

## **OIL ANALYSIS REPORT**

Sample Rating Trend

ISO

Machine Id 843 Component Hydraulic System Fluid {not provided} (--- GAL)

#### DIAGNOSIS

#### Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

#### Contamination

There is a high 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	<b>MATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		RH0002001		
Sample Date		Client Info		21 Feb 2024		
Machine Age	hrs	Client Info		4449		
Oil Age	hrs	Client Info		1		
Oil Changed		Client Info		Changed		
Sample Status				ABNORMAL		
CONTAMINATIO	N	method	limit/base	current	history1	history2
Meter	•		0.4	NEO	motory	motory
water		WC Method	>0.1	NEG		
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184		14		
Iron	ppm	ASTM D5185m	>20	0		
Chromium	ppm	ASTM D5185m	>10	0		
Nickel	ppm	ASTM D5185m	>10	0		
Titanium	ppm	ASTM D5185m		0		
Silver	ppm	ASTM D5185m		0		
Aluminum	ppm	ASTM D5185m	>10	1		
Lead	ppm	ASTM D5185m	>10	0		
Copper	ppm	ASTM D5185m	>75	0		
Tin	ppm	ASTM D5185m	>10	<1		
Vanadium	ppm	ASTM D5185m		0		
Cadmium	ppm	ASTM D5185m		0		
				-		
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES	nom	method	limit/base	current	history1	history2
ADDITIVES Boron Barium	ppm	method ASTM D5185m	limit/base	current 96	history1	history2
ADDITIVES Boron Barium Molybdenum	ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 96 0	history1  	history2
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current 96 0 0	history1	history2  
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	2 current 96 0 0 0 28	history1   	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current           96           0           0           0           28           3209	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current           96           0           0           28           3209           1081	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current           96           0           0           28           3209           1081           1365	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	methodASTM D5185mASTM D5185mASTM D5185mASTM D5185mASTM D5185mASTM D5185mASTM D5185mASTM D5185mASTM D5185mASTM D5185m	limit/base	current           96           0           0           28           3209           1081           1365           6262	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current           96           0           0           28           3209           1081           1365           6262	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current           96           0           0           28           3209           1081           1365           6262           current	history1 history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base	current         96         0         0         28         3209         1081         1365         6262         current         13	history1 history1	history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	limit/base limit/base >20	current         96         0         0         28         3209         1081         1365         6262         current         13         0	history1 history1	history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	limit/base	current         96         0         0         28         3209         1081         1365         6262         current         13         0         0         0         0         0         0         0	history1	history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	limit/base limit/base >20 >20 limit/base	current         96         0         0         28         3209         1081         1365         6262         current         13         0         0         0         0         0         current	history1 history1 history1 history1	history2 history2 history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	limit/base limit/base >20 >20 limit/base >5000	current         96         0         0         28         3209         1081         1365         6262         current         13         0         0         0         13455	history1 history1 history1 history1	history2 history2 history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	limit/base   	current         96         0         0         28         3209         1081         1365         6262         current         13         0         0         0         13455         4000000000000000000000000000000000000	history1	history2 history2 history2 history2 history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	limit/base 	current         96         0         0         28         3209         1081         1365         6262         current         13         0         0         0         13415	history1 history1 history1 history1	history2 history2 history2 history2 history2 history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m	limit/base 	current         96         0         0         28         3209         1081         1365         6262         current         13         0         0         0         13415         134568         14568         3415         104	history1 history1 history1 history1 history1 history1 history1	history2 history2 history2 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method           ASTM D5185m           ASTM D7647           ASTM D7647           ASTM D7647           ASTM D7647           ASTM D7647           ASTM D7647	limit/base limit/base >20 >20 limit/base >20 >20 limit/base >20 >100 >100 >10	current         96         0         0         28         3209         1081         1365         6262         current         13         0         0         0         134568         3415         104         20         1	history1                           history1            history1                  history1	history2 history2 history2 history2 history2

ISO 4406 (c) >19/17/14 **A 21/19/14** 

**Oil Cleanliness** 



# **OIL ANALYSIS REPORT**

Particle Trend	FLUID DEGRADA	ATION	method	limit/base	current	history1	history2
-4μm 6μm	Acid Number (AN)	mg KOH/g	ASTM D8045		1.05		
14μm	VISUAL		method	limit/base	current	historv1	historv2
	White Metal	scalar	*\/ieual		NONE		
nal	Yellow Metal	scalar	*Visual	NONE	NONE		
	Precipitate	scalar	*Visual	NONE	NONE		
24	Silt	scalar	*Visual	NONE	NONE		
Feb 21/	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.1	NEG		
	Free Water	scalar	*Visual		NEG		
mai	FLUID PROPERT	TIES	method	limit/base	current	history1	history2
	Visc @ 40°C	cSt	ASTM D445		63.7		
21/24 -	SAMPLE IMAGES	S	method	limit/base	current	history1	history2
Febi							
mber	Color				a	no image	no image
	Bottom				((. (05)))	no image	no image
	GRAPHS						1
4. C.	Ferrous Alloys				Particle Count	:	
C.M.	10			491,520	I		T <sup>26</sup>
osity @ 40°C	E 5 minim			122,880	- -		-24
· -				30,720	- Devele		-22
	0			₹ 7,680	Abnormal		-20
mal	21/24			o21/24	[··· ] ···		18
	10 10			Eel Les	1.		10
	Non-ferrous Metal	S		12 480		<b>\</b>	+16
	copper			ы 120 е	1		-14
24	8. 5 -			2 30	-		-12
6 T				8	-		-10
	0 4			42/1	-		-8
	Feb 21			Feb2			6
	Viscosity @ 40°C			1	<sup>4</sup> نہ 6 Acid Number	14µ 21µ	38µ 71µ
	70			(B)1.5			
	Abnormal			g 1.0			
	· 50 - C 경 <sub>40</sub> Abnormal			a e 0.5			
	30						
V.	1/24			A A	1/24		
1 6 T	Feb2			Feb2	Feb2		
	: WearCheck USA - 50	1 Madiso	n Ave Carv	. NC 27513		GENERAL	EXCAVATIO
ANAR Sample No.	: RH0002001	Recei	ved : 23	3 Feb 2024		9	757 RIDER R
Lab Number	: 06099101	Teste	d : 26	6 Feb 2024	Dalahidan	WA	RRENTON, V
Unique Number	: 1089/331 : MOR 2 ( Additional To	Diagr	iosed : 26	rep 2024 - Don	Balaridge	Contact: IE	US 2018 BBY WEAVE
Continue 19987 Test Dackage							
Certificate L2367 Test Package	contact Customer Servi	ice at 1-8	00-237-1369	9.		Contact. CE	

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