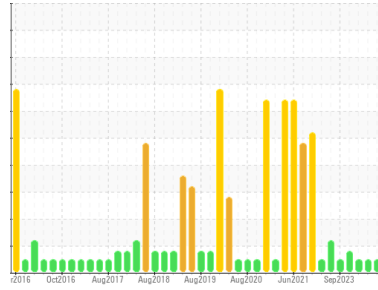


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
Cranes [450335854]
Machine Id
Crane - Mid - Hoisting Winch (S/N Sample Tag MA-04002-S5)
Component
Gearbox
Fluid
PETRO CANADA GEARLUBE TOS 80W90 (26 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

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			PC0080711	PC	PC0080322
Sample Date	Client Info			29 May 2024	19 Mar 2024	20 Jan 2024
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	NORMAL	NORMAL

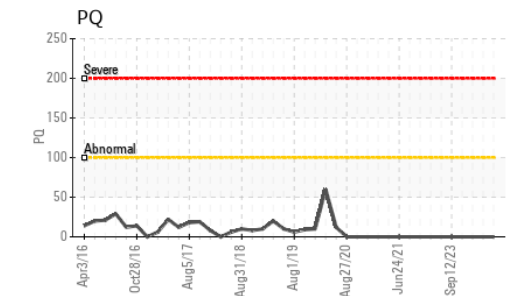
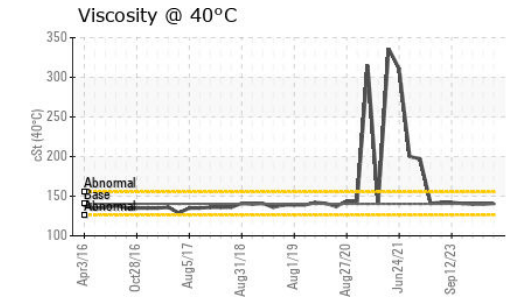
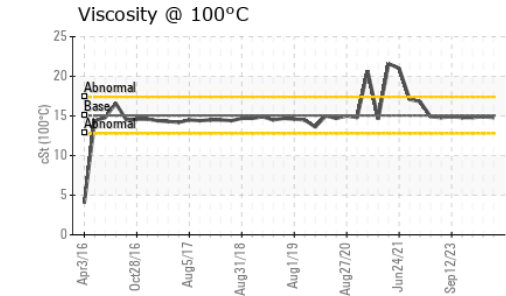
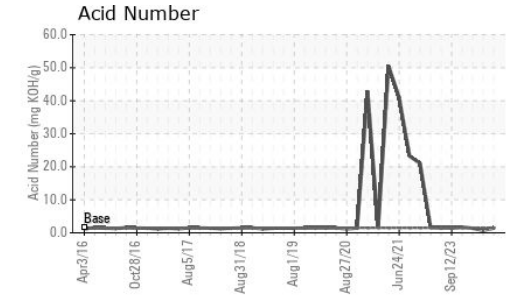
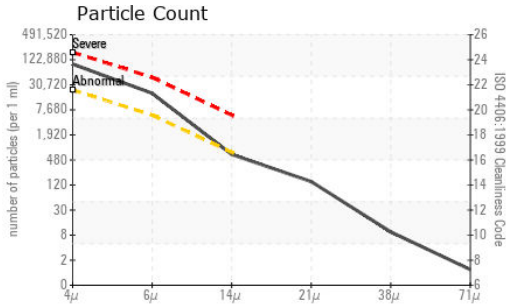
CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method		>0.2	NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		0	0	0
Iron	ppm	ASTM D5185(m)	>150	3	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	<1	0
Aluminum	ppm	ASTM D5185(m)	>5	0	0	<1
Lead	ppm	ASTM D5185(m)	>65	0	0	0
Copper	ppm	ASTM D5185(m)	>80	0	0	<1
Tin	ppm	ASTM D5185(m)	>8	0	0	0
Antimony	ppm	ASTM D5185(m)	>5	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)	240	246	246	241
Barium	ppm	ASTM D5185(m)	1	0	<1	0
Molybdenum	ppm	ASTM D5185(m)	0.0	0	0	0
Manganese	ppm	ASTM D5185(m)		0	0	0
Magnesium	ppm	ASTM D5185(m)	2	1	<1	1
Calcium	ppm	ASTM D5185(m)	6	4	2	3
Phosphorus	ppm	ASTM D5185(m)	1000	987	973	983
Zinc	ppm	ASTM D5185(m)	3	10	3	5
Sulfur	ppm	ASTM D5185(m)	19400	17954	17049	17640
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>20	3	2	3
Sodium	ppm	ASTM D5185(m)		<1	0	<1
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1

OIL ANALYSIS REPORT



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0080711 **Received** : 30 May 2024
Lab Number : **02638946** **Tested** : 31 May 2024
Unique Number : 5788108 **Diagnosed** : 03 Jun 2024 - Kevin Marson
Test Package : MAR 2 (Additional Tests: KV100, PQ, PrtCount, VI)

Suncor - Terra Nova Projects
 Scotia Centre, 235 Water Street
 St. John's, NL
 CA A1C 1B6
 Contact: Josh Hynes
 joshynes@suncor.com
 T: (709)778-3575
 F: (709)724-2835

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 CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>20000	83739	64489	70894
Particles >6µm	ASTM D7647	>5000	16677	12742	13764
Particles >14µm	ASTM D7647	>640	575	570	269
Particles >21µm	ASTM D7647	>160	128	102	42
Particles >38µm	ASTM D7647	>40	8	3	5
Particles >71µm	ASTM D7647	>10	1	1	3
Oil Cleanliness	ISO 4406 (c)	>21/19/16	24/21/16	23/21/16	23/21/15

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974*	1.5	1.42	0.73	1.39

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	VLITE
Debris	scalar Visual*	NONE	VLITE	VLITE	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
Free Water	scalar Visual*		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D7279(m)	140.3	141	140	140
Visc @ 100°C	cSt ASTM D7279(m)	15.05	14.8	14.9	14.8
Viscosity Index (VI)	Scale ASTM D2270*	109	104	106	105

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

