

OIL ANALYSIS REPORT

Sample Rating Trend

ISO

Area Skydrol Room/RIG 19 Machine Id DEC 2643

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

DIAGNOSIS

Recommendation

We recommend you service the filters on this component. 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

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

Fluid Condition

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

				Mar2024			
SAMPLE INFORM	ATION	method	limit/base	current	history1	history2	
Sample Number		Client Info		WC0920422			
Sample Date		Client Info		12 Mar 2024			
Machine Age	hrs	Client Info		0			
Oil Age	hrs	Client Info		0			
Oil Changed		Client Info		N/A			
Sample Status				ATTENTION			
WEAR METALS		method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>20	<1			
Chromium	ppm	ASTM D5185(m)	>20	0			
Nickel	ppm	ASTM D5185(m)	>20	<1			
Titanium	ppm	ASTM D5185(m)		0			
Silver	ppm	ASTM D5185(m)		0			
Aluminum	ppm	ASTM D5185(m)	>20	<1			
Lead	ppm	ASTM D5185(m)	>20	0			
Copper	ppm	ASTM D5185(m)	>20	0			
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		method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	0	<1			
Barium	ppm	ASTM D5185(m)	0	0			
Molybdenum	ppm	ASTM D5185(m)	0	0			
Manganese	ppm	ASTM D5185(m)		0			
Magnesium	ppm	ASTM D5185(m)	0	<1			
Calcium	ppm	ASTM D5185(m)	0	1			
Phosphorus	ppm	ASTM D5185(m)	20000	38982			
Zinc	ppm	ASTM D5185(m)	0	<1			
Sulfur	ppm	ASTM D5185(m)	1900	1679			
Lithium	ppm	ASTM D5185(m)		<1			
CONTAMINANTS		method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>15	0			
Sodium	ppm	ASTM D5185(m)		2			
Potassium	ppm	ASTM D5185(m)	>20	21			
Water	%	ASTM D6304*	>0.6	0.129			
ppm Water	ppm	ASTM D6304*	>6000	1291			
FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2	
Particles >4µm		ASTM D7647	>5000	8188			
Particles >6µm		ASTM D7647	>1300	967			
Particles >14µm		ASTM D7647	>160	18			
Particles >21µm		ASTM D7647		8			
Particles >38µm		ASTM D7647	>10	3			
Particles >71µm		ASTM D7647		2			
Oil Cleanliness		ISO 4406 (c)	>19/17/14	20/17/11			
Un Ultarini 1655		100 4400 (C)	213/11/14	- 20/11/11			



OIL ANALYSIS REPORT

10k -	Particle Trend	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Ē 8k-	4μm 6μm	Acid Number (AN)	mg KOH/g	ASTM D974*	0.10	0.01		
- [] saj 6k -	14μm	VISUAL		method	limit/base	current	history1	history2
number of particles (1 8 8 7 8	Abnormal	White Metal	scalar	Visual*	NONE	NONE		
Jaquinu 2k -		Yellow Metal	scalar	Visual*	NONE	NONE		
		Precipitate	scalar	Visual*	NONE	NONE		
0k -	2/24 -	Silt	scalar	Visual*	NONE	NONE		
	Mar12/24	Debris	scalar	Visual*	NONE	NONE		
-	Water (KF)	Sand/Dirt	scalar	Visual*	NONE	NONE		
14000		Appearance	scalar	Visual*	NORML	NORML		
12000 · 10000 ·	Severe	Odor Emulsified Water	scalar scalar	Visual* Visual*	NORML >0.6	NORML NEG		
r (ppm)	Abramal	Free Water	scalar	Visual*	>0.0	NEG		
ate 6000 ·	Abnormal	FLUID PROPERT	IES	method	limit/base	current	history1	history2
2000 -		Visc @ 40°C	cSt	ASTM D7279(m)	11.42	9.5		
0-	Mar12/24 + Mar12/24 +	SAMPLE IMAGES	6	method	limit/base	current	history1	history2
1.60 1.40 (^B)/ 1.20	≊ ≊ Acid Number Severe	Color					no image	no image
4cid Wrumper (mg KOH/g) 0.8.0 mg KOH/g) 0.8.0 mg KOH/g)	Abnormal	Bottom					no image	no image
≪ 0.20 0.00	Base	GRAPHS						
0.00	Mar12/24	Ferrous Alloys				Particle Count		
	Mar	10 iron 1			491,520			1 ²⁶
	Water (KF)	E 5-			122,880 -	Severe		-24
14000 - 12000 -	Severe				30,720	· · · · ·		-22
10000					5 E 7,680	Abnormal		-20 180 4406:1999 CleanIness -16 -14 -14
(mg 8000 -	A	Mar12/24			Mar12/24 s {per 1 m]]		s	-18 406:11
4000 - 4000 - 4000 -	Abnormal	 Non-ferrous Metal	S		Mar12/24 1.950 1000'	1.		-16 Cle
2000		10 copper			uper of p		•	-14 10
0-		E 5-			\	-12 Code		
	Mar12/24				= 30-			+10
		0			4			
14-	Viscosity @ 40°C	flar12//			Mar12/24			-0 -
12-	Severe Ponorma	Z Viscosity @ 40°C			< 0. 4	Acid Number	14µ 21µ	38µ 71µ
	Base	14 Severemal			음 운 2.00	[]		
cSt (40°C)		12 - Base			() () () () () () () () () () () () () (Severe Abnormal		
8 8-	Abnormal	(0,010 (0,010 73 8 Abnormal Severe			1.00 	Q		
6 -	Severe e	6 4				Base		
4	24	Mar12/24			Mar12/24	12/24		12/24
	Marl 2	Mai			Mai	Marl		Mari
	Laboratory Sample No. Lab Number Test Package To discuss this sample report, Test denoted (*) outside scope Validity of results and interpre	: 5746990 : IND 2 (Additional Tes contact Customer Servi e of accreditation, (m) m	Recei Teste Diagn ts: KF, T ce at 1-8 ethod mo	ved : 13 d : 14 losed : 14 AN Man) 00-268-213 bodified, (e) te	Mar 2024 Mar 2024 Mar 2024 - We sted at extern	es Davis sal lab.	574 Contac stuart.potter@sa	ding Systems 4 Monarch Ave Ajax, ON CA L1S 2G8 t: Stuart Potter frangroup.com T: (905)683-6983

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