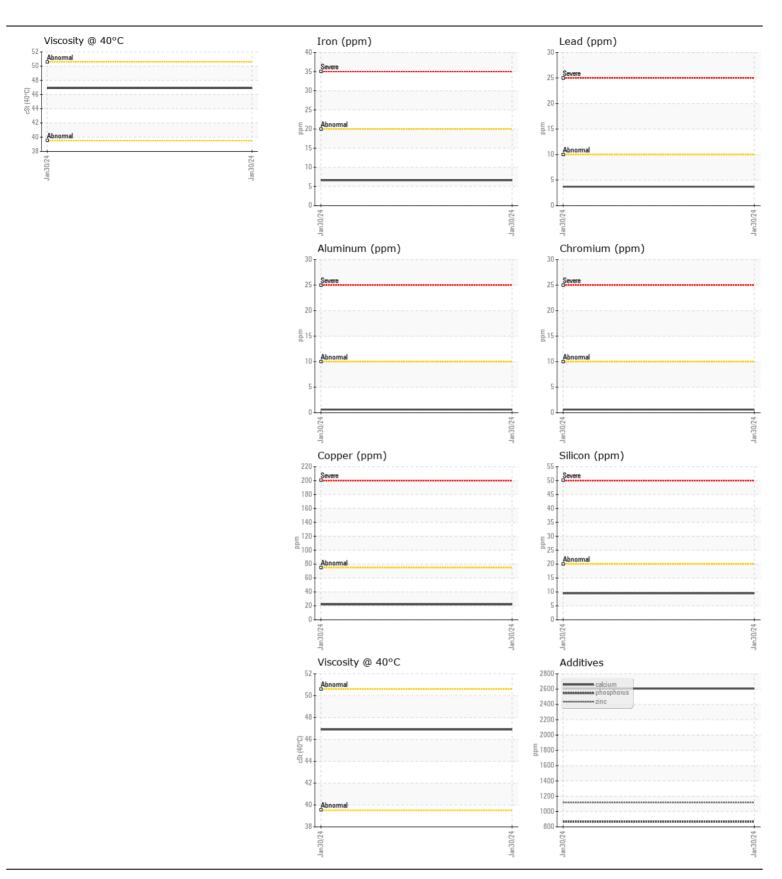
WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL NORMAL

GROVE 4301 (S/N 71183)

Component Hydraulic System Fluid

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		DC0030526		
	Sample Date		Client Info		30 Jan 2024		
	Machine Age	hrs	Client Info		5279		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		N/A		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m	~20	7		
	Chromium	ppm	ASTM D5185m		, <1		
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		<1		
	Titanium	ppm	ASTM D5185m	7.10	<1		
	Silver	ppm	ASTM D5185m		<1		
	Aluminum	ppm	ASTM D5185m	>10	<1		
	Lead	ppm	ASTM D5185m		4		
	Copper	ppm	ASTM D5185m	>75	22		
	Tin	ppm	ASTM D5185m	>10	1		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	nnm	ASTM D5185m	- 20	10		
	Potassium	ppm	ASTM D5185m		3		
There is no indication of any contamination in the oil.	Water	ppm	WC Method	>0.1	NEG		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	LIGHT		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.1	NEG		
FLUID CONDITION	Sodium	nnm	ASTM D5185m		1		
	Boron	ppm	ASTM D5185m		71		
The condition of the oil is acceptable for the time in service.	Barium	ppm	ASTM D5185m		8		
	Molybdenum	ppm	ASTM D5185m		5		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		50		
	Calcium	ppm	ASTM D5185m		2606		
	Phosphorus	ppm	ASTM D5185m		867		
	Zinc	ppm	ASTM D5185m		1119		
	Sulfur	ppm	ASTM D5185m		3919		





Certificate L2367

Report Id: CRAABEMD [WUSCAR] 06099499 (Generated: 02/26/2024 23:49:20) Rev: 1

Laboratory Sample No.

: DC0030526 Lab Number : 06099499 Unique Number : 10897729 Test Package : MOB 1

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 23 Feb 2024 : 26 Feb 2024 **Tested**

: 26 Feb 2024 - Wes Davis Diagnosed

ABERDEEN PROVING GROUND 6721 RARITON AVENUE

ABERDEEN, MD US 21005

Contact: TONY DAVIS tdavis@vacraneworks.com T: (410)688-1725

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

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