



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL



Area
KANSAS/44/EG - DOZER
Machine Id
39.62 [KANSAS^44^EG - DOZER]
Component
Diesel Engine
Fluid
MOBIL DELVAC 1300 SUPER15W40 (--- GAL)

RECOMMENDATION

We advise that you check for the source of the coolant leak. 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		WC0886987	WC0781257	WC0779826
Sample Date		Client Info		10 Apr 2024	13 Jun 2023	02 Mar 2023
Machine Age	hrs	Client Info		9895	8798	8579
Oil Age	hrs	Client Info		0	8347	99
Filter Age	hrs	Client Info		0	0	99
Oil Changed		Client Info		Changed	N/A	N/A
Filter Changed		Client Info		Changed	N/A	N/A
Sample Status				ABNORMAL	NORMAL	MARGINAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	69	28	38
Chromium	ppm	ASTM D5185m	>20	2	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m	>2	1	0	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>25	13	7	9
Lead	ppm	ASTM D5185m	>40	17	0	<1
Copper	ppm	ASTM D5185m	>330	31	2	5
Tin	ppm	ASTM D5185m	>15	1	<1	<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.

Silicon	ppm	ASTM D5185m	>25	18	8	11
Potassium	ppm	ASTM D5185m	>20	4	0	0
Fuel	%	ASTM D3524	>5	<1.0	<1.0	▲ 2.8
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.7	0.6	0.7
Nitration	Abs/cm	*ASTM D7624	>20	11.9	9.6	11.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.9	23.1	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.

Sodium	ppm	ASTM D5185m		▲ 288	6	9
Boron	ppm	ASTM D5185m	0	17	33	29
Barium	ppm	ASTM D5185m	0	<1	0	0
Molybdenum	ppm	ASTM D5185m	0	97	42	37
Manganese	ppm	ASTM D5185m		2	<1	1
Magnesium	ppm	ASTM D5185m	0	452	548	477
Calcium	ppm	ASTM D5185m		1471	1830	1646
Phosphorus	ppm	ASTM D5185m		752	975	735
Zinc	ppm	ASTM D5185m		878	1183	857
Sulfur	ppm	ASTM D5185m		2629	3665	2591
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.0	21.9	20.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	10.1	9.8	10.3
Visc @ 100°C	cSt	ASTM D445	14	12.6	12.8	▲ 12.4

