



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
PIERCE 0487
 Component
Diesel Engine
 Fluid
CHEVRON DELO 400 XLE 10W30 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0701518	WC0616997	WC0576777
Sample Date		Client Info		10 May 2022	15 Oct 2021	20 May 2021
Machine Age	hrs	Client Info		1952	1824	1687
Oil Age	hrs	Client Info		687	559	422
Filter Age	hrs	Client Info		265	137	422
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	25	21	14
Chromium	ppm	ASTM D5185m	>20	2	2	1
Nickel	ppm	ASTM D5185m	>4	<1	0	<1
Titanium	ppm	ASTM D5185m		2	2	2
Silver	ppm	ASTM D5185m	>3	0	<1	<1
Aluminum	ppm	ASTM D5185m	>20	22	16	11
Lead	ppm	ASTM D5185m	>40	1	<1	0
Copper	ppm	ASTM D5185m	>330	35	39	33
Tin	ppm	ASTM D5185m	>15	2	2	2
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

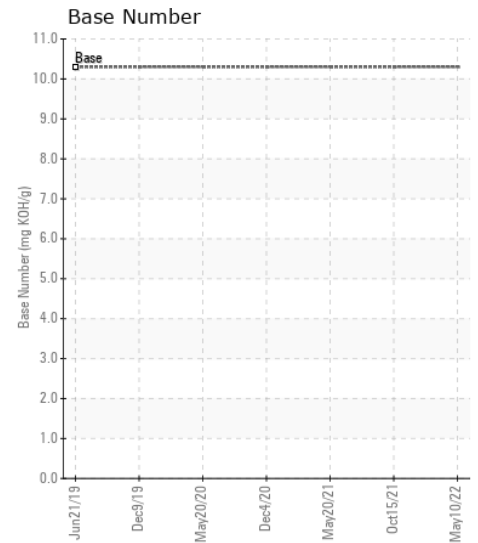
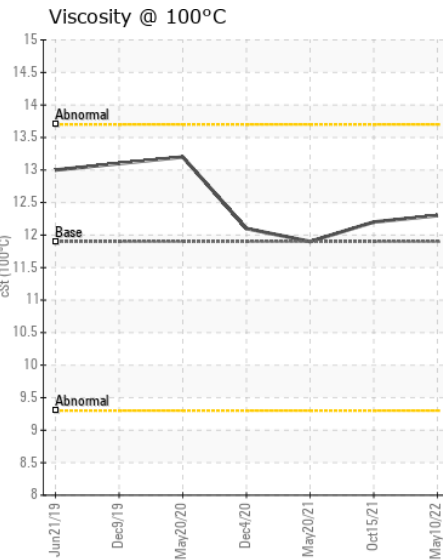
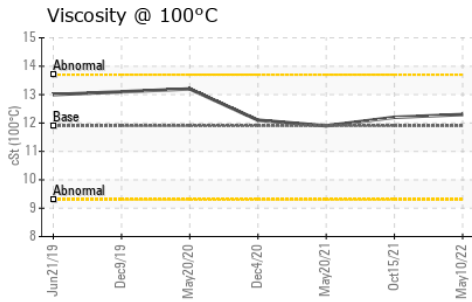
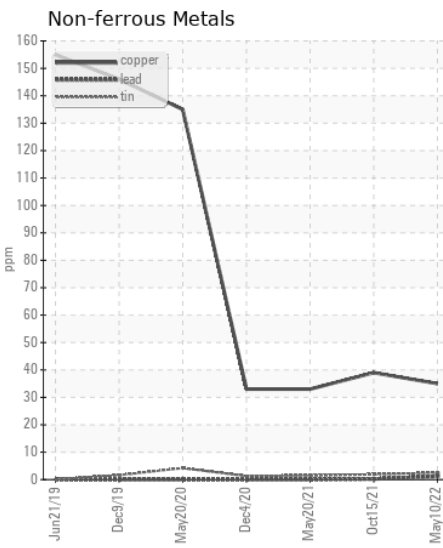
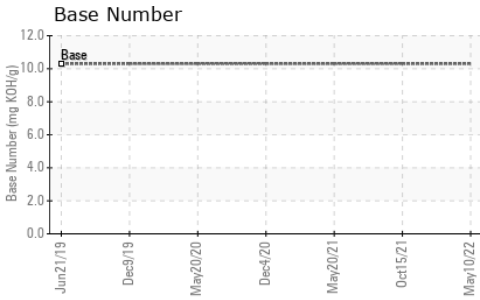
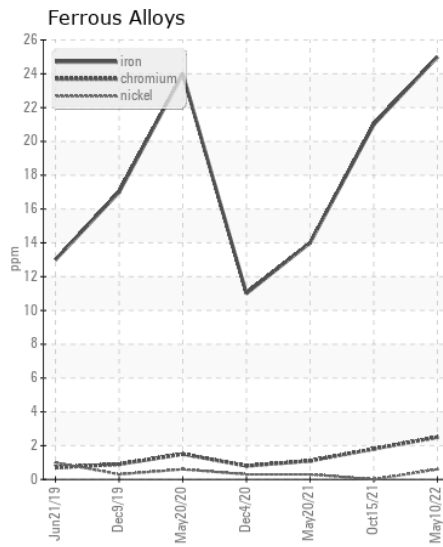
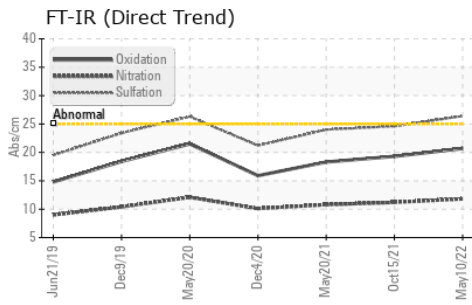
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	4	3
Potassium	ppm	ASTM D5185m	>20	28	29	19
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.7	0.6	0.5
Nitration	Abs/cm	*ASTM D7624	>20	11.8	11.2	10.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.4	24.6	24
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. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		13	8	8
Boron	ppm	ASTM D5185m		22	23	30
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		25	27	24
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m		752	716	677
Calcium	ppm	ASTM D5185m	2900	1470	1430	1327
Phosphorus	ppm	ASTM D5185m	1100	746	738	681
Zinc	ppm	ASTM D5185m	1200	863	859	803
Sulfur	ppm	ASTM D5185m	4000	2702	2485	2353
Oxidation	Abs/.1mm	*ASTM D7414	>25	20.7	19.3	18.3
Base Number (BN)	mg KOH/g	ASTM D2896	10.3	6.4	---	---
Visc @ 100°C	cSt	ASTM D445	11.9	12.3	12.2	11.9



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0701518 **Received** : 11 May 2022
Lab Number : 05541778 **Tested** : 12 May 2022
Unique Number : 9971068 **Diagnosed** : 12 May 2022 - Don Baldrige
Test Package : CONST (Additional Tests: 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)