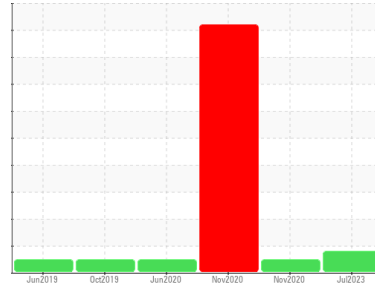


Machine Id
CYCLE DRIVE COMP 542-34Y-WF-482 SP-01-0225-LP LOG PUSHER (S/N 2923)
Component
Reduction Gear
Fluid
PETRO CANADA ENDURATEX EP 220 (16 LTR)



DIAGNOSIS

- Recommendation**
Resample at the next service interval to monitor.
- Wear**
All component wear rates are normal.
- Contamination**
There is no indication of any contamination in the oil.
- Fluid Condition**
Viscosity of sample indicates oil is within ISO 150 range, advise investigate. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PC0051124	PC0036921	PC0022013
Sample Date	Client Info	11 Jul 2023	24 Nov 2020	09 Nov 2020
Machine Age	hrs	28000	0	28000
Oil Age	hrs	0	6200	6000
Oil Changed	Client Info	N/A	N/A	Not Changd
Sample Status		ABNORMAL	NORMAL	SEVERE

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m) >150	83	144	146
Chromium	ppm	ASTM D5185(m) >10	<1	<1	<1
Nickel	ppm	ASTM D5185(m) >10	0	0	<1
Titanium	ppm	ASTM D5185(m)	0	<1	<1
Silver	ppm	ASTM D5185(m)	<1	<1	<1
Aluminum	ppm	ASTM D5185(m) >25	<1	<1	<1
Lead	ppm	ASTM D5185(m) >100	0	<1	0
Copper	ppm	ASTM D5185(m) >50	3	4	4
Tin	ppm	ASTM D5185(m) >10	0	0	0
Antimony	ppm	ASTM D5185(m) >5	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) 60	53	48	46
Barium	ppm	ASTM D5185(m) 0	<1	<1	<1
Molybdenum	ppm	ASTM D5185(m) 0	0	0	0
Manganese	ppm	ASTM D5185(m) 0	<1	1	1
Magnesium	ppm	ASTM D5185(m) 0	<1	0	<1
Calcium	ppm	ASTM D5185(m) 0	4	6	6
Phosphorus	ppm	ASTM D5185(m) 270	267	234	229
Zinc	ppm	ASTM D5185(m) 0	5	4	4
Sulfur	ppm	ASTM D5185(m) 11200	5559	11664	11190
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

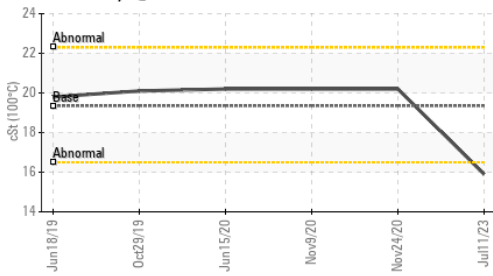
method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m) >50	3	4	4
Sodium	ppm	ASTM D5185(m)	<1	<1	<1
Potassium	ppm	ASTM D5185(m) >20	2	<1	0

VISUAL

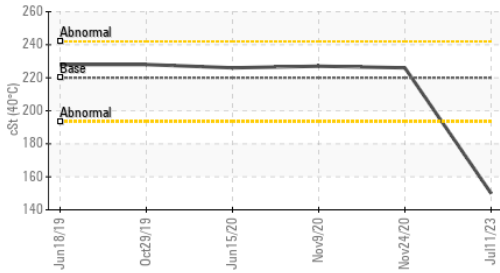
method	limit/base	current	history1	history2	
White Metal	scalar	Visual* NONE	NONE	LIGHT	▲ MODER
Yellow Metal	scalar	Visual* NONE	NONE	NONE	● LTMOD
Precipitate	scalar	Visual* NONE	NONE	NONE	NONE
Silt	scalar	Visual* NONE	NONE	NONE	NONE
Debris	scalar	Visual* NONE	NONE	NONE	NONE
Sand/Dirt	scalar	Visual* NONE	NONE	NONE	NONE
Appearance	scalar	Visual* NORML	NORML	NORML	NORML
Odor	scalar	Visual* NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual* >0.1	NEG	NEG	NEG
Free Water	scalar	Visual*	NEG	NEG	NEG

OIL ANALYSIS REPORT

▲ Viscosity @ 100°C



▲ Viscosity @ 40°C



FLUID PROPERTIES

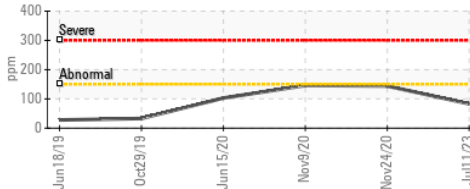
	method	limit/base	current	history1	history2
Visc @ 40°C	cSt ASTM D7279(m)	220	▲ 150	226	227
Visc @ 100°C	cSt ASTM D7279(m)	19.35	▲ 15.9	20.2	20.2
Viscosity Index (VI)	Scale ASTM D2270*	99	110	103	102

SAMPLE IMAGES

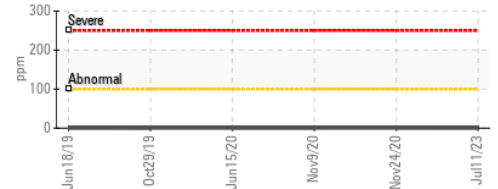
	method	limit/base	current	history1	history2
Color					
Bottom					
PrtFilter			no image	no image	

GRAPHS

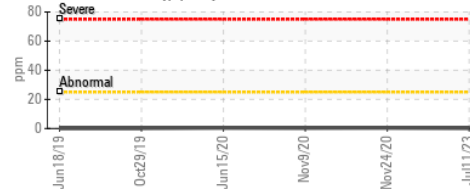
Iron (ppm)



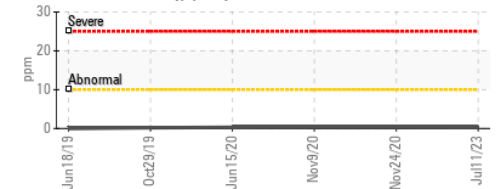
Lead (ppm)



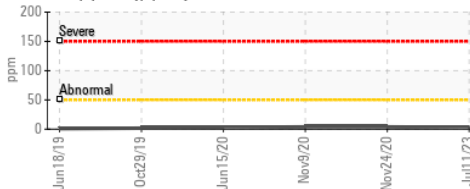
Aluminum (ppm)



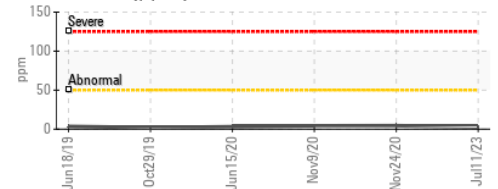
Chromium (ppm)



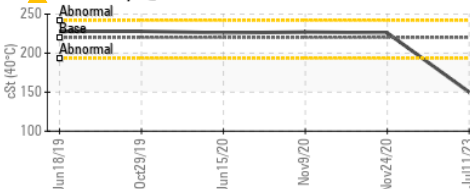
Copper (ppm)



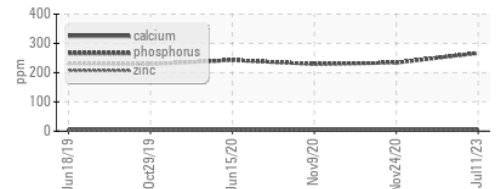
Silicon (ppm)



▲ Viscosity @ 40°C



Additives



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0051124 **Received** : 13 Jul 2023
Lab Number : 02569818 **Diagnosed** : 14 Jul 2023
Unique Number : 5606864 **Diagnostician** : Kevin Marson
Test Package : MOB 1 (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.

DAAQUAM
 43 RANG 6
 ST-PAMPHILE, QC
 CA 60R 3X0

Contact: Pierre-Olivier Leblanc
 pierre-olivier.leblanc@daaquam.com
 T: (418)356-7693
 F: x: