



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Area
OKLAHOMA/102/EG - DOZER
Machine Id
36.18L [OKLAHOMA^102^EG - DOZER]
Component
Diesel Engine
Fluid
MOBIL DELVAC 1300 SUPER15W40 (7 GAL)

RECOMMENDATION

We advise that you check the fuel injection system. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0873875	WC0821858	WC0778252
Sample Date		Client Info		17 Apr 2024	09 Aug 2023	20 Mar 2023
Machine Age	hrs	Client Info		14259	13830	13469
Oil Age	hrs	Client Info		429	361	306
Filter Age	hrs	Client Info		429	361	306
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	SEVERE	SEVERE

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	49	11	12
Chromium	ppm	ASTM D5185m	>20	3	0	0
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m	>2	1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	10	2	4
Lead	ppm	ASTM D5185m	>40	5	2	1
Copper	ppm	ASTM D5185m	>330	4	<1	<1
Tin	ppm	ASTM D5185m	>15	1	<1	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

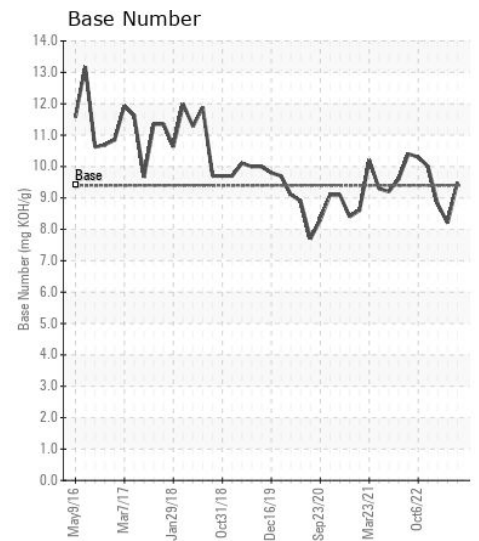
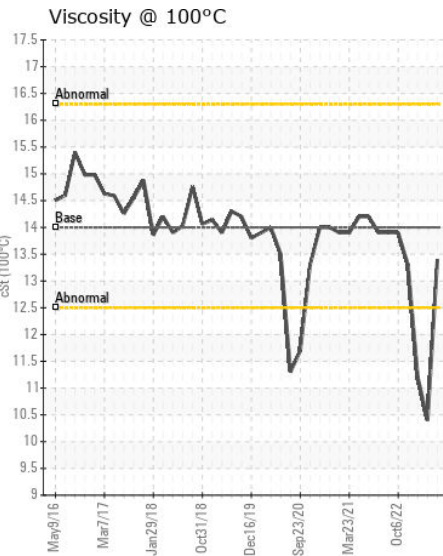
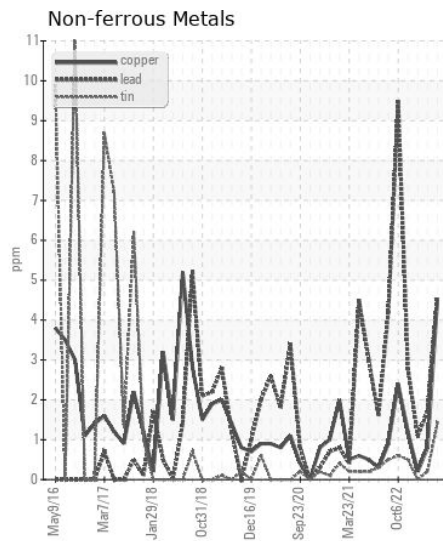
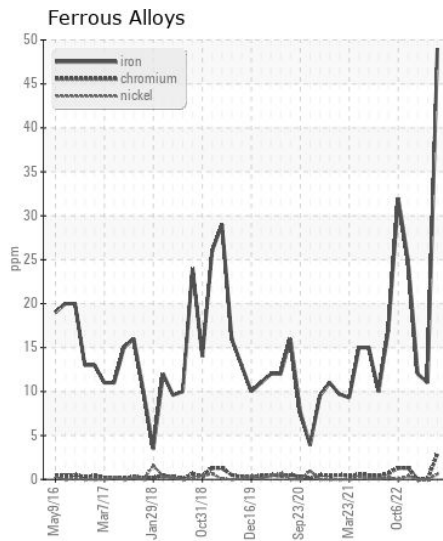
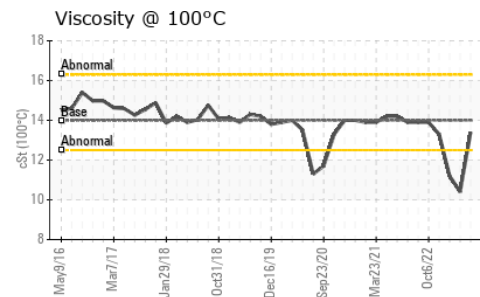
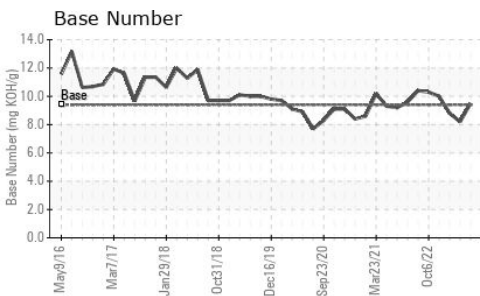
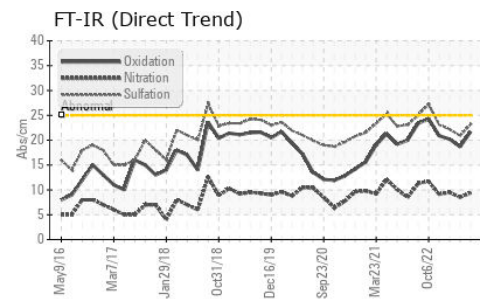
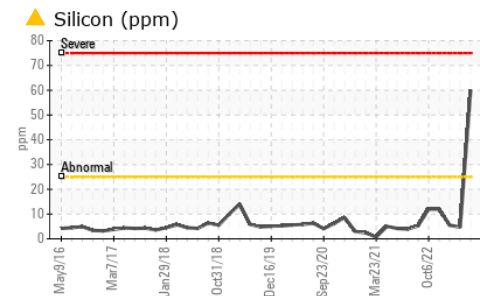
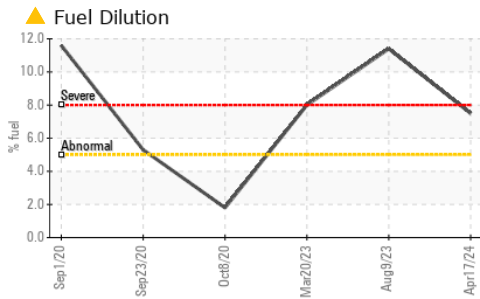
There is a moderate amount of fuel present in the oil. Elemental level of silicon (Si) above normal indicating ingress of seal material.

Silicon	ppm	ASTM D5185m	>25	▲ 60	5	6
Potassium	ppm	ASTM D5185m	>20	3	0	0
Fuel	%	ASTM D3524	>5	▲ 7.5	▲ 11.4	▲ 8.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.8	0.6	0.7
Nitration	Abs/cm	*ASTM D7624	>20	9.4	8.5	9.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.2	20.9	22.2
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		<1	3	2
Boron	ppm	ASTM D5185m	0	37	27	29
Barium	ppm	ASTM D5185m	0	2	0	0
Molybdenum	ppm	ASTM D5185m	0	44	36	34
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	0	491	445	401
Calcium	ppm	ASTM D5185m		1697	1636	1485
Phosphorus	ppm	ASTM D5185m		813	682	608
Zinc	ppm	ASTM D5185m		914	826	709
Sulfur	ppm	ASTM D5185m		2695	2688	1922
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.7	18.7	20.2
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	9.5	8.2	8.8
Visc @ 100°C	cSt	ASTM D445	14	13.4	▲ 10.4	▲ 11.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0873875
Lab Number : 06176465
Unique Number : 11022518
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)