

OIL ANALYSIS REPORT

Sample Rating Trend



45.63L [OKLAHOMA^102] Component **Diesel Engine** Fluid

OKLAHOMA/102

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	0 SUPER15W40 (Jan2022	Apr2022 Jul2022	Oct2022 Jan2023 Mar2023	Jul2023	
DIAGNOSIS	SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
ecommendation	Sample Number		Client Info		WC0808066	WC0778307	WC0769656
esample at the next service interval to monitor.	Sample Date		Client Info		15 Jul 2023	14 Mar 2023	16 Jan 2023
ear	Machine Age	hrs	Client Info		1329	1084	977
component wear rates are normal.	Oil Age	hrs	Client Info		247	230	122
•	Oil Changed		Client Info		Changed	Changed	Changed
ontamination here is no indication of any contamination in the	Sample Status				NORMAL	NORMAL	NORMAL
jil.	CONTAMINATIC	N	method	limit/base	current	history1	history2
uid Condition e BN result indicates that there is suitable	Fuel		WC Method	>5	<1.0	<1.0	<1.0
alinity remaining in the oil. The condition of the	Glycol		WC Method		NEG	NEG	NEG
bil is suitable for further service.	WEAR METALS		method	limit/base	current	history1	history2
	Iron	ppm	ASTM D5185m	>100	19	14	9
	Chromium	ppm	ASTM D5185m	>20	0	<1	<1
	Nickel	ppm	ASTM D5185m	>2	0	0	0
	Titanium	ppm	ASTM D5185m	>2	0	0	0
	Silver	ppm	ASTM D5185m	>2	<1	0	0
	Aluminum	ppm	ASTM D5185m	>25	5	3	4
	Lead	ppm	ASTM D5185m	>40	<1	0	<1
	Copper	ppm	ASTM D5185m	>330	<1	<1	1
	Tin	ppm	ASTM D5185m	>15	0	0	<1
	Vanadium	ppm	ASTM D5185m		0	0	0
	Cadmium	ppm	ASTM D5185m		0	0	0
	ADDITIVES		method	limit/base	current	history1	history2
	Boron	ppm	ASTM D5185m	0	63	64	64
	Barium	ppm	ASTM D5185m	0	2	0	2
	Molybdenum	ppm	ASTM D5185m	0	46	39	41
	Manganese	ppm	ASTM D5185m		<1	<1	<1
	Magnesium	ppm	ASTM D5185m	0	493	466	500
	Calcium	ppm	ASTM D5185m		1803	1661	1671
	Phosphorus	ppm	ASTM D5185m		777	713	762
	Zinc	ppm	ASTM D5185m		930	819	896
	Sulfur	ppm	ASTM D5185m		2762	2884	2934
	CONTAMINANTS	S	method	limit/base	current	history1	history2
	Silicon	ppm	ASTM D5185m	>25	3	3	4
	Sodium	ppm	ASTM D5185m		0	5	4
	Potassium	ppm	ASTM D5185m	>20	2	0	<1
	INFRA-RED		method	limit/base	current	history1	history2
	Soot %	%	*ASTM D7844	>3	0.1	0.1	0.1
	Nitration	Abs/cm	*ASTM D7624	>20	5.9	5.3	5.8
		Abs/.1mm	*ASTM D7415		21.4	21.8	21.5
	Sulfation	7.000/.1111111					
	Sulfation		method	limit/base	current	history1	history2
			method *ASTM D7414		current	history1 19.4	history2 19.4



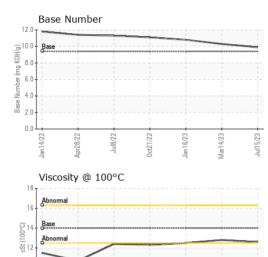
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Jan 14/22

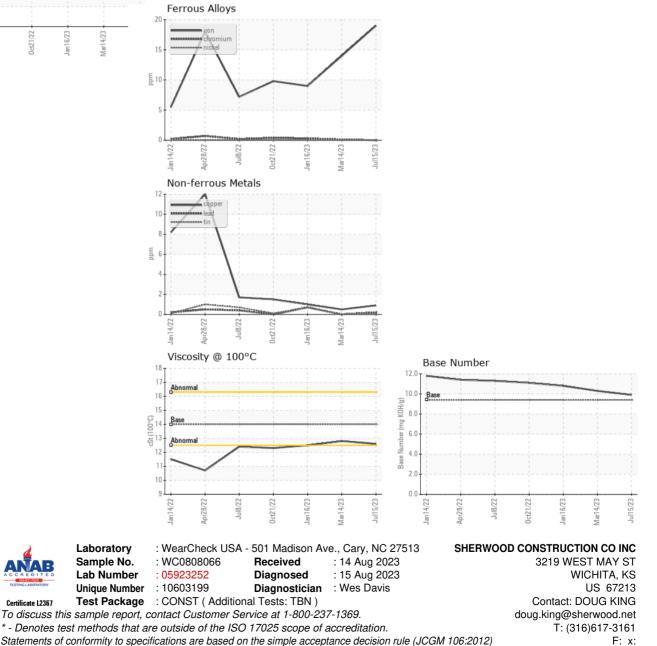
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VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*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 PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14	12.6	12.8	12.5
GRAPHS						



Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Submitted By: PATRICIA BIBLE