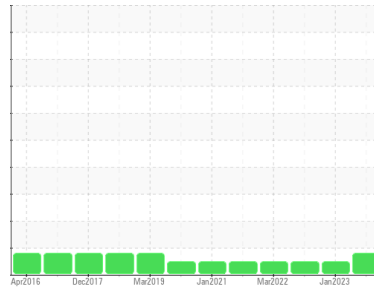


OIL ANALYSIS REPORT



Machine Id
CATERPILLAR 950K 3114 (S/N 950KER4A02631)
Component
Transmission (Manual)
Fluid
PETRO CANADA PRODURO TO-4 SAE 30 (28 LTR)

Sample Rating Trend



VISCOSITY



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 fluid.

Fluid Condition

Viscosity of sample indicates oil is within SAE 20 range, advise investigate. The condition of the fluid is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PC0075751	PC0065755	PC0050950
Sample Date	Client Info		14 Aug 2023	23 Jan 2023	08 Aug 2022
Machine Age	hrs	Client Info	14542	13547	12684
Oil Age	hrs	Client Info	2000	0	0
Oil Changed	Client Info		Changed	Not Changd	Not Changd
Sample Status			ABNORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>200	30	24	20
Chromium	ppm	ASTM D5185(m)	>5	0	0	0
Nickel	ppm	ASTM D5185(m)	>5	0	0	<1
Titanium	ppm	ASTM D5185(m)		<1	<1	<1
Silver	ppm	ASTM D5185(m)	>7	<1	0	0
Aluminum	ppm	ASTM D5185(m)	>25	2	2	2
Lead	ppm	ASTM D5185(m)	>45	3	3	3
Copper	ppm	ASTM D5185(m)	>225	25	24	21
Tin	ppm	ASTM D5185(m)	>10	1	1	1
Antimony	ppm	ASTM D5185(m)		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

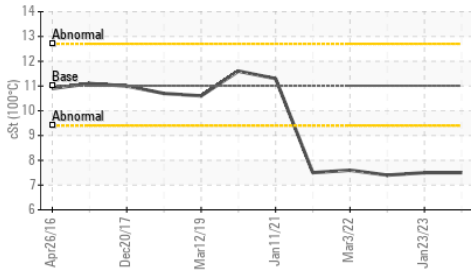
	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	2	7	6	6
Barium	ppm	ASTM D5185(m)	0	<1	0	0
Molybdenum	ppm	ASTM D5185(m)	0	0	0	0
Manganese	ppm	ASTM D5185(m)	9	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	1	11	10	10
Calcium	ppm	ASTM D5185(m)	3131	2904	3064	3024
Phosphorus	ppm	ASTM D5185(m)	1194	1032	1075	973
Zinc	ppm	ASTM D5185(m)	1281	1170	1200	1153
Sulfur	ppm	ASTM D5185(m)	3811	3935	4137	3946
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

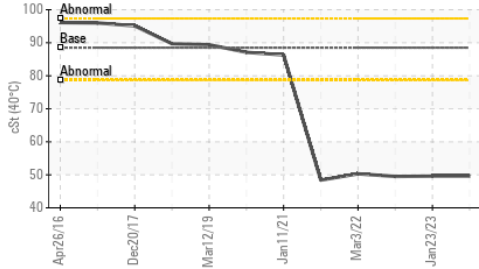
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>125	3	3	3
Sodium	ppm	ASTM D5185(m)		4	3	3
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1

OIL ANALYSIS REPORT

▲ Viscosity @ 100°C



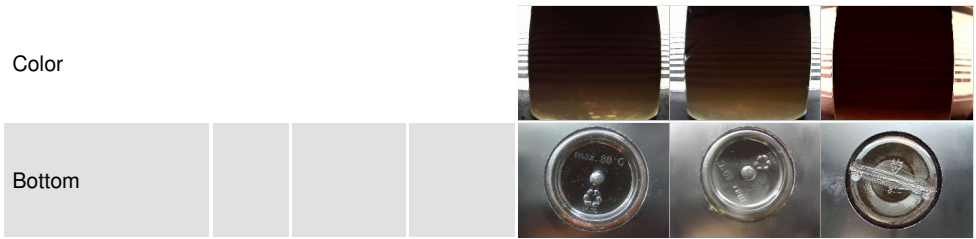
▲ Viscosity @ 40°C



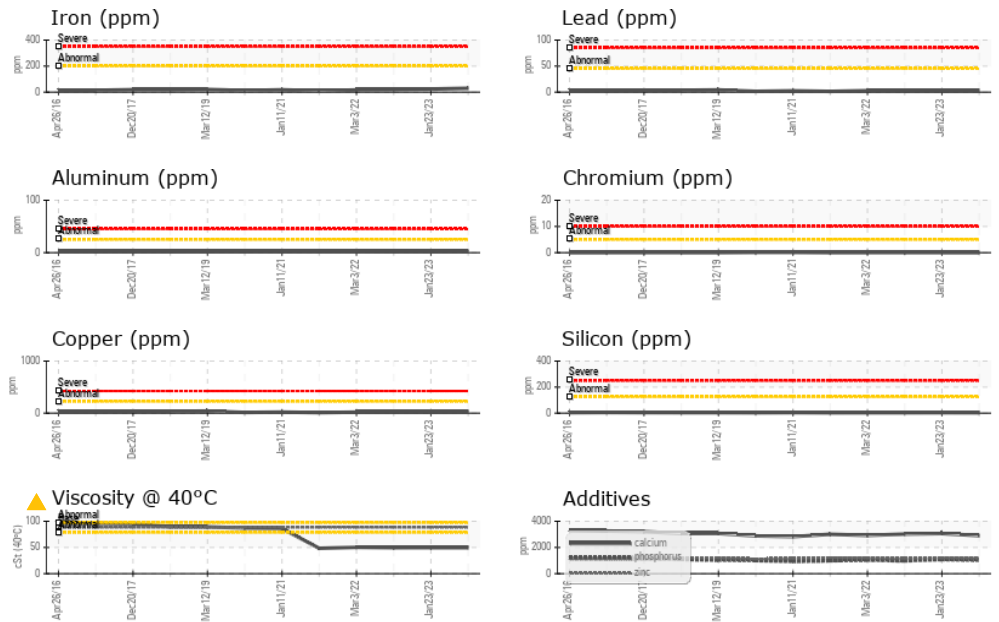
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	88.5 ▲ 49.6	49.6	49.5
Visc @ 100°C	cSt	ASTM D7279(m)	11.01 ▲ 7.5	7.5	7.4
Viscosity Index (VI)	Scale	ASTM D2270*	110	114	111

SAMPLE IMAGES



GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0075751
Lab Number : 02576483
Unique Number : 5629543
Test Package : MOB 1 (Additional Tests: KV100, VI)

TRUCK AND EQUIPMENT SOLUTION
 2 BERTRAM INDUSTRIAL PKWY.
 MIDHURST, ON
 CA L9X 1L2
 Contact: Julie Holden
 parts@tesbarrie.com
 T: (705)792-7620
 F: (705)725-5425

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.