THC Detection Times in Occasional Smoker
by Texture

**Dose: T+ 0:00 | Cannabis**

**Body weight: 0 lbs**

ANALYSIS: THC detection time in occasional marijuana smoker**
( using an immunochromatographic assay)

Document Summary:
This document contains the results and specifics of a study designed to test THC metabolite detection time in urine.

Study Objective:
A primitive study was performed to determine the timeline of detectability of ingested THC. It is generally purported that the ingestion of marijuana is detectable in urine for weeks or even months after ingestion. It has been reported that occasional users purge any detectable levels of THC from their system within 48-72 hours. It is widely accepted that other ingested illicit substances including Cocaine, Methamphetamine, and MDMA are not detectable after 24-48 hours of ingestion, thereby making THC the only illicit drug widely believe to be reliably tested for long term using a urinalysis. This study casts doubt on the validity of drug testing as a reliable means for determining ingestion of illicit substances at all due to the relatively short detection times of any drug.

Study Overview:
The study tested one subject using a common and readily available IC urinalysis(ICA) test. On day one(D1) an initial test was performed to ensure that the subject was free of detectable levels of THC. On day two(D2) the subject ingested THC using the common procedure of smoking dried cannabis using a pipe. Approximately two ‘bowls’ were smoked over the course of a day, and the subject ingested his last ‘hit’ at approximately 8pm on day two(D2). After the initial ingestion the subject abstained from any further contact with THC or marijuana for the duration of the study. No special cleansing products were used, no unusual amounts of liquids were consumed, and no adulterants were introduced into the specimen.(

The subject was then tested every day until the ICA tested negative (-) for detectable levels of THC(D4). The subject was then tested for one additional day(D5) to ensure the reliability of the previous test(D4).

Subject Overview:
The subject is a 21 year old male 5’7’ aprox. 145lbs - occasional marijuana smoker (~1/wk-1/mo)
who prior to initial testing abstained from ingesting marijuana (THC) for approximately two weeks before the initial ICA(*1) urinalysis on which he tested negative(-).

IC Assay Overview:
The ICA(*1) is a competitive binding immunoassay in which drug and drug metabolites in a urine sample compete with immobilized drug conjugate for limited labeled antibody binding sites. By utilizing antibodies that are specific to different drug classes, the test permits independent, simultaneous detection of two drugs from a single sample. The approximate run time is 5 minutes.

In the assay procedure, urine mixes with labeled antibody-dye conjugate and migrates along a porous membrane. When the concentration of a given drug is below the detection limit of the test, unbound antibody-dye conjugate binds to antigen conjugate immobilized on the membrane, producing a rose-pink color band in the appropriate Test Zone for that drug. Conversely, when the drug level is at or above the detection limit, free drug competes with the immobilized antigen conjugate on the membrane by binding to antibody-dye conjugate, forming an antigen-antibody complex, preventing the development of a rose-pink color band.

Regardless of the drug levels in the sample, a rose-pink color band is produced in each Control Zone (marked “C”) by a parallel immunochemical reaction. These bands serve as built-in quality control measures by demonstrating antibody recognition, verifying that the reagents are chemically active. Each ICA(*1) contains dye-conjugated antibody and immobilized antigen in protein matrix with sodium azide. The samples were tested by immersing the ICA(*1) test strips in the urine for ~10 seconds congruent with package labeling.

The test is a two panel test purported to detect at the NIDA cutoff levels:

- THC(tetrahydrocannabinol) at 50ng/ml
- METH(methamphetamine) at 500ng/ml.

The ICA(*1) consisted of two panels, one that tested for the presence of METH, and one for the presence of THC. Each panel had two lines, the first line being the metabolite detection line, the second line being the urine detection line. The second line alerts you to the fact that the urine has in fact passed over the metabolite detection line, allowing you to determine that the sample has traveled over the metabolite detection line and has in fact been tested.

- A positive detection of THC was determined by the lack of a detection line.
- A negative detection of THC was determined by the presence of a detection line.

According to the package, the width and opacity of the detection lines indicate nothing about the inherent presence of THC or METH in the urine, though we found on day three a slight presence of a detection line, it was still determined to be a failing test, as the line was so faint as to be
inconsequential. It was noted that on the THC panel the urine detection and THC detection lines were consistently lighter than the METH panel lines.

The ICA(*1) consistently showed a negative presence of METH.

Study Analysis:

Days on which tests are passed are denoted by color, green is a passing test, red is a failed test.

- **Day One(Thursday) (D1)**: Initial test to determine passing levels of THC in the urine.
- **Day Two(Friday) (D2)**: Day of ingestion
- **Day Three(Saturday) (D3)**: T+24
- **Day Four(Sunday) (D4)**: First Passing Day, approximately two days (48 hours) after initial ingestion
- **Day Five(Monday) (D5)**: Consistent with the previous day, the subject passed the ICA(*1) test.

(see the attached picture for actual test results)

Study Summary:

The study showed that in an occasional marijuana smoker that detection times for THC are approximately 24 hours, within 48 hours of ingestion the subject was testing clean(-) Detection times were determined to be so short that it would be possible to ingest THC on a Friday and be clean by Monday, thereby negating any test given after 48 hours of initial ingestion.

Notes:

- *1 The test was an immunochromographic urinalysis test configured to detect THC at levels of 50ng/ml
- * the test used is a two panel test including THC detection at 50ng/ml and METH(amphetamine) at 500ng/ml
- *** Note: the subject did ingest alcohol including hard liquor during the course of the study.
- ** Though we believe the results of this study to be reliable and verifiable - It must be noted that this is not a true controlled scientific experiment, it is merely provided as the results of testing for THC under real-world circumstances using a readily attainable ICA. This study should be confirmed by a controlled, multiple subject experiment before being purported as a reliable assessment of THC detection times.

Note: These are the actual tests used in the study. The image has been edited due to the unclear nature of the photograph to approximate the actual opacity of the test lines and indicate which tests indicate which tests are negative and which are positive.