

NORMAL WEAR NORMAL CONTAMINATION **FLUID CONDITION** NORMAL

Machine Id

24G1004 VH-140 Compone New (Unused) Oil

Gasoline Engine Oil (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		HPL0005650		
This is a baseline read-out on the submitted sample. (Customer Sample Comment: PLEASE RUN A TBN)	Sample Date		Client Info		11 Jul 2024		
	Machine Age	hrs	Client Info		0		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Not Changd		
	Filter Changed		Client Info		N/A		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m		<1		
	Chromium	ppm	ASTM D5185m		<1		
	Nickel	ppm	ASTM D5185m		0		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		4		
	Lead	ppm	ASTM D5185m		0		
	Copper	ppm	ASTM D5185m		0		
	Tin	ppm	ASTM D5185m		0		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m		22		
	Potassium	ppm	ASTM D5185m	>20	<1		
	Water		WC Method		NEG		
			*Visual	NONE	NONE		
	Silt	scalar					
	Debris	scalar	*Visual	NONE	NONE		
	Debris Sand/Dirt	scalar scalar	*Visual *Visual	NONE NONE	NONE NONE		
	Debris Sand/Dirt Appearance	scalar scalar scalar	*Visual *Visual *Visual	NONE NONE NORML	NONE NONE NORML		
	Debris Sand/Dirt Appearance Odor	scalar scalar scalar scalar	*Visual *Visual *Visual *Visual	NONE NONE	NONE NONE NORML NORML		
	Debris Sand/Dirt Appearance	scalar scalar scalar	*Visual *Visual *Visual	NONE NONE NORML	NONE NONE NORML		
FLUID CONDITION	Debris Sand/Dirt Appearance Odor	scalar scalar scalar scalar	*Visual *Visual *Visual *Visual	NONE NONE NORML	NONE NONE NORML NORML		
FLUID CONDITION	Debris Sand/Dirt Appearance Odor Emulsified Water	scalar scalar scalar scalar scalar	*Visual *Visual *Visual *Visual *Visual	NONE NONE NORML	NONE NONE NORML NORML NEG	 	
FLUID CONDITION	Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	scalar scalar scalar scalar scalar ppm	*Visual *Visual *Visual *Visual ASTM D5185m	NONE NONE NORML	NONE NORML NORML NEG 19	 	
FLUID CONDITION	Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	scalar scalar scalar scalar scalar ppm ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	NONE NONE NORML	NONE NORML NORML NEG 19 139	 	
FLUID CONDITION	Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	scalar scalar scalar scalar scalar ppm ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	NONE NONE NORML	NONE NORML NORML NEG 19 139 2	 	
FLUID CONDITION	Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	scalar scalar scalar scalar ppm ppm ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	NONE NONE NORML	NONE NORML NORML NEG 19 139 2 970		
FLUID CONDITION	Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	scalar scalar scalar scalar ppm ppm ppm ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	NONE NONE NORML	NONE NORML NORML NEG 19 139 2 970 <1		
FLUID CONDITION	Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	scalar scalar scalar scalar ppm ppm ppm ppm ppm	*Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	NONE NONE NORML	NONE NORML NORML NEG 19 139 2 970 <1 472		
FLUID CONDITION	Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum Manganese Magnesium Calcium Phosphorus Zinc	scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	NONE NONE NORML	NONE NORML NORML NEG 19 139 2 970 <1 472 1481		
FLUID CONDITION	Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	NONE NONE NORML	NONE NORML NORML NEG 19 139 2 970 <1 472 1481 711		
FLUID CONDITION	Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum Manganese Magnesium Calcium Phosphorus Zinc	scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm	*Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	NONE NONE NORML	NONE NORML NORML NEG 19 139 2 970 <1 472 1481 711 730		
FLUID CONDITION	Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm ppm ppm ppm	*Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	NONE NONE NORML	NONE NORML NORML NEG 19 139 2 970 <1 472 1481 711 730 24183		

Viscosity Index (VI) Scale ASTM D2270

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