

OIL ANALYSIS REPORT

Sample Rating Trend

ISO

Global Assy MLG/Rig 14 Machine Id DEC 4406

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

DIAGNOSIS

Recommendation

We advise that you perform a filter service, and use off-line filtration to improve the cleanliness of the system fluid. We recommend an early resample to monitor this condition. 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 moderate amount of particulates (2 to 100 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	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0920424		
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				ABNORMAL		
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	<1		
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		method	limit/base	current	history1	history2
_						
Boron	ppm	ASTM D5185(m)	0	<1		
Boron Barium	ppm ppm	ASTM D5185(m) ASTM D5185(m)	0	<1 0		
Barium		. ,				
Barium Molybdenum	ppm	ASTM D5185(m)	0	0		
Barium Molybdenum Manganese	ppm ppm	ASTM D5185(m) ASTM D5185(m)	0	0 0		
Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0	0 0 0		
Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0	0 0 0 <1		
Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)	0 0 0 0	0 0 <1 <1		
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)	0 0 0 0 20000	0 0 <1 <1 38840	 	
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)	0 0 0 0 20000 0	0 0 <1 <1 38840 1	 	
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)	0 0 0 0 20000 0	0 0 <1 <1 38840 1 1751	 	
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)	0 0 0 0 20000 0 1900 Iimit/base	0 0 <1 <1 38840 1 1751 <1		
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon	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 0 0 0 20000 0 1900 Iimit/base	0 0 <1 <1 38840 1 1751 <1 current		
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon	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)	0 0 0 0 20000 0 1900 Iimit/base	0 0 (0 <1 <1 38840 1 1751 <1 <1 current 2	 history1	
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) 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 0 0 20000 0 1900 limit/base >15	0 0 <1 <1 38840 1 1751 <1 <1 current 2 2 2	 history1	 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	0 0 0 20000 0 1900 limit/base >15 >20	0 0 (0 <1 38840 1 1751 <1 current 2 2 2 22	 history1	 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	0 0 0 20000 0 1900 limit/base >15 >20 >0.6	0 0 () () () () () () () () () () () () ()	 history1	 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m)	0 0 0 20000 0 1900 1900 S 15 >15 >20 >20 >0.6 >6000	0 0 (0 <1 38840 1 1751 <1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	 history1 	 history2
Barium Molybdenum Manganese 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 ppm	ASTM D5185(m) ASTM D6304*	0 0 0 20000 0 1900 imit/base >15 >20 >0.6 >0.6 >6000 imit/base	0 0 (0 <1 38840 1 1751 <1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	history1 history1	 history2 history2
Barium Molybdenum Manganese 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 ppm	ASTM D5185(m) ASTM D6304* ASTM D6304*	0 0 0 20000 0 1900 1900 1900 2 5 5 5 5 0 6 0 6 5 0 0 6 5 0 0 6 5 0 0 6 5 0 0 6 5 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 0 (0 <1 <1 38840 1 1751 <1 current 2 2 2 2 2 2 2 2 2 2 0.204 2045 current 2698	 history1 history1	 history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Water ppm Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D50304* ASTM D6304*	0 0 0 20000 0 1900 1900 5 15 >15 >20 >20 >0.6 >6000 imit/base >5000 >1300 >160	0 0 () () () () () () () () () () () () ()	 history1 -	 history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5304* ASTM D6304* ASTM D7647 ASTM D7647 ASTM D7647	0 0 0 20000 0 1900 1900 5 15 >15 >20 >20 >0.6 >6000 imit/base >5000 >1300 >160	0 0 3 4 1 38840 1 1751 3 1751 3 1751 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	 history1 history1	 history2 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Water ppm Water FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5047 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	0 0 0 20000 0 1900 1900 1900 1900 1900 1	0 0 () () () () () () () () () () () () ()	 history1 history1 history1	 history2 history2 history2



Ê 54

TE 31

0

14000

1200

10000

800

400 2000

1.60

1.40

(B/H0X Bul) January (B/H0X

PB 0.40 0.20

0.00

1400

1000

800

4000

2000 Π

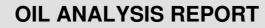
cSt (40°C)

Mar12/24

Water 600 Mar

Water 600 Marl

41





Contact/Location: Stuart Potter - SAFAJA2