

WEAR SEVERE CONTAMINATION SEVERE FLUID CONDITION NORMAL

Machine Id **22033** Component **Differential** Fluid **GEAR OIL SAE 80W90 (--- GAL)**

RECOMMENDATION

We advise that you check for the source of water entry. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

WEAR

Gear wear is indicated.

CONTAMINATION

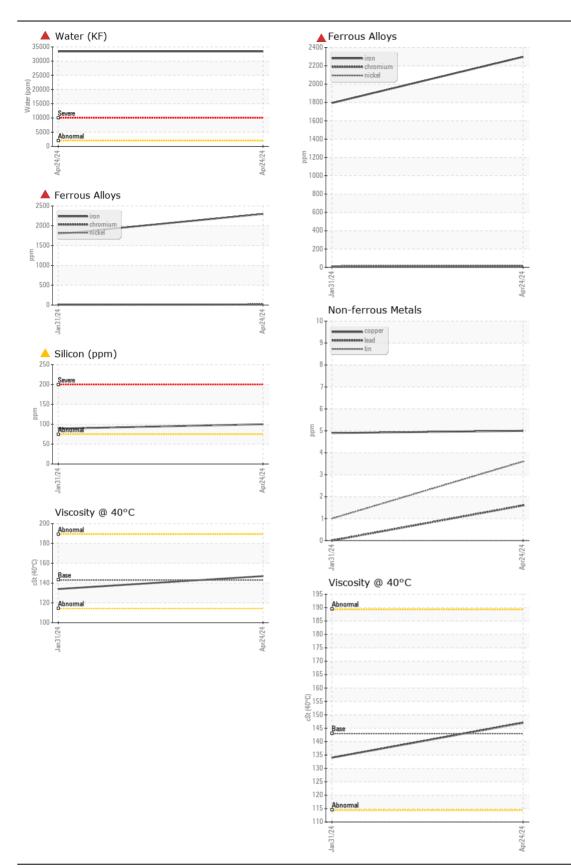
Elemental level of silicon (Si) above normal indicating ingress of seal material. High concentration of visible dirt/debris present in the oil. There is a high concentration of water present in the oil.

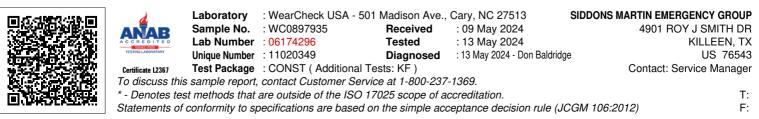
Test	UOM	Method	Limit/Abn	Cı	urrent	Hi	story1	His	story2
Sample Number		Client Info		wo	C0897935	W	0897938		
Sample Date		Client Info		24	Apr 2024	31	Jan 2024		
Machine Age	hrs	Client Info		0		18	01		
Oil Age	hrs	Client Info		0		0			
Filter Age	hrs	Client Info		0		0			
Oil Changed		Client Info		No	t Changd	Cł	nanged		
Filter Changed		Client Info		No	t Changd	Cł	nanged		
Sample Status				SE	EVERE	SE	EVERE		
Iron	ppm	ASTM D5185m	>500		2298	_	1794		
Chromium	ppm	ASTM D5185m	>10		15		11		
Nickel	ppm	ASTM D5185m	>10		4		2		
Titanium	ppm	ASTM D5185m			1		<1		
Silver	ppm	ASTM D5185m			0		0		
Aluminum	ppm	ASTM D5185m	>25		6		4		
Lead	ppm	ASTM D5185m	>25		2		0		
Copper	ppm	ASTM D5185m	>100		5		5		
Tin	ppm	ASTM D5185m	>10		4		1		
Vanadium	ppm	ASTM D5185m			0		0		
White Metal	scalar	*Visual	NONE		NONE		NONE		
Yellow Metal	scalar	*Visual	NONE		NONE		NONE		
Silicon	ppm	ASTM D5185m	>75		100		89		
Silicon Potassium	ppm ppm	ASTM D5185m ASTM D5185m	>75 >20		100 48		89 35		
Potassium	ppm	ASTM D5185m	>20		48		35		
Potassium Water	ppm %	ASTM D5185m ASTM D6304	>20 >.2		48 3.34		35		
Potassium Water ppm Water	ppm % ppm	ASTM D5185m ASTM D6304 ASTM D6304	>20 >.2 >2000	A	48 3.34 33400		35		
Potassium Water ppm Water Silt	ppm % ppm scalar	ASTM D5185m ASTM D6304 ASTM D6304 *Visual	>20 >.2 >2000 NONE	A	48 3.34 33400 NONE		35 NONE		
Potassium Water ppm Water Silt Debris	ppm % ppm scalar scalar	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual	>20 >.2 >2000 NONE NONE	A	48 3.34 33400 NONE HEAVY		35 NONE LIGHT		
Potassium Water ppm Water Silt Debris Sand/Dirt	ppm % ppm scalar scalar scalar	ASTM D5185m ASTM D6304 *Visual *Visual *Visual	>20 >.2 >2000 NONE NONE NONE	A	48 3.34 33400 NONE HEAVY NONE		35 NONE LIGHT NONE		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance	ppm % ppm scalar scalar scalar scalar	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual	>20 >.2 >2000 NONE NONE NONE NORML		48 3.34 33400 NONE HEAVY NONE NORML		35 NONE LIGHT NONE NORML		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water	ppm % ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual *Visual	>20 >.2 >2000 NONE NONE NORML NORML >.2		48 3.34 33400 NONE HEAVY NONE NORML 0.2%		35 NONE LIGHT NONE NORML NORML NEG		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium	ppm % ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m ASTM D6304 *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m	>20 >.2 >2000 NONE NONE NORML NORML >.2 >170		48 3.34 33400 NONE HEAVY NORE NORML 0.2%		35 NONE LIGHT NONE NORML NORML NEG		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron	ppm % ppm scalar scalar scalar scalar scalar scalar ppm	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	 >20 >20 >2000 NONE NONE NORML NORML >.2 >170 400 		48 3.34 33400 NONE HEAVY NONE NORML 0.2% 24 159		35 NONE LIGHT NONE NORML NORML NEG 14 67		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium	ppm % ppm scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m	 >20 >.2 >2000 NONE NONE NORML >.2 >170 400 200 		48 3.34 33400 NONE HEAVY NONE NORML 0.2% 24 159 24		35 NONE LIGHT NORML NORML NORML NEG 14 67 19		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum	ppm % ppm scalar scalar scalar scalar scalar scalar ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m	 >20 >20 >2000 NONE NONE NORML NORML >.2 >170 400 		48 3.34 33400 NONE HEAVY NONE NORML 0.2% 24 159 24 7		35 NONE LIGHT NORML NORML NORML NEG 14 67 19 5		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese	ppm % scalar scalar scalar scalar scalar scalar ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >20 >200 >2000 NONE NONE NORML NORML >.2 >170 400 200 12 		48 3.34 33400 NONE HEAVY NONE NORML 0.2% 24 159 24 159 24 7 68		35 NONE LIGHT NONE NORML NORML NEG 14 67 19 5 43		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	ppm % ppm scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >20 >.2 >2000 NONE NONE NORML >.2 >170 400 200 12 12 		48 3.34 33400 NONE HEAVY NONE NORML 0.2% 24 159 24 7 68 23		35 NONE LIGHT NORML NORML NORML NEG 14 67 19 5 43 43 11		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium	ppm % scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >20 >.2 >2000 NONE NONE NORML >.2 >170 400 200 12 12 12 150 		48 3.34 33400 NONE HEAVY NONE NORML 0.2% 24 24 24 7 68 23 23 70		35 NONE LIGHT NORML NORML NORML NORML 14 67 19 5 43 11 74		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum Manganese Magnesium Calcium	ppm % scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >20 >200 >2000 NONE NONE NORML NORML >20 200 200 12 12 150 1650 		48 3.34 33400 NONE HEAVY NONE NORML 0.2% 24 159 24 159 24 7 68 23 70 1012		35 NONE LIGHT NONE NORML NORML NORML 14 67 19 5 43 11 74 801		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Molybdenum Manganese Magnesium Calcium	ppm % scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >20 >20 >200 NONE NONE NORML >.2 >170 400 200 12 150 1250 		48 3.34 33400 NONE HEAVY NONE NORML 0.2% 24 159 24 7 68 23 70 68 23 70 1012 211		35 NONE LIGHT NORE NORML NORML NORML NEG 14 67 19 5 43 11 74 801 151		
Potassium Water ppm Water Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Malybdenum Manganese Magnesium Calcium	ppm % scalar scalar scalar scalar scalar scalar ppm ppm ppm ppm ppm	ASTM D5185m ASTM D6304 ASTM D6304 *Visual *Visual *Visual *Visual *Visual *Visual ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	 >20 >200 >2000 NONE NONE NORML NORML >20 200 200 12 12 150 1650 		48 3.34 33400 NONE HEAVY NONE NORML 0.2% 24 159 24 159 24 7 68 23 70 1012		35 NONE LIGHT NONE NORML NORML NORML 14 67 19 5 43 11 74 801		

FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

Contact/Location: Service Manager - SIDKIL





Contact/Location: Service Manager - SIDKIL Page 2 of 2