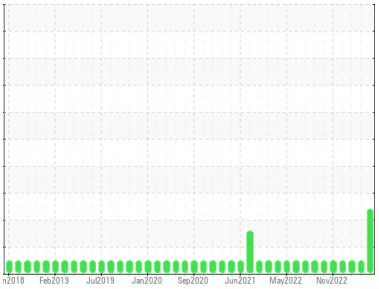
Hilcorp Alaska, LLC

PROBLEM SUMMARY

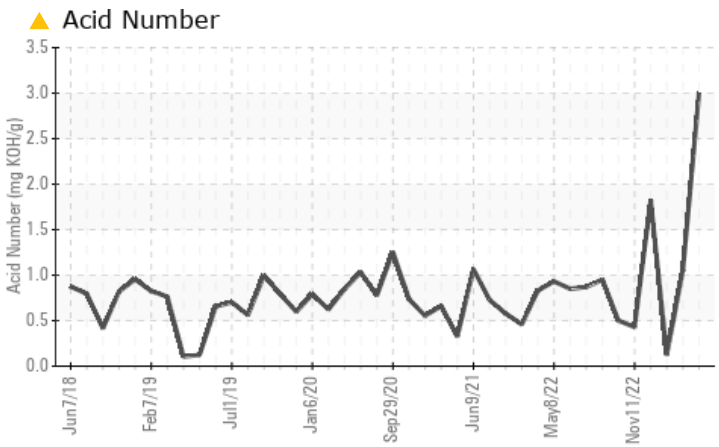
Sample Rating Trend

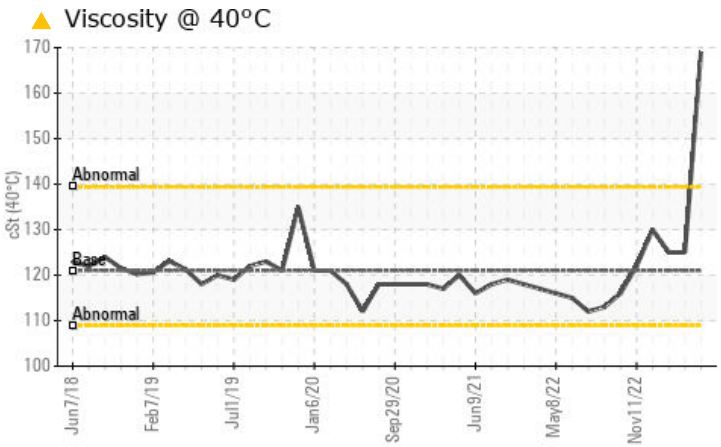


DEGRADATION

Machine Id
C 2605 C 2605
Component
Reciprocating Compressor
Fluid
MOBIL PEGASUS 89 (--- GAL)

COMPONENT CONDITION SUMMARY





RECOMMENDATION

The oil is near the end of it`s useful service life, recommend schedule an oil change. 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.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	NORMAL	NORMAL
Acid Number (AN)	mg KOH/g	ASTM D8045		▲ **3.00**	1.055	0.127
Silt	scalar	*Visual	NONE	▲ **MODER**	NONE	NONE
Visc @ 40°C	cSt	ASTM D445	121	▲ **169**	125	125

Customer Id: BPEMPU
Sample No.: HLC0002539
Lab Number: 05924180
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

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

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Service/change Fluid	---	---	?	The oil is near the end of it's useful service life, recommend schedule an oil change.
Alert	---	---	?	We were unable to perform a particle count due to a high concentration of particles present in this sample.

HISTORICAL DIAGNOSIS

09 Jun 2023 Diag: Jonathan Hester

NORMAL

Resample at the next service interval to monitor.All 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 suitable for further service.

view report

07 Apr 2023 Diag: Don Baldridge

NORMAL

Resample at the next service interval to monitor.All 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 suitable for further service.

view report

07 Jan 2023 Diag: Doug Bogart

NORMAL

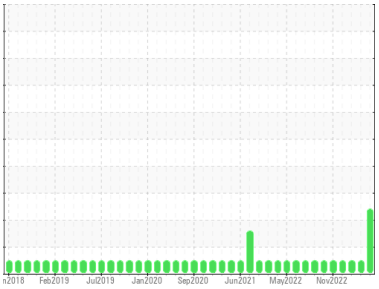
Resample at the next service interval to monitor. Particle count performed inadvertently.All component wear rates are normal. There is no indication of any contamination in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

view report

Hilcorp Alaska, LLC

OIL ANALYSIS REPORT

Sample Rating Trend



DEGRADATION

Machine Id
C 2605 C 2605
Component
Reciprocating Compressor
Fluid
MOBIL PEGASUS 89 (--- GAL)

DIAGNOSIS

Recommendation
The oil is near the end of it`s useful service life, recommend schedule an oil change. 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.

Wear
All component wear rates are normal.

Contamination
There is a moderate amount of visible silt present in the sample.

Fluid Condition
The oil viscosity is higher than normal. The AN level is at the top-end of the recommended limit.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**HLC0002539**	HLC0002576	HLC0001941
Sample Date		Client Info		**06 Aug 2023**	09 Jun 2023	07 Apr 2023
Machine Age	hrs	Client Info		**0**	0	0
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**N/A**	N/A	N/A
Sample Status				**ABNORMAL**	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	**7**	1	<1
Chromium	ppm	ASTM D5185m	>10	**<1**	0	0
Nickel	ppm	ASTM D5185m		**0**	0	0
Titanium	ppm	ASTM D5185m		**0**	0	0
Silver	ppm	ASTM D5185m		**0**	0	0
Aluminum	ppm	ASTM D5185m	>25	**2**	<1	<1
Lead	ppm	ASTM D5185m	>25	**0**	1	0
Copper	ppm	ASTM D5185m	>50	**<1**	3	2
Tin	ppm	ASTM D5185m	>15	**<1**	<1	0
Vanadium	ppm	ASTM D5185m		**0**	0	0
Cadmium	ppm	ASTM D5185m		**<1**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**0**	0	0
Barium	ppm	ASTM D5185m		**0**	0	0
Molybdenum	ppm	ASTM D5185m		**0**	<1	<1
Manganese	ppm	ASTM D5185m		**<1**	0	<1
Magnesium	ppm	ASTM D5185m		**13**	7	15
Calcium	ppm	ASTM D5185m		**3313**	2600	2397
Phosphorus	ppm	ASTM D5185m		**283**	222	218
Zinc	ppm	ASTM D5185m		**332**	250	236
Sulfur	ppm	ASTM D5185m		**5695**	4705	4639

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**7**	10	12
Sodium	ppm	ASTM D5185m		**1**	0	0
Potassium	ppm	ASTM D5185m	>20	**13**	2	0

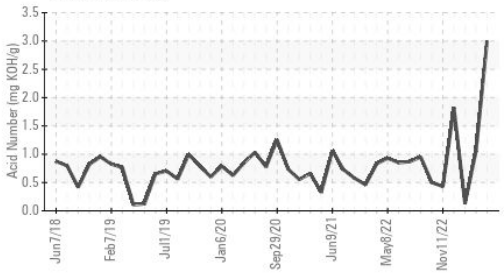
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		**---**	342	506
Particles >6µm		ASTM D7647	>2500	**---**	87	116
Particles >14µm		ASTM D7647	>320	**---**	10	9
Particles >21µm		ASTM D7647	>80	**---**	2	3
Particles >38µm		ASTM D7647	>20	**---**	1	0
Particles >71µm		ASTM D7647	>4	**---**	1	0
Oil Cleanliness		ISO 4406 (c)	>--/18/15	**---**	16/14/10	16/14/10

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		▲ **3.00**	1.055	0.127

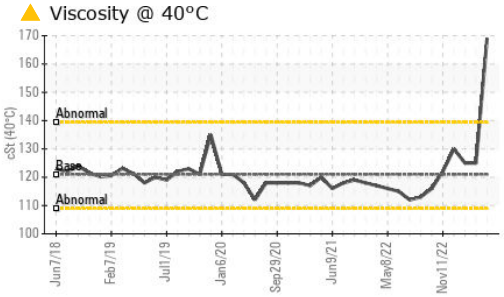
OIL ANALYSIS REPORT

Hilcorp Alaska, LLC

▲ Acid Number



▲ Viscosity @ 40°C



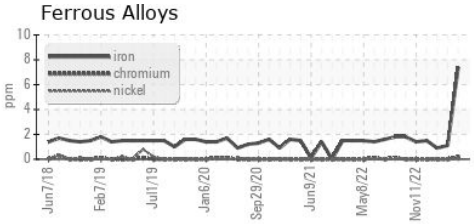
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	▲ **MODER**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Appearance	scalar	*Visual	NORML	**NORML**	NORML	NORML
Odor	scalar	*Visual	NORML	**NORML**	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	**NEG**	NEG	NEG
Free Water	scalar	*Visual		**NEG**	NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	121	▲ **169**	125	125

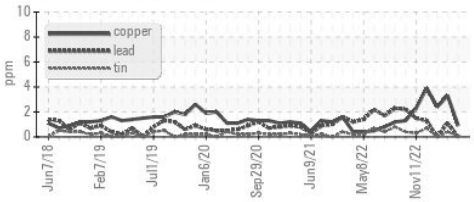
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					
Bottom					

GRAPHS

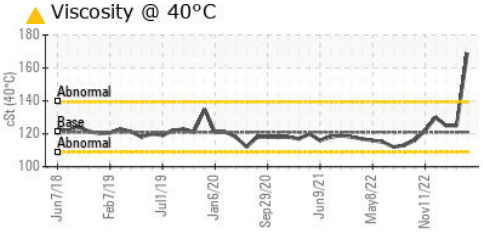
Ferrous Alloys



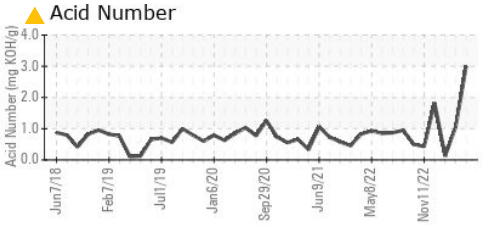
Non-ferrous Metals



▲ Viscosity @ 40°C



▲ Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : HLC0002539 **Received** : 14 Aug 2023
Lab Number : 05924180 **Diagnosed** : 15 Aug 2023
Unique Number : 10604127 **Diagnostician** : Doug Bogart
Test Package : IND 2 (Additional Tests: PrtCount)

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)

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