



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Area
(EQ2072) S
Machine Id
Denise BPS (S/N 662540, 2086454)
Component
Diesel Engine
Fluid
PETRO CANADA DURON UHP 5W40 (15 GAL)

RECOMMENDATION

We advise that you check the fuel injection system. We recommend that you drain the oil and perform a filter service on this component if not already done. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0934071	WC0810889	WC0696110
Sample Date		Client Info		08 May 2024	18 May 2023	11 May 2022
Machine Age	hrs	Client Info		490	467	429
Oil Age	hrs	Client Info		61	77	0
Filter Age	hrs	Client Info		0	77	0
Oil Changed		Client Info		Not Changd	Not Changd	Changed
Filter Changed		Client Info		N/A	N/A	Changed
Sample Status				SEVERE	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	2	2	2
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		9	8	9
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	<1	2	<1
Lead	ppm	ASTM D5185m	>40	2	2	2
Copper	ppm	ASTM D5185m	>330	3	<1	2
Tin	ppm	ASTM D5185m	>15	<1	1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

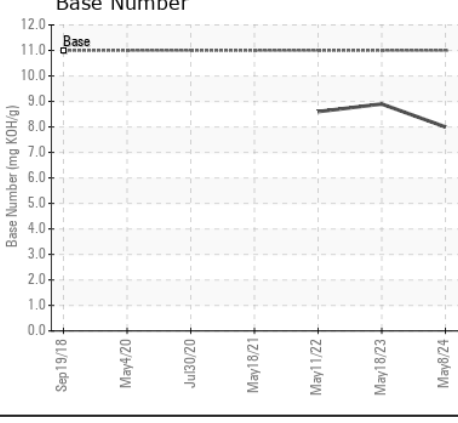
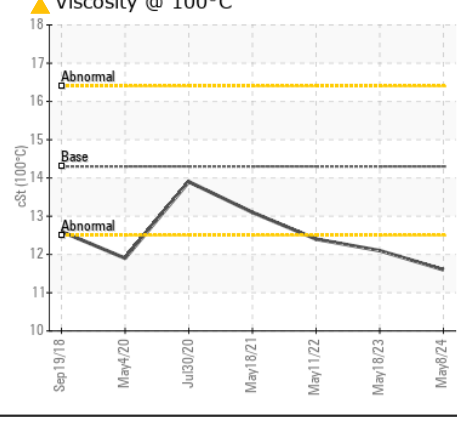
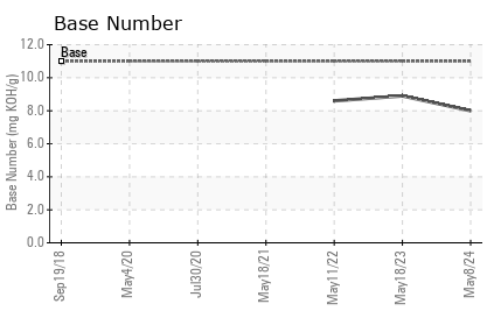
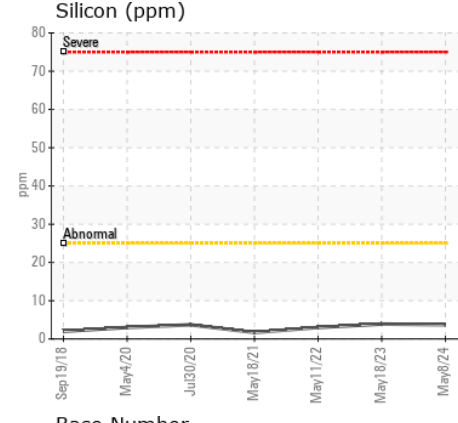
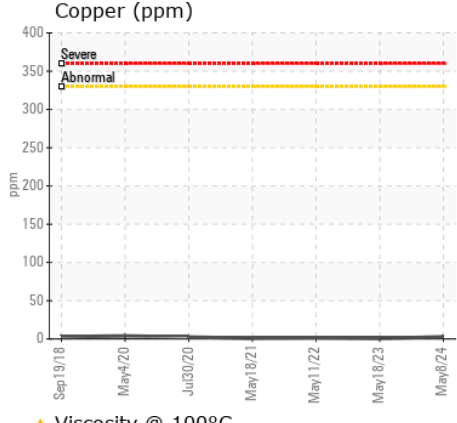
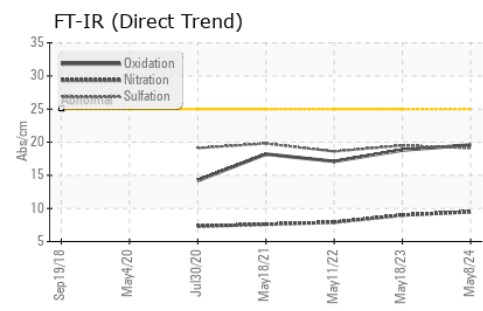
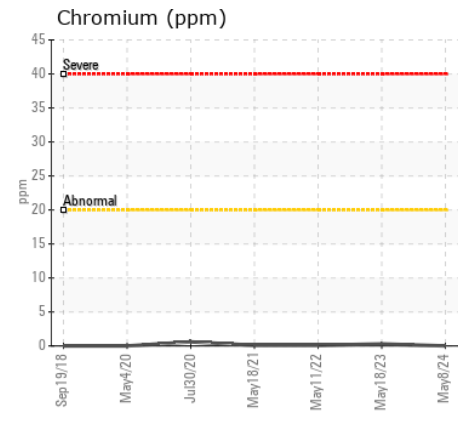
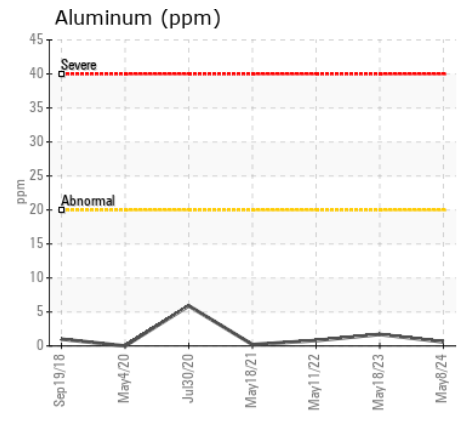
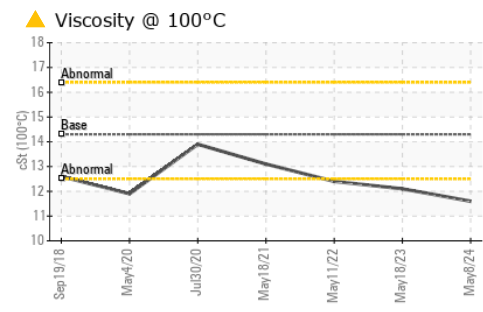
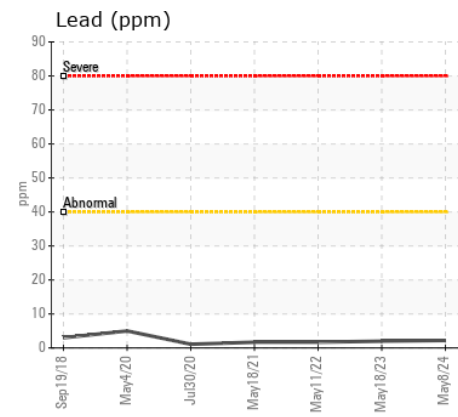
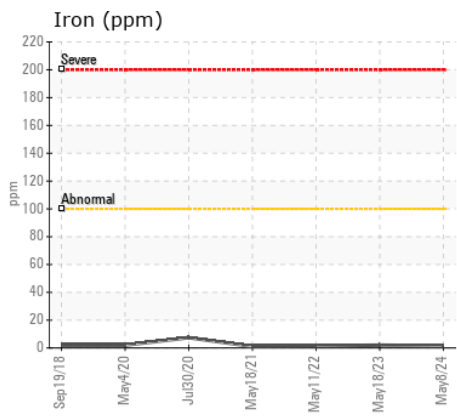
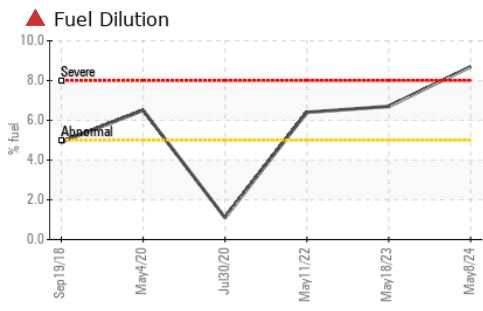
There is a high amount of fuel present in the oil.

Silicon	ppm	ASTM D5185m	>25	4	4	3
Potassium	ppm	ASTM D5185m	>20	<1	2	0
Fuel	%	ASTM D3524	>5	▲ 8.7	▲ 6.7	▲ 6.4
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	9.5	9.0	7.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.1	19.5	18.6
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

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		2	2	2
Boron	ppm	ASTM D5185m	65	61	67	71
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	65	48	48	48
Manganese	ppm	ASTM D5185m	0	<1	<1	0
Magnesium	ppm	ASTM D5185m	1160	957	977	992
Calcium	ppm	ASTM D5185m	820	952	943	998
Phosphorus	ppm	ASTM D5185m	1160	997	1041	1045
Zinc	ppm	ASTM D5185m	1260	1235	1300	1186
Sulfur	ppm	ASTM D5185m	3000	3964	4260	3079
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.6	18.8	17.1
Base Number (BN)	mg KOH/g	ASTM D2896	11.0	8.0	8.9	8.6
Visc @ 100°C	cSt	ASTM D445	14.3	▲ 11.6	▲ 12.1	▲ 12.4



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0934071 **Received** : 13 May 2024
Lab Number : 06176908 **Tested** : 15 May 2024
Unique Number : 11022961 **Diagnosed** : 15 May 2024 - Sean Felton
Test Package : MOB 1 (Additional Tests: PercentFuel, TBN)
 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)

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