

Area

Cranes [450335854]

Machine Id

Crane - Mid - Hydraulic System (Reservoir) (S/N Sample Tag MA-04002-S4)

Component

Hydraulic System

Fluid

PETRO CANADA ATF DEXRON III/MERCON (800 LTR)

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

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	PC0080710	PC	PC
Sample Date	Client Info	29 May 2024	19 Mar 2024	20 Jan 2024
Machine Age	hrs	0	0	0
Oil Age	hrs	0	0	0
Oil Changed	Client Info	N/A	N/A	N/A
Sample Status		ATTENTION	NORMAL	NORMAL

CONTAMINATION

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

WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184*	0	0	0
Iron	ppm ASTM D5185(m) >20	<1	<1	<1
Chromium	ppm ASTM D5185(m) >10	0	0	0
Nickel	ppm ASTM D5185(m) >10	0	0	<1
Titanium	ppm ASTM D5185(m)	0	0	0
Silver	ppm ASTM D5185(m)	0	0	0
Aluminum	ppm ASTM D5185(m) >10	0	0	<1
Lead	ppm ASTM D5185(m) >20	0	0	<1
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	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

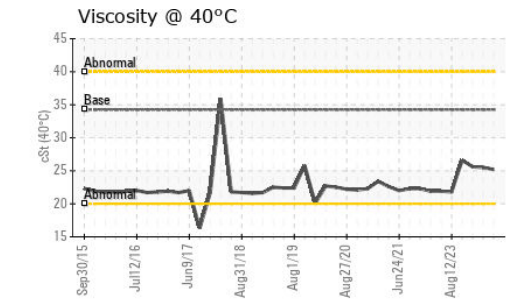
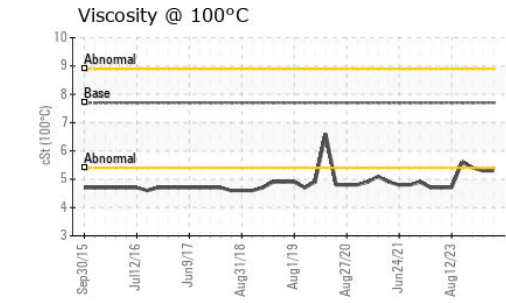
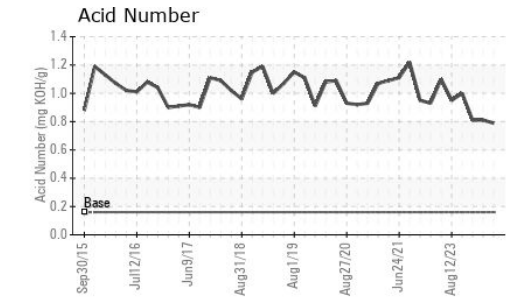
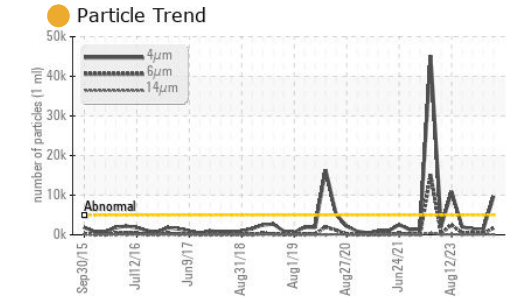
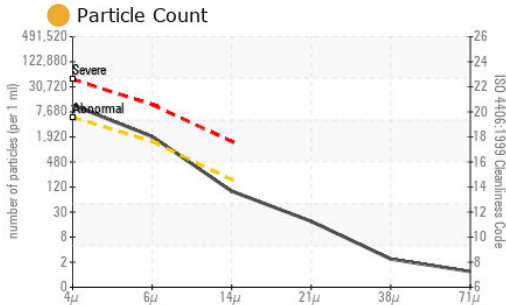
ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m) 130	94	93	94
Barium	ppm ASTM D5185(m) 1.0	2	2	2
Molybdenum	ppm ASTM D5185(m) 0.0	0	0	0
Manganese	ppm ASTM D5185(m)	0	0	0
Magnesium	ppm ASTM D5185(m) 1.0	2	2	2
Calcium	ppm ASTM D5185(m) 20	66	64	66
Phosphorus	ppm ASTM D5185(m) 280	239	235	238
Zinc	ppm ASTM D5185(m) 10	47	46	46
Sulfur	ppm ASTM D5185(m) 440	705	695	759
Lithium	ppm ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >15	<1	<1	2
Sodium	ppm ASTM D5185(m)	<1	1	1
Potassium	ppm ASTM D5185(m) >20	<1	<1	<1

OIL ANALYSIS REPORT



FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	● 9664	1254	1531
Particles >6µm	ASTM D7647	>1300	● 1718	371	354
Particles >14µm	ASTM D7647	>160	84	57	28
Particles >21µm	ASTM D7647	>40	16	21	6
Particles >38µm	ASTM D7647	>10	2	3	0
Particles >71µm	ASTM D7647	>3	1	1	0
Oil Cleanliness	ISO 4406 (c)	>19/17/14	● 20/18/14	17/16/13	18/16/12

FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D974*	0.16	0.79	0.81	0.81

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	VLITE
Silt	scalar	Visual*	NONE	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	VLITE	NONE	NONE
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*	>0.05	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)	34.26	25.2	25.5	25.6
Visc @ 100°C	cSt	ASTM D7279(m)	7.7	5.3	5.3	5.4
Viscosity Index (VI)	Scale	ASTM D2270*	210	149	146	152

SAMPLE IMAGES	method	limit/base	current	history1	history2	
Color						
Bottom						



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0080710 **Received** : 30 May 2024
Lab Number : **02638866** **Tested** : 31 May 2024
Unique Number : 5788028 **Diagnosed** : 31 May 2024 - Kevin Marson
Test Package : MAR 2 (Additional Tests: KV100, PQ, VI)

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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.