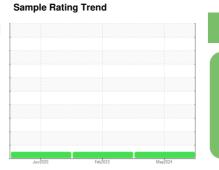


OIL ANALYSIS REPORT

[618586] MARION 8050 DL3124 (S/N 23187)

2 Swing Drive

{not provided} (--- GAL)





DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		BRI006995	BRM001755	BRM000799
Sample Date		Client Info		15 May 2024	14 Feb 2023	03 Jun 2020
Machine Age	hrs	Client Info		126810	122910	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>400	68	46	71
Chromium	ppm	ASTM D5185m	>10	<1	0	<1
Nickel	ppm	ASTM D5185m	>10	<1	<1	<1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	3	0	3
Lead	ppm	ASTM D5185m	>50	4	0	0
Copper	ppm	ASTM D5185m	>200	7	4	3
Tin	ppm	ASTM D5185m	>10	1	0	0
Antimony	ppm	ASTM D5185m	>5			1261
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	<1
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<1	0	<1
Barium	ppm	ASTM D5185m		0	0	<1
Molybdenum	ppm	ASTM D5185m		67	50	46
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m		<1	0	<1
Calcium	ppm	ASTM D5185m		2	2	4
Phosphorus	ppm	ASTM D5185m		401	255	219
Zinc						
ZII 10	ppm	ASTM D5185m		12	0	15
-	ppm	ASTM D5185m ASTM D5185m		12 7996	0 7237	15 7138
-	ppm		limit/base			
Sulfur CONTAMINANTS	ppm	ASTM D5185m	limit/base	7996	7237	7138
Sulfur CONTAMINANTS Silicon	ppm	ASTM D5185m method		7996 current	7237 history1	7138 history2
Sulfur	ppm ppm	ASTM D5185m method ASTM D5185m	>50	7996 current	7237 history1	7138 history2
Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m	>50	7996 current 9 2	7237 history1 7 <1	7138 history2 10 <1
Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal	ppm ppm ppm ppm scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method *Visual	>50 >20 limit/base NONE	7996 current 9 2 4 current NONE	7237 history1 7 <1 0 history1 NONE	7138 history2 10 <1 13 history2 LIGHT
Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal	ppm ppm ppm ppm scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method *Visual	>50 >20 limit/base NONE NONE	7996 current 9 2 4 current NONE NONE	7237 history1 7 <1 0 history1 NONE NONE	7138 history2 10 <1 13 history2 LIGHT NONE
Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate	ppm ppm ppm ppm scalar scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m wethod *Visual *Visual *Visual	>50 >20 limit/base NONE NONE NONE	7996 current 9 2 4 current NONE NONE NONE	7237 history1 7 <1 0 history1 NONE NONE NONE	7138 history2 10 <1 13 history2 LIGHT NONE NONE
Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt	ppm ppm ppm ppm scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m Method *Visual *Visual *Visual *Visual	>50 >20 limit/base NONE NONE	7996 current 9 2 4 current NONE NONE NONE NONE	7237 history1 7 <1 0 history1 NONE NONE NONE NONE	7138 history2 10 <1 13 history2 LIGHT NONE NONE NONE
Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris	ppm ppm ppm ppm scalar scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>50 >20 limit/base NONE NONE NONE NONE NONE NONE	7996 current 9 2 4 current NONE NONE NONE NONE NONE NONE NONE	7237 history1 7 <1 0 history1 NONE NONE NONE NONE NONE NONE NONE NON	7138 history2 10 <1 13 history2 LIGHT NONE NONE NONE
Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>50 >20 limit/base NONE NONE NONE NONE NONE NONE NONE NON	7996 current 9 2 4 current NONE NONE NONE NONE NONE NONE NONE NON	7237 history1 7 <1 0 history1 NONE NONE NONE NONE NONE NONE NONE NON	7138 history2 10 <1 13 history2 LIGHT NONE NONE NONE NONE NONE
Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance	ppm ppm ppm scalar scalar scalar scalar scalar scalar scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method *Visual *Visual	>50 >20 limit/base NONE NONE	7996 current 9 2 4 current NONE NONE	7237 history1 7 <1 0 history1 NONE NONE NONE NONE NONE NONE NONE NON	7138 history2 10 <1 13 history2 LIGHT NONE NONE NONE NONE NONE NONE NONE NON
Sulfur CONTAMINANTS Silicon Sodium Potassium VISUAL White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt	ppm ppm ppm ppm scalar scalar scalar scalar scalar scalar	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m method *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual *Visual	>50 >20 limit/base NONE NONE NONE NONE NONE NONE NONE NON	7996 current 9 2 4 current NONE NONE NONE NONE NONE NONE NONE NON	7237 history1 7 <1 0 history1 NONE NONE NONE NONE NONE NONE NONE NON	7138 history2 10 <1 13 history2 LIGHT NONE NONE NONE NONE NONE

Emulsified Water

scalar *Visual

scalar *Visual

>0.2

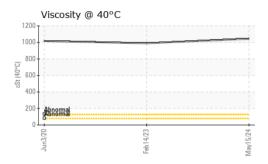
NEG

NEG

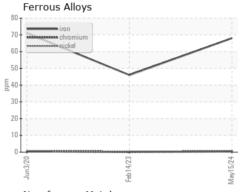
JSS ANZALONE - WITSCOLMT

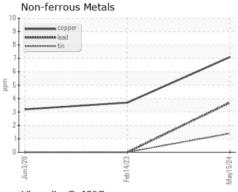


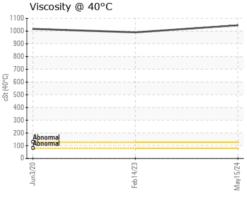
OIL ANALYSIS REPORT















Certificate 12367

Laboratory

Sample No. : BRI006995 Lab Number : 06207003 Unique Number : 11074464

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Received : 11 Jun 2024 Tested : 13 Jun 2024 Diagnosed

: 13 Jun 2024 - Don Baldridge

WESTMORELAND ROSEBUD MINING PO BOX 99 COLSTRIP, MT US 59323

Test Package : IND 1 To discuss this sample report, contact Customer Service at 1-800-237-1369.

Contact: RUSS ANZALONE CANZALONE@WESTMORELAND.COM T:

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Report Id: WESCOLMT [WUSCAR] 06207003 (Generated: 06/13/2024 16:35:22) Rev: 1

Contact/Location: RUSS ANZALONE - WESCOLMT

F: