

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id **2801 - EZ CRUSHER** Hydraulic System Fluid AW HYDRAULIC OIL ISO 32 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Wear

All component wear rates are normal.

Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

Fluid Condition

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

SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PTK0005511	PTK0004509	PTK0004515
Sample Date		Client Info		29 Mar 2024	12 Sep 2023	09 Mar 2023
Machine Age	hrs	Client Info		2974	2663	2370
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	ABNORMAL	ABNORMAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	2	2	0
Chromium	ppm	ASTM D5185m	>10	1	<1	0
Nickel	ppm	ASTM D5185m	>10	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>10	2	0	<1
Lead	ppm	ASTM D5185m	>10	0	<1	0
Copper	ppm	ASTM D5185m	>75	<1	<1	0
Tin	ppm	ASTM D5185m	>10	<1	0	0
Antimony	ppm	ASTM D5185m				
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		<1	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base 5	current 0	history1 0	history2 0
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	limit/base 5 5	current 0 0	history1 0 0	history2 0 0
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	limit/base 5 5 5	current 0 0 <1	history1 0 0 <1	history2 0 0 0
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base 5 5 5	current 0 0 <1 <1	history1 0 0 <1 0	history2 0 0 0 <1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base 5 5 5 25	current 0 0 <1 <1 3	history1 0 0 <1 0 3	history2 0 0 0 <1 4
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base 5 5 5 5 2 5 2 5 2 0 0	Current 0 0 <1 <1 3 59	history1 0 0 <1 0 3 62	history2 0 0 0 <1 4 52
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base 5 5 5 5 2 5 2 5 2 5 2 0 0 300	Current 0 0 <1 <1 3 59 294	history1 0 0 <1 0 3 62 322	history2 0 0 0 <1 4 52 312
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base 5 5 5 5 2 2 5 2 0 0 3 0 0 3 0 0 3 7 0	Current 0 0 <1 <1 3 59 294 367	history1 0 <1 0 3 62 322 413	history2 0 0 0 <1 4 52 312 377
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	Method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	imit/base 5 5 5 2 2 2 0 0 3 0 0 3 7 0 2 5 0 0 2 5 0 0	current 0 -0 <1 <1 59 294 367 1030	history1 0 0 <1 0 3 62 322 413 1188	history2 0 0 <1 4 52 312 377 619
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	limit/base 5 5 5 2 2 2 5 2 0 0 3 0 0 3 7 0 2 5 0 0 3 7 0 2 5 0 0 3 7 0 2 5 0 0 3 0 0 3 7 0 2 5 3 0 1 3 0 0 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	current 0 0 <1 <1 3 59 294 367 1030 current	history1 0 <1 0 3 62 322 413 1188 history1	history2 0 0 0 2 312 377 619
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	imit/base 5 5 5 25 200 300 370 2500 2500 imit/base >20	current 0 -0 -1 <1 3 59 294 367 1030 current 4	history1 0 0 <1 0 3 62 322 413 1188 history1 4	history2 0 0 0 <1 4 52 312 377 619 history2 <1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	imit/base 5 5 5 25 200 300 370 2500 imit/base >20	current 0 -0 -1 <1 59 294 367 1030 current 4 <1	history1 0 0 <1 0 3 62 322 413 1188 history1 4 0	history2 0 0 0 - 4 52 312 377 619 history2 <1 0
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	imit/base 5 5 5 20 300 370 2500 Imit/base >20	current 0 0 <1 <1 3 59 294 367 1030 current 4 <1 <1	history1 0 0 - 0 - 0 3 62 322 413 1188 history1 4 0 <1	history2 0 0 0 0 <1 4 52 312 377 619 history2 <1 0 0 0 0 0 0 0
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	imit/base 5 5 5 25 200 300 370 2500 Imit/base >20 Imit/base	current 0 0 -1 <1 3 59 294 367 1030 current 4 <1 <1 <1 <1 <1 current	history1 0 0 <1 0 3 62 322 413 1188 history1 4 0 <1	history2 0 0 0 <1 4 52 312 377 619 history2 <1 0 0 history2 <1 0 0 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	limit/base 5 5 5 25 200 300 370 2500 2500 limit/base >20 20 limit/base	current 0 -1 <1 3 59 294 367 1030 current 4 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 4 <1 <1 <1 <110	history1 0 0 <1 0 3 62 322 413 1188 history1 4 0 <1 history1 63512	history2 0 0 0 - 4 52 312 377 619 history2 <1 0 0 0 0 0 334421
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >6µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	imit/base 5 5 5 200 300 370 2500 200 >20 imit/base >20 imit/base >20 imit/base >20	current 0 0 <1 <1 3 59 294 367 1030 current 4 <1 <1 <1 <1 <1 1030	history1 0 0 <1 0 3 62 322 413 1188 history1 4 0 <1 history1 63512 19057	history2 0 0 0 0 <1 4 52 312 377 619 history2 <1 0 0 0 0 334421 7651
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >6µm Particles >14µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	imit/base 5 5 5 200 300 370 2500 200 20 imit/base >20 S20 S20 S200 >2500 >2500 >2500 >320	current 0 0 <1 <1 3 59 294 367 1030 current 4 <1 <1 <1 <1 1030 current 4 <1 current 4110 1034 76	history1 0 0 0 0 3 62 322 413 1188 history1 4 0 <1 4 0 <1 history1 63512 19057 1133	history2 0 0 0 <1 4 52 312 377 619 history2 <1 0 <10 0 <10 0 34421 <7651 <741
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >14µm Particles >21µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	imit/base 5 5 5 20 300 370 2500 2500 20 imit/base >20 >2	current 0 0 <1 <1 3 59 294 367 1030 current 4 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	history1 0 0 <1 0 3 62 322 413 1188 history1 4 0 <1 63512 1133 234	history2 0 0 0 <1 4 52 312 377 619 history2 <1 0 <1 0 <10 0 34421 <7651 <741 <270
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium FLUID CLEANLIN Particles >4µm Particles >4µm Particles >21µm Particles >38µm	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647 ASTM D7647	imit/base 5 5 5 25 200 300 370 2500 2500 20 imit/base >20 20 320 >320	current 0 0 <1 <1 3 59 294 367 1030 current 4 <1 <1 1030 current 4 <1 <1 1034 76 16 1	history1 0 0 <1 0 3 62 322 413 1188 history1 4 0 <1 63512 1133 234 6	history2 0 0 0 4 52 312 377 619 377

ISO 4406 (c) >18/15

17/13

Oil Cleanliness

▲ 20/17

21/17



OIL ANALYSIS REPORT







FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.57	0.37	0.32	0.18
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	LIGHT	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
FI LIID PROPERT	IFS	method	limit/base	current	historv1	history2
Visc @ 40°C	cSt	ASTM D445	32	33.1	33.0	33.9
SAMPLE IMAGES)	method	limit/base	current	history1	history2

Color



Bottom



Certificate L2367

Contact/Location: Joseph Duff - LKQBAL Page 2 of 2