

OIL ANALYSIS REPORT

ISO

Area **RIG 26 DEC 7814** Component **Hydraulic System** Fluid **HYDRAULIC OIL (PE) ISO 10 (--- GAL)**

DIAGNOSIS

Recommendation

Little or no information is provided as to the component and lubricant being tested. Recommendations are therefore generic in nature and may not apply to the current application. Please forward information as to equipment type, reservoir capacity, lubricant type and any pertinent information to allow for a more accurate assessment. We recommend you service the filters on this component. Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) HYDRAULIC OIL (PE) ISO 10. Please confirm.

NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

There is a light amount of silt (particulates < 14 microns in size) present in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

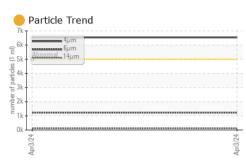
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0926856		
Sample Date		Client Info		03 Apr 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				ATTENTION		
CONTAMINATION	N	method	limit/base	current	history1	history2
Water		WC Method	>0.05	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	0		
Chromium	ppm	ASTM D5185(m)	>20	0		
Nickel	ppm	ASTM D5185(m)	>20	0		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		0		
Aluminum	ppm	ASTM D5185(m)	>20	0		
Lead	ppm	ASTM D5185(m)	>20	0		
Copper	ppm	ASTM D5185(m)	>20	<1		
Tin	ppm	ASTM D5185(m)	>20	0		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES						
ADDITIVES Boron	ppm	method ASTM D5185(m)	limit/base	current <1	history1	history2
	ppm ppm					
Boron		ASTM D5185(m)	5	<1		
Boron Barium	ppm	ASTM D5185(m) ASTM D5185(m)	5 5	<1 0		
Boron Barium Molybdenum	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5	<1 0 0		
Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5 5	<1 0 0 0		
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5 5 5	<1 0 0 0 0		
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5 5 5 5	<1 0 0 0 0 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5 5 5 5 5 27500	<1 0 0 0 0 <1 41474		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5 5 5 5 5 27500 5	<1 0 0 0 0 <1 41474 2		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5 5 5 5 5 27500 5	<1 0 0 0 <1 41474 2 1563 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5 5 5 5 27500 5 2500	<1 0 0 0 <1 41474 2 1563 <1		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5 5 5 5 27500 5 2500 5 2500	<1 0 0 0 <1 41474 2 1563 <1 <i>current</i>	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon	ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	5 5 5 5 5 27500 5 2500 5 2500	<1 0 0 0 <1 41474 2 1563 <1 current 0	 history1 	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	5 5 5 5 27500 5 22500 5 2500 imit/base >15	<1 0 0 0 <1 41474 2 1563 <1 current 0 3 17	 history1	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	5 5 5 5 27500 5 2500 5 2500 imit/base >15	<1 0 0 0 <1 41474 2 1563 <1 current 0 3 17	 history1 	 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	5 5 5 5 27500 5 27500 5 2500 imit/base >20 imit/base	<1 0 0 0 (0 <1 41474 2 1563 <1 563 <1 Current 0 3 17 Current	 history1 history1	 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	5 5 5 5 27500 5 27500 5 2500 imit/base >20 imit/base >5000	<1 0 0 0 (0 (1 41474 2 1563 <1 563 <1 0 0 3 17 0 0 536	 history1 history1 	 history2 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	5 5 5 27500 5 27500 5 2500 imit/base >15 >20 imit/base >5000 >1300	<1 0 0 0 (1 41474 2 1563 <1 current 0 3 17 current 6536 1229	 history1 history1 	
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D76477 ASTM D7647	5 5 5 5 27500 5 2500 5 2500 imit/base >20 imit/base >5000 >1300 >160	<1 0 0 0 <1 41474 2 1563 <1 current 0 3 17 current 6536 1229 111	 history1 history1	 history2 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647	5 5 5 5 27500 5 2500 5 2500 imit/base >15 >20 imit/base >5000 >1300 >160 >40	<1 0 0 0 -1 41474 2 1563 <1 Current 0 3 17 Current 0 6536 1229 111 41		
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium PtUID CLEANLIN Particles >4µm Particles >1µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	5 5 5 5 27500 5 27500 5 2500 2500 215 20 215 20 20 215 20 215 20 215 20 215 20 215 20 215 20 215 20 215 20 215 20 215 20 215 20 215 20 215 20 215 215 215 215 215 215 215 215 215 215	<1 0 0 0 0 <1 41474 2 1563 <1 Current 0 3 17 Current 6536 1229 111 41 41 4 2 20/17/14		

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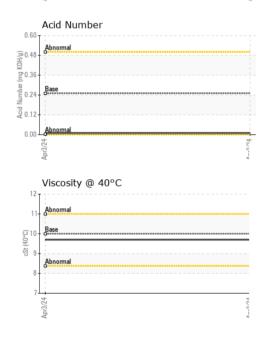
ontact/Location: Stuart Potter - SAFAJA2



OIL ANALYSIS REPORT







FLUID DEGRADA	TION	method	limit/base	current	history1	history2
cid Number (AN)	mg KOH/g	ASTM D974*	0.25	0.01		
VISUAL		method	limit/base	current	history1	history2
Vhite Metal	scalar	Visual*	NONE	NONE		
ellow Metal	scalar	Visual*	NONE	NONE		
Precipitate	scalar	Visual*	NONE	NONE		
Silt Debris	scalar scalar	Visual* Visual*	NONE NONE	NONE		
Sand/Dirt	scalar	Visual*	NONE	NONE		
ppearance	scalar	Visual*	NORML	NORML		
Ddor	scalar	Visual*	NORML	NORML		
Emulsified Water	scalar	Visual*	>0.05	NEG		
Free Water	scalar	Visual*		NEG		
FLUID PROPERT	IES	method	limit/base	current	history1	history2
/isc @ 40°C	cSt	ASTM D7279(m)	10	9.7		
SAMPLE IMAGES	\$	method	limit/base	current	history1	history2
Color					no image	no image
Bottom					no image	no image
GRAPHS						
Ferrous Alloys			101 10	Particle Count		
iron			491,520			2
nickel			122,880	Severe		-2
			30,720			-2
3/24			42/5 1 ml	Abnormal		-2
Apr3/24			Apr3/24 (per 1 ml) 1920	Abnormal	•	-2' -11
Non-ferrous Metals	5		Apr3/24 Apr3/24 1.920 800 800 800 800 800 800 800 800 800 8			-2
Non-ferrous Metals	5		Apr3/274 Apr3/274 Apr3/274 1.020 1200 1200 1200 1200 1200 1200 120			-2/ -11 -11 -11
Non-ferrous Metal	5		Apr3/2- 1 marticles (per 1 m 80			-2 -11 -11 -11 -11
Non-ferrous Metals	S		Apr3/2- Apr3/2- 480 120 120			-2
Non-ferrous Metals	5		2/2/2/04 1.9200 1.9200 1.9200 1.9200 1.9200 1.9200 1.9200 1.920			-12
Non-ferrous Metals	5		April 2012 480 1000 1000 1000 1000 1000 1000 1000		1411 2111	-11
Non-ferrous Metals	5		April 2012 April 2012	βμ Acid Number	14μ 21μ	-12
Non-ferrous Metals	5		April 2012 April 2012	βμ Acid Number	14μ 21μ	-11
Non-ferrous Metals	5		April 2012 April 2012	βμ Acid Number	14μ 21μ	-11
Non-ferrous Metals	5		April 2012 April 2012	βμ Acid Number	14μ 21μ	-11
Non-ferrous Metals	S		April 2012 480 1000 1000 1000 1000 1000 1000 1000	βμ Acid Number	14μ 21μ	-11

Laboratory CALA Sample No. : WC0926856 : 04 Apr 2024 574 Monarch Ave Received Lab Number : 02626825 Tested : 05 Apr 2024 Ajax, ON ISO 17025:2017 Accredited Laboratory CA L1S 2G8 Unique Number : 5759957 Diagnosed : 05 Apr 2024 - Wes Davis Test Package : IND 2 (Additional Tests: TAN Man) Contact: Stuart Potter stuart.potter@safrangroup.com To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. T: Validity of results and interpretation are based on the sample and information as supplied. F: (905)683-6983

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St (40°C)

Contact/Location: Stuart Potter - SAFAJA2 Page 2 of 2