185(m)	<1	2	<1
Potassium	ppm ASTM D5185(m) >20	<1	1	<1

FLUID CLEANLINESS

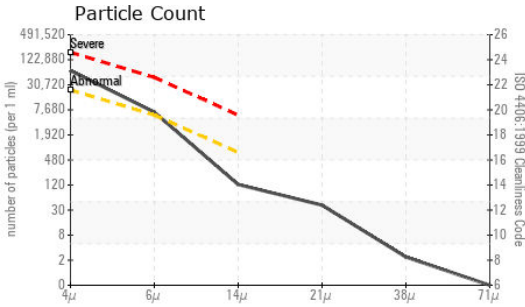
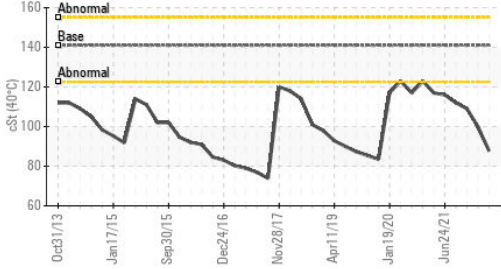
method	limit/base	current	history 1	history 2
Particles >4µm	ASTM D7647 >20000	58245	61158	58292
Particles >6µm	ASTM D7647 >5000	5889	6725	4472
Particles >14µm	ASTM D7647 >640	109	266	68
Particles >21µm	ASTM D7647 >160	35	56	10
Particles >38µm	ASTM D7647 >40	2	1	0
Particles >71µm	ASTM D7647 >10	0	0	0
Oil Cleanliness	ISO 4406 (c) >21/19/16	23/20/14	23/20/15	23/19/13

OIL ANALYSIS REPORT

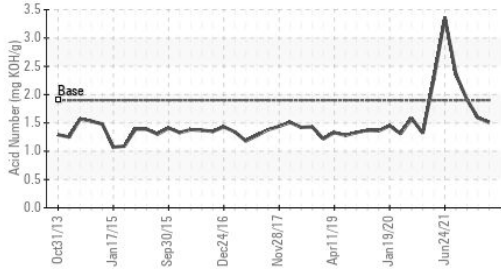
▲ Viscosity @ 100°C



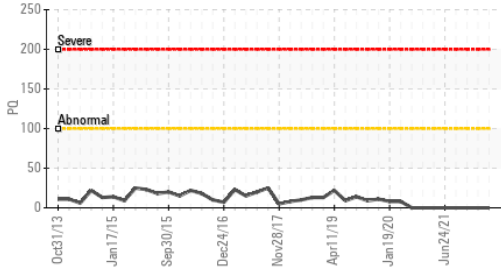
▲ Viscosity @ 40°C



Acid Number



PQ



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0052192 **Received** : 06 Jul 2023
Lab Number : **02568261** **Diagnosed** : 07 Jul 2023
Unique Number : 5605307 **Diagnostician** : Kevin Marson
Test Package : MAR 2 (Additional Tests: KV100, PQ, PrtCount, TAN Man, 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.

FLUID DEGRADATION

method	limit/base	current	history 1	history 2	
Acid Number (AN) mg KOH/g	ASTM D974*	1.9	1.51	1.59	1.91

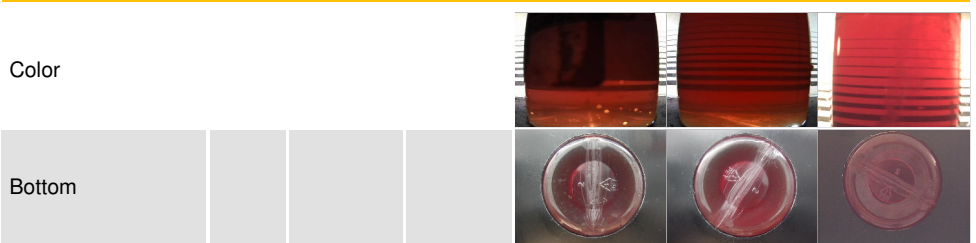
VISUAL

method	limit/base	current	history 1	history 2		
White Metal	scalar	Visual*	NONE	NONE	NONE	VLITE
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	VLITE
Sand/Dirt	scalar	Visual*	NONE	NONE	VLITE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES

method	limit/base	current	history 1	history 2		
Visc @ 40°C	cSt	ASTM D7279(m)	141.0	▲ 87.7	▲ 99.8	109
Visc @ 100°C	cSt	ASTM D7279(m)	15.06	▲ 11.1	▲ 11.8	12.6
Viscosity Index (VI)	Scale	ASTM D2270*	108	113	107	108

SAMPLE IMAGES



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