



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL



Machine Id
CAT 320EL 6914 (S/N CAT0320EEWBK03069)
Component
Left Final Drive
Fluid
PETRO CANADA TRAXON 80W90 (15 LTR)

RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill. Resample at the next service interval to monitor. The fluid was specified as PETRO CANADA TRAXON 80W90, however, a fluid match indicates that this fluid is SAE 30 Transmission/Drive Train Oil. Please confirm the oil type and grade on your next sample.

WEAR

All component wear rates are normal.

CONTAMINATION

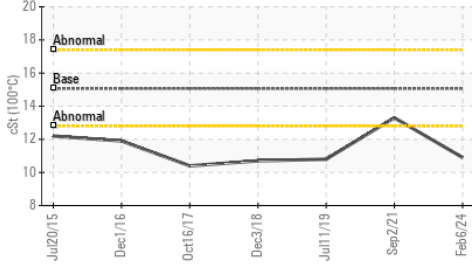
There is no indication of any contamination in the oil.

FLUID CONDITION

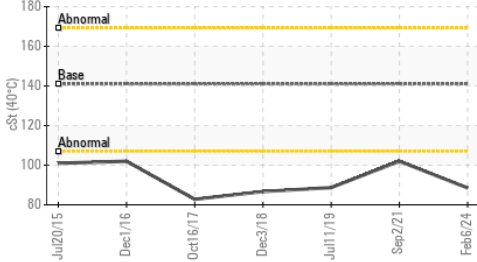
Viscosity of sample indicates oil is within SAE 30 range, advise investigate. This plus the additive levels indicates that this is not the same brand, or type of oil as reported. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0067887	PC0051467	PC0013047
Sample Date		Client Info		06 Feb 2024	02 Sep 2021	11 Jul 2019
Machine Age	hrs	Client Info		8184	6463	4974
Oil Age	hrs	Client Info		0	500	500
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	N/A	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185(m)	>800	243	127	49
Chromium	ppm	ASTM D5185(m)	>10	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	0
Titanium	ppm	ASTM D5185(m)	>15	<1	<1	<1
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>75	25	8	4
Lead	ppm	ASTM D5185(m)	>10	0	<1	<1
Copper	ppm	ASTM D5185(m)	>75	<1	<1	0
Tin	ppm	ASTM D5185(m)	>8	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185(m)	>400	112	36	16
Potassium	ppm	ASTM D5185(m)	>20	9	4	2
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	Visual*	NONE	LIGHT	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE	VLITE
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
Sodium	ppm	ASTM D5185(m)		7	3	2
Boron	ppm	ASTM D5185(m)	243	4	28	<1
Barium	ppm	ASTM D5185(m)	1	0	0	0
Molybdenum	ppm	ASTM D5185(m)		0	<1	0
Manganese	ppm	ASTM D5185(m)		2	1	<1
Magnesium	ppm	ASTM D5185(m)	2	17	17	10
Calcium	ppm	ASTM D5185(m)	6	3522	3039	3104
Phosphorus	ppm	ASTM D5185(m)	987	896	1046	990
Zinc	ppm	ASTM D5185(m)	1	1055	1216	1258
Sulfur	ppm	ASTM D5185(m)	21530	3248	4192	3752
Visc @ 40°C	cSt	ASTM D7279(m)	141.0	▲ 88.5	102	88.7
Visc @ 100°C	cSt	ASTM D7279(m)	15.06	▲ 10.9	13.3	10.8
Viscosity Index (VI)	Scale	ASTM D2270*	108	108	128	106

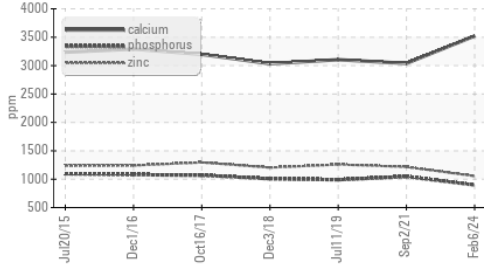
▲ Viscosity @ 100°C



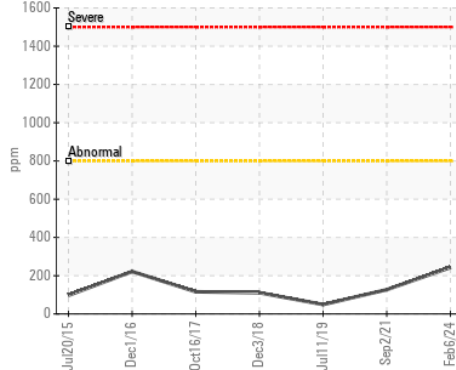
▲ Viscosity @ 40°C



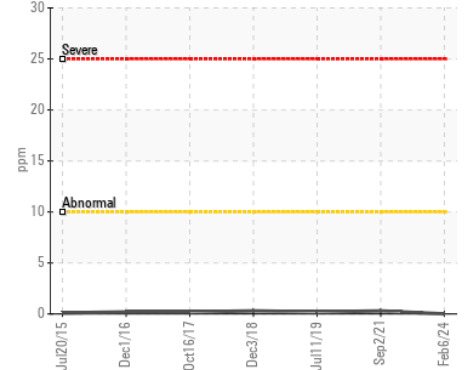
Additives



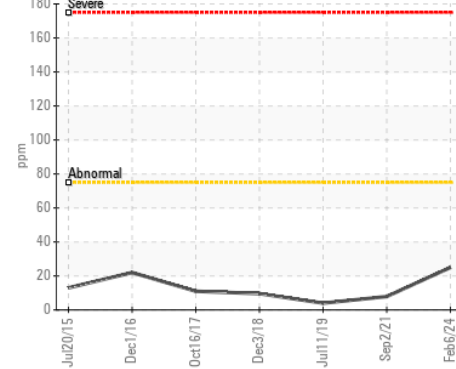
Iron (ppm)



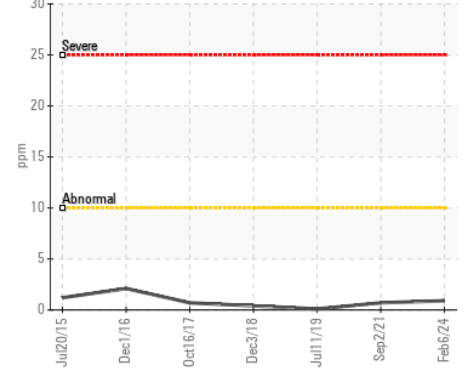
Lead (ppm)



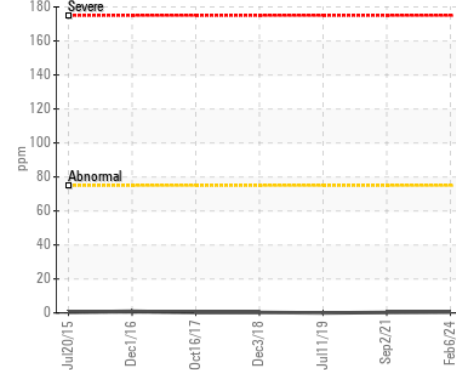
Aluminum (ppm)



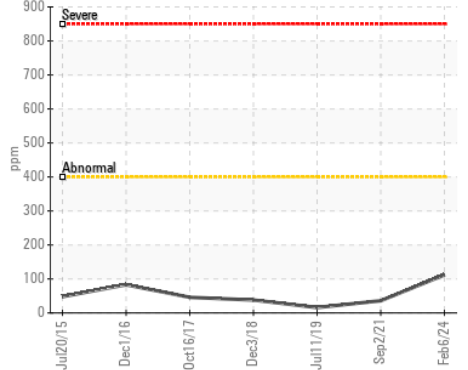
Chromium (ppm)



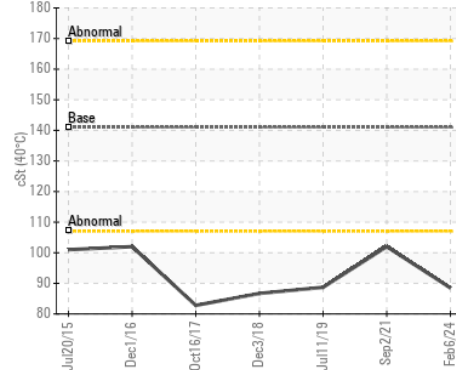
Copper (ppm)



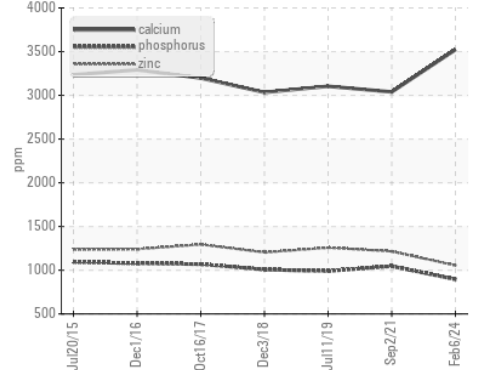
Silicon (ppm)



▲ Viscosity @ 40°C



Additives



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

Sample No. : PC0067887

Lab Number : 02616775

Unique Number : 5733885

Test Package : MOB 1 (Additional Tests: KV100, VI)

Received : 20 Feb 2024

Tested : 21 Feb 2024

Diagnosed : 21 Feb 2024 - Kevin Marson

TRUCK AND EQUIPMENT SOLUTION

2 BERTRAM INDUSTRIAL PKWY.

MIDHURST, ON

CA L9X 1L2

Contact: Julie Holden

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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.