

**WEAR CONTAMINATION FLUID CONDITION** 

**NORMAL ABNORMAL NORMAL** 

## VOLVO VNR6430 06972 (S/N 4V5WC9DF1PN624150)

Diesel Engine <sup>Fluid</sup> {not provided} ( GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
No corrective action is recommended at this time. Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Number	OOM	Client Info	LITTIOTION	ARI06161281		
	Sample Date		Client Info		27 Apr 2024		
	Machine Age	mls	Client Info		8167		
	Oil Age	mls	Client Info		0		
	Filter Age	mls	Client Info		0		
	Oil Changed	11110	Client Info		N/A		
	Filter Changed		Client Info		N/A		
	Sample Status		Oliciti iiilo		ABNORMAL		
WEAD							
WEAR	Iron	ppm	ASTM D5185m		48		
Metal levels are typical for a new component breaking in.	Chromium	ppm	ASTM D5185m		2		
	Nickel	ppm	ASTM D5185m	>2	6		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m		<1		
	Aluminum	ppm	ASTM D5185m		14		
	Lead	ppm	ASTM D5185m		<1		
	Copper	ppm	ASTM D5185m		21		
	Tin	ppm	ASTM D5185m	>15	2		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
Fuel content negligible. Elemental level of silicon (Si) above normal indicating ingress of seal material. Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components.	Silicon	ppm	ASTM D5185m	>25	<b>83</b>		
	Potassium	ppm	ASTM D5185m		44		
	Fuel	%	ASTM D3524		0.4		
	Water	,-	WC Method		NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.1		
	Nitration	Abs/cm	*ASTM D7624		7.3		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	24.0		
	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		
	<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG		
FLUID CONDITION	Cadima		ACTM DE105		• • • • • • • • • • • • • • • • • • • •		
	Sodium Boron	ppm ppm	ASTM D5185m ASTM D5185m		3 390		
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.	Barium		ASTM D5185m		2		
	Molybdenum	ppm	ASTM D5185m		111		
	•	ppm	ASTM D5185m				
	Manganese Magnesium	ppm	ASTM D5185m		5 532		
	Calcium	ppm	ASTM D5185m		1559		
	Phosphorus	ppm	ASTM D5185m		747		
	Zinc	ppm	ASTM D5185m		880		
	Sulfur	ppm	ASTM D5185m		2904		
		C10 10 I I	MODINI DO LOOM		2904		

Oxidation

Visc @ 100°C cSt

20.0

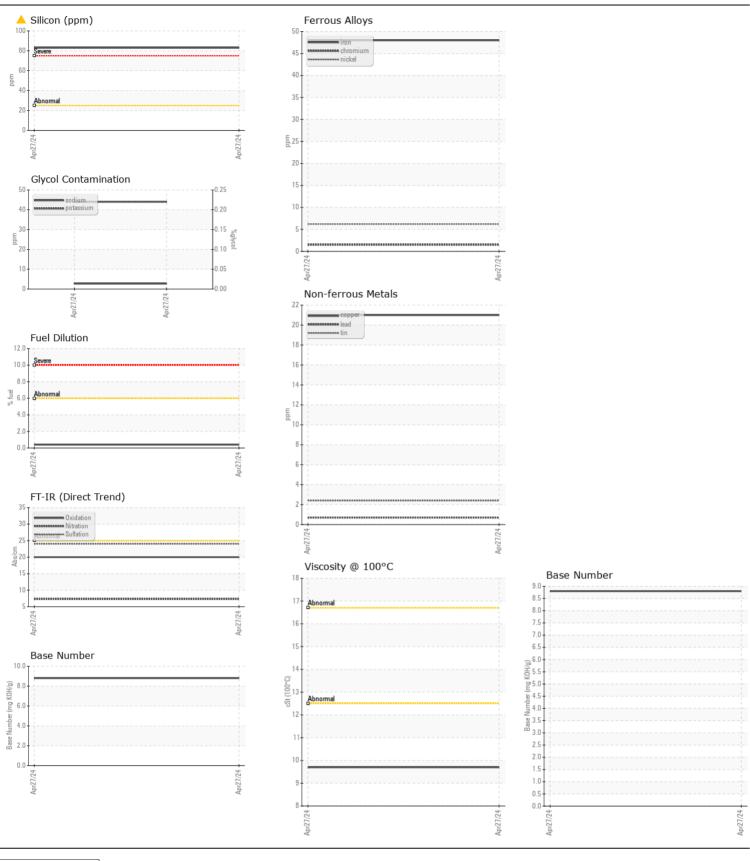
8.8

9.7

Abs/.1mm \*ASTM D7414 >25

ASTM D445

Base Number (BN) mg KOH/g ASTM D2896







Certificate L2367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

: ARI06161281 Lab Number : 06161281 Unique Number: 10996704

Received **Tested** 

: 02 May 2024 Diagnosed Test Package : CONST ( Additional Tests: FuelDilution, PercentFuel, TBN )

: 02 May 2024 - Don Baldridge

: 26 Apr 2024

**INSITUFORM TECHNOLOGIES, INC** 17988 EDISON AVE. CHESTERFIELD, MO

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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.