

OIL SAMPLING

Oil sampling is a method of collecting a volume of fluid from lubricated or hydraulic machinery for the purpose of oil analysis. When collecting an oil sample, it is highly important to make sure that procedures are used to minimize sample disturbance during and after the sampling process. Oil samples are usually taken into a small, clear and clean bottle which is sealed and sent to a laboratory for analysis. Proper oil sampling is critical for maintaining an effective oil analysis program. Oil analysis is pointless without a representative sample. There are two major goals in obtaining a representative oil sample; one to maximize data density. Other is to minimize data disturbance. It is mandatory to make sure that the sample does not become contaminated during the sampling process, otherwise end up in disturb and distort data.

SAMPLING INSTRUCTIONS & PRECAUTIONS

For best results, we suggest the following procedure and precautions when taking the sample.

INSTRUCTIONS FOR TAKING THE SAMPLE

The sample should be taken **not more than 30 minutes** after shutdown.

AVOID CONTAMINATION OF THE SAMPLE

- ❖ Ensure equipment information label/sticker is filled out correctly and completely.
- ❖ Remove sticky back and apply to the sample bottle.
- ❖ Bring oil to be sampled to operating temperature. This will assure that the insoluble and semi-soluble material is suspended evenly throughout the system.
- ❖ Always sample from the upstream of filters and downstream of machine components to ensure that no data like particles is being removed by filters or separators.

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Blue Oceans Software



Tehenomics specialises in providing oil analysis services, and specialty lubricants to the mining industry.



By implementing a regular magnetic plug inspection program you will have a very low cost, effective and immediate early warning condition monitoring tool.



Tehenomics filtration services can assist companies with the design and installation of a range of fuel and oil filtration solutions.

OIL SAMPLING

- ❖ Insert supplied tubing through top of pump until approximately 10 mm protrudes into bottle space and tighten tube nut with finger pressure. Screw bottle on pump firmly.
- ❖ Take care to remove all dirt and contaminants from compartment opening.
- ❖ Take care with HOT compartments, especially engines and PRESSURISED hydraulic systems.
- ❖ Insert tubing to within 50 to 100 mm from bottom of compartment being sampled.
- ❖ Operate sampling pump until bottle is $\frac{3}{4}$ full. Stop oil flow by loosening bottle to break the vacuum.
- ❖ Remove bottle and recap immediately, make sure no contaminants enter the bottle.
- ❖ Discard sampling tube in a thoughtful manner, clean up any spillage with clean rags.

Mail or forward samples immediately to Techenomics Laboratory.

NOTE: If sampling pump should become contaminated, disassemble pump, flush with clean solvent and dry thoroughly. **DO NOT** use petrol or diesel to clean pumps.

FOR INQUIRIES?

Contact Techenomics laboratory on +61-2-65712699

FOR SAMPLE TRAINING?

Contact Techenomics Technical Staff on +61-2-65712699



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