**OIL ANALYSIS REPORT** 

**WEAR CONTAMINATION FLUID CONDITION** 

**NORMAL ABNORMAL NORMAL** 

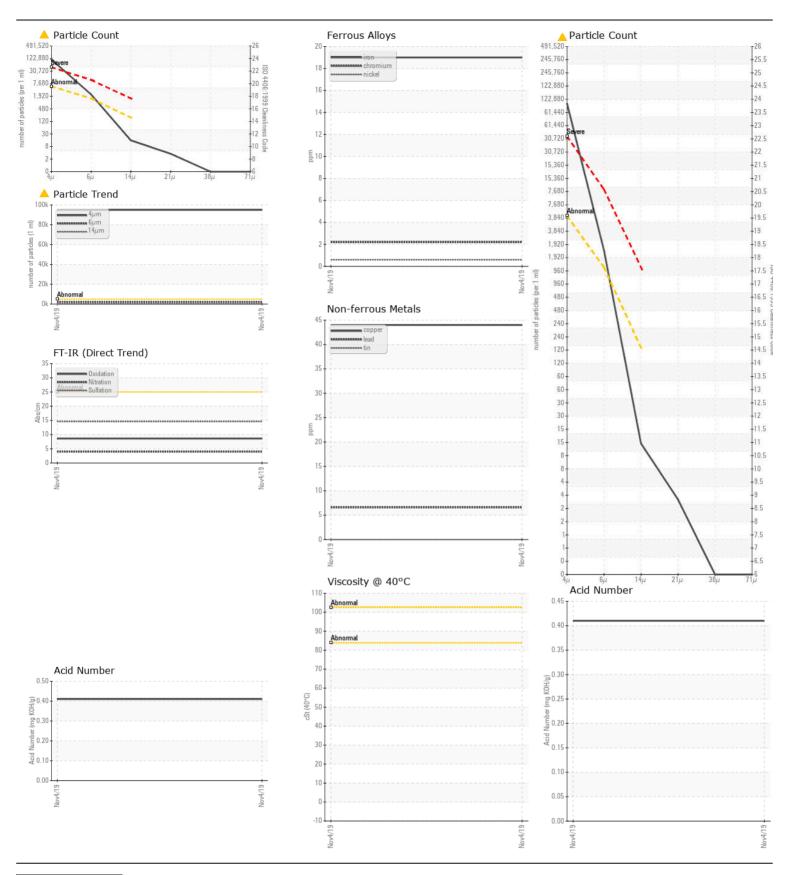
Machine Id

## LIFT TRUCK - MITSUBISHI - MA BAKER

Hydraulic System

{not provided} (--- GAL)

No corrective action is recommended at this time. Resample at the next service interval to monitor.   Sample Date   Client Info   Nav 2019	DECOMMENDATION	T4	LIOM	Madaad	Lineit/Alen	O	I Bakamud	LliataO
No corrective action is recommended at this time. Resample at the next service interval to monitor.    Machine Age   mits   Client Info   0       Oil Age   mits   Client Info   0       Oil Changed   Client Info   0       Filter Age   mits   Client Info   0       Filter Changed   Client Info   N/A       Filter Chan	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Machine Age	·							
Oil Age   Filter Age   miths   Cilent Info   0   0   0   0   0   0   0   0   0			mthe					
Filter Age		•				-		
Oil Changed   Effect		•						
Filter Changed   Sample Status   Sample Stat		•	111(110			-		
Name								
Iron				Oliciti IIIIo				
All component wear rates are normal.    Nickel   pm   ASIM DSISSm   >10   2								
All component wear rates are normal.    Nickel   pm   ASIM DSISSm   >10   2	WEAR	Iron	ppm	ASTM D5185m	>20	19		
Titanium   ppm   ASTM 05185m   <1		Chromium	ppm	ASTM D5185m	>10	2		
Silver	All component wear rates are normal.	Nickel	ppm	ASTM D5185m		<1		
Aluminum   ppm   ASTM D5185m   >1.0   19			ppm	ASTM D5185m		<1		
Lead   ppm   ASTM D5185m   >10   7		Silver	ppm	ASTM D5185m				
Copper		Aluminum	ppm	ASTM D5185m	>10	19		
Tin			ppm					
		• •	ppm					
White Metal   Scalar   Visual   NONE   NON					>10	-		
Yellow Metal   Scalar   Visual   NONE   NO						-		
Silicon   ppm   ASTM D5185m   >20   9         Potassium   ppm   ASTM D5185m   >20   0         Water   WCMethod   0.1   NEG       Soot %   %   ASTM D7844   0   0       Soot %   %   ASTM D7844   0   0       Soot %   %   ASTM D7844   0   0       Soot %   Mitration   Abs.l.mm   ASTM D7844   4       Sulfation   Abs.l.mm   ASTM D7847   5000   494970       Particles >6µm   ASTM D7847   >300   2034       Particles >1µm   ASTM D7847   >40   3       Particles >21µm   ASTM D7847   >40   3       Particles >21µm   ASTM D7847   >40   3       Particles >71µm   ASTM D7848   ASTM D7848       Particles >71µm			scalar					
Potassium		Yellow Metal	scalar	*Visual	NONE	NONE		
Potassium	CONTABINATION	Cilioon	nnm	ACTM DE10Em	- 20			
There is a high amount of silt (particulates < 6 microns in size) present in the oil.    Water	CONTAININATION							
Soot %			ρριτι			-		
Nitration   Abs/cm   *ASTM D7624   4			0/		>0.1			
Sulfation								
Particles >4µm								
Particles >6µm   ASTM D7647   >1300   2034         Particles >14µm   ASTM D7647   >160   13         Particles >21µm   ASTM D7647   >10   0         Particles >21µm   ASTM D7647   >10   0         Particles >71µm   ASTM D7647   >10   0         Particles >71µm   ASTM D7647   >3			7100/.1111111		>5000			
Particles >14μm   ASTM D7647   >160   13         Particles ≥21μm   ASTM D7647   >10   0         Particles >71μm   ASTM D7647   >3   0         Particles >71μm   ASTM D7647   >3   0         Particles >71μm   ASTM D7647   >3   0         Oil Cleanliness   ISO 4406 (c)   191/714   Δ 24/18/11         Silt   Scalar   "Visual   NONE   NONE   NONE         Debris   Scalar   "Visual   NONE   NONE   NONE         Appearance   Scalar   "Visual   NORML								
Particles > 21µm								
Particles >38µm   Particles >71µm   ASTM D7647   >10   0								
Particles > 71 \( \mu\)								
Oil Cleanliness   ISO 4406 (c)   >19/17/14   A 24/18/11						0		
Debris   Scalar   *Visual   NONE   NORML						<b>24/18/11</b>		
Sand/Dirt   Scalar   *Visual   NONE   NONE   NORML		Silt	scalar	*Visual	NONE	NONE		
Appearance Odor   Scalar   *Visual   NORML		Debris	scalar	*Visual	NONE	NONE		
Odor   Emulsified Water   Scalar   *Visual   NORML		Sand/Dirt	scalar	*Visual	NONE	NONE		
Emulsified Water   scalar   *Visual   >0.1   NEG		Appearance	scalar	*Visual	NORML	NORML		
Sodium   ppm   ASTM D5185m   6		Odor	scalar	*Visual	NORML	NORML		
Boron   ppm   ASTM D5185m   40           Barium   ppm   ASTM D5185m   c1         Molybdenum   ppm   ASTM D5185m   c1         Manganese   ppm   ASTM D5185m   c1         Calcium   ppm   ASTM D5185m   c1         Phosphorus   ppm   ASTM D5185m   c1   c1         Phosphorus   ppm   ASTM D5185m   c1   c1         Phosphorus   ppm   ASTM D5185m   c1   c1         Sulfur   ppm   ASTM D5185m   c1   c1         Sulfur   ppm   ASTM D5185m   c1   c1         Acid Number (AN)   mg KOH/g   ASTM D8045   c1         ASTM D8045   c1         ASTM D5185m   c1   c1         ASTM D8045		Emulsified Water	scalar	*Visual	>0.1	NEG		
Boron   ppm   ASTM D5185m   40           Barium   ppm   ASTM D5185m   c1         Molybdenum   ppm   ASTM D5185m   c1         Manganese   ppm   ASTM D5185m   c1         Calcium   ppm   ASTM D5185m   c1   c1         Phosphorus   ppm   ASTM D5185m   c1   c1         Phosphorus   ppm   ASTM D5185m   c1   c1         Sulfur   ppm   ASTM D5185m   c1   c1         Sulfur   ppm   ASTM D5185m   c1   c1         Sulfur   ppm   ASTM D5185m   c1   c1         Acid Number (AN)   mg KOH g   ASTM D8045   c1         ASTM D8045   c1         ASTM D5185m   c1   c1         ASTM D8045   c1       ASTM D8045   c1	ELUID COMPITION	01'		AOTM DEADE				
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.    Molybdenum   ppm   ASTM D5185m   0             Manganese   ppm   ASTM D5185m   2           Magnesium   ppm   ASTM D5185m   125           Phosphorus   ppm   ASTM D5185m   125           Phosphorus   ppm   ASTM D5185m   184           Zinc   ppm   ASTM D5185m   109           Sulfur   ppm   ASTM D5185m   2850           Oxidation   Abs/.1mm *ASTM D7414   8.6           Acid Number (AN)   mg KOHlg   ASTM D8045   0.410	FLUID CONDITION							
suitable for further service.       Molybdenum ppm       ASTM D5185m       0           Manganese ppm       ASTM D5185m       <1           Magnesium ppm       ASTM D5185m       2           Calcium ppm       ASTM D5185m       125           Phosphorus ppm       ASTM D5185m       184           Zinc ppm       ASTM D5185m       109           Sulfur ppm       ASTM D5185m       2850           Oxidation       Abs/.1mm       *ASTM D7414       8.6           Acid Number (AN)       mg KOHlg       ASTM D8045       0.410	The AN level is acceptable for this fluid. The condition of the cit is							
Manganese       ppm       ASTM D5185m       <1	•							
Magnesium         ppm         ASTM D5185m         2             Calcium         ppm         ASTM D5185m         125             Phosphorus         ppm         ASTM D5185m         184             Zinc         ppm         ASTM D5185m         109             Sulfur         ppm         ASTM D5185m         2850             Oxidation         Abs/.1mm         *ASTM D7414         8.6             Acid Number (AN)         mg KOH/g         ASTM D8045         0.410		•						
Calcium         ppm         ASTM D5185m         125             Phosphorus         ppm         ASTM D5185m         184             Zinc         ppm         ASTM D5185m         109             Sulfur         ppm         ASTM D5185m         2850             Oxidation         Abs/.1mm         *ASTM D7414         8.6             Acid Number (AN)         mg KOH/g         ASTM D8045         0.410								
Phosphorus         ppm         ASTM D5185m         184             Zinc         ppm         ASTM D5185m         109             Sulfur         ppm         ASTM D5185m         2850             Oxidation         Abs/.1mm         *ASTM D7414         8.6             Acid Number (AN)         mg KOH/g         ASTM D8045         0.410		•						
Zinc         ppm         ASTM D5185m         109             Sulfur         ppm         ASTM D5185m         2850             Oxidation         Abs/.1mm         *ASTM D7414         8.6             Acid Number (AN)         mg KOH/g         ASTM D8045         0.410								
Sulfur         ppm         ASTM D5185m         2850             Oxidation         Abs/.1mm         *ASTM D7414         8.6             Acid Number (AN)         mg KOH/g         ASTM D8045         0.410		•						
Oxidation         Abs/.1mm         *ASTM D7414         8.6             Acid Number (AN)         mg KOH/g         ASTM D8045         0.410								
Acid Number (AN)         mg KOH/g         ASTM D8045         0.410								
		Visc @ 100°C	cSt	ASTM D445		5.8		





Certificate L2367

Laboratory

Sample No. Lab Number

: TR04843742 : 04843742 Unique Number : 8813682

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

Test Package: MOB 2 (Additional Tests: FT-IR, FuelDilution, KV100, TBN)

: 11 Nov 2019 : 13 Nov 2019 : 13 Nov 2019 - Jonathan Hester Diagnosed

FORT WORTH, TX US 76106 Contact: JOSE PEPE GARCIA

To discuss this sample report, contact Customer Service at 1-800-827-0711.

pedidos@texasrefinery.com.mx;josegpegarcia@texasrefinery.com.mx T:

**TEXAS REFINERY - MEXICO** 

\* - 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)

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