



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
CATERPILLAR 3406 UNIT 2 CTSOO705
 Component
Rear Gasoline Engine
 Fluid
ESSO XD-3 EXTRA 15W40 (60 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PN0006225	PN0003725	PN0002464
Sample Date		Client Info		19 Jun 2024	10 Jun 2022	08 Jun 2021
Machine Age	hrs	Client Info		316	267	237
Oil Age	hrs	Client Info		0	0	21
Filter Age	hrs	Client Info		0	0	21
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>150	1	1	1
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>5	0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>40	<1	2	3
Lead	ppm	ASTM D5185(m)	>50	0	0	0
Copper	ppm	ASTM D5185(m)	>155	<1	<1	1
Tin	ppm	ASTM D5185(m)	>10	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	<1
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

There is no indication of any contamination in the oil.

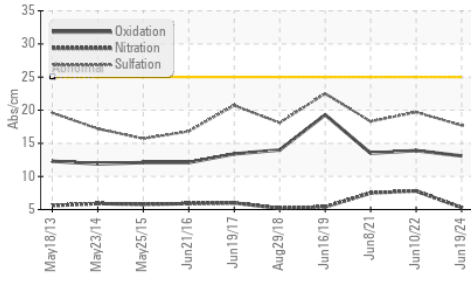
Silicon	ppm	ASTM D5185(m)	>30	2	6	7
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*		0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	5.3	7.8	7.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	17.7	19.7	18.3
Silt	scalar	Visual*	NONE	VLITE	---	---
Debris	scalar	Visual*	NONE	NONE	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

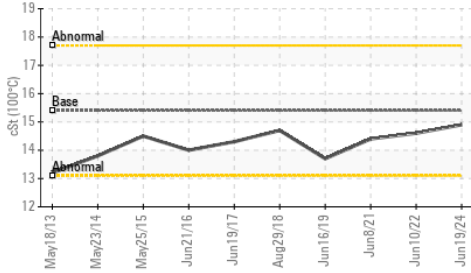
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)	>192	1	2	3
Boron	ppm	ASTM D5185(m)		12	74	74
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		52	86	84
Manganese	ppm	ASTM D5185(m)		0	0	<1
Magnesium	ppm	ASTM D5185(m)		809	69	75
Calcium	ppm	ASTM D5185(m)	3780	1204	2203	2077
Phosphorus	ppm	ASTM D5185(m)	1370	973	1131	1012
Zinc	ppm	ASTM D5185(m)	1500	1148	1184	1170
Sulfur	ppm	ASTM D5185(m)	3800	2618	3275	3303
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.1	13.9	13.5
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	14.9	14.6	14.4

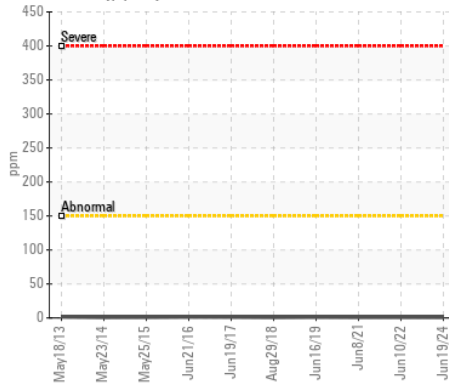
FT-IR (Direct Trend)



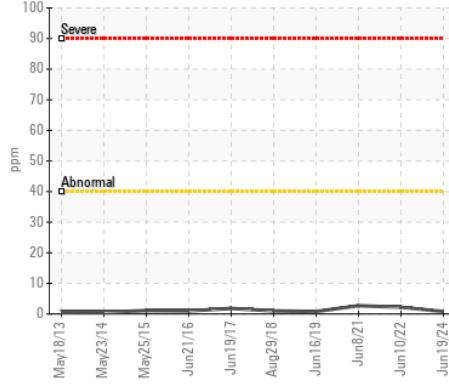
Viscosity @ 100°C



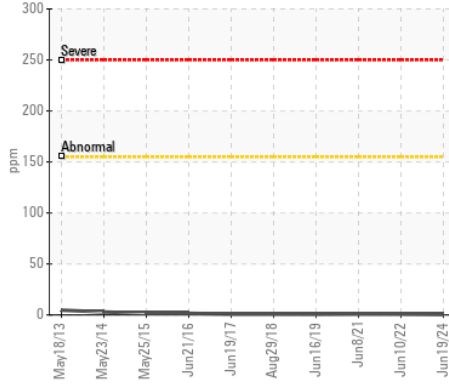
Iron (ppm)



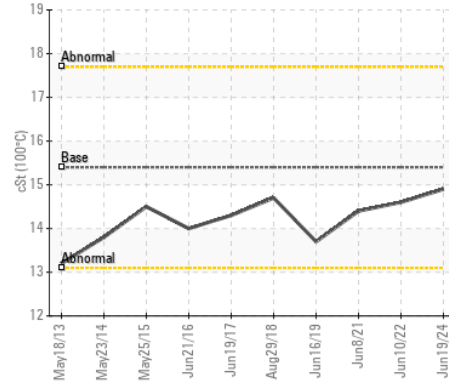
Aluminum (ppm)



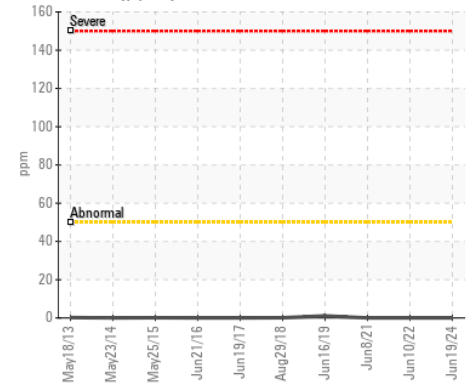
Copper (ppm)



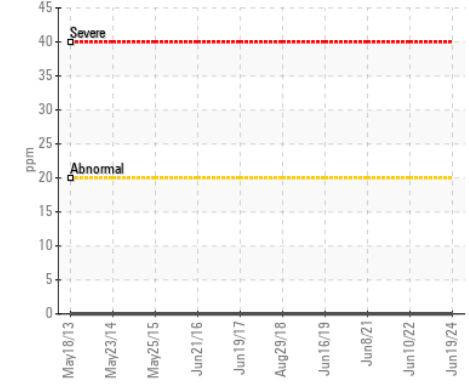
Viscosity @ 100°C



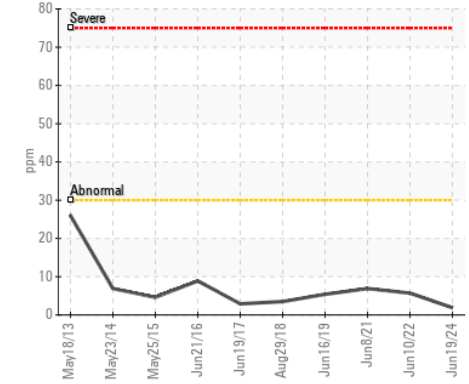
Lead (ppm)



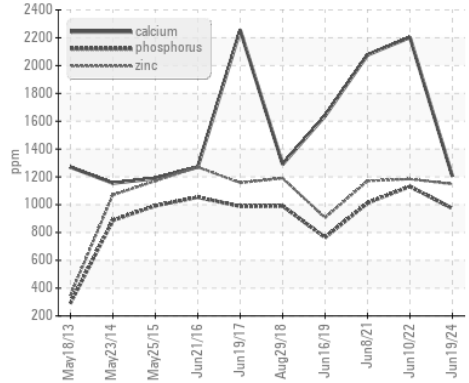
Chromium (ppm)



Silicon (ppm)



Additives



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PN0006225 **Received** : 25 Jun 2024
Lab Number : 02643940 **Tested** : 25 Jun 2024
Unique Number : 5801479 **Diagnosed** : 25 Jun 2024 - Wes Davis
Test Package : MOB 1 (Additional Tests: Visual)

POWER STATION INC.
 1050 JAYSON COURT
 MISSISSAUGA, ON
 CA L4W 2V5
 Contact: Ryan Udall
 rudall@pwrstn.com
 T: (905)565-1621
 F: (905)629-1499

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.