

OIL ANALYSIS REPORT

Sample Rating Trend

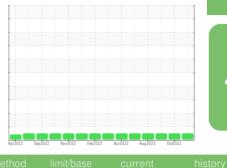
NORMAL



Area OKLAHOMA/3 Machine Id 39.63 [OKLAHOMA^3] Component

Diesel Engine

MOBIL DELVAC 1300 SUPER15W40 (--- GAL)





SAMPLE INFORMATION method WC0857301 WC0857291 WC0833962 Sample Number **Client Info** 19 Oct 2023 Sample Date Client Info 18 Oct 2023 24 Aug 2023 4226 Machine Age hrs **Client Info** 4226 3833 Oil Age hrs Client Info 252 348 3299 Oil Changed **Client Info** Changed N/A Changed NORMAL Sample Status NORMAL NORMAL CONTAMINATION Fuel WC Method >5 <1.0 <1.0 <1.0 Glycol WC Method NEG NEG NEG WEAR METALS Iron ASTM D5185m >100 19 17 29 ppm Chromium ASTM D5185m >20 ppm <1 <1 <1 Nickel ASTM D5185m >2 0 0 0 ppm 0 ASTM D5185m >2 0 0 Titanium ppm Silver ppm ASTM D5185m >2 0 0 0 Aluminum ASTM D5185m >25 1 3 ppm <1 Lead ASTM D5185m >40 0 0 <1 ppm Copper ppm ASTM D5185m >330 1 1 6 0 0 Tin ppm ASTM D5185m >15 <1 0 0 Vanadium ASTM D5185m 0 ppm Cadmium ppm ASTM D5185m 0 0 0 26 ASTM D5185m 0 26 19 Boron ppm Barium ppm ASTM D5185m O 0 0 0 Molybdenum ASTM D5185m Λ 41 39 42 nnm Μ

CONTAMINANTS		method			history1	history2
Sulfur	ppm	ASTM D5185m		2572	2455	2923
Zinc	ppm	ASTM D5185m		944	908	945
Phosphorus	ppm	ASTM D5185m		711	667	771
Calcium	ppm	ASTM D5185m		1726	1678	1794
Magnesium	ppm	ASTM D5185m	0	520	501	527
Manganese	ppm	ASTM D5185m		<1	<1	<1
Molybuenum	ppm	ASTIVI DJ TOJITI	0	41	39	42

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Silicon	ppm	ASTM D5185m	>25	5	5	5	
Sodium	ppm	ASTM D5185m		3	3	5	
Potassium	ppm	ASTM D5185m	>20	0	0	0	

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0.4	0.3	0.4
Nitration	Abs/cm	*ASTM D7624	>20	9.1	9.0	9.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.7	22.5	22.6
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	22.0	21.7	22.2
Base Number (BN)	mg KOH/g	ASTM D2896	9.4	9.1	9.1	8.2

Resample at the next service interval to monitor.

Recommendation

Wear

All component wear rates are normal.

Contamination

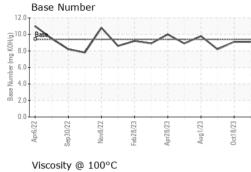
There is no indication of any contamination in the oil.

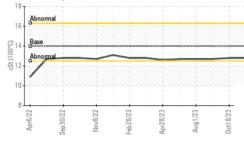
Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

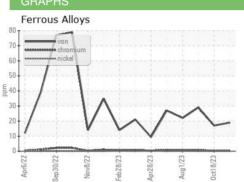


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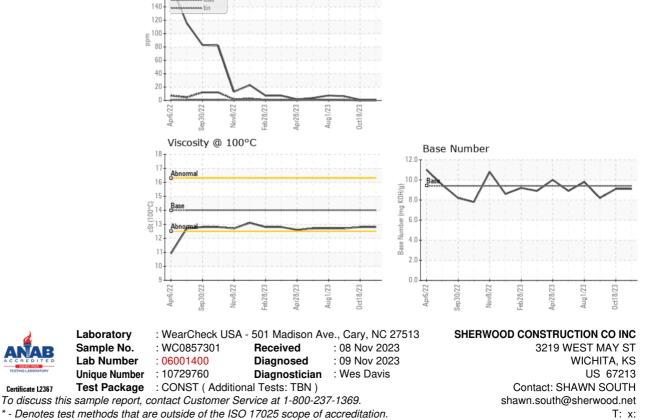
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14	12.8	12.8	12.7
CRAPHS						



Non-ferrous Metals

lead

180 160



* - 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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