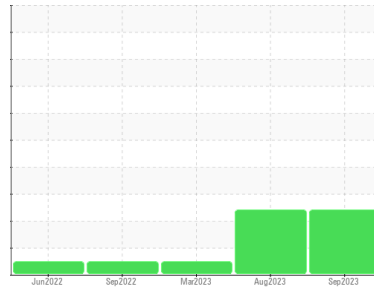




PROBLEM SUMMARY

Sample Rating Trend



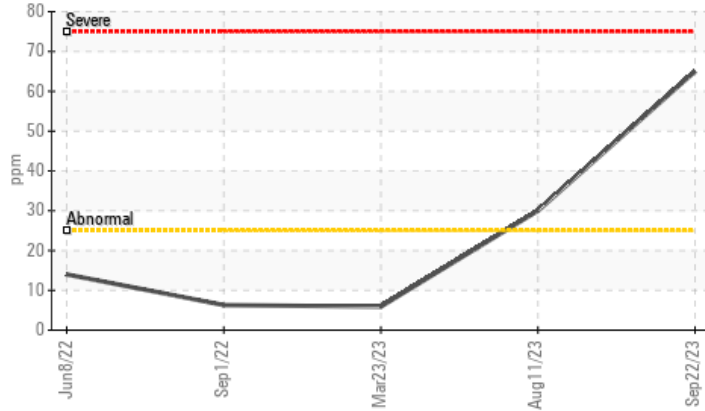
DIRT



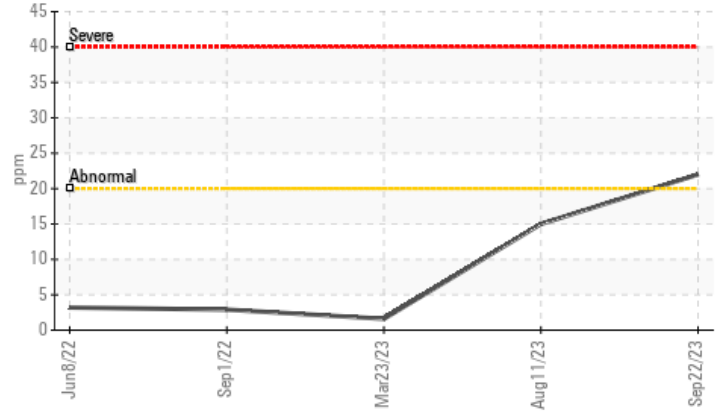
Machine Id
CIMLINE 10-1456 CIMLINE TARPOT (S/N 1G92M1529KM119146)
 Component
Diesel Engine
 Fluid
PETRO CANADA 10W30 (--- GAL)

COMPONENT CONDITION SUMMARY

▲ Silicon (ppm)



▲ Aluminum (ppm)



RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				ABNORMAL	ABNORMAL	NORMAL
Aluminum	ppm	ASTM D5185m	>20	▲ 22	▲ 15	2
Silicon	ppm	ASTM D5185m	>25	▲ 65	▲ 30	6

Customer Id: CONLINNE
 Sample No.: SBP0004781
 Lab Number: 05960498
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Don Baldrige +1
don.b505@comcast.net

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Dirt Access	---	---	?	We advise that you check the air filter, air induction system, and any areas where dirt may enter the component.

HISTORICAL DIAGNOSIS

11 Aug 2023 Diag: Sean Felton

DIRT



We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor. All component wear rates are normal. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

view report



23 Mar 2023 Diag: Angela Borella

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



01 Sep 2022 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

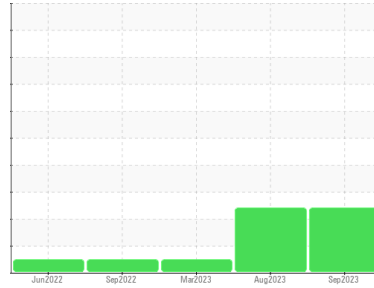
view report





OIL ANALYSIS REPORT

Sample Rating Trend



DIRT



Machine Id
CIMLINE 10-1456 CIMLINE TARPOT (S/N 1G92M1529KM119146)
 Component
Diesel Engine
 Fluid
PETRO CANADA 10W30 (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	SBP0004781	SBP0004756	SBP0003800
Sample Date	Client Info	22 Sep 2023	11 Aug 2023	23 Mar 2023
Machine Age	hrs	2206	1955	1721
Oil Age	hrs	251	234	358
Oil Changed	Client Info	Changed	Changed	Changed
Sample Status		ABNORMAL	ABNORMAL	NORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<1.0	<1.0	<1.0
Glycol	WC Method	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	69	42	12
Chromium	ppm ASTM D5185m >20	2	<1	<1
Nickel	ppm ASTM D5185m >4	<1	<1	0
Titanium	ppm ASTM D5185m	<1	<1	<1
Silver	ppm ASTM D5185m >3	0	0	0
Aluminum	ppm ASTM D5185m >20	▲ 22	▲ 15	2
Lead	ppm ASTM D5185m >40	<1	<1	0
Copper	ppm ASTM D5185m >330	5	3	2
Tin	ppm ASTM D5185m >15	<1	<1	<1
Vanadium	ppm ASTM D5185m	<1	0	0
Cadmium	ppm ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	23	7	5
Barium	ppm ASTM D5185m	0	0	0
Molybdenum	ppm ASTM D5185m	58	61	33
Manganese	ppm ASTM D5185m	<1	1	1
Magnesium	ppm ASTM D5185m	943	1034	527
Calcium	ppm ASTM D5185m	1599	1316	685
Phosphorus	ppm ASTM D5185m	1017	1067	560
Zinc	ppm ASTM D5185m	1285	1365	722
Sulfur	ppm ASTM D5185m	3643	3823	1724

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	▲ 65	▲ 30	6
Sodium	ppm ASTM D5185m	6	3	1
Potassium	ppm ASTM D5185m >20	8	4	1

INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	0.2	0.2	0.4
Nitration	Abs/cm *ASTM D7624 >20	6.8	6.3	7.7
Sulfation	Abs/.1mm *ASTM D7415 >30	20.3	17.9	19.5

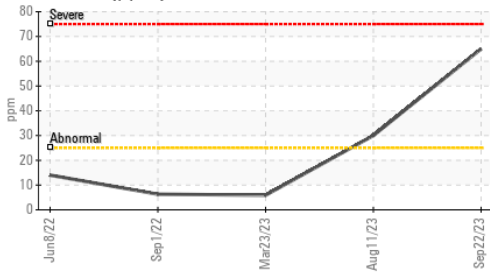
FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	17.0	14.1	15.0
Base Number (BN)	mg KOH/g ASTM D2896	9.2	8.5	8.9

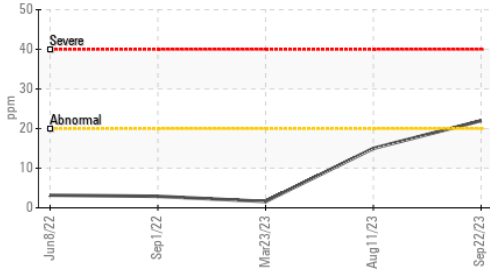


OIL ANALYSIS REPORT

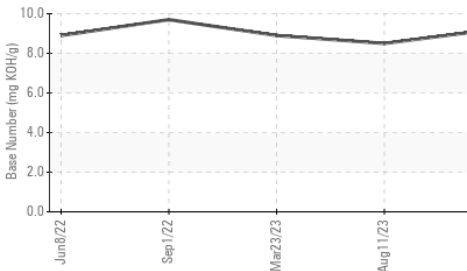
▲ Silicon (ppm)



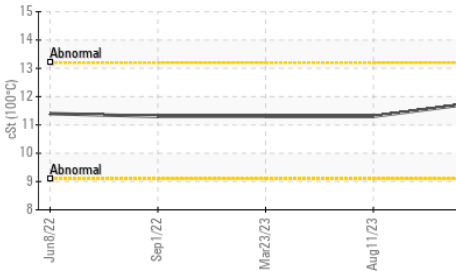
▲ Aluminum (ppm)



Base Number



Viscosity @ 100°C

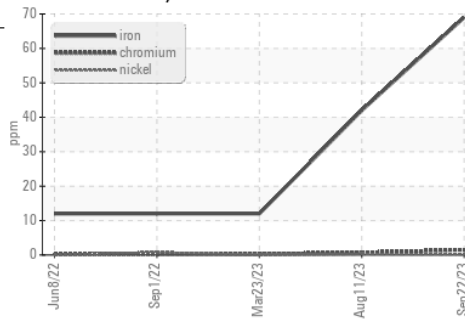


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

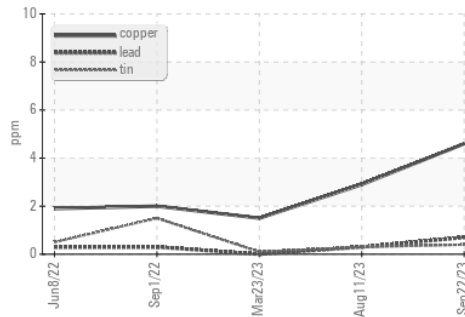
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	11.8	11.3	11.3

GRAPHS

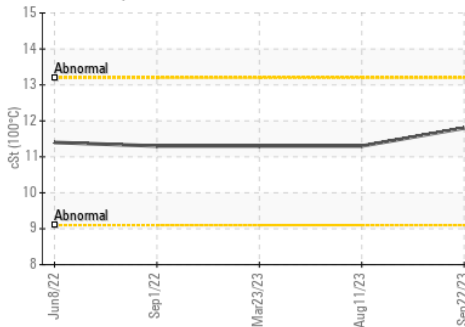
Ferrous Alloys



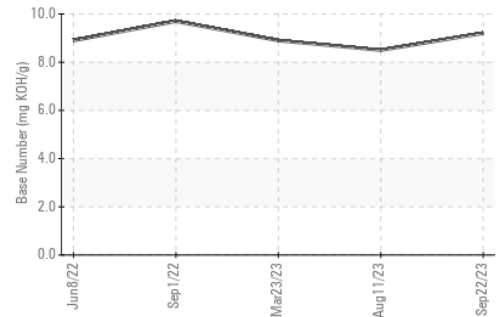
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : SBP0004781 **Received** : 25 Sep 2023
Lab Number : 05960498 **Diagnosed** : 27 Sep 2023
Unique Number : 10661711 **Diagnostician** : Don Baldrige
Test Package : FLEET

Constructors Inc. - 603659
 1815 Y Street
 Lincoln, NE
 US 68508

Contact: Jack Linhart
 jackl@constructorslincoln.com

T: (402)434-2157

F:

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)