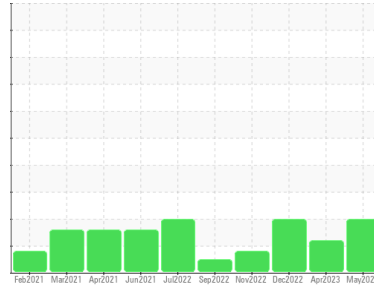


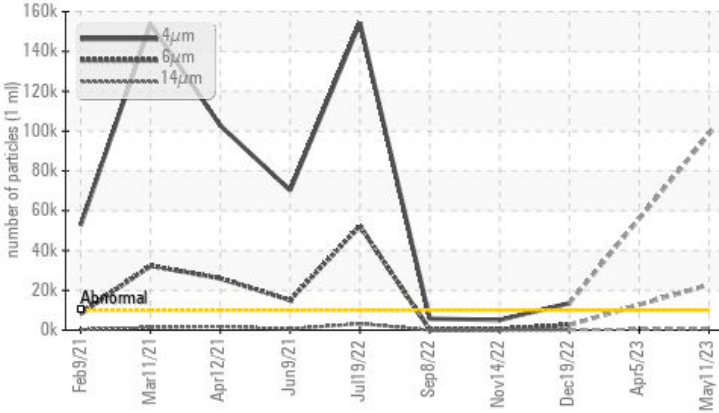


Machine Id  
**BOSS JAMES RANCH 19 (S/N 117142)**  
 Component  
**Compressor**  
 Fluid  
**TULCO LUBSOIL LPG WS 150 (10 GAL)**



## COMPONENT CONDITION SUMMARY

### ▲ Particle Trend



## RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor.

## PROBLEMATIC TEST RESULTS

Sample Status			ABNORMAL	ABNORMAL	ABNORMAL
Particles >4µm	ASTM D7647	>10000	▲ 98447	---	▲ 13555
Particles >6µm	ASTM D7647	>1300	▲ 22867	---	▲ 2623
Particles >14µm	ASTM D7647	>320	▲ 813	---	102
Particles >21µm	ASTM D7647	>80	▲ 169	---	17
Oil Cleanliness	ISO 4406 (c)	>20/17/15	▲ 24/22/17	---	▲ 21/19/14

Customer Id: RICHOB  
 Sample No.: TO90003367  
 Lab Number: 05867344  
 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data:  
 Doug Bogart +1 (800)237-1369 x4016  
[dougb@wearcheckusa.com](mailto:dougb@wearcheckusa.com)

To change component or sample information:  
 Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

**RECOMMENDED ACTIONS**

Action	Status	Date	Done By	Description
Change Filter	MISSED	Nov 30 2023	?	We recommend you service the filters on this component.

**HISTORICAL DIAGNOSIS**

**05 Apr 2023 Diag: Don Baldrige**

WEAR



We recommend you service the filters on this component if applicable. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample. The iron level is abnormal. All other component wear rates are normal. High concentration of visible dirt/debris present in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report



**19 Dec 2022 Diag: Don Baldrige**

WEAR



No corrective action is recommended at this time. Resample at the next service interval to monitor. Gear wear is indicated. All other component wear rates are normal. There is a high amount of silt (particulates < 14 microns in size) present in the oil. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

view report



**14 Nov 2022 Diag: Angela Borella**

WEAR



We recommend an early resample to monitor this condition. The iron level is abnormal. All other component wear rates are normal. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable. The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

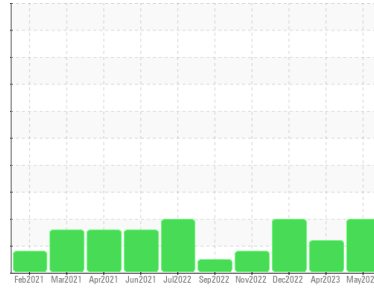
view report





Machine Id  
**BOSS JAMES RANCH 19 (S/N 117142)**

Component  
**Compressor**  
 Fluid  
**TULCO LUBSOIL LPG WS 150 (10 GAL)**



**DIAGNOSIS**

**Recommendation**  
 We recommend you service the filters on this component. Resample at the next service interval to monitor.

**Wear**  
 All component wear rates are normal.

**Contamination**  
 There is a high amount of particulates present in the oil.

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

SAMPLE INFORMATION	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>TO90003367</b>	TO90002795	TO90002623
Sample Date	Client Info		<b>11 May 2023</b>	05 Apr 2023	19 Dec 2022
Machine Age	hrs	Client Info	<b>3724</b>	2866	734
Oil Age	hrs	Client Info	<b>0</b>	0	0
Oil Changed	Client Info		<b>N/A</b>	N/A	N/A
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

WEAR METALS	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<1	▲ 80	▲ 95
Chromium	ppm	ASTM D5185m >10	0	<1	<1
Nickel	ppm	ASTM D5185m	<1	<1	5
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m	0	0	<1
Aluminum	ppm	ASTM D5185m >25	0	0	<1
Lead	ppm	ASTM D5185m >25	0	0	0
Copper	ppm	ASTM D5185m >50	<1	<1	2
Tin	ppm	ASTM D5185m >15	1	<1	<1
Vanadium	ppm	ASTM D5185m	0	0	<1
Cadmium	ppm	ASTM D5185m	0	0	<1

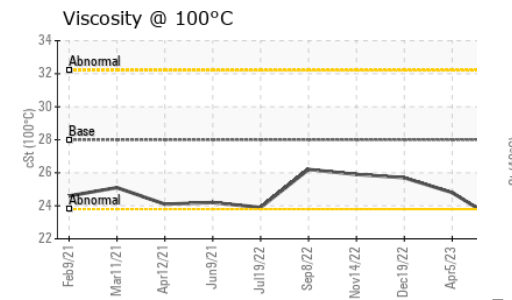
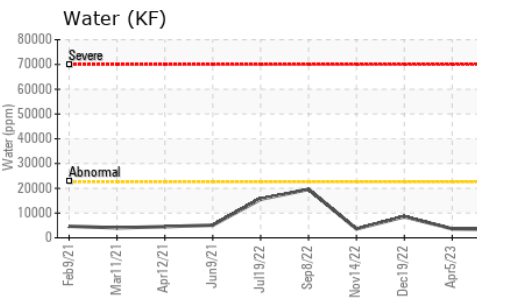
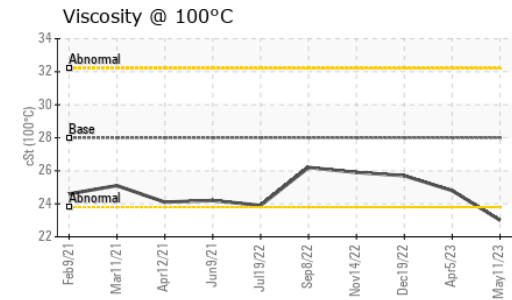
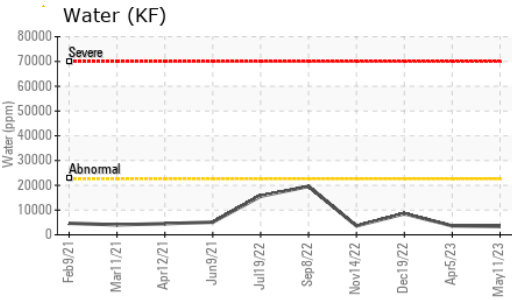
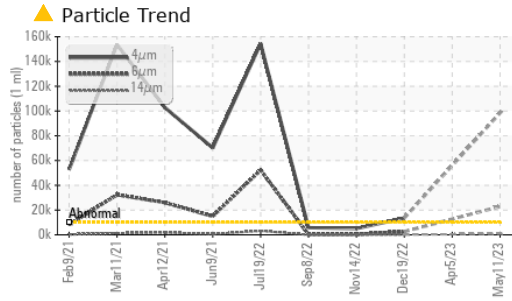
ADDITIVES	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	0	0	0
Barium	ppm	ASTM D5185m 0	0	0	1
Molybdenum	ppm	ASTM D5185m 0	0	0	0
Manganese	ppm	ASTM D5185m	<1	<1	1
Magnesium	ppm	ASTM D5185m 0	1	2	3
Calcium	ppm	ASTM D5185m 0	5	19	26
Phosphorus	ppm	ASTM D5185m 0	102	200	274
Zinc	ppm	ASTM D5185m 0	0	30	28
Sulfur	ppm	ASTM D5185m 0	159	103	140

CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<1	0	1
Sodium	ppm	ASTM D5185m	5	23	33
Potassium	ppm	ASTM D5185m >20	2	2	2
Water	%	ASTM D6304 >2.26	<b>0.341</b>	0.364	0.853
ppm Water	ppm	ASTM D6304 >22600	<b>3410</b>	3640	8530

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	▲ <b>98447</b>	---	▲ 13555
Particles >6µm	ASTM D7647	>1300	▲ <b>22867</b>	---	▲ 2623
Particles >14µm	ASTM D7647	>320	▲ <b>813</b>	---	102
Particles >21µm	ASTM D7647	>80	▲ <b>169</b>	---	17
Particles >38µm	ASTM D7647	>20	<b>3</b>	---	2
Particles >71µm	ASTM D7647	>4	<b>0</b>	---	1
Oil Cleanliness	ISO 4406 (c)	>20/17/15	▲ <b>24/22/17</b>	---	▲ 21/19/14

FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.24</b>	0.43	0.30

# OIL ANALYSIS REPORT



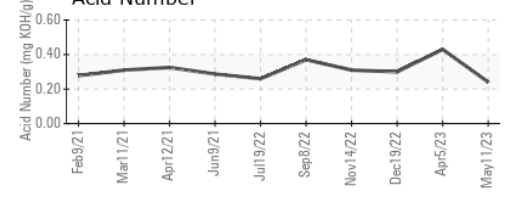
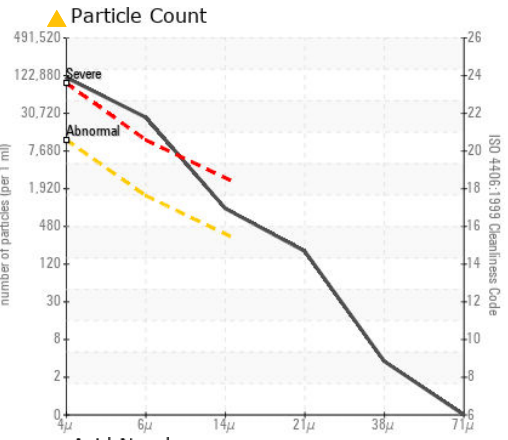
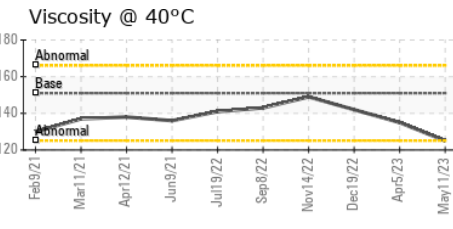
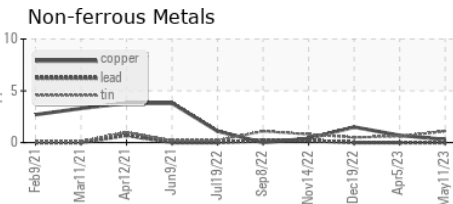
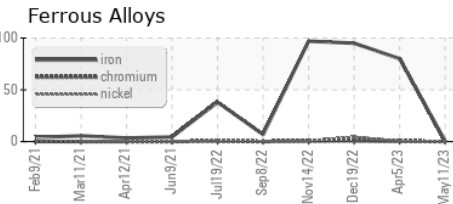
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	<b>LIGHT</b>	▲ <b>HEAVY</b>
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>2.26	<b>NEG</b>	NEG
Free Water	scalar	*Visual		<b>NEG</b>	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	151	<b>125</b>	135
Visc @ 100°C	cSt	ASTM D445	28	<b>23.0</b>	24.8
Viscosity Index (VI)	Scale	ASTM D2270	224	<b>215</b>	218

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO90003367 **Received** : 07 Jun 2023  
**Lab Number** : 05867344 **Diagnosed** : 10 Jun 2023  
**Unique Number** : 10507128 **Diagnostician** : Doug Bogart  
**Test Package** : IND 2 ( Additional Tests: KF, KV100, PrtCount, VI )

**RICHARDS ENERGY COMPRESSION**  
 1629 WEST BENDER  
 HOBBS, NM  
 US 88240  
 Contact: BILL RICHARDSON  
 richardsenergy@windstream.net

To discuss this sample report, contact Customer Service at 1-800-237-1369.  
 \* - 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)