

Machine Id		
GROVE	4306 (S/N	70530)
Component		
Winch		

GEAR OIL SAE 85W140 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

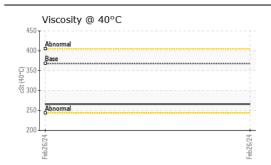
There is no indication of any contamination in the oil.

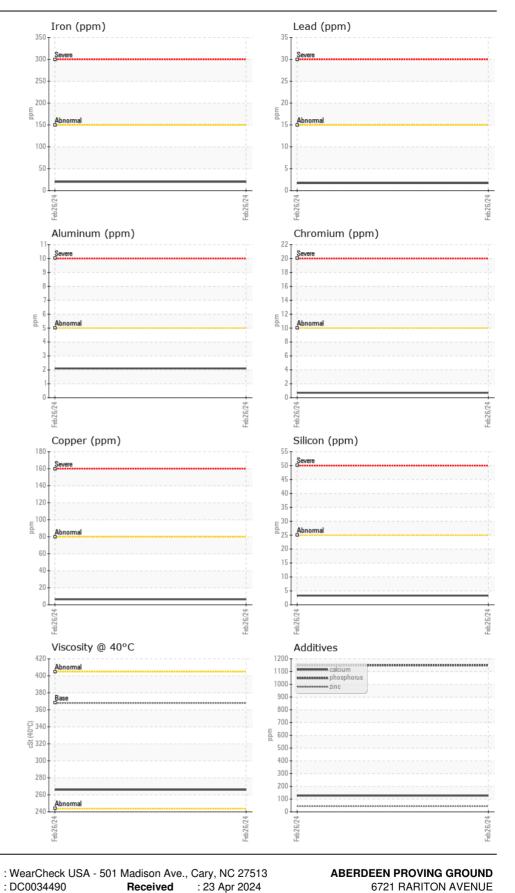
FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DC0034490		
Sample Date		Client Info		26 Feb 2024		
Machine Age	hrs	Client Info		4845		
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			
			150			
Iron Chromium	ppm	ASTM D5185m	>150	20		
	ppm	ASTM D5185m	>10	<1		
Nickel	ppm	ASTM D5185m	>10	<1		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	. 5	0		
Aluminum	ppm	ASTM D5185m	>5	2		
Lead	ppm	ASTM D5185m	>15	2		
Copper	ppm	ASTM D5185m	>80	6		
Tin	ppm	ASTM D5185m		<1		
Vanadium	ppm	ASTM D5185m		<1		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Silicon	ppm	ASTM D5185m	>25	3		
Potassium		ACTM DE105m	00	2		
Fulassium	ppm	ASTM D5185m	>20	2		
Water	ppm	WC Method	>20 >0.2	2 NEG		
	ppm scalar			_		
Water		WC Method	>0.2	NEG	 	
Water Silt	scalar	WC Method *Visual	>0.2 NONE	NEG LIGHT		
Water Silt Debris	scalar scalar	WC Method *Visual *Visual	>0.2 NONE NONE	NEG LIGHT NONE		
Water Silt Debris Sand/Dirt	scalar scalar scalar	WC Method *Visual *Visual *Visual	>0.2 NONE NONE NONE	NEG LIGHT NONE NONE		
Water Silt Debris Sand/Dirt Appearance	scalar scalar scalar scalar	WC Method *Visual *Visual *Visual *Visual	>0.2 NONE NONE NONE NORML	NEG LIGHT NONE NONE NORML		
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	scalar scalar scalar scalar scalar scalar scalar	WC Method *Visual *Visual *Visual *Visual *Visual *Visual	>0.2 NONE NONE NORML NORML	NEG LIGHT NONE NONE NORML NORML NEG	 	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	scalar scalar scalar scalar scalar scalar scalar	WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>0.2 NONE NONE NORML NORML >0.2	NEG LIGHT NONE NORE NORML NEG 5	 	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	scalar scalar scalar scalar scalar scalar ppm	WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>0.2 NONE NONE NORML NORML >0.2	NEG LIGHT NONE NORML NORML NEG 5 75		
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	scalar scalar scalar scalar scalar scalar ppm ppm	WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	 >0.2 NONE NONE NORML >0.2 400 200 	NEG LIGHT NONE NORML NORML NEG 5 75 0	 	
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	scalar scalar scalar scalar scalar scalar ppm ppm ppm	WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	>0.2 NONE NONE NORML NORML >0.2	NEG LIGHT NONE NORML NORML NEG 5 75 0 3		
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	scalar scalar scalar scalar scalar ppm ppm ppm ppm	WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	>0.2 NONE NONE NORML >0.2 400 200 12	NEG LIGHT NONE NORML NORML NEG 5 75 0 3 <1		
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm	WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >0.2 NONE NORML NORML >0.2 400 200 12 12 	NEG LIGHT NONE NORML NORML NEG 5 75 0 3 <1 18		
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	WC Method *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >0.2 NONE NONE NORML >0.2 400 200 12 12 150 	NEG LIGHT NONE NORML NORML NEG 5 75 0 3 <1 18 127		
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Malybdenum Manganese Magnesium Calcium	scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm	WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >0.2 NONE NONE NORML >0.2 400 200 12 12 150 1650 	NEG LIGHT NONE NORML NORML NEG 5 75 0 3 <1 18 127 1149		
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum Manganese Magnesium Calcium Phosphorus Zinc	scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm	WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >0.2 NONE NONE NORML NORML >0.2 400 200 12 150 1250 	NEG LIGHT NONE NORML NORML NEG 5 75 0 3 <1 18 127 1149 45		
Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm	WC Method *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >0.2 NONE NONE NORML >0.2 400 200 12 12 150 1650 	NEG LIGHT NONE NORML NORML NEG 5 75 0 3 <1 18 127 1149		

Contact/Location: TONY DAVIS - CRAABEMD







Lab Number : 06158036 Tested ABERDEEN, MD : 24 Apr 2024 Diagnosed Unique Number : 10993459 : 24 Apr 2024 - Wes Davis Test Package : MOB 1 Contact: TONY DAVIS Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. tdavis@vacraneworks.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (410)688-1725 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Laboratory

Sample No.

Contact/Location: TONY DAVIS - CRAABEMD Page 2 of 2

US 21005

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