**[CAPTION]**

**MOTION FOR ORDER AUTHORIZING EXPERT-AT PUBLIC EXPENSE**

Respondent-Mother, by counsel, respectfully moves this Court for an order authorizing counsel to retain the services of toxicology expert, [expert's name], and directing that the costs of such expert assistance be paid by the County. This motion is made pursuant to Ind. Evidence Rule 702; Ind. Code §31-32-2-3; Ind. Code §31-34-4-6; Ind. Code §34-47-3-5; Art. I, Sec. 12 and 23 of the Indiana Constitution; and the Fourth, Fifth, and Fourteenth Amendments to the United States Constitution; and in support of this Motion, the Respondent states the following:

1. Mother is the Respondent in the above-captioned child in need of services proceeding. Mother is also the named Respondent in a Verified Motion for Rule to Show Cause action filed under the same cause number by the Department of Child Services. Additionally, the Department has filed a Request for Authorization to Take Custody of Child. A Petition for Termination of Parental Rights has recently been filed under a separate cause number.

2. The Department of Child Services alleges [describe facts of failed drug screen] that Mother tested positive for delta-9-tetrahydrocannabinol in the amount of 1.3 nanograms per milliliter on or about September 17, 2013. It is further alleged that Mother tested positive for methadone in the amount of 7.3 nanograms per milliliter on July 29, 2013.

3. The Department claims that Mother has violated certain Court orders to "refrain from using or abusing controlled substances." The Department bases these claims on the alleged results of chemical testing performed and reported by its own contracted service provider, [insert name of laboratory].

4. Mother contends the results of the two drug tests in question are below standard "cut-off" levels, and that the method of testing is not reliable enough in this case to provide the basis for such serious sanctions as loss of the parent-child relationship, loss of custody of her child, or her potential incarceration upon a finding that she is in contempt of Court order for the following reasons:

   a. The testing has been performed by the Department's contracted service provider, rather than by an independent, unbiased laboratory;

b. The Department's laboratory does not perform standard panel drug screening. Rather [laboratory], in this case, has run samples and then suggested the compounds for which the Department should request;

c. Mother has not been offered portions of the tested samples for independent evaluation. Mother does not believe there are 'left-over' materials available for independent testing on conclusion of Forensic Fluid's testing;

d. Oral fluid drug testing has not been approved as a scientifically reliable method of determining drug use/abuse by any Indiana appellate court decision known to Mother's counsel;

e. The reliability of oral fluid drug testing is limited by many factors, including:

- The collection method used (there are several commercially available testing kits, each with its own reliability concerns and track records);
- The amount of oral fluid available for testing, which may be influenced by the use of oral fluid production stimulants, such as candies, chewing gum, or other non-reactive objects;
- Oral fluid production may be minimized by the use of certain drugs and medications, such as amphetamines, marijuana, antihistamines, antipsychotic drugs, anticholinergic drugs and a number of antidepressants.
- In some instances, there may not be enough oral fluid available for effective testing, or the concentration of a chemical substance may appear artificially higher due to the concentrating effect of a reduced volume of saliva;
- In some instances, where oral fluid production has been artificially stimulated, the concentration of substances present in oral fluids may be reduced relative to the volume of saliva collected;
- Some medications, such as benzodiazepines are not present in oral fluids in large enough quantities to ensure consistently accurate test results;
- Some drugs, such as cocaine and amphetamines have higher concentrations in oral fluid compared to blood, although these same chemicals may also reduce saliva production;

- Some drugs, such as delta-9 tetrahydrocannabinol are lipophilic (fat loving) and will be present in abnormally high concentrations immediately following exposure, even inadvertent exposure to marijuana smoke;

> *In the case of cannabis, a study has found THC concentrations for a short period following high passive exposure in an unventilated room of up to 26 ng/mL.*[86] *Ingestion of poppy seeds in food can cause a positive test result for morphine and exceed the 40 ng/mL SAMHSA cut-off for about one hour following consumption.*[87]"
> Drummer, Olaf H. Drug Testing in Oral Fluid, Clin.BiochemRev. 2006 August 27 (3): 147-159. PMCID: PMC 1579288
> <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1579288/>

- The administration route of the substances being monitored also affects the reliability of oral fluid testing, with smoking and oral ingestion causing high initial concentrations, which decrease over a period of time;
- Irregularity of oral surfaces, such as glandular ducts, periodontal disease, and tooth decay may allow particles of drugs to become trapped for a period of time following oral administration of the substance, again resulting in inaccurately high concentrations of the substance in the oral cavity. Counsel believes Mother has been suffering from severe dental decay throughout the latter months of this case;
- The acidity or alkalinity (pH balance) of the oral cavity, the saliva, the collection equipment and the fluid in the collection reservoir, will all affect the concentration of chemicals found in the saliva, both initially and over a length of time. Ionization of the chemicals in question may affect re-absorption or increased deposition of the chemical into surrounding membranes, into the oral fluids, or into the bloodstream;
- Many individual factors combine to create difficulty in predicting the accuracy of oral fluid testing and in correlating chemicals found in saliva with the quantity of the same chemical which would be found through blood testing, or urinalysis;
- For these reasons, minimum concentrations have been established by the United States Substance Abuse and Mental Health Services Administration (SAMSHA). These minimum concentration levels are known as “cut-off” levels.

f. The "cut-off" levels apparently used by Forensic Fluids to declare "positive" test results are much less than the SAMHSA recommended "cut-off" levels for the same chemicals;

> *"…in workplace applications the Substance Abuse & Mental Health Services Administration in the USA (SAMHSA) has recommended confirmation cut-offs for THC, cocaine, morphine and the amphetamines of 4, 8, 40, and 50 ng/mL, respectively."*
> Drummer, Olaf H. Drug Testing in Oral Fluid, Clin.BiochemRev. 2006 August 27 (3): 147-159. PMCID: PMC 1579288
> <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1579288/>

The allegedly positive THC test result in this case produced a testing result of 1. 3ng/mL, considerably below the 4 ng/mL cut-off point for THC set by SAMHSA.

g. Although a SAMHSA cut-off level for methadone has not yet been located by the undersigned attorney, extrapolating results, it would seem logical to assume that the SAMHSA confirmatory cut-off level for methadone should be set at the same level as the SAMHSA cut-offs for morphine and codeine, which is currently set at 40ng/mL, *supra*. The allegedly positive methadone test result in this case indicated a positive test result of 7.3ng/mL - well below recommended standards.

h. No information has been provided regarding any confirmatory testing performed on the samples in question, therefore Mother cannot determine if any confirmatory testing has taken place. Further the lab report does not indicate whether recommended confirmatory testing methods (gas chromatography/mass spectrometry or high (ultra) performance liquid chromatography/mass spectrometry) were employed during a confirmation process.

i. Levels of chemicals present in oral fluids do not correspond directly to blood levels of the same chemicals, for most compounds.

> *"In the case of most drugs the oral fluid concentration can be estimated from the pH of oral fluid and blood, the protein binding of the drug and its pKa.[13,28] For acidic drugs the equilibrium favours blood, hence oral fluid concentrations are less than for blood, while for basic drugs higher oral fluid concentrations occur. The average concentration ratio is shown in Table 2. In the absorptive phase there are often higher concentrations in the oral fluid due to local absorption in the mucous membranes of the buccal cavity."*
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> * * *
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> *". . .the pharmacokinetics of drugs in oral fluid is more complex than that of blood. Detection times in this specimen will depend on a range of factors including dose, frequency of use (ie acute versus chronic use) and detection limits of analytical assays."*

Drummer, Olaf H. Drug Testing in Oral Fluid, Clin.BiochemRev. 2006 August 27 (3): 147-159. PMCID: PMC 1579288 <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1579288/>

j. Finally, testing protocols and lab practices must conform to controlled protocol:

> *"The principles of good laboratory practice do need to be also considered for on-site testing. In practice this may be more difficult given that the environmental conditions and location are much less controlled than a laboratory. Nevertheless, it is imperative that the collection and testing process is as controlled as is reasonably feasible and the staff performing the collection of specimens and the testing are properly trained, otherwise it is likely that initial on-site results will be less reliable. This may produce a higher rate of FP [False Positives] and FN [False Negatives]. Id.*

k. Obviously, extensive knowledge of chemical qualitative and quantitative analysis, modern drug testing procedures and scientific protocol will be required to challenge the results which the Department claims necessitate removal of a [age] year old child from the home he currently shares with his Mother, next-door to his grandparents and older brother.

5. Mother is indigent and cannot afford the expenses associated with defending herself against the allegations which are currently pending in these cases.

6. Mother is entitled to the assistance and representation of competent counsel in these proceedings [See: I.C. §31-32-2-3 and I.C. §31-34-4-6 ].

7. Mother's currently appointed pauper counsel has no post-graduate training in chemistry, and has not completed college-level courses in quantitative or qualitative analysis.

8. Mother's attorney needs to consult with a chemical and/or toxicological expert in order to effectively evaluate the chemical test results at issue in this case.

9. Mother needs the benefit of her own court-appointed expert witness at any further hearings concerning the disputed drug screening results.

10. The Department of Child Services has indicated that it will likely call its chemist, [name] to explain the test procedures and results. Mother believes [name] has an M.S. in Chemistry and is the director of Forensic Fluid Laboratory.

11. Mother has certain fundamental due process rights in the maintenance of the integrity of her family. "A parent's interest in the care, custody, and control of his or her children is arguably one of the oldest of our fundamental liberty interests." Bester v. Lake County Office of Family & Children, 839 N.E.2d 143, 147 (Ind. 2005).

12. Mother has statutory and procedural rights in these causes, including the right to confront and cross-examine witnesses presented by the Department and the right to compel attendance of her own witnesses and to present evidence in her defense. [I.C. §31-32-2-3 and I.C. §31-34-4-6 (2013)]

13. ***, with his expertise in the field of toxicology, is eminently and perhaps uniquely qualified to assist the Respondent-Mother. *** has over thirty-five (35) years of experience as a practicing toxicologist. [Insert details of expert's education and experience]14. [Expert] is available to provide assistance in this case at a rate of [$___] per hour.

15. The requested expert assistance is essential for the Respondent to defend against the current allegations of the Department of Child Services, to protect her fundamental interest in family preservation, and to defend against the Department's contempt proceedings. The services of such an expert are necessary to enable Defendant to prepare effectively for hearing on these matters, to present evidence on her own behalf, and to cross-examine the Department's witnesses. Were it not for Respondent's poverty, counsel would retain the expert requested. Under these circumstances, the Constitutions of the United States and Indiana, and the statutory requirements of I.C. §31-32-2-3 and I.C. §31-34-4-6, and I.C. §34-47-3-5 (2013) require that funds for expert assistance be provided.

16. Ind. Evid. R. 702(a):

> *"If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise."*

WHEREFORE, the Defendant requests that this Court grant her motion for an order authorizing hiring of *** at the county's expense.

[signature]

References:


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