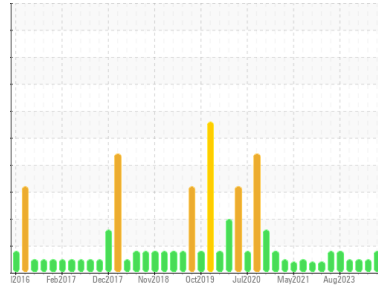


OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area

Cranes

Machine Id

Crane - Aft - Hoisting Winch (S/N Sample Tag MA-04001-S5)

Component

Winch

Fluid

PETRO CANADA GEARLUBE TOS 80W90 (8 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	PC0080135	PC0082751	PC0076379
Sample Date	Client Info	15 Jul 2024	17 Mar 2024	31 Dec 2023
Machine Age	hrs	Client Info	0	0
Oil Age	hrs	Client Info	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 >0.2	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
PQ	ASTM D8184*	0	0	0
Iron	ppm ASTM D5185(m) >30	12	3	<1
Chromium	ppm ASTM D5185(m) >2	0	0	0
Nickel	ppm ASTM D5185(m) >2	<1	<1	0
Titanium	ppm ASTM D5185(m) >2	0	0	0
Silver	ppm ASTM D5185(m) >2	0	0	0
Aluminum	ppm ASTM D5185(m) >5	3	<1	<1
Lead	ppm ASTM D5185(m) >70	0	0	0
Copper	ppm ASTM D5185(m) >65	<1	<1	<1
Tin	ppm ASTM D5185(m) >9	0	0	0
Antimony	ppm ASTM D5185(m) >5	<1	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

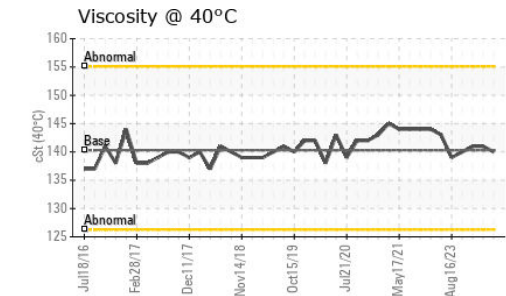
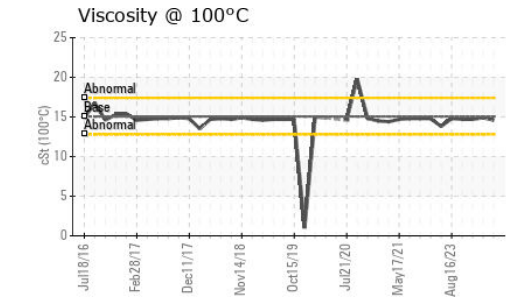
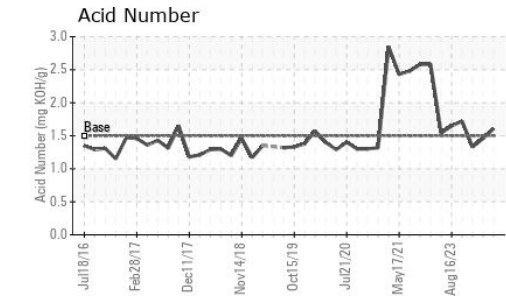
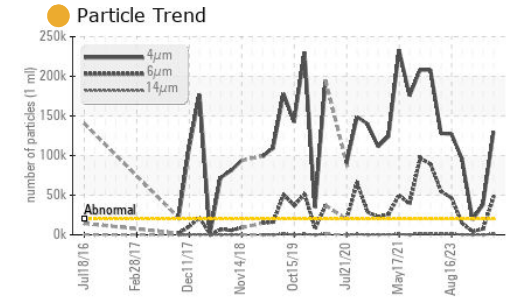
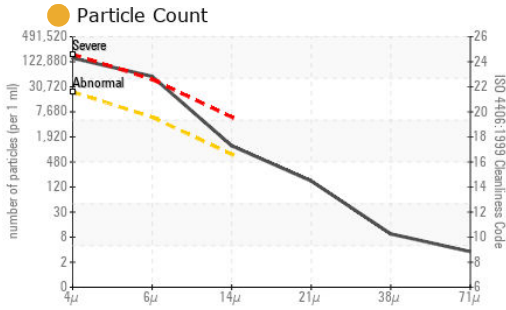
ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185(m) 240	215	249	238
Barium	ppm ASTM D5185(m) 1	0	0	0
Molybdenum	ppm ASTM D5185(m) 0.0	0	0	0
Manganese	ppm ASTM D5185(m)	<1	0	0
Magnesium	ppm ASTM D5185(m) 2	2	<1	<1
Calcium	ppm ASTM D5185(m) 6	6	2	1
Phosphorus	ppm ASTM D5185(m) 1000	909	1017	981
Zinc	ppm ASTM D5185(m) 3	92	8	2
Sulfur	ppm ASTM D5185(m) 19400	17123	17875	17679
Lithium	ppm ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185(m) >30	2	2	<1
Sodium	ppm ASTM D5185(m)	1	1	0
Potassium	ppm ASTM D5185(m) >20	<1	<1	1

OIL ANALYSIS REPORT



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0080135
Lab Number : 02648238
Unique Number : 5813790
Test Package : IND 2 (Additional Tests: KV100, PQ, PrtCount, TAN Man, VI)

Received : 16 Jul 2024
Tested : 17 Jul 2024
Diagnosed : 18 Jul 2024 - Kevin Marson

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	129805	38187	18955
Particles >6µm	ASTM D7647	>5000	47275	7584	4269
Particles >14µm	ASTM D7647	>640	1032	190	27
Particles >21µm	ASTM D7647	>160	148	42	10
Particles >38µm	ASTM D7647	>40	8	8	5
Particles >71µm	ASTM D7647	>10	3	6	3
Oil Cleanliness	ISO 4406 (c)	>21/19/16	24/23/17	22/20/15	21/19/12

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g ASTM D974*	1.5	1.61	1.46	1.33

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*	>0.2	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	140	141	141
Visc @ 100°C	cSt ASTM D7279(m)	15.05	14.6	14.9	14.7
Viscosity Index (VI)	Scale ASTM D2270*	109	103	106	103

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					