

Machine Id 29286

Component Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (--- GAL)

······································							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		WC0829897	WC0711095	
Resample at the next service interval to monitor.	Sample Date		Client Info		19 Jan 2024	03 Apr 2023	
	Machine Age	mls	Client Info		167606	74828	
	Oil Age	mls	Client Info		0	0	
	Filter Age	mls	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185m	>100	56	30	
WEAR	Chromium	ppm	ASTM D5185m		2	<1	
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		- <1	0	
	Titanium	ppm	ASTM D5185m	~7	<1	0	
	Silver		ASTM D5185m	-3	0	0	
	Aluminum	ppm	ASTM D5185m		14	10	
	Lead	ppm			0	0	
		ppm	ASTM D5185m ASTM D5185m		49	20	
	Copper Tin	ppm	ASTM D5185m				
		ppm		>10	2	<1	
	Vanadium	ppm	ASTM D5185m		0	<1	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	9	4	
	Potassium	ppm	ASTM D5185m	>20	27	21	
There is no indication of any contamination in the oil.	Fuel		WC Method	>5	<1.0	<1.0	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	1.8	0.4	
	Nitration	Abs/cm	*ASTM D7624	>20	15.6	7.5	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	28.6	18.8	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>158	0	<1	
The DNI we sult indicate a that the wais on the black limits we waiting in the	Boron	ppm	ASTM D5185m	250	<1	0	
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		<1	0	
	Molybdenum	ppm	ASTM D5185m	100	75	63	
	Manganese	ppm	ASTM D5185m		<1	<1	
	Magnesium	ppm	ASTM D5185m	450	1071	967	
	Calcium	ppm	ASTM D5185m	3000	1223	1080	
	Phosphorus	ppm	ASTM D5185m	1150	990	994	
	Zinc	ppm	ASTM D5185m	1350	1361	1260	
	Sulfur	ppm	ASTM D5185m	4250	2231	3096	
	Oxidation	Abs/.1mm	*ASTM D7414		28.8	14.9	
	D 11 1 (D1)	1/01/1		0 -		= 0	

Base Number (BN) mg KOH/g ASTM D2896 8.5

ASTM D445 14.4

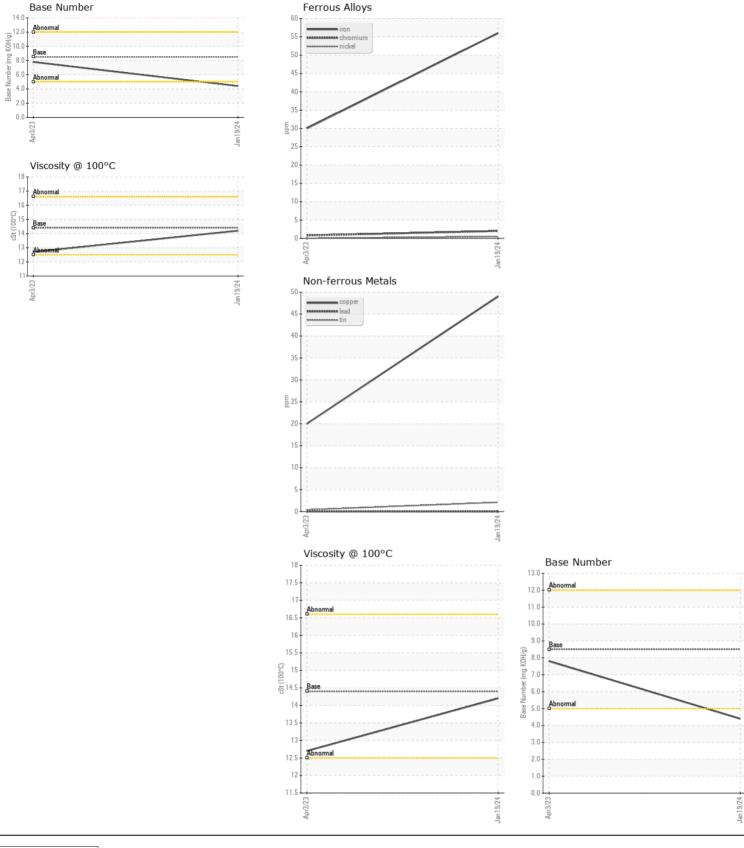
Visc @ 100°C cSt

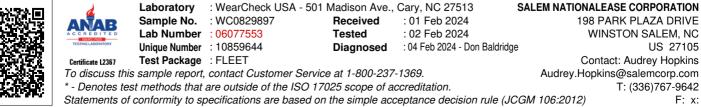
7.8

12.7

4.4

14.2





娟

Contact/Location: Audrey Hopkins - SALWIN