



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Area

Store 2 - Beaver [RO#150787 UNIT575]

Machine Id

PETERBILT 337 575 (S/N 2NP2HJ6X5FM267182)

Component

Diesel Engine

Fluid

JOHN DEERE ENGINE OIL PLUS 50 II 15W40 (24 QTS)

RECOMMENDATION

Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0025641	LEC0045683	LEC0040621
Sample Date		Client Info		17 May 2024	14 Nov 2023	05 Jun 2023
Machine Age	mls	Client Info		167184	156004	144734
Oil Age	mls	Client Info		11180	11270	9024
Filter Age	mls	Client Info		11180	11270	9024
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ATTENTION	ATTENTION	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>110	32	36	29
Chromium	ppm	ASTM D5185m	>4	1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>25	8	6	4
Lead	ppm	ASTM D5185m	>45	<1	<1	0
Copper	ppm	ASTM D5185m	>85	8	3	2
Tin	ppm	ASTM D5185m	>4	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

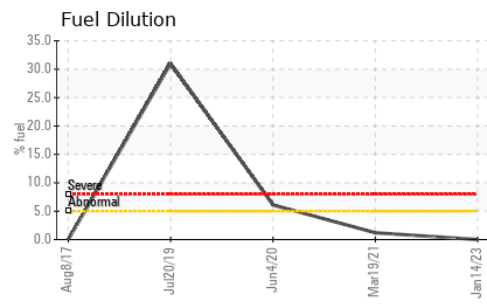
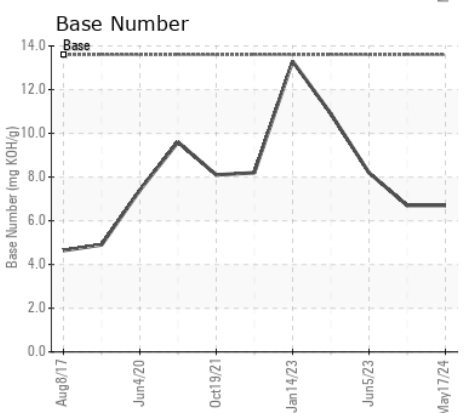
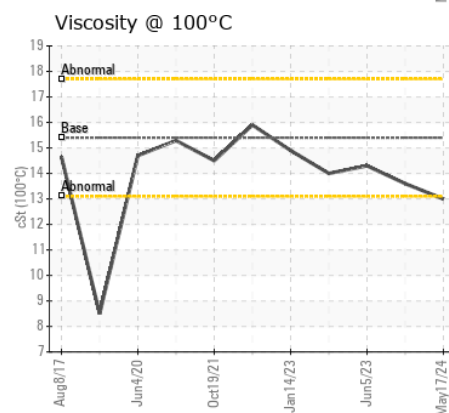
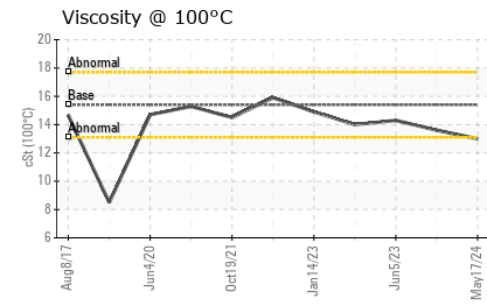
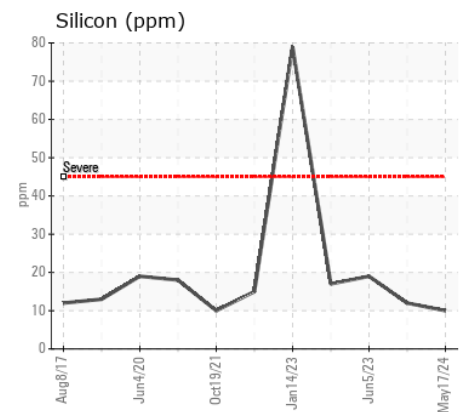
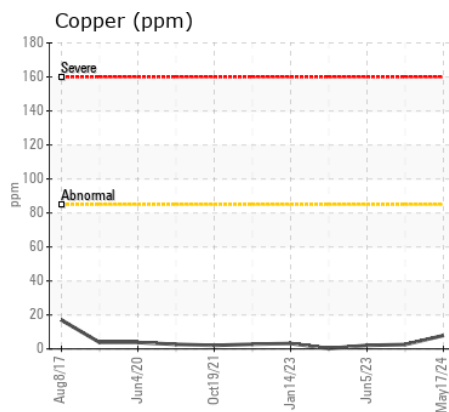
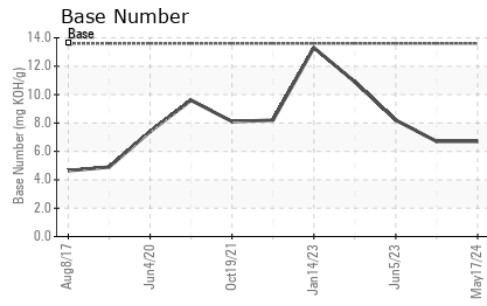
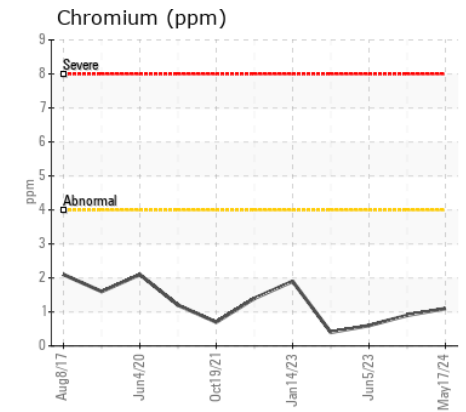
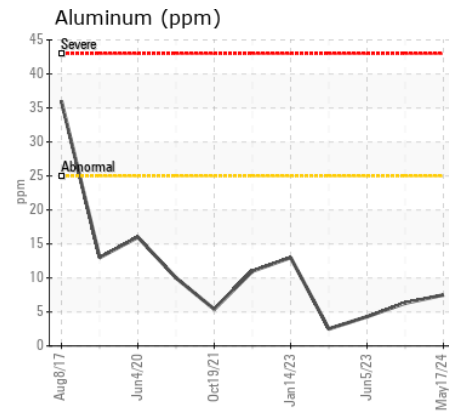
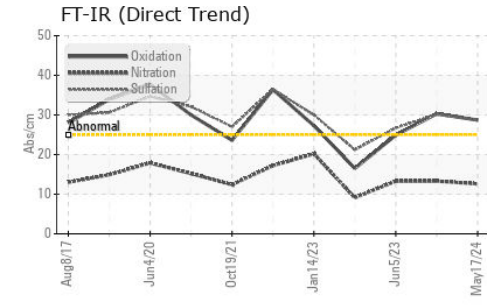
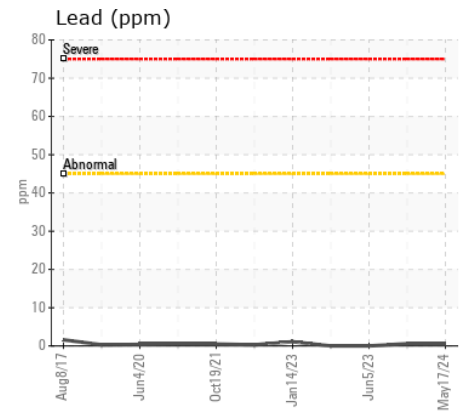
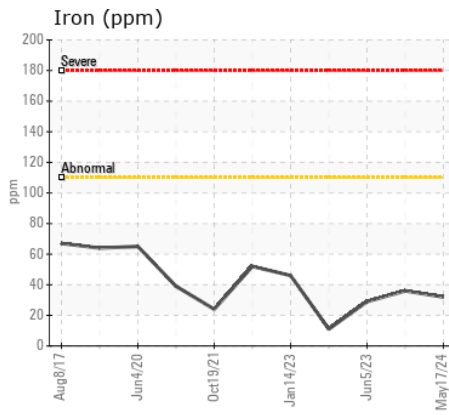
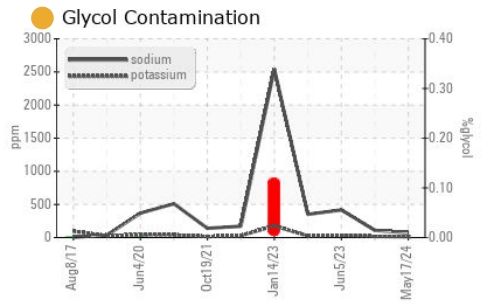
Sodium and/or potassium levels are high. Test for glycol is negative.

Silicon	ppm	ASTM D5185m	>120	10	12	19
Potassium	ppm	ASTM D5185m	>20	13	17	33
Fuel	%	ASTM D3524	>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	0.8	0.6
Nitration	Abs/cm	*ASTM D7624	>20	12.6	13.3	13.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	28.7	30.1	26.7
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 acceptable for the time in service.

Sodium	ppm	ASTM D5185m		72	109	418
Boron	ppm	ASTM D5185m		86	61	94
Barium	ppm	ASTM D5185m		0	10	0
Molybdenum	ppm	ASTM D5185m		248	259	277
Manganese	ppm	ASTM D5185m		<1	1	<1
Magnesium	ppm	ASTM D5185m		764	762	819
Calcium	ppm	ASTM D5185m		1349	1411	1544
Phosphorus	ppm	ASTM D5185m		787	825	791
Zinc	ppm	ASTM D5185m		1014	1023	1023
Sulfur	ppm	ASTM D5185m		2899	3325	3662
Oxidation	Abs/.1mm	*ASTM D7414	>25	28.7	30.3	24.9
Base Number (BN)	mg KOH/g	ASTM D2896	13.6	6.7	6.7	8.2
Visc @ 100°C	cSt	ASTM D445	15.4	13.0	13.6	14.3



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LEC0025641
Lab Number : 06188977
Unique Number : 11045729
Test Package : MOBCE (Additional Tests: FuelDilution, TBN)

LESLIE EQUIPMENT COMPANY
 105 TENNIS CENTER DR.
 MARIETTA, OH
 US 45750-9765
 Contact: LEANNE KENDALL
 KendalLeanne@lec1.com

Certificate L2367
 Received : 23 May 2024
 Tested : 24 May 2024
 Diagnosed : 28 May 2024 - Sean Felton
 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)