

## Machine Id OSHKOSH 4415 Component Diesel Engine Fluid DIESEL ENGINE OIL SAE 15W40 (--- GAL)

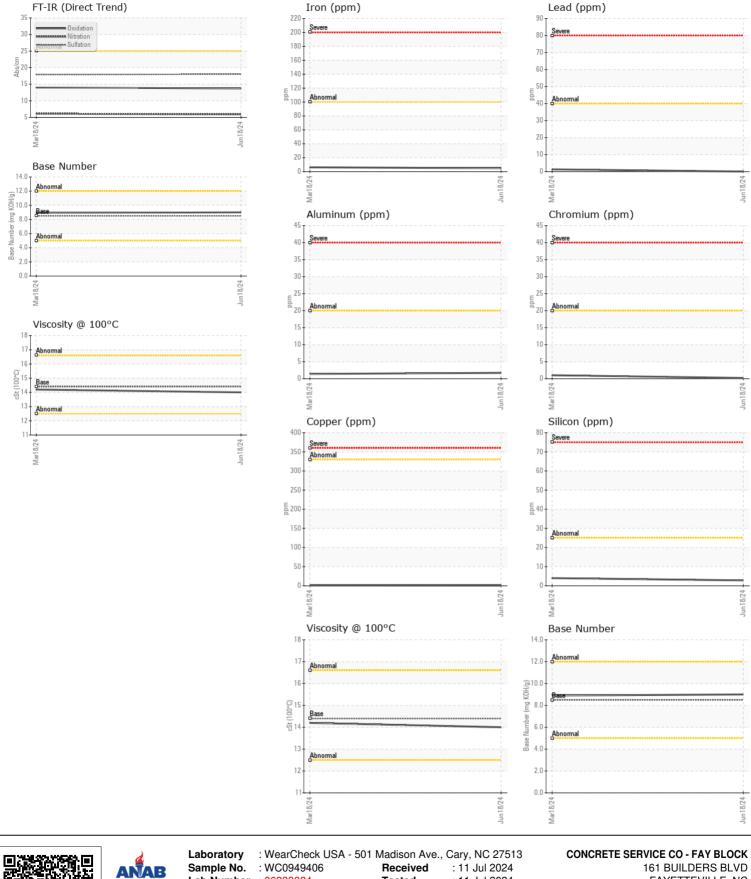
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		WC0949406	WC0906189	
Resample at the next service interval to monitor.	Sample Date		Client Info		18 Jun 2024	18 Mar 2024	
	Machine Age	mls	Client Info		0	29303	
	Oil Age	mls	Client Info		0	0	
	Filter Age	mls	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	5	6	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		<1	1	
	Nickel	ppm	ASTM D5185m		0	1	
	Titanium	ppm	ASTM D5185m	~7	<1	<1	
	Silver	ppm	ASTM D5185m	-3	<1	<1	
	Aluminum	ppm	ASTM D5185m		2	1	
	Lead		ASTM D5185m		0	1	
	Copper	ppm ppm	ASTM D5185m		0 <1	1	
	Tin	ppm	ASTM D5185m		<1	1	
	Vanadium	ppm	ASTM D5185m	210	<1	<1	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
		Scalai	visual	NONL		NONL	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	3	4	
	Potassium	ppm	ASTM D5185m	>20	2	1	
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	0.2	0.2	
	Nitration	Abs/cm	*ASTM D7624	>20	5.9	6.1	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	18.0	17.9	
	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	
	Boron	ppm	ASTM D5185m		5	2	
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		0	0	
	Molybdenum	ppm	ASTM D5185m		58	58	
	Manganese	ppm	ASTM D5185m		0	1	
	Magnesium	ppm	ASTM D5185m	450	913	911	
	Calcium	ppm	ASTM D5185m		1110	1056	
	Phosphorus	ppm	ASTM D5185m		1075	1069	
	Zinc	ppm	ASTM D5185m		1221	1186	
	Sulfur	ppm	ASTM D5185m		3029	3407	
	Oxidation	Abs/.1mm	*ASTM D7414		13.7	14.0	
	Base Number (BN)				9.0	8.9	
		01					

Visc @ 100°C cSt

ASTM D445 14.4

14.2

14.0



Sample No. : WC0949406 Received 161 BUILDERS BLVD : 11 Jul 2024 Lab Number : 06233024 Tested FAYETTEVILLE, NC : 11 Jul 2024 Unique Number : 11116517 Diagnosed : 11 Jul 2024 - Wes Davis US 28301 Test Package : MOB 1 (Additional Tests: TBN) Contact: BRYAN VANNIMAN Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. bryanvanniman@fayblock.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (800)326-9198 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: