

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Area Assy RO/Rig 24 DEC 7525

Hydraulic System Fluid SKYDROL LD-4 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The water content is negligible. The system and fluid cleanliness is acceptable.

Fluid Condition

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

SAMPLE INFORM	NATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0926849	WC0920419	
Sample Date		Client Info		03 Apr 2024	12 Mar 2024	
Machine Age	hrs	Client Info		0	0	
Oil Age	hrs	Client Info		0	0	
Oil Changed		Client Info		N/A	N/A	
Sample Status				NORMAL	NORMAL	
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>20	0	0	
Chromium	ppm	ASTM D5185(m)	>20	0	0	
Nickel	ppm	ASTM D5185(m)	>20	0	<1	
Titanium	ppm	ASTM D5185(m)		0	0	
Silver	ppm	ASTM D5185(m)		0	0	
Aluminum	ppm	ASTM D5185(m)	>20	0	<1	
Lead	ppm	ASTM D5185(m)	>20	0	0	
Copper	ppm	ASTM D5185(m)	>20	<1	<1	
Tin	ppm	ASTM D5185(m)	>20	0	0	
Antimony	ppm	ASTM D5185(m)		0	0	
Vanadium	ppm	ASTM D5185(m)		0	0	
Beryllium	ppm	ASTM D5185(m)		0	0	
Cadmium	ppm	ASTM D5185(m)		0	0	
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	0	2	1	
Barium	ppm	ASTM D5185(m)	0	0	0	
Molybdenum	ppm	ASTM D5185(m)	0	0	0	
Manganese	ppm	ASTM D5185(m)		0	0	
Manganese Magnesium	ppm ppm	ASTM D5185(m) ASTM D5185(m)	0	0 <1	0 <1	
-		× 7		-		
Magnesium	ppm	ASTM D5185(m)		<1	<1	
Magnesium Calcium	ppm ppm	ASTM D5185(m) ASTM D5185(m)	0 20000	<1 2	<1 3	
Magnesium Calcium Phosphorus	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 20000	<1 2 41793	<1 3 39628	
Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 20000 0	<1 2 41793 2	<1 3 39628 2	
Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 20000 0	<1 2 41793 2 1551	<1 3 39628 2 1692	
Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 20000 0 1900 limit/base	<1 2 41793 2 1551 <1	<1 3 39628 2 1692 <1	
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method ASTM D5185(m)	0 20000 0 1900 limit/base >15	<1 2 41793 2 1551 <1 current	<1 3 39628 2 1692 <1 kistory1	
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) method	0 20000 0 1900 limit/base >15	<1 2 41793 2 1551 <1 current 0	<1 3 39628 2 1692 <1 history1 <1	 history2
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	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)	0 20000 0 1900 limit/base >15	<1 2 41793 2 1551 <1 current 0 3 20	<1 3 39628 2 1692 <1 + istory1 <1 3	 history2
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm 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)	0 20000 0 1900 limit/base >15 >20	<1 2 41793 2 1551 <1 current 0 3	<1 3 39628 2 1692 <1 history1 <1 3 19	 history2
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Water	ppm 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 D6304*	0 20000 0 1900 limit/base >15 >20 >0.6	<1 2 41793 2 1551 <1 current 0 3 20 0.336	<1 3 39628 2 1692 <1 history1 <1 3 19 0.323	 history2
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm %	ASTM D5185(m) ASTM D5304*	0 20000 0 1900 limit/base >15 >20 >0.6 >6000	<1 2 41793 2 1551 <1 current 0 3 20 0.336 3368	<1 3 39628 2 1692 <1 history1 <1 3 19 0.323 3232	 history2
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm	ppm 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 D6304* ASTM D6304*	0 20000 0 1900 Imit/base >15 >20 >0.6 >6000 Imit/base	<1 2 41793 2 1551 <1	<1 3 39628 2 1692 <1 history1 <1 3 19 0.323 3232 history1	 history2 history2
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm %	ASTM D5185(m) ASTM D6304* ASTM D6304* ASTM D6304*	0 20000 0 1900 imit/base >15 >20 >20 >0.6 >6000 imit/base >5000 >1300	<1 2 41793 2 1551 <1	<1 3 39628 2 1692 <1 1692 <1 history1 <1 3 19 0.323 3232 history1 1948 412	 history2 history2
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Water ppm Water Ppm Water FLUID CLEANLIN Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm %	ASTM D5185(m) ASTM D6304* ASTM D6304* ASTM D6304* ASTM D7647 ASTM D7647 ASTM D7647	0 20000 0 1900 imit/base >15 >20 >20 >0.6 >6000 imit/base >5000 >1300 >160	<1 2 41793 2 1551 <1 1551 <1 Current 0 3 20 0.336 3368 Current 1339 309 36	<1 3 39628 2 1692 <1 1692 <1 history1 <1 3 19 0.323 3232 history1 1948 412 19	 history2 history2 history2
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Water ppm Water Ppm Water FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm %	ASTM D5185(m) ASTM D5047 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	0 20000 0 1900 Imit/base >15 >20 >0.6 >6000 Imit/base >5000 >1300 >160 >40	<1 2 41793 2 1551 <1	<1 3 39628 2 1692 <1 1692 <1 history1 <1 3 19 0.323 3232 history1 1948 412	 history2 history2 history2
Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Water ppm Water Ppm Water FLUID CLEANLIN Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm %	ASTM D5185(m) ASTM D6304* ASTM D6304* ASTM D6304* ASTM D7647 ASTM D7647 ASTM D7647	0 20000 0 1900 >15 >15 >20 >0.6 >6000 >0 imit/base >5000 >1300 >160 >40 >10	<1 2 41793 2 1551 <1 1551 <1 Current 0 3 20 0.336 3368 Current 1339 309 36	<1 3 39628 2 1692 <1 1692 <1 1692 <1 10 0.323 3232	 history2 history2 history2



OIL ANALYSIS REPORT

Water (KF)	FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
00 - Severe	Acid Number (AN)	mg KOH/g	ASTM D974*	0.10	0.03	0.04	
00-00-	VISUAL		method	limit/base	current	history1	history2
00 - Abnormal	White Metal	scalar	Visual*	NONE	NONE	NONE	
	Yellow Metal	scalar	Visual*	NONE	NONE	NONE	
00-	Precipitate	scalar	Visual*	NONE	NONE	NONE	
ar12/24 +	Silt	scalar	Visual*	NONE	NONE	NONE	
Marl 2/24	Debris	scalar	Visual*	NONE	NONE	NONE	
Particle Trend	Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	
	Appearance	scalar	Visual*	NORML	NORML	NORML	
k - μοποιτια - 4μm βματικά βμα	Odor		Visual*	NORML	NORML	NORML	
k	Emulsified Water	scalar	Visual*	>0.6	NEG	NEG	
	Free Water	scalar	Visual*		NEG	NEG	
k	FLUID PROPER	TIES	method	limit/base	current	history1	history2
k	Visc @ 40°C	cSt	ASTM D7279(m)	11.42	8.7	8.6	
Mar12/24	SAMPLE IMAGE	S	method	limit/base	current	history1	history2
≥ Water (KF)	Color						no image
0 +	Bottom						no image
0	GRAPHS						
Ма1 2/2 пр. Ма1 2/2 година. Россили	Ferrous Alloys			491,52	Particle Coun	t	т26
W	iron						
Viscosity @ 40°C	E. 5 -			122,88	Severe		+24
Severe				30,72	0-		-22
				₹ Ē ^{7,68}	0 Abnormal		-20 8
8+	Mar12/24			Apr3/24 . (per 1 ml)	0	N	-18
8 - Abnormal	– Non-ferrous Meta	ls		Apr3/24 4 particles (per 1 ml) 2601			-20 -18 -16
6 - Severe	10 copper]			5		•	14
4	unnesses lead			12 numper			-12
Marl 2/24	5. 5			3			12
× v	0				8-		+10
Particle Trend	12/24			Apr3/24	2-		-8
4μm	Mai			A	0 4µ 6µ	14µ 21µ	38µ 71µ
kk - δοτοπτά δμm ····································	Viscosity @ 40°C	Acid Number		- <i>j</i>			
k +	12 Basemal		Severe		1		
k	(1)010 (1)00			() HOX Bu 1.5 L HOX Bu 1.0 L HOX 0.5	Abnormal		
k +	³ Abnormal 6 Severe				0		
	4			÷	0		4
Mar12/24	Mar12/2			Apr3/24	Mar12/24		Apr3/24
Laboratory Sample No. Lab Number	: WearCheck - C8-117 : WC0926849	5 Appleby Recei Teste Diagr	ved : 04 d : 05	igton, ON L7 1 Apr 2024 5 Apr 2024 5 Apr 2024 - V	L 5H9		d ing Systems 4 Monarch Ave Ajax, ON CA L1S 2G8

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