

Drug & Alcohol Testing Service Level Agreement

1. Sample Collection:

- All sample collections are undertaken by a Cellmark approved suitably trained sampling professional (the Sampler).
- Cellmark will provide its own kit for the collection of hair samples.
- In all cases a completed Sample Declaration Form (SDF) is required.
- If a second "B" sample of hair is required please notify Cellmark when registering the case so that the correct kit can be sent for the collection.
- Blood and urine analysis is carried out in conjunction with our contracted sampling service who will provide sample collection kits for these sample types.
- Samples (including blood and urine) are sent via the postal service, courier or hand-delivered.
- Samples should be posted on the day of sampling but if stored overnight, hair samples should be stored at room temperature and blood and urine should be refrigerated.

2. Chain of Custody:

- The Sample Declaration Form (SDF) is designed to record evidence of the identity of the Donor, their consent to analyse the samples and the details and signature of the Sampler.
- The SDF should be completed by both the Sampler and the Donor.
- The SDF must be returned to Cellmark along with the hair sample(s) in the tamper evident packaging provided.
- The Sampler will return any blood or urine samples to the appointed laboratory along with completed paperwork.
- No laboratory testing will commence if the relevant paperwork is incomplete, the sample packaging has been damaged, or there is evidence of it being tampered with.
- Cellmark will not commence testing on a hair sample if the information on the SDF and the original registration do not match.

3. Laboratory Testing and Reporting of Results:

- Cellmark will test the hair sample(s) for evidence of drug and excessive alcohol use and report the results. Testing will be carried out at Cellmark's Abingdon laboratory.
- All substances detected as a result of the testing will be reported unless instructed otherwise.
- The appointed laboratory will undertake the analysis of blood and urine samples for evidence of alcohol usage.
- The length of hair sample available at the time of collection will determine what time period can be covered by the analysis. If the length of sample is insufficient to carry out the requested analyses the customer will be contacted to determine if they wish to proceed with the analysis or for another sample to be collected at a later date.
- Cellmark will not normally undertake laboratory analysis on a hair sample if the sample is of insufficient weight, unless agreed by the customer.
- If the type of hair is not specified on the SDF it will be assumed to be head hair.
- All samples requiring drug analysis are subjected to testing for the substances requested using techniques known as liquid chromatography with tandem mass spectrometry (LC-MS/MS) and/or gas chromatography with tandem mass spectrometry (GC-MS/MS).
- Tests for the alcohol markers ethyl glucuronide (EtG) and ethyl palmitate are carried out using GC-MS/MS.
- Results for drugs and alcohol markers will be reported in nanograms of drug per milligram of hair (ng/mg).
- Results of the alcohol marker analysis (EtG and ethyl palmitate) will be reported to indicate 'chronic excessive' alcohol consumption only (abstinence cannot be determined from the results).
- For any result to be reported as detected it will need to fall above the reporting 'cut-off' concentrations (see table) which are based upon a minimum sample (or section) weight of 20 milligrams (mg) of hair.
- To account for any hair left on the scalp during sampling, and the time taken for hair to grow above the scalp, 10 days will be subtracted from the date of collection before determining approximate time periods.
- Wash samples can be analysed if requested (at an additional cost).
- Cellmark reserves the right to amend these cut-off levels and update uncertainties if it is considered scientifically appropriate. Customers will be kept informed of any such changes.
- It is not Cellmark's policy to comment on 'low, medium or high' drug or alcohol usage.

4. Timing:

- Our standard turnaround time for cases is 5-7 working days from the receipt of samples at our laboratory.

5. Reporting:

- All test reports will be sent by Cellmark via secure email (or posted if requested) to the customer who registered the case.
- Cellmark will provide a report covering the outcome of the hair sample analysis.
- Cellmark will also incorporate into the report the results covering the outcome of blood and urine sample analyses (if requested).

6. Expert Witness:

- Cellmark can provide an expert witness to attend court if necessary subject to agreement to pay Cellmark's court attendance fees.

7. Retention of Samples

- Cellmark retains unused hair samples for a minimum of two years. Hair samples are stored at room temperature.
- Cellmark retains hair extracts for a minimum period of one year. Hair extracts are stored frozen.
- Cellmark retains wash samples for a minimum period of one year. Hair washes are stored at room temperature.
- Cellmark retains paperwork associated with samples for a minimum of two years.
- Urine & blood samples collected by our contracted sample collection service are retained for six weeks unless a specific request to retain for longer is received. The paperwork is kept for 2 months and reports produced are kept for 4 years, before being destroyed.
- At the end of the agreed storage period hair samples will either be destroyed as clinical waste or may be anonymised and used for validation testing and method development, unless instructed otherwise.

Compound	Critical Reporting Limit			
	Cellmark cut-off (ng/mg)	SoHT* cut-off (ng/mg)	Method uncertainty at the Cellmark cut-off (± %) ⁽³⁾	
Morphine ⁽¹⁾	0.2	0.2	24	Opiates
Dihydrocodeine ⁽¹⁾	0.2	0.2	24	
Codeine ⁽¹⁾	0.2	0.2	43	
6-MAM ⁽¹⁾	0.2	0.2	29	
6-Acetylcodeine ⁽¹⁾	0.05	n/a	30	Amphetamines
Heroin ⁽¹⁾	0.2	0.2	30	
Amphetamine ⁽¹⁾	0.2	0.2	25	
MDA ⁽¹⁾	0.2	0.2	30	
Methamphetamine ⁽¹⁾	0.2	0.2	24	
MDMA ⁽¹⁾	0.2	0.2	21	
MDEA ⁽¹⁾	0.2	0.2	20	
MBDB ⁽¹⁾	0.1	n/a	29	Benzodiazepines
Diazepam ⁽¹⁾	0.05	n/a	38	
Desmethyldiazepam ⁽¹⁾	0.05	n/a	40	
Chlordiazepoxide ⁽¹⁾	0.05	n/a	28	
Oxazepam ⁽¹⁾	0.05	n/a	33	
Temazepam ⁽¹⁾	0.05	n/a	22	Cocaine
Cocaine ⁽¹⁾	0.5	0.5	37 ⁽⁴⁾	
AEME ⁽¹⁾	0.05	n/a	26	
Benzoylcegonine ⁽¹⁾	0.05	n/a	28	
Cocaethylene ⁽¹⁾	0.05	n/a	20	
EME ⁽¹⁾	0.05	n/a	21	
Norcocaine ⁽¹⁾	0.05	n/a	22	
THC ⁽¹⁾	0.05	0.05	32 ⁽⁴⁾	Cannabis
THC-COOH ⁽¹⁾	0.00025	0.00020	18	
THC-OH ⁽¹⁾	0.00025	n/a	22	
CBD ⁽¹⁾	0.1	n/a	36	
CBN ⁽¹⁾	0.1	n/a	40	
Methadone ⁽¹⁾	0.2	0.2	24	
EDDP ⁽¹⁾	0.05	n/a	22	
Mephedrone ⁽¹⁾	0.1	n/a	37	
Ketamine ⁽¹⁾	0.2	0.2	13	
LSD	0.01	n/a	32	
PCP	0.1	n/a	20	Alcohols
Ethyl glucuronide (3 cm) ⁽¹⁾⁽²⁾	0.03	0.03	21	
Ethyl glucuronide (6 cm) ⁽¹⁾⁽²⁾	0.03	0.03	23	
Ethyl palmitate (3 cm) ⁽²⁾	0.35	0.35	22 ⁽⁴⁾	
Ethyl palmitate (6 cm) ⁽²⁾	0.45	0.45	22 ⁽⁴⁾	

⁽¹⁾ UKAS accredited test. The collection of samples, interpretation of results and opinions expressed in this statement are outside the scope of UKAS accreditation.

⁽²⁾ For a 3 or 6 cm section of head hair - this is to assess chronic excessive alcohol consumption only.

⁽³⁾ Method Uncertainty determined from spiked material at critical reporting level at >99% confidence interval (unless otherwise stated).

⁽⁴⁾ Method Uncertainty determined from spiked material at levels below critical reporting level at >99% confidence interval.

Notes:

The method uncertainty is not accounted for when reporting results.

Cellmark reporting cut-offs have been established using the *Society of Hair Testing (SoHT) recommendations and the results of extensive in-house validation.