



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Machine Id
PIERCE 2585
 Component
Diesel Engine
 Fluid
CHEVRON DELO 400 XLE 15W40 (35 QTS)

RECOMMENDATION

We advise that you check the fuel injection system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0804010	WC0701508	WC0646964
Sample Date		Client Info		04 Apr 2023	16 Jun 2022	20 Dec 2021
Machine Age	hrs	Client Info		7803	7260	7025
Oil Age	hrs	Client Info		543	235	823
Filter Age	hrs	Client Info		543	235	823
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				SEVERE	ABNORMAL	SEVERE

WEAR

Bearing and/or bushing wear is indicated.

Iron	ppm	ASTM D5185m	>200	59	15	20
Chromium	ppm	ASTM D5185m	>10	3	1	1
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m	>2	10	10	10
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>30	▲ 29	9	12
Lead	ppm	ASTM D5185m	>30	▲ 23	0	<1
Copper	ppm	ASTM D5185m	>30	2	1	2
Tin	ppm	ASTM D5185m	>4	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

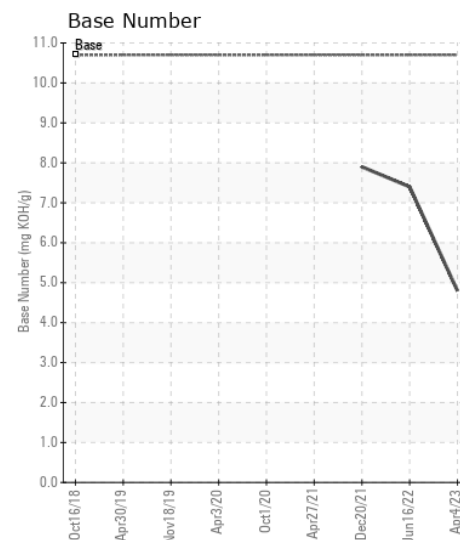
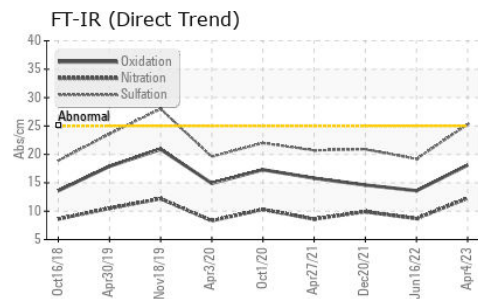
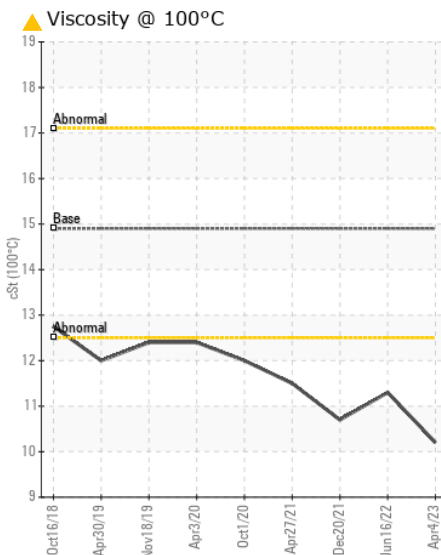
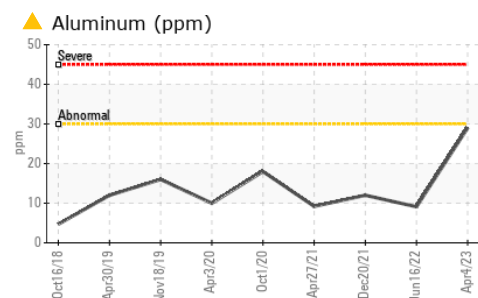
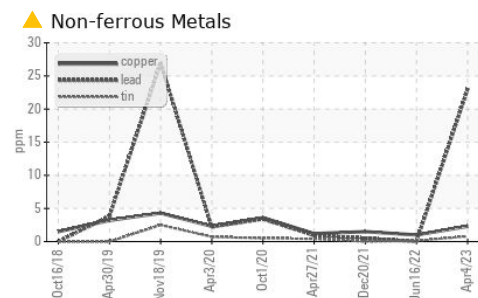
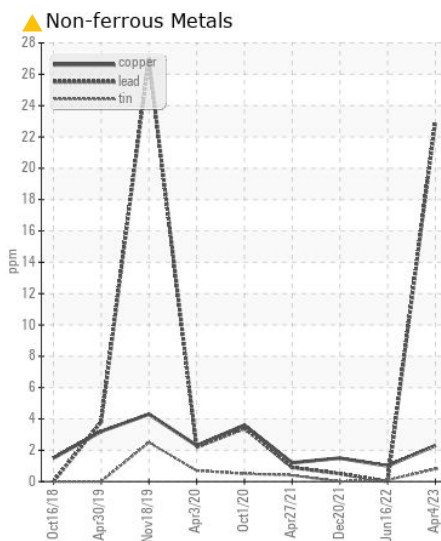
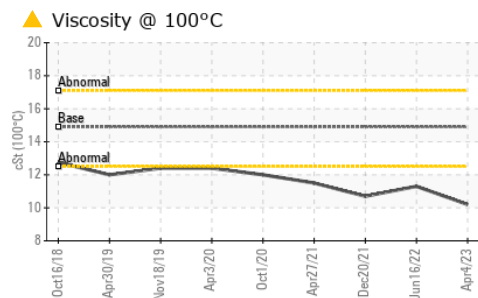
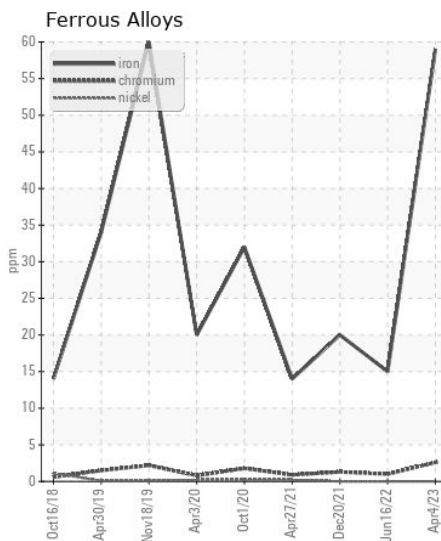
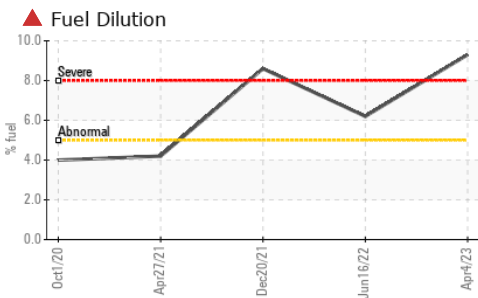
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

Silicon	ppm	ASTM D5185m	>30	7	3	5
Potassium	ppm	ASTM D5185m	>20	12	1	6
Fuel	%	ASTM D3524	>5	▲ 9.3	▲ 6.2	▲ 8.6
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	2.2	0.8	1.1
Nitration	Abs/cm	*ASTM D7624	>20	12.3	8.7	9.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.3	19.2	20.9
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	>0.2	NEG	NEG	NEG

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Sodium	ppm	ASTM D5185m		9	4	5
Boron	ppm	ASTM D5185m		30	92	85
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		39	40	41
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m		587	591	604
Calcium	ppm	ASTM D5185m		1349	1259	1350
Phosphorus	ppm	ASTM D5185m	760	580	626	673
Zinc	ppm	ASTM D5185m	830	767	742	758
Sulfur	ppm	ASTM D5185m	2770	2878	2574	2576
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.1	13.6	14.6
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	4.8	7.4	7.9
Visc @ 100°C	cSt	ASTM D445	14.9	▲ 10.2	▲ 11.3	▲ 10.7



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0804010 **Received** : 13 Apr 2023
Lab Number : 05818649 **Tested** : 18 Apr 2023
Unique Number : 10426732 **Diagnosed** : 19 Apr 2023 - Doug Bogart
Test Package : CONST (Additional Tests: PercentFuel, TBN)

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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)