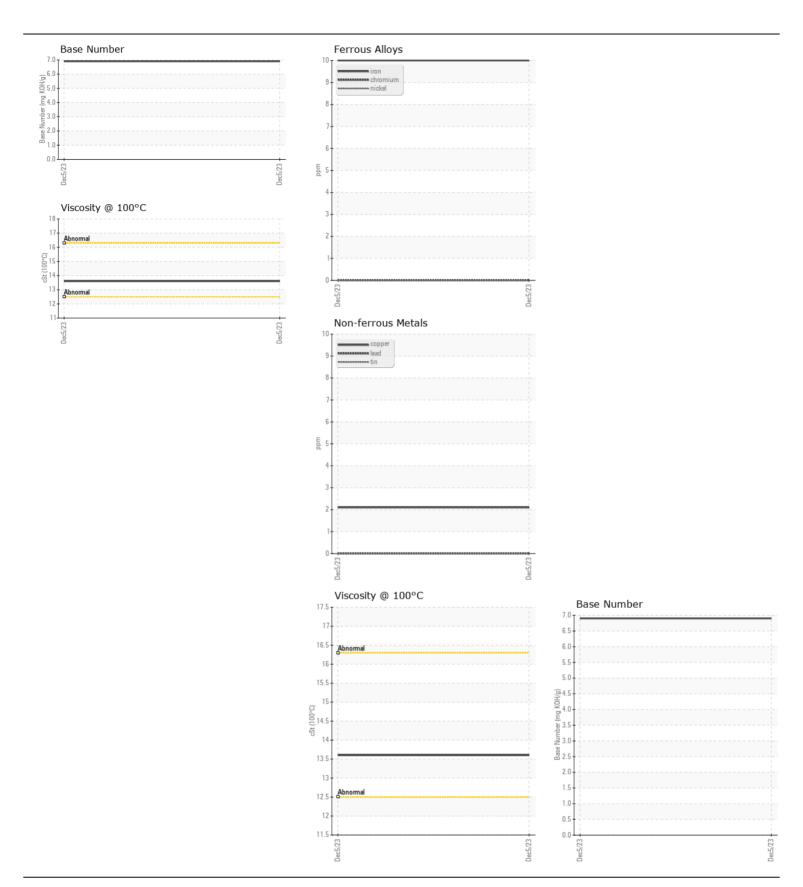
WEAR CONTAMINATION **FLUID CONDITION** **NORMAL NORMAL NORMAL**

Machine Id **T-779**

Diesel Engine

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History	History2
RECOMMENDATION		UOIVI	Client Info	LIIIIII/ADII	WC0878700	History1	
Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Number				05 Dec 2023		
	Sample Date	bro	Client Info				
	Machine Age	hrs	Client Info		577		
	Oil Age	hrs	Client Info		274		
	Filter Age	hrs	Client Info		274		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				NORMAL		
VEAR	Iron	ppm	ASTM D5185m	>100	10		
VEAIL	Chromium	ppm	ASTM D5185m		0		
Metal levels are typical for a new component breaking in.	Nickel	ppm	ASTM D5185m		0		
	Titanium	ppm	ASTM D5185m	77	0		
	Silver		ASTM D5185m	~3	0		
	Aluminum	ppm	ASTM D5185m		2		
	Lead		ASTM D5185m		0		
	Copper	ppm	ASTM D5185m		2		
	Tin	ppm	ASTM D5185m		0		
		ppm		>10	0		
	Vanadium White Metal	ppm	*Visual	NONE	NONE		
		scalar					
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	4		
CONTAININATION	Potassium	ppm	ASTM D5185m	>20	0		
There is no indication of any contamination in the oil.	Fuel	PP	WC Method	>5	<1.0		
	Water		WC Method		NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.2		
	Nitration	Abs/cm	*ASTM D7624	>20	8.6		
	Sulfation	Abs/.1mm	*ASTM D7415		18.2		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water		*Visual	>0.2	NEG		
<u></u>			visuai				
FLUID CONDITION	Sodium	ppm	ASTM D5185m		<1		
	Boron	ppm	ASTM D5185m		75		
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		
	Molybdenum	ppm	ASTM D5185m		95		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		46		
	Calcium	ppm	ASTM D5185m		2086		
	Phosphorus	ppm	ASTM D5185m		879		
	Zinc	ppm	ASTM D5185m		1215		
	Sulfur	ppm	ASTM D5185m		4117		
	Oxidation	Abs/.1mm	*ASTM D7414	-25	13.9		
	Base Number (BN)			>20	6.9		
	Dase Mullipel (DIV)	IIIg KUN/g	49 LINI D7030		0.9		







Report Id: DUKRAL [WUSCAR] 06030290 (Generated: 02/02/2024 07:34:54) Rev: 1

Laboratory Sample No. Lab Number

: WC0878700 : 06030290 Unique Number : 10780081

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Recieved : 11 Dec 2023 Diagnosed : 12 Dec 2023

Diagnostician : Wes Davis

Test Package : CONST (Additional Tests: TBN)

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

DUKE LAZZARA 4201 FAYETTEVILLE RD RALEIGH, NC

US 27603 Contact: NICK DIXON

NICK.DIXON@DUKELAZZAM.COM T: (919)760-7797

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