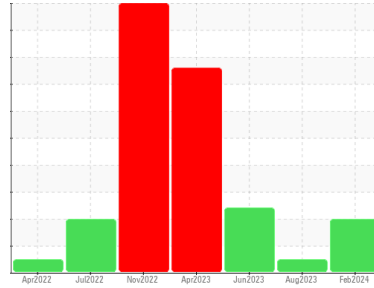


# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Area  
**COMPRESSOR STATIONS/RED HILLS WEST AREA**

Machine Id  
**VIPER (S/N ASB180227)**

Component  
**Compressor**

Fluid  
**TULCO LUBSOIL LPG WS 150 (--- 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>TO60002027</b>	TO60001269	TO60000793
Sample Date	Client Info		<b>07 Feb 2024</b>	11 Aug 2023	08 Jun 2023
Machine Age	hrs	Client Info	<b>2257</b>	13030	11493
Oil Age	hrs	Client Info	<b>0</b>	0	432
Oil Changed	Client Info		<b>N/A</b>	Not Changd	Changed
Sample Status			<b>ABNORMAL</b>	NORMAL	ATTENTION

WEAR METALS	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>4</b>	0	0
Chromium	ppm	ASTM D5185m >10	<b>&lt;1</b>	0	0
Nickel	ppm	ASTM D5185m	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >25	<b>2</b>	<1	<1
Lead	ppm	ASTM D5185m >25	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >50	<b>0</b>	<1	0
Tin	ppm	ASTM D5185m >15	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

ADDITIVES	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>0</b>	0	0
Barium	ppm	ASTM D5185m 0	<b>8</b>	0	0
Molybdenum	ppm	ASTM D5185m 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	2
Calcium	ppm	ASTM D5185m 0	<b>&lt;1</b>	0	0
Phosphorus	ppm	ASTM D5185m 0	<b>24</b>	271	249
Zinc	ppm	ASTM D5185m 0	<b>0</b>	0	0
Sulfur	ppm	ASTM D5185m 0	<b>0</b>	85	96

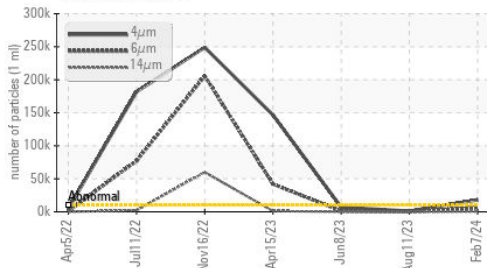
CONTAMINANTS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>0</b>	<1	<1
Sodium	ppm	ASTM D5185m	<b>1</b>	<1	<1
Potassium	ppm	ASTM D5185m >20	<b>1</b>	0	0
Water	%	ASTM D6304 >2.26	<b>1.27</b>	0.015	0.012
ppm Water	ppm	ASTM D6304 >22600	<b>12700</b>	154.0	129.3

FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>10000	<b>▲ 18086</b>	1097	7032
Particles >6µm	ASTM D7647	>1300	<b>▲ 6295</b>	151	● 1389
Particles >14µm	ASTM D7647	>320	<b>▲ 474</b>	4	32
Particles >21µm	ASTM D7647	>80	<b>▲ 93</b>	0	6
Particles >38µm	ASTM D7647	>20	<b>1</b>	0	0
Particles >71µm	ASTM D7647	>4	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c)	>20/17/15	<b>▲ 21/20/16</b>	17/14/9	● 20/18/12

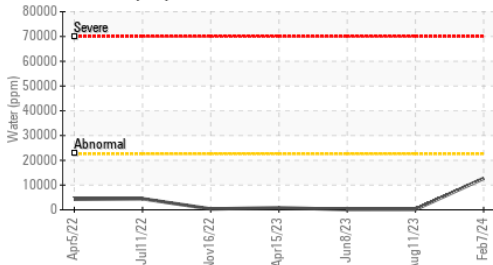
FLUID DEGRADATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>0.069</b>	0.057	0.071

# OIL ANALYSIS REPORT

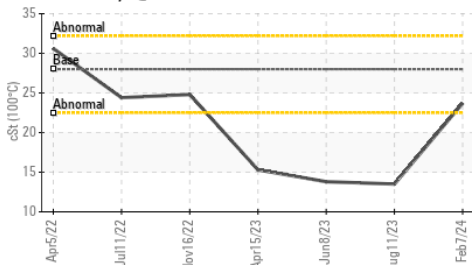
## Particle Trend



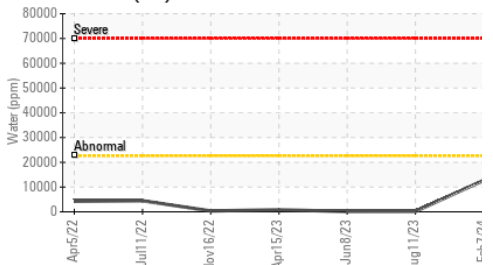
## Water (KF)



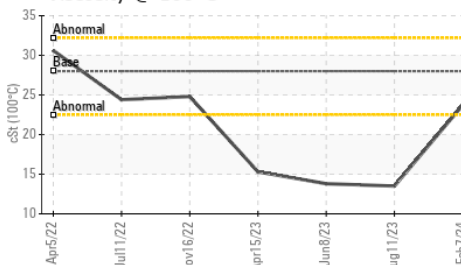
## Viscosity @ 100°C



## Water (KF)



## Viscosity @ 100°C



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	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	LAYRD
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>2.26	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	151	127	115
Visc @ 100°C	cSt	ASTM D445	28	23.7	13.8
Viscosity Index (VI)	Scale	ASTM D2270	224	219	118

## SAMPLE IMAGES

Color

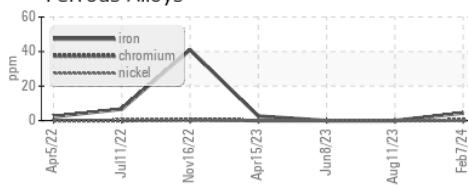


Bottom

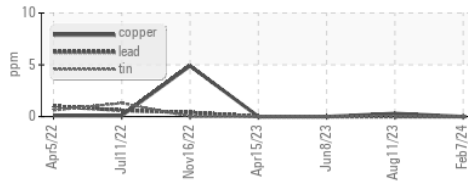


## GRAPHS

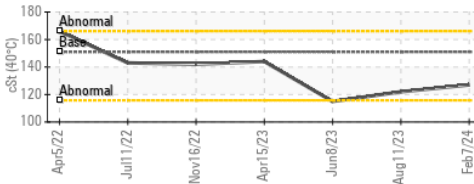
### Ferrous Alloys



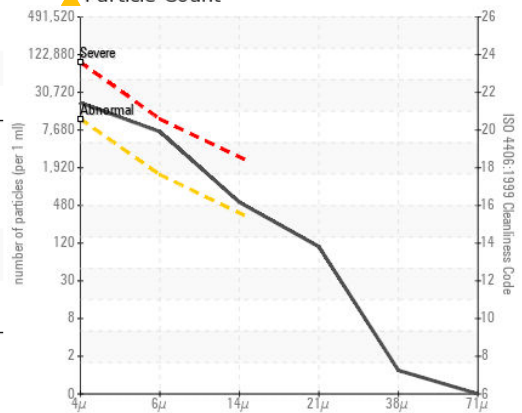
### Non-ferrous Metals



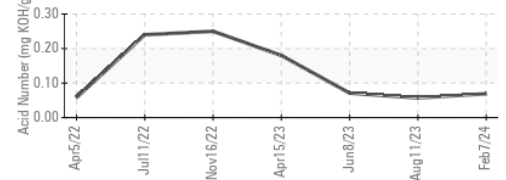
### Viscosity @ 40°C



### Particle Count



### Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO60002027 **Received** : 26 Feb 2024  
**Lab Number** : 06100937 **Tested** : 27 Feb 2024  
**Unique Number** : 10899167 **Diagnosed** : 28 Feb 2024 - Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, KV100, PrtCount, VI )

**MIDLAND - EOG RESOURCES INC.**  
 5509 CHAMPIONS DRIVE  
 MIDLAND, TX  
 US 79706  
 Contact: HERMAN GARZA  
 herman\_garza@eogresources.com  
 T: (432)686-3600  
 F:

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)