Oil analysis reports available on your machinery and operating systems.

Oil used in hydraulic machinery is often overlooked as a potential for failure. Whilst keeping the oil at the required level is taken as green the actual quality of the oil is frequently forgotten which can be detrimental to your machinery.

With modern hydraulic systems becoming more complicated and advances in technology, the individual components are more reliant on the oil being of a high standard to achieve maximum performance with contaminated oil potentially being capable of halting and damaging an expensive system.

Hydraquip's engineering team provide an oil sampling service:
- **Lubricant Analysis**
- **Fuel Analysis**
- **Glycol Coolant Analysis**
- **Electric Oil Analysis**
- **New Oil testing**

An oil sampling can help with:
- **Development of more efficient maintenance strategies**
- **Reduce number of failures**
- **Extend oil drain intervals**
- **Improve equipment efficiency and reduce energy wastage**
- **Decrease equipment downtime**

Hydraquip offer oil sampling as part of their preventative maintenance programs where a sample of oil from your hydraulic machinery is sent to our laboratory for testing. An oil analysis report is then available within 7 working days. The report will identify any early signs of contamination, fluid degradation and abnormal wear before causing any costly or permanent damage to your equipment. The report will look into the properties of the oil to monitor if the lubricant has reached a point at which it is no longer serviceable and when the customer can schedule in a change of oil within its machinery. Hydraquip's experts will look to identify the cause of contamination and will advise of this prior to replacing the oil.

Hydraquip's trained engineers adhere to the latest industry standards to ensure the oil samples have correctly and safely been extracted. The result and accuracy of the sample is only as good as the sample provided. All samples are taken using 500ml glass bottles with polycone caps to prevent gas escape.

To book call our service centre on 0345 812 0212 or for technical questions on oil sampling call 0191 414 2491 or your normal Hydraquip branch/contact.

EXAMPLE LABORATORY REPORTS

HYDRAQUIP HOSE & HYDRAULICS

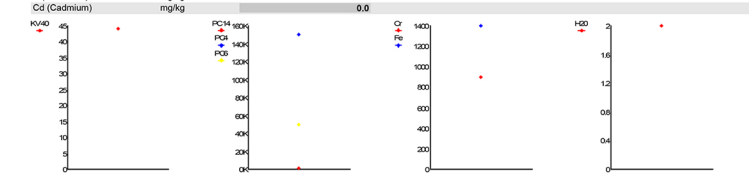
REQUIRES ATTENTION

Make:	HYDRAQUIP	Sample No:	4723148
Model:		Location:	TEST CLIENT
Serial No:	TEST2	Client:	TEST CLIENT
System:	HYDRAULIC	Form No:	1234
Brand:	SHELL TELLUS	Job No.:	20155
Grade:	32	Sampled:	17/10/14
Unique No.:	4101558	Received:	17/10/14

Diagnosis Key: Normal | Caution | Serious — Diagnostician: Carys Jones

Very high viscosity Water level serious. Sample appears cloudy. High TAN. The levels of Iron and Chromium appear high and suggest wear of a pump and/ or hydraulic rods/pistons. ISO cleanliness code exceeds 18/15 (cleanliness limit). Advice : Change oil and check unit for source of contamination.

Results		Current Sample	Historical Samples
Sample No		4723148	
Status			
Sampled		17/10/14	
Fluid Age		1080	
Unit Age		2320	
Fluid Condition			
Viscosity @ 40 °C	mm²/s	44.2	
Appearance	-	Cloudy	
Neut No.	mg KOH/g	7.76	
Additives			
B (Boron)	mg/kg	0.8	
Ba (Barium)	mg/kg	0.2	
Ca (Calcium)	mg/kg	9.6	
Mg (Magnesium)	mg/kg	0.8	
P (Phosphorus)	mg/kg	280	
S (Sulphur)	mg/kg	590	
Zn (Zinc)	mg/kg	256	
Contamination			
Particles >4µm	particles/ml	150214	
Particles >6µm	particles/ml	50124	
Particles >14µm	particles/ml	1204	
Water	%	2.00	
ISO Code	-	24/23/17	
Na (Sodium)	mg/kg	1.6	
K (Potassium)	mg/kg	3.7	
Si (Silicon)	mg/kg	3.8	
Li (Lithium)	mg/kg	1.0	
Wear Metals			
Al (Aluminium)	mg/kg	0.2	
Sn (Tin)	mg/kg	3.7	
Pb (Lead)	mg/kg	0.3	
Cu (Copper)	mg/kg	0.4	
Fe (Iron)	mg/kg	1398	
Cr (Chromium)	mg/kg	900	
Mo (Molybdenum)	mg/kg	0.0	
Ag (Silver)	mg/kg	0.0	
Ni (Nickel)	mg/kg	0.0	
Mn (Manganese)	mg/kg	0.1	
Ti (Titanium)	mg/kg	0.1	
V (Vanadium)	mg/kg	0.0	
Cd (Cadmium)	mg/kg	0.0	



HYDRAQUIP HOSE & HYDRAULICS

GOOD

Make:	HYDRAQUIP	Sample No:	4723146
Model:		Location:	TEST CLIENT
Serial No:	TEST1	Client:	TEST CLIENT
System:	HYDRAULIC	Form No:	123
Brand:	SHELL TELLUS	Job No.:	20154
Grade:	32	Sampled:	17/10/14
Unique No.:	4101543	Received:	17/10/14

Diagnosis Key: Normal | Caution | Serious — Diagnostician: Team

Wear appears satisfactory. No significant contamination. Advice : Monitor at the recommended sampling period.

Results		Current Sample	Historical Samples
Sample No		4723146	
Status			
Sampled		17/10/14	
Fluid Age		480	
Unit Age		1740	
Fluid Condition			
Viscosity @ 40 °C	mm²/s	33.0	
Appearance	-	Clear & Bright	
Neut No.	mg KOH/g	0.03	
Additives			
B (Boron)	mg/kg	0.9	
Ba (Barium)	mg/kg	0.2	
Ca (Calcium)	mg/kg	9.4	
Mg (Magnesium)	mg/kg	0.7	
P (Phosphorus)	mg/kg	269	
S (Sulphur)	mg/kg	587	
Zn (Zinc)	mg/kg	201	
Contamination			
Particles >4µm	particles/ml	6254	
Particles >6µm	particles/ml	1211	
Particles >14µm	particles/ml	55	
Water	%	0.10	
ISO Code	-	20/17/12	
Na (Sodium)	mg/kg	1.5	
K (Potassium)	mg/kg	0.1	
Si (Silicon)	mg/kg	3.7	
Li (Lithium)	mg/kg	0.8	
Wear Metals			
Al (Aluminium)	mg/kg	0.3	
Sn (Tin)	mg/kg	0.3	
Pb (Lead)	mg/kg	0.3	
Cu (Copper)	mg/kg	2.0	
Fe (Iron)	mg/kg	0.3	
Cr (Chromium)	mg/kg	0.1	
Mo (Molybdenum)	mg/kg	0.0	
Ag (Silver)	mg/kg	0.0	
Ni (Nickel)	mg/kg	0.0	
Mn (Manganese)	mg/kg	0.1	
Ti (Titanium)	mg/kg	2.8	
V (Vanadium)	mg/kg	0.0	
Cd (Cadmium)	mg/kg	0.0