

## WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

## Rock Screen Machine Id RS-1 145 Component Diesel Engine Fluid DIESEL ENGINE OIL SAE 15W40 (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		KFS0006016	KFS0002921	KFS0001185
	Sample Date		Client Info		16 Apr 2024	27 Mar 2023	25 Aug 2022
	Machine Age	hrs	Client Info		2484	43069	2007
	Oil Age	hrs	Client Info		500	0	0
	Filter Age	hrs	Client Info		500	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron		ASTM D5185m	. 100	-1.4	30	15
WEAN	Chromium	ppm	ASTM D5185m		14 <1	3	<1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		<1 <1	1	0
	Titanium	ppm	ASTM D5185m	>4	<1	0	0
	Silver	ppm	ASTM D5185m	. 0	<1 0	0	0
	Aluminum	ppm	ASTM D5185m		2	31	3
		ppm					
	Lead	ppm	ASTM D5185m ASTM D5185m		<1 2	0	0
	Copper Tin	ppm				0	
		ppm	ASTM D5185m	>15	<1	0	<1
	Vanadium	ppm	ASTM D5185m	NONE	0		
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	7	11	6
	Potassium	ppm	ASTM D5185m	>20	2	2	0
There is no indication of any contamination in the oil.	Fuel		WC Method	>5	<1.0	<1.0	0.2
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.1	0.5	0.1
	Nitration	Abs/cm	*ASTM D7624	>20	7.1	11.5	9.9
	Sulfation	Abs/.1mm	*ASTM D7415	>30	18.4	19.1	23.3
	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	Sodium	ppm	ASTM D5185m	<158	0	0	0
	Boron	ppm	ASTM D5185m		9	2	130
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	0
	Molybdenum	ppm	ASTM D5185m		68	54	84
	Manganese	ppm	ASTM D5185m	100	<1	<1	<1
	Magnesium	ppm	ASTM D5185m	450	906	766	679
	Calcium	ppm	ASTM D5185m		1151	1088	1436
	Phosphorus	ppm	ASTM D5185m		1027	942	788
	Zinc	ppm	ASTM D5185m		1188	1097	950
	Sulfur	ppm	ASTM D5185m		3088	2855	2414
	Oxidation	Abs/.1mm	*ASTM D5165111		14.6	18.9	2414
	Base Number (BN)				14.6	9.92	7.61
			ASTIVI D2090	14.4	10.00	9.92	11.0

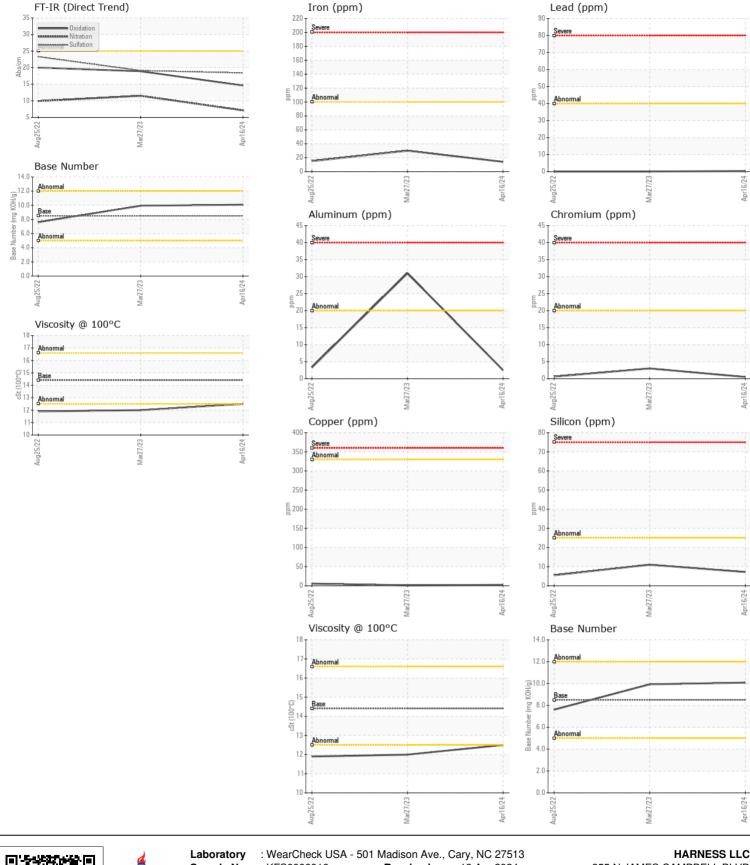
Visc @ 100°C cSt

ASTM D445 14.4

11.9

12.0

12.5



Sample No. Received 855 N JAMES CAMPBELL BLVD : KFS0006016 : 19 Apr 2024 Lab Number : 06155269 Tested COLUMBIA, TN : 22 Apr 2024 Diagnosed Unique Number : 10990692 : 22 Apr 2024 - Wes Davis US 38401 Test Package : MOB 2 Contact: BEN HARNESS Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. ben@slectharness.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (615)733-4480 F: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)