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Validation of Enzyme-linked Immunosorbent Assays for the Detection of Licit and Illicit Drugs

in Human Breast Milk

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Validation of Enzyme-linked Immunosorbent Assays for the Detection of Licit and Illicit
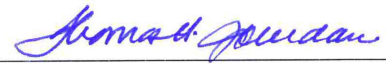
Drugs in Human Breast Milk

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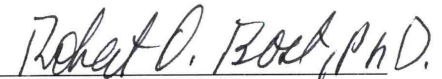APPROVED FOR THE DEPARTMENT OF FORENSIC SCIENCE

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Abstract

Human breast milk contains essential nutrients and immunological factors that are critical for the health and development of infants. The benefits of breast-feeding have been studied extensively, and research has shown that breastfed infants have a decreased risk of infections and illnesses. There are many instances when mothers are unable to provide their own milk, which is the case with many prematurely born infants. Breast milk banks and facilities that process human milk provide an alternative solution to synthetic or animal derived infant formula, allowing babies to receive the benefits of human breast milk. There are many drugs that can pass into a woman's breast milk and cause possible harm to an infant. It is important that donor milk be screened for drugs-of-abuse in order to prevent this from occurring. The purpose of this study was to optimize and validate enzyme-linked immunosorbent assays (ELISA) for the detection of a seven-drug panel in human breast milk. The following Neogen Corporation kits were utilized: Amphetamine Ultra, Benzodiazepine Group, Cocaine/Benzoylecgonine (BZE), Cotinine, Opiate Group, Oxycodone/Oxymorphone, and THC. Sample dilutions that minimized breast milk matrix interference were determined, and cutoff levels for each assay were proposed based on the linear range of the assay. The seven-drug panel was validated through the assessment of drift, precision, and accuracy. The Cocaine/BZE and Opiate Group cutoffs were increased from 30 to 50 ng/mL after several false negative results were obtained during the accuracy portion of the validation. The ELISA assays were validated at two different sites, and the robustness of the method was demonstrated.

Introduction

Problem Statement

Human breast milk contains essential nutrients and immunological factors that are critical for the health and development of infants (Leaf & Winterson, 2009; Marchei, et al., 2011). The benefits of breastfeeding have been studied extensively, and research has shown that breastfed infants have a decreased risk of infections and illnesses (American Academy of Pediatrics, 2012; Ito & Lee, 2003; Leaf & Winterson, 2009; Marchei, et al., 2011). There are many instances when mothers are unable to provide their own milk, which is the case with many prematurely born infants (Boyd, Quigley, & Brocklehurst, 2007; Ganapathy, Hay, & Kim, 2011; Sullivan, et al., 2010). Human milk banks and facilities that produce human-milk-based nutritional products are able to provide an alternative solution to synthetic or animal derived infant formula, which allows babies to receive the benefits of human breast milk (Bertino, et al., 2009; Boyd, et al., 2007; Simmer & Hartmann, 2009; Wojcik, Rechtman, Lee, Montoya, & Medo, 2009). While it is important that all breastfeeding mothers avoid drugs and other harmful substances that could pass into their milk and affect the health of their babies, it is essential for milk banks and facilities that process human milk to ensure that they are supplying drug-free milk to hospitals (Marchei, et al., 2011). Due to the demand of human milk and milk products, milk banks and manufacturing facilities are focused on increasing processing efficiency. One of the ways that this can be achieved is by utilizing a high-throughput screening method for drugs-of-abuse that has a short turn-around time.

Enzyme-linked immunosorbent assays (ELISA) have been used extensively in forensic toxicology settings for the purposes of screening for the presence of drugs (Elian, 2003; Hand & Baldwin, 2008). Screening tests are typically less expensive and time consuming than

confirmation tests (Gaensslen, Harris, & Lee, 2008). A screening test has the ability to detect whether a particular substance may be present in a sample, or if the substance is not present (Smith, 2003). Confirmation testing can then be performed on samples that screen positive, which removes the need to perform a complete analysis on each submitted sample (Gaensslen, et al., 2008; Smith, 2003). ELISA assays are easy to use, have a short turn-around time, can be automated for high-throughput scenarios, and have the ability to detect low levels of drug (Elian, 2003; Hand & Baldwin, 2008; Smith, 2003).

Purpose

The use of ELISA assays for drug screening purposes has primarily been reserved for commonly tested body fluids, such as blood, urine, and saliva. In situations where testing is to be performed in a matrix that differs from that for which an ELISA has been validated, good science dictates that the kit be validated to demonstrate its efficacy in the new matrix (Hand & Baldwin, 2008). This is of particular importance in the case of breast milk as it contains natural emulsifying agents that possess detergent-like activity, and "may interfere with antibody-antigen reactions which take place in immunoassay screening tests" (Kerrigan & Goldberger, 2000). The purpose of this project was to optimize and validate a method for the screening of a seven-drug panel in human breast milk using ELISA assays.

Significance of the Study

The majority of human milk and human-milk-based products supplied to pre-term infants originate from human milk banks and processing facilities (Bertino, et al., 2009; Boyd, et al., 2007; Ganapathy, et al., 2011; Simmer & Hartmann, 2009; Wojcik, et al., 2009). These infants typically have weak immune systems and are at risk of developing many different kinds of diseases (Ganapathy, et al., 2011; Sullivan, et al., 2010). It is critical that these babies be

provided human milk in order to nourish their still-developing bodies and immune systems

(Boyd, et al., 2007; Sullivan, et al., 2010). It is also essential that these babies not be exposed to

any drugs that could cause further harm (Berlin, 2003; Lozano, et al., 2007; Marchei, et al.,

2011). Screening for drugs in breast milk is an important public health issue, because providing

drug-free human milk to infants has a positive effect their health both immediately and as they

age. This translates to babies, children, and adults who need less heath care, and are less of an

economic strain on the health care system (Ito & Lee, 2003). From a business standpoint, milk

banks and processing facilities are more likely to be able to sell their products if they can

demonstrate that they have a robust screening process for their donors, which includes a drugs-

of-abuse screening (Polifka, 1998).

Seven-Drug Panel

The literature was reviewed to determine the dangers of exposing infants to breast milk

containing drugs. Based on this research and the prevalence of use within the general

population, a drug panel for the following categories of drugs was developed: amphetamines,

benzodiazepines, cocaine, nicotine, opiates, including oxycodone, and cannabinoids. ELISA

assays were assessed for their feasibility of use in the screening of this drug panel in breast milk.

ELISA kits from Neogen Corporation (Lexington, KY) were evaluated for the development of

the final seven-drug panel. The following nine kits were initially evaluated: Amphetamine Ultra,

Benzodiazepine Group, Cocaine/BZE, Cotinine, Hydromorphone, Methamphetamine/MDMA,

Opiate Group, Oxycodone/Oxymorphone, and THC. The Hydromorphone kit was not used for

the final panel because the Opiate kit demonstrated high cross-reactivity with hydromorphone.

The Methamphetamine/MDMA kit was not used for the final panel because the Amphetamine

Ultra kit demonstrated high cross-reactivity with d-methamphetamine, and it was decided that

the identification of MDMA (3,4-methylenedioxy-N-methylamphetamine) in breast milk would

not be pursued for this drug panel. The final seven-drug panel consisted of the following seven

Neogen kits: Amphetamine Ultra, Benzodiazepine Group, Cocaine/BZE, Cotinine, Opiate

Group, Oxycodone/Oxymorphone, and THC.

Definitions

Absorbance (A): A logarithmic measure of the amount of light absorbed at a particular

wavelength as the light passes through a sample or substance. The absorbance of a solution is

linearly related to the concentration of the absorbing species (K. Cole & Levine, 2009).

%B/B$_0$: The ratio of the absorbance of a particular sample well (B) to the absorbance of the

negative well (B$_0$), expressed as a percentage. B$_0$ contains no analyte, so it is the concentration

at which maximum absorbance can occur (Hand & Baldwin, 2008; Smith, 2003).

Calibrator: A calibrator is used to calibrate an assay, and is either prepared from reference

material or purchased from a suitable vendor (American Board of Forensic Toxicology). A

negative calibrator is used to determine an absorbance value that corresponds with no

analyte/antibody competition. A cutoff calibrator is used to determine an absorbance value that

samples will be compared to in order to make positive and negative determinations (Schwope,

Milman, & Huestis, 2010).

Coefficient of variation (CV): The % CV is a ratio of a sample standard deviation to the sample

mean expressed as a percentage (D'Agostino, Sullivan, & Beiser, 2006).

Cutoff level: The cutoff level establishes the concentration at which a sample is declared either

positive or negative for the analyte of interest. A sample with a concentration greater than the

cutoff level will be reported out as positive, while a sample with a concentration lower than the

cutoff level will be declared negative (Hand & Baldwin, 2008; Smith, 2003).

Enzyme-linked immunosorbent assay (ELISA): An ELISA is a biochemical technique used to detect the presence of an antibody or antigen in a sample (Hand & Baldwin, 2008; Smith, 2003). *I-50*: The absorbance that is halfway in between the maximum and minimum absorbance. It can be thought of as the concentration directly between no competition and maximum competition of the analyte for the antibody (Schwope, et al., 2010).

Literature Review

Benefits of Breastfeeding

Human breast milk is ideally suited for the growth and development of human infants (Lawrence & Schaefer, 2007). It contains essential nutrients, immunological factors, digestive enzymes, growth factors, and enzymes, all of which are critical for an infant's health and development (Leaf & Winterson, 2009; Marchei, et al., 2011). Breastfeeding has been shown to lower the prevalence a wide variety of diseases and conditions. For infants and toddlers, the risk of developing respiratory tract infections, otitis media, gastrointestinal tract infections, necrotizing enterocolitis, and sudden infant death syndrome is drastically reduced (American Academy of Pediatrics, 2012; Ganapathy, et al., 2011; Singhal, Cole, Fretwell, & Lucas, 2004; Sullivan, et al., 2010). Long-term benefits include a decreased risk of allergic disease, diabetes, obesity, atherosclerotic cardiovascular disease, celiac disease, and inflammatory bowel disease (American Academy of Pediatrics, 2012; Friguls, et al., 2010, Ito & Lee, 2003). Babies who are breastfed have also demonstrated greater aptitude scores on developmental and intelligence tests (Ito & Lee, 2003; Lawrence & Schaefer, 2007). Both the American Academy of Pediatrics (2012) and the American Dietetic Association (2009) suggest exclusive breastfeeding for six months, and then breastfeeding with complementary foods from six to 12 months.

Hazards of Maternal Drug Use

While very few drugs are absolutely contraindicated during breastfeeding, the adverse effects of the majority of drugs and medications on infant health, both short term and long term, are not well known. "Most recommendations on the safety of medications during lactation are based on theoretical risks, case reports, or single case studies that measured breast milk or infant serum levels" (Ito & Lee, 2003). The exact prevalence of drug use by breastfeeding women is unknown, but there are several estimates in the literature. It is estimated that between 0.4 and 27% of urban American women abuse drugs while pregnant (Kerrigan & Goldberger, 2000). It can be assumed that the majority of these women would continue to abuse drugs while breastfeeding. Ito and Lee (2003) reported that during the first week after delivery, roughly 90% of women take some form of medication. Howard and Lawrence (1999) reported that in a study of 14,000 women, 79% had used at least one medication, with an average of 3.3 different drugs, during breastfeeding. In a similar study of 838 breastfeeding women, 80% were taking at least one drug, 20% were taking two or more, and 89% of the breastfed infants were younger than four months (Berlin & Briggs, 2005). There are case reports of clinically significant toxicity in infants who have been exposed to drugs through breast milk. However, the amount of data is sparse due to the fact that it is difficult to conduct research in breastfeeding women and their infants regarding clinical risk assessments of drugs (Friguls, et al., 2010).

An infant's exposure to drugs in breast milk depends on a drug's milk-to-plasma concentration ratio, maternal and mammary pharmacokinetics, the amount of milk consumed, and the infant's rate of drug clearance (Begg, 1996; Friguls, et al., 2010; Ito & Lee, 2003). The pharmacokinetic considerations of neonates and young infants are difficult to estimate due to the continuous shifting of their ability to absorb, metabolize, and eliminate substances (Atkinson,

Begg, & Darlow, 1988). Drug clearance rates in neonates and young infants are low due in large part to the immaturity of their drug elimination systems (Friguls, et al., 2010). Renal excretion of drugs is dependent on the glomerular filtration rate, tubular secretion, and protein binding (Atkinson, et al., 1988; Friguls, et al., 2010). The glomerular filtration rate for a full-term neonate is approximately 25% of adult values (Friguls, et al., 2010). This rate doubles within the first two weeks of life and adult levels are reach by three to five months of age (Atkinson, et al., 1988; Friguls, et al., 2010). Both protein binding and tubular function are decreased in neonates, with adult values being achieved within ten to twelve and seven to nine months respectively (Atkinson, et al., 1988). Both phase I and phase II drug metabolism are impaired in neonates. Cytochrome P450 isoenzymes develop at different rates in relation to one another, and between infants (Atkinson, et al., 1988; Friguls, et al., 2010). "Overlapping substrate specificities and genetic polymorphisms add complexity to drug biotransformation in infants" (Friguls, et al., 2010).

Breast Milk as a Matrix

Breast milk is an unconventional matrix for assessing both maternal and neonatal exposure to drugs (Marchei, et al., 2011). Breastfeeding women produce an average of 600 to 1000 mL of milk a day, and an infant typically consumes 150 mL/kg/day (Berlin & Briggs, 2005; Sagraves, 1997). The composition of breast milk changes not only as the infant ages, but also during the course of a feeding and throughout the day (Kerrigan & Goldberger, 2000; Leaf & Winterson, 2009; Sagraves, 1997). Analytical challenges intrinsic to the extraction of drugs from breast milk include its high protein and fat content, along with its continually changing composition (Friguls, et al., 2010; Kerrigan & Goldberger, 2000).

Drug characteristics affecting the amount of drug excreted from plasma into breast milk include protein binding, ionization, degree of lipophilicity, and molecular weight (Agatonovic-Kustrin, Ling, Tham, & Alany, 2002; Howard & Lawrence, 1999; Ito & Lee, 2003; Sagraves, 1997). Highly protein-bound drugs are less likely to leave the maternal serum and pass into the breast milk (Agatonovic-Kustrin, et al., 2002; Howard & Lawrence, 1999; Sagraves, 1997). The maternal characteristics influencing the concentration of a substance in milk depend on the dose ingested, duration of consumption, the amount of milk excreted daily, the pH of maternal plasma and milk, and the woman's individual metabolic and physiological characteristics (Agatonovic-Kustrin, et al., 2002; Howard & Lawrence, 1999; Ito & Lee, 2003; Sagraves, 1997). The pH of human breast milk is slightly more acidic (average pH of 7.1 to 7.2) than plasma (pH of 7.4), which favors the passage of alkaline drugs into milk (Agatonovic-Kustrin, et al., 2002; Howard & Lawrence, 1999; Sagraves, 1997). "Typically, a low-molecular weight, un-ionized, lipid-soluble basic compound that has low plasma protein binding can cross into human milk with relative ease" (Sagraves, 1997).

Excretion of drugs in breast milk mostly occurs by simple passive diffusion, but carrier-mediated transport and active transport take place for certain drugs (Agatonovic-Kustrin, et al., 2002; Howard & Lawrence, 1999; Ito & Lee, 2003). The ratio between the concentration of the drug in milk and that in maternal plasma is called the milk-to-plasma (M:P) concentration ratio (Begg, 1996; Friguls, et al., 2010; Sagraves, 1997). While this ratio is extremely useful in predicting how likely it is that a drug will concentrated in the breast milk, it is based on the assumption "that the milk and plasma concentrations parallel each other throughout the maternal dosing interval," which is not always true (Begg, 1996; Sagraves, 1997). In general higher M:P

ratios indicate that a greater amount of drug is transferred to the breast milk (Howard &

Lawrence, 1999).

Specific Drugs

      Amphetamines.

      Amphetamines are among most widely abused compounds by recreational drug users in

developing countries, and rates of use are reportedly increasing (Bartu, Dusci, & Ilett, 2009;

Friguls, et al., 2010). "Methamphetamine is currently the most frequently encountered

clandestinely produced controlled substance in the U.S.," due in large part to the ease with which

it can be synthesized in makeshift laboratories (Moore, 2010). Amphetamines stimulate the

central nervous system (CNS) and can produce euphoric effects. Methamphetamine possesses a

long half-life, which can be ten times longer than cocaine (Moore, 2010). Amphetamine has a

six to 12 hour half-life, with both hepatic and renal clearance contributing to its elimination

(Friguls, et al., 2010). Amphetamines and cocaine have similar pharmacokinetic profiles. They

are "highly lipid soluble and well absorbed orally, with a bioavailability of approximately 67%

and a volume of distribution of 3-7 L/kg" (Moore, 2010). Amphetamines are weak bases with

relatively low molecular weights, allowing them to easily diffuse "across cell membranes into

tissues or biological substrates with a more acidic pH than blood, such as milk" (Friguls, et al.,

2010; Steiner, Villen, Hallberg, & Rane, 1984). Amphetamine has a high milk-to-plasma ratio,

ranging from 2.8:1 to 7.5:1, which indicates that is concentrated in breast milk (Friguls, et al.,

2010; Steiner, et al., 1984). Methamphetamine undergoes N-demethylation to amphetamine,

which is catalyzed by human hepatic cytochrome P450 isoenzyme CYP2D6 (Bartu, et al., 2009;

Friguls, et al., 2010). It is primarily excreted in the urine as the parent drug, with up to 45% of a

single dose being eliminated within 24 hours (Moore, 2010). Amphetamine is an active

metabolite, and accounts for approximately 4-7% of a methamphetamine dose in a 24-hour urine sample (Bartu, et al., 2009).

Bartu et al. (2009) collected urine and milk samples from two mothers who were intravenous users of methamphetamine. Urine was collected four hours after a single dose, and milk samples were collected prior to drug use and at two to six hour intervals following the dose, for a period of 24 hours. The urine samples were analyzed by gas chromatography-mass spectrometry (GC-MS), while the milk samples were analyzed using high performance liquid chromatography (HPLC). Both the urine and milk samples contained primarily methamphetamine and lower amounts of amphetamine. The average methamphetamine concentrations in the milk samples collected 24 hours post dosing were 111 µg/L and 281 µg/L. The amphetamine concentrations were 4 µg/L and 15 µg/L in the same samples. These milk samples were found to have an average half-life of ten hours for methamphetamine, and 28 hours for amphetamine. The absolute infant doses were calculated to be 17.5 µg/kg/day and 44.7 µg/kg/day. Based on this data, the authors recommended that breastfeeding be withheld for 48 hours following a single recreational dose of methamphetamine (Bartu, et al., 2009).

Steiner et al. (1984) studied the excretion of amphetamine into the milk of a breastfeeding mother with narcolepsy, who was treated daily with 20 mg of amphetamine. The concentration of amphetamine was three times higher in breast milk than in maternal plasma on the tenth day following delivery, and seven times higher on the 42nd day after delivery. This supports the theory that alkaline drugs accumulate in breast milk. Urine samples were collected from the nursing infant, and small amounts of amphetamine were detected. The infant was monitored for an additional 24 months, and no adverse effects were observed or reported (Steiner, et al., 1984). An investigation of the transfer of dexamphetamine into breast milk

during treatment for attention deficit hyperactivity disorder was conducted using a high

performance liquid chromatography-ultraviolet (HPLC-UV) method. This study found that the

relative infant dose was <10% of the maternal dose (Ilett, Hackett, Kristensen, & Kohan, 2007).

The following adverse effects have been reported for infants breastfed by amphetamine

users: irritability, poor sleeping pattern, agitation, and crying (American Academy of Pediatrics,

2001; Friguls, et al., 2010). Ariagno, Karch, Middleberg, Stephens, & Valdes-Dapena (1995)

reported the death of an infant breastfed by a methamphetamine user. The infant's blood

concentration contained 39 ng/mL of methamphetamine, and the authors presented evidence that

the death was attributable to cardiopulmonary failure caused by exposure to the drug in breast

milk (Ariagno, et al., 1995).

Benzodiazepines.

Benzodiazepines are frequently prescribed to women during pregnancy and after

childbirth, but long-term therapy should be avoided during breastfeeding (Friguls, et al., 2010;

Howard & Lawrence, 1999). They are CNS depressants, and approximately 30% of

benzodiazepine use is illicit (Friguls, et al., 2010; Jufer-Phipps & Levine, 2010).

Benzodiazepines are highly protein-bound, with a volume of distribution of 2 L/kg (Jufer-Phipps

& Levine, 2010). Benzodiazepines can be categorized into long-acting, intermediate-acting, and

short-acting compounds, depending on the length of their half-life (Friguls, et al., 2010; Howard

& Lawrence, 1999; Iqbal, Sobhan, & Ryals, 2002; Jufer-Phipps & Levine, 2010). The long half-

lives of some of these compounds, coupled with an infant's underdeveloped metabolic and

excretory function, can lead to measurable amounts of drug in plasma and tissues, such as the

brain (Friguls, et al., 2010; Howard & Lawrence, 1999; Kerrigan & Goldberger, 2000). The M:P

ratios for most benzodiazepines are fairly low, with breast milk concentrations at ten to 20% of

the maternal plasma concentrations (Jufer-Phipps & Levine, 2010). "Because these drugs affect neurotransmitter function in the developing CNS, it may not be possible to predict long-term neurodevelopmental effects" (Friguls, et al., 2010).

   Alprazolam.

   Alprazolam is an intermediate-acting benzodiazepine that has two active metabolites, 4-hydroxyalprazolam and α-hydroxyalprazolam, which are known to cross the placenta (Friguls, et al., 2010; Iqbal, et al., 2002; Jufer-Phipps & Levine, 2010; Oo, Kuhn, Desai, Wright, & McNamara, 1995). It has a pKa of 2.4, is soluble in methanol and ethanol, insoluble in water, and has a bioavailability of approximately 90%. A single dose of alprazolam will be almost completely eliminated with 72 hours (Jufer-Phipps & Levine, 2010).

   Oo et al. (1995) studied the pharmacokinetics of alprazolam and its metabolites in breast milk. Blood and breast milk samples were collected from eight subjects following single oral doses of alprazolam, for a period of 36 hours. These samples were analyzed with HPLC-UV following protein precipitation with acetonitrile and solid phase extraction (SPE). The milk and plasma concentrations paralleled one another, and the milk concentrations were found to be lower than plasma concentrations, with a M:P ratio of 0.36:1. Low concentrations of 4-hydroxyalprazolam were detected in plasma only, while α-hydroxyalprazolam was not detected in plasma or milk. The results of this study suggest that neonatal doses of alprazolam in breast milk would be low and are unlikely to result in any adverse effects in the nursing infant (Oo, et al., 1995). However, case studies have been reported where mothers discontinued their use of alprazolam during breastfeeding due to adverse effects observed in their infants. These symptoms included restlessness, irritability, and sleep disturbance. The mothers also noted

withdrawal symptoms at the discontinuation of breastfeeding (O. Anderson, 1989; Iqbal, et al., 2002).

Diazepam.

Diazepam is a long-acting benzodiazepine with a half-life of approximately 20–50 hours in full-term infants (Dusci, Good, Hall, & Ilett, 1990; Friguls, et al., 2010; Iqbal, et al., 2002). It has a pKa of 3.3, is soluble in ethanol, slightly soluble in water, and has an oral bioavailability of around 100%. It undergoes demethylation by the CYP2C19 and CYP3A4 isoenzymes, which form its primary metabolite of nordiazepam. This active metabolite can accumulate in the plasma following repeated dosing (Jufer-Phipps & Levine, 2010). Diazepam and its metabolites have been found to possess M:P ratios ranging from 0.2:1 to 2.7:1 (Friguls, et al., 2010). Due to diazepam's long half-life and slow metabolism in infants, accumulation of both diazepam and its metabolites can occur (A. P. Cole & Hailey, 1975; K. Cole & Levine, 2009; Friguls, et al., 2010).

Cole and Hailey (1975) conducted a study of nine mothers taking diazepam. Maternal milk and blood samples were collected along with neonate blood samples. Both diazepam and N-desmethyldiazepam were detected in breast milk samples and neonate blood samples. "Appreciable amounts of active substances were detected in one infant ten days after a single dose was given to the mother" during the delivery (A. P. Cole & Hailey, 1975). Several other studies have reported infant sedation and lethargy in breastfed infants whose mothers were using diazepam (Friguls, et al., 2010; Iqbal, et al., 2002).

Cannabinoids.

Marijuana is the most commonly used recreational drug of abuse around the world, and is also prescribed for health reasons (Friguls, et al., 2010; Huestis, 2010). The frequency of use among pregnant women is estimated to be between five and 34% (Astley & Little, 1989).

Infants can be exposed to marijuana from consuming the milk of mothers who use the drug and also from passive inhalation (Friguls, et al., 2010; Liston, 1998). The principal psychoactive compound in marijuana, delta-9- tetrahydrocannabinol (Δ^9-THC or THC), is highly lipid soluble, rapidly distributed into the brain and adipose tissue, has a large volume of distribution, and binds extensively to plasma proteins (Friguls, et al., 2010; Garry, et al., 2009; Huestis, 2010; Liston, 1998). At low doses, it causes both stimulant and depressant effects, while at high doses it acts as a CNS depressant (Huestis, 2010). The elimination half-life of THC ranges from 20 to 48 hours, and traces of the drug can remain in the body for four to six weeks. It is stored in adipose tissues for long periods of time (weeks to months), and chronic users may exhibit a longer half-life of 4 days (Friguls, et al., 2010; Garry, et al., 2009). Marijuana is concentrated in breast milk and has a high M:P ratio of up to 8:1 (Friguls, et al., 2010; Garry, et al., 2009; Liston, 1998). An infant ingests approximately 0.8% of the weight-adjusted maternal intake of one joint (marijuana cigarette) during a single breast milk feeding (Friguls, et al., 2010; Garry, et al., 2009). Infants who have been exposed to marijuana through breast milk will excrete THC in their urine for two to three weeks (Garry, et al., 2009).

Animal studies have shown that newborn animals exposed to marijuana in breast milk suffered from altered brain cell metabolism due to impaired DNA and RNA synthesis of brain cells. As critical brain development occurs during an infant's first few months of life, exposure to marijuana during this time could negatively affect this process (Garry, et al., 2009; Liston, 1998). Case studies have described sedation, reduced muscular tonus, and poor sucking in infants who have been exposed to marijuana (Astley & Little, 1989; Garry, et al., 2009). Astley and Little (1989) conducted a study that examined the relationship between infant exposure to marijuana from breast milk, and motor and mental development at 12 months of age. Of the 136

infants assessed, 68 were exposed to marijuana through breastfeeding. This exposure was

associated with a decrease in infant motor development. The largest decreases were seen in

infants who had daily exposure to marijuana during the first month of life (Astley & Little,

1989). The analysis of marijuana is human breast milk has only been performed in one study to

date. Perez-Reyes et al. (1982) used liquid chromatography-mass spectrometry (LC-MS) to

study the passage of THC into breast milk and found that moderate amounts of drug were

excreted in recreational users, but that chronic users accumulated a much greater proportion of

drug.

        Cocaine.

        Cocaine is a psychotropic drug with anesthetic properties (Chasnoff, Lewis, & Squires,

1987), and its illicit use in the United States and Europe has steadily increased over the past

decade (Chasnoff, et al., 1987; Huestis, 2010; Isenschmid, 2010). The bioavailability varies

dramatically depending on the route of administration, with 100% bioavailability in intravenous

doses and 20% bioavailability when the drug is ingested orally (Isenschmid, 2010). The half-life

of cocaine is approximately one hour, and it is rapidly excreted into breast milk (Friguls, et al.,

2010; Winecker, et al., 2001). It is primarily metabolized to benzoylecgonine (BZE) and

ecgonine methyl ester (EME), and excretion occurs primarily by simple filtration into the urine.

One to nine percent of cocaine is excreted unchanged, 26-54% is excreted as BZE, 18-41% as

EME, and 2-3% as ecgonine. Approximately 64-69% of a single dose will be excreted in the

urine with three days, with 86% of this amount being excreted with the first day (Isenschmid,

2010). Abuse of cocaine can lead to extremely high plasma concentrations (Dickson, et al.,

1994). Although the M:P ratio has not been established in human, rats were found to have a ratio

of 7.8:1 (Dickson, et al., 1994; Friguls, et al., 2010). If human M:P ratios are similarly high,

toxic concentrations could easily accumulate in infants. Dickson et al. (1994) used the

Henderson-Hasselbach equation to demonstrate that the concentration of cocaine in breast milk

could be twenty times that of the mother's plasma levels.

Several case studies have reported intoxication in breastfed infants exposed to cocaine.

Chasnoff et al. (1987) reported the admission of a two week old breastfed infant whose mother

had a history of cocaine and alcohol abuse. The mother admitted using 0.5 g of cocaine prior to

breastfeeding her child five times. The infant quickly became irritable, had vomiting, diarrhea,

and dilated pupils. Both the mother's milk and the infant's urine were found to contain cocaine

and BZE. The milk samples were negative for both cocaine and metabolites 36 hours after the

last reported cocaine use. The infant's urine sample was negative 60 hours after the last reported

breastfeeding (Chasnoff, et al., 1987). Winecker et al. (2001) collected breast milk from 11

mothers who admitted cocaine use, and found that the highest cocaine concentration was 12.1

µg/mL of breast milk. The authors concluded that breastfed infants of these mothers could be

exposed to significant amounts of drug (Winecker, et al., 2001).

Nicotine.

Despite the publicized risks associated with tobacco use, approximately 25-30% of

women in the U.S. smoke cigarettes during pregnancy (Howard & Lawrence, 1999; Ilett, et al.,

2003). Nicotine is a toxic substance, with low-level poisoning leading to dizziness, nausea, and

weakness. Toxic concentrations can cause tremors, convulsions, paralysis of the respiratory

muscles, and death (Howard & Lawrence, 1999). Nicotine has a half-life of approximately one

hour in serum and two hours in breast milk, and is metabolized to cotinine, trans-3-hydroxy

cotinine and cotinine-N-oxide (Friguls, et al., 2010; Luck & Nau, 1987). The cotinine serum

concentration remains constant during a four hour period following smoking (Friguls, et al.,

2010). Nicotine has a M:P ratio of around 3:1 (Dahlstrom, Ebersjo, & Lundell, 2004; Friguls, et al., 2010; Luck & Nau, 1987). It has a pKa of 8.0, which causes it to become concentrated as it passes into breast milk (Dahlstrom, Lundell, Curvall, & Thapper, 1990; Friguls, et al., 2010). The excretion of nicotine and cotinine into breast milk is proportional to the number of cigarettes smoked (Dahlstrom, et al., 2004; Dahlstrom, et al., 1990; Friguls, et al., 2010; Luck & Nau, 1987). In a study by Dahlstrom et al. (2004), infants of mothers who used chewing tobacco while breastfeeding were exposed to higher nicotine concentrations than infants whose mothers who smoked cigarettes.

Infants raised by smokers have been found to have nicotine and cotinine in their urine, with much higher concentrations seen in breastfed infants. For this reason, it is difficult to correlate a maternal M:P ratio with the levels seen in infants unless they are completely protected from passive inhalation (Howard & Lawrence, 1999). Ilett et al. (2003) found that the absolute infant dose of nicotine and cotinine decreased by 70% when breastfeeding mothers used nicotine patches instead of smoking. Many studies have shown that smoking is associated with the production of lower volumes of milk (Howard & Lawrence, 1999). Infants of smoking mothers have shown increased rates of infantile colic and respiratory infections, with decreased respiratory rates and oxygen saturation following breastfeeding. A case of nicotine withdrawal syndrome was seen in a breastfeeding infant whose mother was a heavy tobacco smoker. High concentrations of nicotine were measured in both the infant's and mother's hair, and 128 ng/mL of cotinine was detected in samples of breast milk. The infant demonstrated "spontaneous tremors and rigidity for a month after birth, indicating that fluctuating nicotine contents in different sessions of breastfeeding generated a postnatal nicotine withdrawal syndrome" (Friguls, et al., 2010).

Opiates.

Opiates are able to prevent the transmission of painful stimuli, creating an analgesic effect. They are able to prevent the recognition of painful sensations while inhibiting the negative emotional component of pain. They may also produce euphoria. Opiates are divided into three categories based on their action mechanism: full agonist, mixed agonist-antagonist, and full antagonists. There are many side effects and risks associated with the use of opiates. Respiratory failure is the major cause of death in intoxication cases, and addiction liability can cause physical dependence. Drug tolerance is also very common, which requires an individual to take higher and higher concentrations of drug to produce the same effect (Kerrigan & Goldberger, 2010).

Codeine.

Codeine is a morphine agonist, in the sense that its analgesic properties are dependent on its biotransformation into morphine by cytochrome P450 CYP2D6 (Friguls, et al., 2010; Kerrigan & Goldberger, 2010). Approximately 10-20% of a codeine dose is excreted unchanged, while another 10% of the dose is metabolized to morphine. "Further metabolism can produce the active metabolite morphine-6-glucuronide (M6G), which is more potent than morphine itself" (Kerrigan & Goldberger, 2010). After a fatal case in which a breastfed infant was exposed to codeine through breast milk, both the U.S. Food and Drug Administration and Health Canada published warnings indicating that codeine use in breastfeeding may not be safe for infants (Friguls, et al., 2010; Madadi, et al., 2007). The mother in this case was found to be an ultrarapid metabolizer of cytochrome P450 CYP2D6, a genetic combination that occurs at a frequency of one to 29% in the general population. This caused her to quickly accumulate very high breast milk concentrations of morphine. Postmortem testing of the infant revealed a blood

concentration of 70 ng/mL of morphine. Milk samples were taken after the woman had cut her

dose in half, and concentrations of 86 ng/mL were found. It is also notable that the mother was

homozygous for single nucleotide polymorphisms compromising the UG 2B7*2 allele. This

allele is responsible for the production of M6G, which is even more potent than morphine

(Madadi, et al., 2007).

In a study of 17 mothers consuming codeine, milk codeine concentrations ranged from

33.8 to 314 ng/mL from 20 to 240 minutes after codeine consumption. The milk morphine

concentrations ranged from 1.9 to 20.5 ng/mL during the same period of time. Eleven of the

infants in this study demonstrated plasma codeine levels of up to 4.5 ng/mL and plasma

morphine levels up to 2.2 ng/mL. The authors concluded that moderate use of codeine was

probably safe (Meny, Naumburg, Alger, Brill-Miller, & Brown, 1993). In a study of

breastfeeding mothers receiving morphine via patient-controlled analgesia (PCA) after cesarean

delivery, the transfer of morphine and its active metabolite M6G into breast milk was evaluated.

The authors concluded that neonatal exposure did not seem to be significant (Baka, Bayoumeu,

Boutroy, & Marie-Claire-Laxenaire, 2002). However, another study revealed that infants

breastfed by mothers using codeine could experience adverse CNS effects such as drowsiness,

apnea and cyanosis (Madadi, Shirazi, Walter, & Koren, 2008).

Morphine.

Morphine is commonly prescribed to women for the management of postoperative pain

following cesarean sections (Friguls, et al., 2010). In a study of five lactating women who

received morphine for postoperative pain, the M:P ratio was 2.45:1, and a peak milk

concentration of 500 ng/mL was observed. The authors concluded that the amount of morphine

transferred to an infant was likely to be small, and was unlikely to cause any adverse effects

(Feilberg, Rosenborg, Christensen, & Mogensen, 1989). In a study of a breastfeeding mother receiving intrathecal morphine, low levels of drug were detected in serum and milk samples. The breastfed infant did not demonstrate any sleep, behavior, or developmental problems (Oberlander, et al., 2000). A study of a mother receiving low doses of morphine revealed a substantial variation in morphine milk concentrations of ten to 100 ng/mL. Her breastfed infant was found to have a serum concentration of 4 ng/mL. This value is within the analgesic range for infants, but as this value represents one sampling, the concentration could have been much higher. No adverse effects were observed in the infant (Robieux, Koren, Vandenbergh, & Schneiderman, 1990).

Heroin.

Heroin (diacetylmorphine) is a synthetic morphine derivative that is one of the most widely abused opioids (Kerrigan & Goldberger, 2000). Administration of the drug through intravenous means is the most common, followed by inhalation. It is a highly lipid-soluble compound with a short half-life of 15 to 30 minutes. Heroin is quickly hydrolyzed to 6-monoacetylmorphine (6-MAM) by the liver, brain, heart, and kidneys, and is then converted to morphine, which has a much longer half-life than heroin, at two to three hours. There are no published reports of the analysis of heroin in human breast milk. Heroin is excreted in breast milk in sufficient quantities to cause addiction in an infant, and the following adverse effects have been reported: tremors, restlessness, vomiting, and poor feeding (Friguls, et al., 2010).

Hydrocodone.

Hydrocodone is a commonly prescribed analgesic, especially in nursing mothers. While clinical data is sparse, several cases of neonatal sedation have been attributed to hydrocodone use during breastfeeding. Metabolism of hydrocodone to its more potent metabolite,

hydromorphone, occurs via the CYP2D6 enzyme. If the nursing mother is an ultrarapid

metabolizer of CYP2D6, higher doses of the more potent metabolite may be passed on to the

nursing infant (Sauberan, et al., 2011). The M:P ratio for hydromorphone is 2.57:1, and there is

minimal protein binding and little partitioning into the milk fat (Edwards, Rudy, Wermeling,

Desai, & McNamara, 2003).

In a study of two mothers who had been taking a combination of acetaminophen and

hydrocodone, it was determined that the infants received 3.1% and 3.7% of the maternal weight-

adjusted dosage. This translated to an absolute hydrocodone dosage of 8.58 µg/kg/day and 3.07

µg/kg/day based on the different dosages ingested by the nursing mothers. Relative infant doses

of less than 10% generally indicate that a medication is safe for use during breastfeeding, but

breast milk levels of hydromorphone were not measured in this study (P. O. Anderson, Sauberan,

Lane, & Rossi, 2007). A pharmacokinetic study was conducted on 30 nursing mothers in an

inpatient setting, who were receiving hydrocodone bitartrate for postpartum pain. Their breast

milk was analyzed for hydrocodone and hydromorphone through the use of isotope-dilution

liquid chromatography mass spectrometry. Fully breastfed neonates received an average of 1.6%

(range 0.2% - 9%) of the maternal weight-adjusted hydrocodone bitartrate dosage. When

combined with hydromorphone, the total median opiate dosage from breast milk was 0.7% of a

therapeutic dosage for older infants. Most mothers excreted little to no hydromorphone into

breast milk. The authors concluded that standard postpartum dosages of hydrocodone appear to

be acceptable for use in nursing mothers, but prolonged use of high dosages is not advisable

(Sauberan, et al., 2011). In a study of eight nursing mothers receiving hydromorphone, it was

determined that although the drug distributes rapidly from the plasma into breast milk, the drug

does not partition into fat. It was predicted that an infant would receive approximately 0.67% of

the maternal dose (Edwards, et al., 2003).

Oxycodone.

Oxycodone is an analgesic with effects similar to morphine, but with a lower incidence of

nausea and hallucinations (Pokela, Anttila, Seppala, & Olkkola, 2005). Due to concerns about

neonatal CNS depression after codeine and breastfeeding, some clinicians are now prescribing

oxycodone to nursing mothers in place of codeine (Lam, et al., 2012). However, the prevalence

of CNS depression as a result of oxycodone and breastfeeding does not support this view.

Oxycodone has rapid oral absorption and high oral bioavailability. It is a weak base with a pKa

of 8.5, and the passage from blood to milk is favored. It is moderately protein bound, therefore

sufficient unbound drug would be able to pass from the maternal plasma into breast milk

(Seaton, Reeves, & McLean, 2007). Oxycodone is primarily metabolized by the CYP3A4

isoenzyme to non-toxic metabolites (Hendrickson & McKeown, 2012). Approximately 15% of

an oxycodone dose is metabolized by CYP2D6 to oxymorphone, which is more 14 times potent

than oxycodone (Hendrickson & McKeown, 2012; Lam, et al., 2012). Rapid CYP2D6

metabolizers may produce increased concentrations of the more potent oxymorphone, while poor

CYP2D6 metabolizers may have problems clearing the parent drug from their system

(Hendrickson & McKeown, 2012).

In a study of 50 breastfeeding mothers, oxycodone was detected in breast milk up to 24

hours after dosing, regardless of the dosage amount. The median milk-to-plasma ratio was 3.2:1.

Over the following 48-hour period, a larger range of milk-to-plasma levels was observed.

Oxycodone was found in breast milk up to 72 hours after dosing, and the authors concluded that

breastfed infants may receive >10% of a therapeutic infant dose (Seaton, et al., 2007). A study of

533 breastfeeding mothers and infants found that infants whose mothers used oxycodone while

breastfeeding had a 20.1% rate of infant central nervous system depression (Lam, et al., 2012).

Prevalence of Usage

A global review was conducted to determine the prevalence the use of

meth/amphetamine, cannabis, cocaine, and opioids between 1990 and 2008 of people aged 15 to

64 years. While there was qualitative evidence of use and dependence in a large majority of the

world's population, there were not many estimates of the extent of such use. Meth/amphetamine

use or dependence was found in 181 out of 229 countries/territories of the world, which equates

to 99% of the world's population aged 15-64 years. Evidence of cannabis use or dependence

was located in 201 countries/territories, which encompasses more than 99% of the world's

population aged 15-64 years. Cocaine use or dependence was traced to 182 countries/territories

representing more than 98% of the world's population aged 15-64 years. Evidence of opioid use

or dependence was found in 192 countries/territories, which equates to more than 99% of the

world's population aged 15-64 years (Degenhardt, et al., 2011).

Federal government guidelines by the Substance Abuse and Mental Health Services

Administration (SAMHSA) require drug testing for certain employees (Substance Abuse and

Mental Health Services Administration, 2011). These employees must be tested for five specific

categories of drugs, which is referred to as the "SAMHSA 5", and was previously called the

"NIDA-5." Because of this federal requirement, most drug testing companies offer a basic

drugs-of-abuse panel that tests for drugs in these five common categories: cannabinoids

(marijuana, hash), cocaine (cocaine, crack, benzoylecognine), amphetamines (amphetamines,

methamphetamines, speed), opiates (heroin, opium, codeine, morphine), and phencyclidine

(PCP). Many testing companies also offer an expanded panel that includes a few additional drug

classes and specific drugs in the testing process. These additional categories can be added to the

"SAMHSA 5" panel, and are typically chosen from the following categories: barbiturates

(phenobarbital, secobarbitol, butalbital), hydrocodone (Lortab, Vicodin), methaqualone

(quaaludes), benzodiazepines (Valium, Xanax, Librium, Serax, Rohypnol), methadone,

propoxyphene (Darvon compounds), ethanol (alcohol), and MDMA (Ecstasy) ("Drug testing

basics," 2009). SAMHSA recently approved the addition of additional Schedule II prescription

medications for inclusion in the Mandatory Guidelines for Federal Drug Testing Programs.

These Schedule II drugs include oxycodone, oxymorphone, hydrocodone, and hydromorphone

(Hayes & Bannister, 2012).

Each year, Quest Diagnostics releases an annual Drug Testing Index (2012). This index

examines the national trend of positivity rates, or the proportion of positive results for each drug

to all such drug tests performed, among three major testing populations: federally mandated

safety-sensitive workers, the general workforce, and the combined U.S. workforce. Between

January and December of 2011, Quest Diagnostics performed 1.6 million drug tests for federally

mandated safety-sensitive workers, and 4.8 million drug tests in the general U.S. workforce.

Due to more stringent government drug testing rules, federally mandated cutoff levels for

cocaine and amphetamines were lowered in October of 2010. In 2011, a 33% increase in cocaine

positives (positivity rates increased from 0.24% to 0.32%) and a 26% increase in amphetamines

positives (positivity rates increased from 0.35% to 0.44%) were seen in the safety-sensitive

workforce, due in large part to the lower cutoff rules. In the general U.S. workforce during the

same time period, cocaine positivity increased 8% (from 0.25% to 0.27%) and amphetamine

positivity increased 16.7% (from 0.66% to 0.77%) from the previous year. Some of these tests

employed the lower cutoffs required for federal testing, but an exact percentage could not be

determined. Overall, amphetamine positivity has increased 75% since 2007. Over 500,000 drug tests for oxycodone were administered to the general U.S. workforce in 2011, and positivity rates were 10% higher than in 2010 (1.0% to 1.1%), and up 25% since 2007. Positive drug tests for opiates in the general workforce were up 7.7% (0.39% to 0.42%) from 2010, and up 20% since 2007. Positivity for propoxyphene, which was pulled off of the market in November 2010, decreased 84.7% from 2010. Of all the drug tests that were non-negative (which includes invalid and adulterated samples), marijuana and amphetamines were seen at the highest rates, 43.3% and 18.4% respectively, followed by opiates (9.5%), benzodiazepines (7.6%), cocaine (7.5%), barbiturates (3.2%), oxycodones (2.7%), and methadone (2.3%). Propoxyphene (0.62%), PCP (0.54%), and MDMA (0.03%) positives were seen at much lower rates (Quest Diagnostics, 2012).

The U.S. Department of Health and Human Services conducts an annual survey of the civilian, non-institutionalized population of the United States who are 12 or older. This survey interviews approximately 67,500 people each year. The 2010 National Survey on Drug Use and Health (NSDUH) focused on trends between 2009 and 2010 as well as from 2002 to 2010. The NSDUH obtains information on the following nine categories of illicit drugs: marijuana, cocaine, heroin, hallucinogens, and inhalants, as well as the nonmedical use of prescription-type pain relievers, tranquilizers, stimulants, and sedatives. In 2010, an estimated 22.6 million Americans aged 12 or older were current illicit drug users, meaning that they had used an illicit drug during the month prior to the survey. This translates to approximately 8.9% of the general population. Marijuana was the most commonly used illicit drug with 17.4 million past month users, or 6.9% of the general population. It was used by 76.8% of current illicit drug users and was the only drug used by 60.1% of them. In 2010, an estimated 15.7% (4.6 million) of past year marijuana

users used the drug on 300 or more days within the past 12 months, while 39.9% (6.9 million) of

current users used the drug on 20 or more days in the past month. An estimated 9 million people

aged 12 or older (3.6% of the general population) were current users of illicit drugs other than

marijuana. The majority of these users were nonmedical users of psychotherapeutic drugs,

including 5.1 million users of pain relievers, 2.2 million users of tranquilizers, 1.1 million users

of stimulants, and 374,000 users of sedatives. An estimated 1.5 million people (0.6% of the

population) were current users of cocaine, 1.2 million people (0.5%) were users of

hallucinogens, and 353,000 people (0.1% of the population) were users of methamphetamine.

The NSDUH also includes a series of questions about the use of tobacco products. An estimated

69.6 million Americans aged 12 or older were current users of a tobacco product. This

represents 27.4% of the population in that age range (Substance Abuse and Mental Health

Services Administration, 2011).

ELISA

An ELISA is an immunoassay test, which uses antibody interactions to identify and

measure amounts of chemical substances. This technique is capable of sensitivity greater than or

equal to instrumental methods, is easy to automate, and is less subject to matrix effects than other

analytical techniques. ELISA kits are generally designed for a particular sample matrix. When

situations arise where testing is to be performed in a matrix that differs from that for which the

kit has been validated, good science dictates that the kit be validated to demonstrate its efficacy

in the new matrix (Hand & Baldwin, 2008; Smith, 2003).

Drug screening.

In forensic toxicology, ELISA tests are used to screen biological samples for the presence

of drugs. To improve efficiency, pre-packaged ELISA kits are typically purchased for this

purpose. The ELISA process is based on the competition between the drug or drug metabolite in

the sample with the kit supplied drug-enzyme conjugate for a limited number of antibody

binding sites. Both the drug and the drug-enzyme conjugate bind to antibodies that have been

embedded in the ELISA plate wells. A chemical is used to develop color in the bound labeled

drug. Samples containing higher concentrations of drug will displace a larger amount of the

labeled drug-enzyme conjugate than samples containing the drug at lower concentrations. The

proportion of bound labeled drug is inversely proportional to the amount of unlabeled drug,

which can be determined by the extent of color development, and is captured by the absorbance

value (Hand & Baldwin, 2008; Smith, 2003).

Cutoffs.

The cutoff level is a specific drug concentration at which a sample is considered to be

positive. A sample result is compared to the absorbance value a single-point cutoff calibrator.

An absorbance value higher than the cutoff calibrator is declared negative, while a value lower

than the cutoff calibrator is reported as positive. Cutoff levels are based on the ability of the

specific assay, the sensitivity requirements of the market for which the assay was designed, and

what type of drug levels may be seen in the general population. For most programs using

immunoassays, oversight agencies mandate administrative cutoffs well above the limit of

detection of the method. This helps to ensure that laboratories are achieving accurate results and

reduces the risk of identifying positive results in individuals that are passively exposed to certain

drugs (Hand & Baldwin, 2008; Smith, 2003).

Drug Confirmation.

ELISA is a screening technique that is used as a presumptive test. This means that it can

only be used to determine if drugs of interest may be present in samples or if they are not

present. Suspect samples and samples that screen positive should be confirmed using HPLC,

LC-MS, or GC-MS (Hand & Baldwin, 2008; Smith, 2003). In order to use these techniques, the

drugs must be extracted from the breast milk matrix. Due to its high protein and fat content and

changing composition, this can be challenging (Friguls, et al., 2010).

Methods

Materials

Human breast milk samples were provided by Prolacta Bioscience (Monrovia, CA). The

milk consisted of three samples from three different donors, and another sample of pooled milk

from all three donors. This milk was used for all of the optimization and validation work in this

project, and was also used to prepare negative and cutoff calibrators for each of the ELISA

assays.

ELISA kits were obtained from Neogen Corporation. Each kit contained the following

consumables and reagents necessary to conduct the assay. A kit-specific 96-well antibody-

coated Costar plate was provided for each assay. Each plate had 12 strips of eight breakaway

wells coated with anti-drug antiserum, and was ready to use. These breakaway strips could be

mixed with strips from other kits so that multiple assays could be analyzed on one plate. EIA

buffer (phosphate buffered saline solution with bovine serum and a preservative) was provided

for sample dilutions. A drug-enzyme conjugate (drug-horseradish peroxidase) was provided for

each assay. Wash buffer concentrate (phosphate buffered saline solution with a surfactant) was

diluted with nanopure water prior to use. This diluted wash buffer was used to wash all the

unbound conjugate and samples from the plate after the conjugate incubation period. K-Blue

substrate (stabilized 3, 3', 5, 5' tetramethylbenzidine plus hydrogen peroxide) was provided to

develop color in the plate wells after the washing step. An acid stop solution (1 N sulfuric acid)

was provided to stop the enzyme reaction in each instance. Depending on the kit, serum, urine, and/or oral fluid calibrators were provided for each assay. A Certificate of Analysis was provided for the specific lot of calibrator in each kit. The lot # and expiration date for each kit component was recorded and is reported with the raw data (Attachment C through Attachment H).

The following analytical drug standards were obtained from Cerilliant Corporation (Round Rock, TX): d-amphetamine, oxazepam, benzoylecgonine, cotinine, hydromorphone, morphine, d- methamphetamine, oxycodone, and Δ^9-THC-COOH. The catalog number, lot number, expiration date, and storage conditions for each standard are listed in Table 1. Each standard was prepared in methanol at a concentration of 1 mg/mL. Eppendorf brand pipettes and pipette tips were purchased for this study. The pipettes were calibrated prior to purchase. The calibration date and lot number for each pipette are listed in Table 2. Fisher Scientific brand 12 x 75 mm glass tubes were utilized for sample preparation and analysis.

A Dynex DSX Automated ELISA Four-Plate System (Chantilly, VA) was obtained from Neogen Corporation. The DSX consists of a horizontal platform, which serves as the work area and houses sample tips (four boxes of 108 tips), reagent tips (41 tips), deep well dilution plates (two plates), reagent rack (holds up to 24 reagents), and the sample rack (holds up to 99 samples). It also contains a robotic pipette arm that travels on the x, y, and z axes for optimal pipetting performance, an ambient drawer that can hold up to four ELISA plates, four wash bottles capable of storing two liters of fluid in each bottle, a plate washer, four incubators, an absorbance reader, a barcode reader for plates and samples, a tip waste container, and a liquid waste container capable of holding eight liters.

The Dynex DSX was operated using Revelation software (v. 6.15). Methods were written for each assay so that the DSX instrument made the necessary sample dilutions, pipetted all of the required samples and reagents for each assay, incubated and read each plate. The disposable sample and reagent pipette tips, conjugate vials, calibrator vials, and deep-well dilution plates were also obtained from Neogen Corporation. The instrument was installed and qualified prior to use by Dynex Technologies and Neogen Corporation.

Unless otherwise specified, all of the development and validation work was performed at Analytical Research Laboratories (Oklahoma City, OK).

ELISA kits

The literature was reviewed to determine the dangers of exposing infants to breast milk containing drugs. Based on this research and the prevalence of use within the general population, a seven-drug panel for the following categories of drugs was constructed: amphetamines, benzodiazepines, cocaine, nicotine, opiates, oxycodone, and cannabinoids. Enzyme-linked immunosorbent assays (ELISA) were used for the screening of this drug panel in breast milk due to their ease of use, quick turnaround time, and ability to detect low concentrations of drug. ELISA kits from Neogen Corporation (Lexington, KY) were utilized for the seven-drug panel. The following nine kits were initially evaluated: Amphetamine Ultra, Benzodiazepine Group, Cocaine/BZE, Cotinine, Hydromorphone, Methamphetamine/MDMA, Opiate Group, Oxycodone/Oxymorphone, and THC. The Hydromorphone kit was not used for the final panel because the Opiate kit demonstrated high cross-reactivity with hydromorphone. The Methamphetamine/MDMA kit was not used for the final panel because the Amphetamine Ultra kit demonstrated high cross-reactivity with d-methamphetamine, and it was determined that

the identification of MDMA (3,4-methylenedioxy-N-methylamphetamine) in breast milk would

not be pursued for this drug panel.

The final seven-drug panel consisted of the following seven Neogen kits. The calibrator

for each kit was given an arbitrary value of 100%. The response values for the additional

analytes are ratios of the calibrator, and are expressed as percentages. The Amphetamine Ultra

kit used d-amphetamine as the calibrator and cross-reacted with N-desmethylselegiline at 906%,

d-methamphetamine at 688%, and (-)- ephedrine at 49%. The Benzodiazepine Group kit used

oxazepam as the calibrator and cross-reacted with diazepam at 434%, estazolam at 365%,

nordiazepam at 361%, alprazolam at 346%, tetrazepam at 264%, flurazepam at 262%,

lormetazepam at 231%, prazepam at 198%, temazepam at 192%, halazepam at 173%, triazolam

at 171%, 7-amino flunitrazepam at 147%, nitrazepam at 141%, N-desmethyl flunitrazepam at

119%, flunitrazepam at 110%, bromazepam at 85%, clonazepam at 79%, lorazepam at 70%,

midazolam at 65%, and clobazam at 59%. The Cocaine/Benzoylecgonine kit used

benzoylecgonine (BZE) as the calibrator, and cross-reacted with cocaine at 133%, cocaethylene

at 124%, and m-hydroxycocaine at 96%. The Cotinine kit used cotinine (a nicotine metabolite)

as the calibrator and reacted with cotinine only. The Opiate Group kit used a morphine as the

calibrator and cross-reacted with 6-acetylcodeine at 195%, codeine at 190%, morphine-3-

glucuronide at 154%, ethylmorphine at 110%, hydrocodone at 122%, 6-acetylmorphine at 146%,

heroin/diacetylmorphine at 154%, nalorphine at 76%, and hydromorphone at 66%. The

Oxycodone/Oxymorphone kit used oxycodone as the calibrator and cross-reacted with

oxymorphone at 88%. The THC kit used Δ^9-THC-COOH (11-nor-9-carboxy-delta-9-

tetrahydrocannabinol) as the calibrator and cross-reacted with Δ^8-THC-COOH at 88%, and Δ^9-

THC, the parent drug, at 4%. This information is summarized in Table 3.

Screening

Human breast milk samples were provided by Prolacta Bioscience (Monrovia, CA). The milk consisted of three samples from three different donors, and another sample of pooled milk from all three donors. Approximately ten milliliters of each sample was sent to NMS Labs (Willow Grove, PA) to ensure that the milk was free of drugs before it was used for project development and validation purposes.

All four samples were screened for the following categories of drugs by ELISA: amphetamines, barbiturates, benzodiazepines, cannabinoids, cocaine, methadone, opiates, phencyclidine, and propoxyphene. The samples were also screened for cotinine by liquid chromatography – tandem mass spectrometry (LC-MS/MS). The pooled sample was tested for the presence of the following categories of drugs by LC-MS/MS and gas chromatography/mass spectrometry (GC/MS): propoxyphene and metabolite, cocaine and metabolites, benzodiazepines, opiates, cannabinoids, barbiturates, phencyclidine, methadone and metabolite, and amphetamines.

Method Optimization

Sample dilutions and matrix interference.

The effect of the human breast milk matrix on the performance of each kit was examined, and the ideal sample dilutions were determined according to the amount of matrix interference and the degree of variability between samples. The smallest sample dilution that minimized these factors was used.

This work was performed by Ashley Estridge at Neogen Corporation. Five human breast milk samples were analyzed. The first four samples consisted of milk received from Prolacta Bioscience. These samples consisted of three samples from three different donors, and another

sample of pooled milk from all three donors. The fifth sample was an in-house breast milk sample of traceable provenance. These five samples were assayed with each kit, and were analyzed both undiluted and diluted. Dilutions of each blank sample were examined the following levels: 1:2, 1:5, 1:10, 1:20, and 1:50. EIA buffer was used to dilute the samples. Samples were assayed in duplicate and the assays were completed manually. Absorbance values and the percent of milk matrix interference (versus EIA buffer) for each sample were compared for each assay.

After the optimal dilutions were determined, the breast milk samples were pooled. This pool was used to make standards at various concentrations, as shown in Table 4. These samples were assayed at the specified dilutions. Standard curves were generated and compared to standard curves using standards prepared in EIA buffer, as shown in Table 5, to determine if the selected dilutions had a negative effect on the shape of the curve.

Determination of cutoff levels.

A specific cutoff level for each kit was determined based on the linear range of the standard curve. Varying concentrations of breast milk and EIA buffer were prepared by spiking the blank matrix with the specific analytical drug standard for each kit, as depicted in Table 4 and Table 5. Each concentration was analyzed in duplicate. This work was performed by Ashley Estridge at Neogen Corporation, and all of the assays were run manually.

The average absorbance reading for each concentration was used for analysis, and standard curves were generated for EIA buffer and breast milk by plotting the mean B/B_0 values against concentration on a log-logit plot. Logit values were calculated using the following formula: $\ln[(B/B_0)/(100-(B/B_0))]$. A regression line was calculated using the method of least squares, which was expressed as the coefficient of determination (r^2). The I-50, slope, and

intercept were also determined. The linear range of the curve was assessed by approximating the 70 to 30% range on each curve for the milk standards.

Matrix interference with sample dilutions.

The amount of milk matrix interference at the specified dilution for each assay was determined by comparing the absorbance readings between EIA buffer and human breast milk at the 0 ng/mL concentration, and was expressed as a percentage.

Multi-drug calibrators.

Multi-drug cutoff calibrators were compared to single drug cutoffs in order to determine if they were equivalent to one another. The multi-drug calibrators were constructed so that calibrators within a group would not cross-react with any other assays. The Group 4 and Group 6 multi-drug calibrators were compared with single drug spikes. The formulation and concentration of these standards is summarized in Table 6, and described in detail in the *Preparation of Negative and Cutoff Calibrator* section.

Stability of calibrators in human milk.

The stability of prepared human breast milk cutoff standards was examined over a period of 31 days to determine the length of time that prepared milk standards could be used. This work was performed by Ashley Estridge at Neogen Corporation, and the assays were run manually. The Group 4 and Group 5 multi-drug calibrators were examined at days zero, two, four, 25, and 31. The average absorbance value, standard deviation, and % CV were calculated for each assay.

Variability between single and multiple readings.

Samples of negative breast milk were analyzed with each assay to determine the variability between absorbance readings. Single readings of multiple wells were compared with

multiple readings of a single well. Two strips of each assay were prepared as follows. Negative

calibrators were assayed in the first two wells, and cutoff calibrators were assayed in wells three

and four. A sample of negative breast milk was assayed in wells five through 14. A single

reading of all ten wells was taken at the completion of the run. This same plate was then read ten

separate times, and the reading for the ninth well of each assay was used for analysis. The

negative and cutoff calibrator readings were averaged for each reading. The following

calculations were performed on the single and multiple readings for each assay: average,

standard deviation, percent change between the average readings and the negative calibrator, the

$\%B/B_0$ for the calibrators, the $\%B/B_0$ for the cutoff calibrator and average reading, and the

percent change between the two $\%B/B_0$ values.

Validation

Three separate validations were performed. The first validation run used calibrators

prepared in EIA buffer, examined nine kits (the Hydromorphone and MDMA/Methamphetamine

kits were initially evaluated), and used morphine as the calibrator for the Opiate kit. The results

for the Hydromorphone and Methamphetamine/MDMA kits are not reported, as these kits were

not used in the finalized seven-drug panel. This validation used Group 1, Group 2, and Group 3

multi-drug calibrators. The cutoff levels utilized for each validation for each kit are outlined in

Table 6. The ELISA plates were constructed in the following way for each validation test. The

first well contained the negative calibrator (blank EIA buffer), the second well contained the

cutoff calibrator (a multi-drug calibrator spiked into EIA buffer), the third well contained the

Neogen kit supplied negative calibrator in a serum matrix, and the fourth well contained the

Neogen kit supplied cutoff calibrator in a serum matrix. The Neogen calibrators were analyzed

determine if the assays were performing correctly. Each assay was programmed so that the

calibrators were taken from the control rack. The negative and cutoff calibrators were analyzed

one time. Any wells analyzed following these calibrators were run as samples and were taken

from the sample rack. The data obtained from this run was used to further optimize the method.

The second validation run used calibrators prepared in human breast milk.

Hydromorphone was used as the calibrator for the Opiate kit used Group 4 and Group 5 multi-

drug calibrators. The cutoff levels for each kit are outlined in Table 6. The ELISA plates were

constructed in the following manner for each validation test. The first well contained the

negative calibrator (blank human breast milk), the second and third wells contained the cutoff

calibrator (a multi-drug calibrator spiked human breast milk), the fourth well contained the

Neogen kit supplied negative calibrator in a serum matrix, and the fifth well contained the

Neogen kit supplied cutoff calibrator in a serum matrix. The Neogen calibrators were analyzed

determine if the assays were performing correctly. Each assay was programmed so that the

calibrators were taken from the control rack. The negative and cutoff calibrators were analyzed

in duplicate, and the average value was determined. Any wells analyzed following these

calibrators were run as samples and were taken from the sample rack. Both the calibrators and

samples were diluted to the amount specified for each assay.

The third validation run used calibrators prepared in human breast milk, and validated the

final seven-drug panel. For this validation, the negative calibrator was run in duplicate and the

cutoff levels for the cocaine and opiate kits were increased, as shown in Table 6. This validation

used Group 4 and Group 6 multi-drug calibrators. This validation was run at Prolacta Bioscience

on a qualified Dynex DSX instrument. The first and second wells contained the negative

calibrator (blank human breast milk), the third and fourth wells contained the cutoff calibrator (a

multi-drug calibrator spiked into human breast milk), the fifth well contained the Neogen kit

supplied negative calibrator in a serum matrix, and the sixth well contained the Neogen kit

supplied cutoff calibrator in a serum matrix. The Neogen calibrators were analyzed determine if

the assays were performing correctly. Each assay was programmed so that the calibrators were

taken from the control rack. The negative and cutoff calibrators were analyzed in duplicate, and

the average value was determined. Any wells analyzed following these calibrators were run as

samples and were taken from the sample rack. Both the calibrators and samples were diluted to

the amount specified for each assay.

Calculation of %B/B_0.

A 50% B/B_0 value was targeted for each assay. The %B/B_0 value was calculated by

determining the ratio between the mean absorbance values of the cutoff and negative calibrators,

and was expressed as a percentage. Due to the variable nature of ELISA assays, a 30 – 70%

range of B/B_0 values for each assay was considered acceptable. These values allow for a good

separation of absorbance values between the negative and cutoff concentrations. The %B/B_0

value was calculated for each assay in each validation to determine the normal range of values.

If a %B/B_0 value was observed outside the normal range, a new calibrator was prepared.

Preparation of negative and cutoff calibrators.

Negative controls were prepared from human breast milk that was confirmed to be free of

drugs. For the initial validation, 1 mL of negative breast milk was transferred into three separate

control vials, one for the Group 1 negative control, one for the Group 2 negative control, and one

for the Group 3 negative control. For the second validation, 1 mL of negative breast milk was

transferred into two separate control vials, one for the Group 4 negative control and one for the

Group 5 negative control. For the third validation, 1 mL of negative breast milk was transferred

into two separate control vials, one for the Group 4 negative control and one for the Group 6

negative control. For any negative calibrators being used for sample analysis, 1 mL of the calibrator was transferred to a 12 x 75 mm glass tube. All controls and samples were vortexed prior to analysis.

Cutoff controls were prepared from human breast milk that was confirmed to be free of drugs. The milk was vortexed prior to calibrator preparation. For any cutoff calibrators being used for control purposes, 1 mL of the calibrator was transferred into a control tube. For any cutoff calibrators being used for sample analysis, 1 mL of the calibrator was transferred to a 12x75 mm glass tube. All controls and samples were vortexed prior to analysis.

Analytical drug standards for each assay were obtained from Cerilliant. Each drug standard came prepared at a concentration of 1 mg/mL in methanol. A 10 µg/mL solution of each standard was prepared in EIA buffer using the following method. One milliliter aliquots of EIA buffer were made into a glass tube for each analyte. Using a 2-20 µL pipette, the pipette tip was pre-rinsed twice with EIA buffer and 10 µL was removed from the glass tube. This was repeated for each analyte. A fresh pipette tip was pre-rinsed twice with the analytical drug standard, 10 µL of the standard was pipetted into the glass tube of EIA buffer, and the tip was rinsed twice. Any excess methanol was removed from the outside of the tip by wiping it on edge of standard stock vial. Each tube was covered and vortexed.

A 1 µg/mL solution was prepared with the 10 µg/mL solution using the following method. Using a 100-1000 µL pipette, 250 µL of human breast milk was transferred into a labeled glass tube for each analyte. Using a 20-200 µL pipette, the tip was pre-rinsed twice with milk and 25 µL was removed from the glass tube. This was repeated for each analyte. Using a 20-200 µL pipette, a fresh pipette tip was pre-rinsed twice with the 10 µg/mL solution and 25 µL of this solution was transferred into the glass tube of milk corresponding to that analyte. This

was repeated for each analyte. The tubes containing the 1 µg/mL solution were covered and vortexed. This solution was used to prepare the multi-drug calibrators and the accuracy samples.

Preparation volumes for the solutions and cutoff calibrators were scaled up depending on the needs of the particular validation run. The process for the preparation of the Group 4 and Group 6 cutoff controls are detailed below. The concentrations for the cutoff controls from Group 4, Group 2, Group 3, and Group 5 are summarized in Table 6. The Group 4 and Group 6 cutoff calibrators were prepared using the 1 µg/mL solution. The Group 4 cutoff calibrator contained d-amphetamine, cotinine, and oxycodone for use with the Amphetamine Ultra, Cotinine, and Oxycodone/Oxymorphone assays. To prepare the Group 1 cutoff calibrator, 1 mL of human breast milk was transferred into a glass tube. Using a 20-200 µL pipette, the tip was pre-rinsed twice with milk and 130 µL was removed from the glass tube. Using a 20-200 µL pipette, a fresh pipette tip was pre-rinsed twice with the 1 µg/mL solution for d-Amphetamine and 50 µL of the this solution was pipetted into the glass tube of milk. This procedure was repeated for the cotinine and oxycodone solutions, with 50 µL of cotinine and 30 µL of oxycodone being added to the tube of human milk. The tube was covered and vortexed.

The Group 6 cutoff calibrator contained oxazepam, benzoylecgonine, hydromorphone, and Δ^9-THC-COOH for use with the Benzodiazepine Group, Cocaine/BZE, Opiate Group, and THC assays. To prepare the Group 6 cutoff calibrator, 1 mL of human breast milk was transferred into a glass tube. Using a 20-200 µL pipette, the tip was pre-rinsed twice with milk and 170 µL of milk was removed from the glass tube. Using a 20-200 µL pipette, a fresh pipette tip was pre-rinsed twice with the 1 µg/mL solution for oxazepam and 50 µL of the this solution was pipetted into the glass tube of milk. This procedure was repeated for the benzoylecgonine, hydromorphone, and Δ^9-THC-COOH solutions, with 50 µL of benzoylecgonine, 50 µL

hydromorphone, and 20 µL of Δ^9-THC-COOH being added to the tube of human milk. The tube was covered and vortexed.

        Test procedures.

        The following test procedures were written into the pre-defined assays. A minimum volume of 50 µL for each breast milk calibrator and sample was transferred to a deep-well plate and was diluted with EIA buffer to the appropriate dilution value for each assay. Mixing in the deep well plate occurred immediately after the calibrator or sample was dispensed, and three mix cycles were performed. For the Amphetamine Ultra, Benzodiazepine Group, Oxycodone/Oxymorphone, and THC assays, 10 µL of each calibrator and sample were transferred to the appropriate microtiter wells. For the Cocaine/BZE, Cotinine, and Opiate Group assays, 20 µL of each calibrator and sample were transferred to the appropriate microtiter wells. For the Amphetamine Ultra, Benzodiazepine Group, Cotinine, Oxycodone/Oxymorphone, and THC assays, 100 µL of each assay conjugate were transferred to the appropriate microtiter wells. For the Cocaine/BZE and Opiate Group assays, 180 µL of each assay conjugate were transferred to the appropriate microtiter wells. All of the assays, with the exception of Cotinine, incubated for 45 minutes at ambient temperature. The Cotinine microtiter plates incubated for 30 minutes at room temperature. After the conjugate incubation period, the liquid was aspirated from each well and each plate was washed five times. For each wash cycle, 300 µL of wash buffer was dispensed to each well, and then was aspirated. After the final cycle, the washer performed an additional aspiration step, and the washer was cleaned with 3 mL of deionized water. Each well was then filled with 100 µL of K-Blue Substrate (150 µL for the Cotinine assay). All assays, with the exception of Cotinine, incubated for 30 minutes an ambient temperature. The Cotinine assay incubated for 15 minutes at ambient temperature. After the

substrate incubation period, 100 µL of Acid Stop (150 µL for the Cotinine assay) was added to each well to halt the enzyme reaction. The absorbance of each plate was read at 450 nm.

Drift.

Negative and cutoff calibrators were assayed in the first and last wells of the run to ensure that the controls performed similarly at the beginning and end of the plate. Three strips of eight wells were set up for each assay. The calibrators were run in the first four wells for the first validation, in the first five wells for the second validation, and in the first six wells for the final validation. A negative calibrator was run as a sample in well 23, and a cutoff calibrator was run as a sample in well 24. Samples of blank EIA buffer were analyzed in the remaining wells.

The %B/B_0 for each calibrator set was calculated. If any of the calibrators in the first wells were run in duplicate, the average was used for analysis. While many ELISA validations set their cutoff for plate drift at 20 or 25% CV (DeSilva, et al., 2003; Findlay, et al., 2000; Kelley & DeSilva, 2007; Schwope, et al., 2010), the U.S. Food and Drug Administration (FDA) specify that precision determinations should not exceed 15% CV (U.S. Department of Health and Human Services, FDA, CDER, 2001). For this study, the 15% CV guideline for precision was also applied to the plate drift determination. The drift validation passed if there was less than 15% variation between the %B/B_0 for the first and last set of calibrators.

Precision.

Negative and cutoff controls were assayed in every other sample well to confirm the precision of the instrument and the performance of the calibrators. "The precision of an analytical method describes the closeness of individual measures of an analyte when the procedure is applied repeatedly to multiple aliquots of a single homogenous volume of biological matrix" (USDHHS, FDA, CDER, 2001). Precision was run two separate times for each

validation run, for a total of six precision assays. A larger volume of milk was prepared for both the negative and cutoff samples. Aliquots were taken from each single homogenous volume for precision analysis. Three strips of eight wells were set up for each assay. The calibrators were run in the first four wells for the first validation, in the first five wells for the second validation, and in the first six wells for the final validation. Samples of negative and cutoff calibrators were alternated in the remaining wells.

The standard deviation and % CV was calculated separately for the negative samples and the cutoff samples in each run. According the FDA, the precision determinations for each concentration level should not exceed 15% CV (USDHHS, FDA, CDER, 2001). The precision validation passed if there was less than 15% CV for the negative samples and cutoff samples in each run.

Accuracy.

The accuracy validation assessed the ability of each assay to correctly determine the true result. Analytical drug standards were spiked into breast milk at 50% below the cutoff level, at the cutoff level, and 50% above of the cutoff level. The preparation for these spikes is detailed in Table 7 and Table 8. For the first and second validation, nine replicates of each level were analyzed. For the third validations, six replicates of each level were analyzed. The absorbance value of each sample was compared to the absorbance value of the cutoff control in order to make a positive or negative determination. If the absorbance value of the sample was greater than the absorbance of the cutoff calibrator, the sample was negative. If the absorbance value of the sample was less than the absorbance of the cutoff calibrator, the sample was positive. The accuracy validation passed if there were no false positives for the samples at 50% below the cutoff level and no false negatives for the samples at 50% above the cutoff level.

Sample analysis.

Nineteen samples of human breast milk were screened at Prolacta Bioscience using the finalized ELISA seven-drug panel. These samples originated from nineteen different donors, and were de-identified prior to screening. The samples had screened negative for the presence of opiates/morphine, marijuana, cocaine/BZE, benzodiazepines, methamphetamine, and amphetamine by personnel at Prolacta through the use of an immunochromatographic assay.

Data Analysis

All data was analyzed using a current statistical analysis computer program (Excel for Windows, version 14.0, Redmond, WA).

Results and Discussion

Screening

Human breast milk samples were provided by Prolacta Bioscience (Monrovia, CA). The milk consisted of three samples from three different donors, and another sample of pooled milk from all three donors. All four samples were screened for the following categories of drugs by ELISA: amphetamines, barbiturates, benzodiazepines, cannabinoids, cocaine, methadone, opiates, phencyclidine, and propoxyphene. The samples were also screened for cotinine by LC-MS/MS. The screening results for all four samples were negative. The pooled sample was then confirmed to be negative for the presence of the following categories of drugs by LC-MS/MS and GC/MS: propoxyphene and metabolite, cocaine and metabolites, benzodiazepines, opiates, cannabinoids, barbiturates, phencyclidine, methadone and metabolite, and amphetamines. The methods and cutoff levels for each test are listed in Attachment A. The results are detailed in the NMS Labs issued Toxicology Report (Attachment B).

It is imperative that any breast milk that will be used for preparation of calibrators or assay validation is verified as being truly negative for the presence of drugs. If any drugs are present in the milk, and this milk is used as a negative calibrator or is fortified with analytical drug standards and used as a cutoff calibrator, the resultant values will not be a true representation of the level for a negative or cutoff. Any results obtained using these calibrators are likely to be inaccurate.

Method Optimization

Sample dilutions and matrix interference.

Absorbance values of sample dilutions versus EIA buffer were compared, and the amount of matrix interference was calculated. The undiluted milk samples showed interference in all of the assays. This was demonstrated by a reduction in the absorbance of the milk sample when compared to the absorbance of EIA buffer. The Cotinine assay showed the least amount of matrix interference at 20.3%, while the THC assay demonstrated the greatest amount of matrix interference at 73.6%. The degree of variability between samples was lowest in the Benzodiazepine Group, Cocaine/BZE, Cotinine, Opiate Group, and Oxycodone/Oxmorphone assays, greater in the Amphetamine Ultra assay, and greatest in the THC assay. Dilutions of the milk samples reduced the amount of matrix interference and lessened the degree of variability between samples while producing absorbance values that more closely approximated the values of EIA buffer. This data is summarized in Table 9. The optimal dilutions were determined by selecting the smallest dilution that minimized both the matrix effect of the milk along with the degree of variability between samples. These dilutions are depicted in Table 10. Due to a high degree of matrix interference and variability between samples, samples were diluted 1:100 in EIA buffer for the THC kit only.

After the optimal dilutions were determined, the breast milk samples were pooled. This pool was used to make standards at various concentrations, as shown in Table 11 through Table 16. After these samples were assayed at the specified dilutions, standard curves were generated and compared to standard curves using standards prepared in EIA buffer (Figure 1 through Figure 7). The selected sample dilutions did not appear to have any negative effects on the shape of the standard curves for breast milk.

Determination of cutoff levels.

The initial cutoff levels were based on the linear range along with the levels of the serum calibrators included with each kit. For the Amphetamine Ultra, Benzodiazepine Group, Cocaine/BZE, Cotinine, Opiate Group, the serum calibrators were at a concentration of 50 ng/mL. The Oxycodone/Oxymorphone calibrator was at 10 ng/mL and the THC calibrator was at 5 ng/mL.

The 70-30% B/B_0 range for each assay was approximated. The widest ranges of cutoff values were seen in the Amphetamine Ultra and Cotinine assays, while the narrowest ranges were seen in the Oxycodone/Oxymorphone, Cocaine/BZE, and THC assays. The linearity data, including the approximate linear range for each kit are listed in Table 11 through Table 16. The following cutoffs were proposed: Amphetamine Ultra – 50 ng/mL, Benzodiazepine Group – 50 ng/mL, Cocaine/BZE – 30 ng/mL, Cotinine – 50 ng/mL, Opiate Group – 30 ng/mL, Oxymorphone/Oxycodone – 30 ng/mL, and THC – 20 ng/mL. The proposed cutoff levels remained unchanged with the exception of the Cocaine/BZE and Opiate Group assays. Both assays were initially set at 30 ng/mL, but were raised to 50 ng/mL because of false negative results being obtained during the accuracy validation.

As there is very little research on the range of drug concentrations seen in human breast milk and the concentrations that could be harmful to infants, these cutoff levels may need to be scaled up or down within the linear range. As more research is done in this area on larger populations of breastfeeding women, the prevalence of concentrations can be determined. Further research is needed to ascertain drug concentrations that may cause harm to infants.

Matrix interference with sample dilutions.

The amount of milk matrix interference at the specified dilution for each assay was determined by comparing the absorbance readings between EIA buffer and human breast milk at the 0 ng/mL concentration, and was expressed as a percentage. The interference varied from a low of 1% in the Oxycodone/Oxymorphone assay, to 20% for the Opiate Group assay. Despite the 20% matrix interference, the Opiate Group assay performed well in the validations, with the exception of accuracy. This issue was resolved by increasing the cutoff level, but it is possible that the sample dilution could be increased while maintaining the lower cutoff level. The THC assay, which demonstrated 73.6% interference with undiluted breast milk, was reduced to 3% matrix interference when a 1:100 dilution was utilized. The absorbance values and percent matrix interference are listed in Table 18.

Multi-drug calibrators.

The multi-drug calibrators demonstrated similar performance to the single drug calibrators. The percent difference between the multi-drug and single drug calibrators was under 6% for the majority of the assays. There was a 10.7% difference between calibrators for the Cocaine/BZE assay, and a 14.6% difference between calibrators for the Benzodiazepine Group assay. The data suggests that less drug was spiked in the multi-drug calibrators than in the single drug calibrators, which could be attributed to human error. The %B/B_0 values of these two

assays still fall within the range of $\%B/B_0$ values observed in the second and third validations (Table 19). The data for the comparison of multi-drug and single drug calibrators is depicted in Attachment C, and is summarized in Table 20.

The use of multi-drug calibrators streamlines the amount of controls that need to be prepared and reduces the amount of reagents and consumables needed when analyzing samples. For the purposes of high-throughput sample analysis, the use of multi-drug calibrators is recommended.

Stability of calibrators in human milk.

Drugs at the cutoff concentrations were found to be stable in human milk for at least 31 days when stored at refrigerated conditions (2-8 ℃). The % CV for the five time points ranged from 5% for the Benzodiazepine Group and THC assays to 15% for the Cocaine/BZE assays. Aside from the Cotinine assay, there was not a demonstration of linear degradation for any of the assays. The data is summarized in Table 21.

For quality control purposes, the majority of human milk banks store unpasteurized human milk at -20 to -30°C for up to three months (Wojcik, et al., 2009). The Academy of Breastfeeding Medicine (2004) recommends that human milk be stored at refrigerated conditions (approximately 4°C) for no longer than five days, and at frozen conditions (approximately - 20°C) for no longer than 12 months. Milk stored for longer periods is still safe for consumption, but research has shown that lipids start to degrade, resulting in a lower quality product (The Academy of Breastfeeding Medicine, 2004). As the calibrators have demonstrated stability for 31 days, it is recommended that new calibrators be prepared every five days when stored at refrigerated conditions.

Variability between single and multiple readings.

The single reading of ten multiple wells provided more robust data than multiple readings of a single well. The absorbance readings continued to fall as each reading was made, and this is likely due to the amount of time that elapsed between each of the readings. The acid stop applied to the wells makes the wells stable to read for a certain period of time, but the stability drops off as the acid stop continues to react within the well. The data is depicted in Attachment D, and is summarized in Table 22 and 23.

For the single readings of multiple wells, the percent change between the average absorbance of the multiple readings and the negative calibrator ranged from a low of 1.2% in the Oxycodone/Oxymorphone assay and 6.5% in the Amphetamine Ultra assay to a high of 17.5% in the Cocaine/BZE assay and 30.5% in the Cotinine assay. For the multiple readings of a single well, the percent change between the average absorbance of the multiple readings and the negative calibrator ranged from a low of 0.2% in the Oxycodone/Oxymorphone assay and 2.0% in the Amphetamine Ultra assay to a high of 22.4% in the Cocaine/BZE assay and 45.4% in the Cotinine assay. The trends were identical between single and multiple readings for all assays. This shows that the variability for the Cocaine/BZE and Cotinine assays is likely to be greater than the variability seen in the other assays. This variability did not have any effect on the qualitative results obtained from the final validation. The majority of the %B/B$_0$ values did not fall within the range of values seen in the second and third validations. Again, these values did not have a negative effect on the ability of the assays to obtain qualitative results and may be attributed to the day-to-day variability that occurs in ELISA assays.

Validation

    Drift.

        The % CV was consistently lower when the calibrators were prepared in breast milk versus EIA buffer, with the exception of the Benzodiazepine Group and Opiate Group assays. When the Cocaine/BZE, Oxycodone/Oxymorphone, and Opiate Group assays were run during the second validation, the % CV for the Cocaine/BZE assay was 20.78%, the % CV for the Oxycodone/Oxymorphone assay was 17.76%, and the average $\%B/B_0$ for the Opiate Group assay was 86.72%, which was much higher than expected. New calibrators were prepared, and these assays were repeated. The Cocaine/BZE % CV dropped to 1.15%, and the Oxycodone % CV dropped to 1.72%. The Opiate Group average $\%B/B_0$ dropped to 72.94%, while the % CV rose from 2.04 to 10.24. During the final validation, the THC assay had a low % CV of 1.10%, but the average $\%B/B_0$ was extremely high at 91.09%. New calibrators were prepared and analyzed with the calibrators producing the high B/B_0 values. Drift was not evaluated, but the $\%B/B_0$ dropped to 72.55% and the original calibrator had an absorbance value of 1.055 while the new calibrator had an absorbance value of 1.069. The absorbance values for the cutoff calibrator obtained during the drift run were most likely the result of some type of error. It is important to track the typical range of $\%B/B_0$ values so that errant results can be detected.

        The cutoff levels for the Cocaine/BZE and Opiate Group assays were raised from 30 ng/mL for the second validation to 50 ng/mL for the final validation. The average $\%B/B_0$ values for the Cocaine/BZE dropped from 80.78% to 61.02% and from 86.73% and 78.01% to 57.33% for the Opiate assay.

        All of the drift validations passed as there was less than 15% variation between the $\%B/B_0$ for the beginning control set and the ending control set for each assay. The data for each

validation is depicted in Attachment E through Attachment G, and the results of each drift

validation are summarized in Table 24.

Precision.

The % CV for the negative and cutoff calibrators for the first and second run of each day

was similar. The second validation run demonstrated more variability in the % CV for the cutoff

calibrators between the first and second run of each day. Outliers were removed from data

obtained during the first two runs of the first validation and from the second run of the second

validation. The values removed from the first validation were consistently in the same wells

between assays. As this data was not being used to validate the final panel, the values were

removed without performing statistical analyses. A Grubb's test for outliers was performed on

the precision data from the second validation in order to demonstrate that the data point was

indeed an outlier. The Benzodiazepine Group, Cocaine/BZE, Opiate Group, and THC assays all

had outlying data within the same well position for each assay, and were all prepared as the

Group 5 calibrator. The Grubbs value for each assay was calculated using the following

formula: $G = (y_{max}-y_{min})/SD$. The Benzodiazepine Group assay had a Grubbs value of 3.12, the

Cocaine/BZE assay had a Grubbs value of 3.44, the Opiate Group assay had a Grubbs value of

3.50, and the THC assay had a Grubbs value of 3.30. Based on the sample size of nine values,

the critical Z value for an upper one-tailed test was 2.323 at a significance level of 0.01. Because

the G values were all greater than the critical Z value, the maximum values in each data set were

outliers. The following values were removed from each assay: 2.435 - Benzodiazepine Group,

1.453 – Cocaine/BZE, 1.787 – Opiate Group, 1.898 – THC. The resultant average, standard

deviation, and % CV for each assay is reported in Table 25. The corresponding data for each

validation is depicted in Attachment E through Attachment G.

All three precision validations passed because the % CV for the negative and cutoff calibrators was less than 15%. This confirms the precision of the instrument and the performance of the calibrators.

Accuracy.

When samples are prepared at the cutoff level, they may return either a positive or negative result, as the sample concentration is so close to the concentration of the cutoff calibrator. Ideally, sample prepared exactly at the cutoff should come back negative. The accuracy of each assay improved when calibrators prepared in breast milk were utilized. The only problem assays for the second validation were Cocaine/BZE and Opiate Group with false positives and Oxycodone/Oxymorphone with false negatives. The Cocaine/BZE and Opiate group assays were remedied by increasing the cutoff levels from 30 ng/mL to 50 ng/mL. Both of these assays passed at 100% in the final validation. The false negative for the Oxycodone/Oxymorphone assay was determined to be an outlier using the Grubbs test. The problem well had an absorbance value of 1.667, which was higher than the average for both the cutoff level and 50% above the cutoff level. This well had a G value of 3.34, making it an outlier for an upper one-tailed test at a significance level of 0.01. When this assay was analyzed during the final validation, it passed with 100% accuracy. Only the final accuracy validation passed, as all of the samples prepared at 50% above and 50% below the cutoff level were correctly identified. The data for each validation is depicted in Attachment E through Attachment G, and the accuracy results are summarized in Table 26.

The failing assays from the second validation were repeated after the final validation using the revised cutoff levels, and passed with 100% accuracy. The results are not reported, but this demonstrates the robustness of the method between two different sites.

Sample analysis.

All nineteen milk samples screened negative using the finalized ELISA seven-drug panel, and the data is depicted in Attachment H. This supports the negative results obtained with the immunochromatographic screen. There were no matrix issues seen with milk from a variety of different donors.

Conclusions

A seven-drug panel was successfully optimized and validated for the screening of licit and illicit drugs in human breast milk. This method is robust and was successfully validated at two different sites. The details of the final seven-drug panel are detailed in Table 27.

Future Research

It is suggested that the sensitivity and specificity of this method be explored by examining blinded samples of breast milk prepared at 50% above and below the cutoff level for each assay. By examining multiple samples instead of replicates of one sample, the diagnostic sensitivity and specificity can be determined (Schwope, et al., 2010).

A limited number of breast milk donors were examined in this study. Although there were not any issues with assay performance between these donors, additional research should be undertaken. The composition of breast milk changes over time and is likely to be different between individuals (Wojcik, et al., 2009), so further study is needed to determine if these changes affect the ability of the ELISA assays to detect drugs.

For this study, human breast milk samples were not available from women who were known users of the drugs tested in this panel. Because all individuals metabolize drugs differently, the concentrations of drugs and metabolites in breast milk may differ from person to person. Samples of milk obtained from women who have been taking drugs should be screened

by this ELISA panel to determine if there is a difference between metabolized samples and drug spiked samples.

Due to the complicated metabolism associated with the transition of drugs from plasma into breast milk, it is difficult to determine the range of drug concentrations that may be present in the general population of breastfeeding women. This is a difficult subject to study, due to the dangers and ethical dilemmas that are intrinsic in examining the relationship of drug use, breastfeeding, and the possible dangers to infants. As there is no therapeutic infant dose for many of the drugs in this panel, it is difficult to say what breast milk levels may be harmful. The cutoff levels suggested in this study may need to be scaled up or down depending on what is found in future research.

The composition of breast milk may have an effect on what concentrations are seen in samples. For example, if drugs tend to partition into milk with a higher preponderance of fat, it may be more difficult to detect the drug's presence in samples that are lower in fat content. Additional research could be done to determine the ability of drugs to pass into samples of certain macronutrient profiles.

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Tables

Table 1
Analytical Drug Standards

STANDARD	CATALOG NUMBER	LOT NUMBER	EXP. DATE	STORAGE CONDITIONS
S(+)-Amphetamine (dextro-Amphetamine)	A-008	FE042511-01	4/2016	Refrigerator
Oxazepam	O-902	FE111710-02	11/2014	Freezer
Benzoylecgonine	B-004	FE012411-02	2/2016	Freezer
(-)-Cotinine	C-016	FN051110-04	5/2015	Freezer
Hydromorphone	H-004	FE020410-01	2/2015	Freezer
Oxycodone	O-002	FE092910-02	9/2015	Refrigerator
Morphine	M-005	FE080411-01	8/2016	Freezer
(±)-Methamphetamine	M-009	FE061710-02	6/2015	Refrigerator
(-)-11-nor-9-Carboxy-Δ^9-THC	T-019	FE042111-02	4/2016	Freezer

Table 2

Pipette Information

DESCRIPTION	VOLUME RANGE	LOT NUMBER	CALIBRATION EXP. DATE
Eppendorf® Research® Plus pipette, adjustable volume	2-20 μL	496487Z	9/27/2012
Eppendorf® Research® Plus pipette, adjustable volume	20-200 μL	284487A	9/27/2012
Eppendorf® Research® Plus pipette, adjustable volume	100-1000 μL	204781A	9/27/2012

Table 3

Neogen Corporation Kits, Calibrators, and Cross-Reactivity

KIT	CALIBRATOR	CROSS-REACTS WITH	
Amphetamine Ultra	d-Amphetamine	N-desmethylselegiline (906%) d-Methamphetamine (688%)	d-Amphetamine (100%) (-)- Ephedrine (49%)
Benzodiazepine Group	Oxazepam	Diazepam (434%) Estazolam (365%) Nordiazepam (361%) Alprazolam (346%) Tetrazepam (264%) Flurazepam (262%) Lormetazepam (231%) Prazepam (198%) Temazepam (192%) Halazepam (173%) Triazolam (171%)	7-amino flunitrazepam (147%) Nitrazepam (141%) N-desmethyl flunitrazepam (119%) Flunitrazepam (110%) Oxazepam (100%) Bromazepam (85%) Clonazepam (79%) Lorazepam (70%) Midazolam (65%) Clobazam (59%)
Cocaine/BZE	Benzoylecgonine (BZE)	Cocaine (133%) Cocaethylene (124%)	BZE (100%) m-hydroxycocaine (96%)
Cotinine	Cotinine	Cotinine (100%)	
Opiate Group	Hydromorphone	Morphine (100%) 6-acetylcodeine (195%) Codeine (190%) Morphine-3-glucuronide (154%) Ethylmorphine (110%)	Hydrocodone (122%) 6-acetylmorphine (146%) Heroin/diacetylmorphine (154%) Nalorphine (76%) Hydromorphone (66%)
Oxycodone/ Oxymorphone	Oxycodone	Oxycodone (100%)	Oxymorphone (88%)
THC	Δ^9-THC-COOH	Δ^9-THC-COOH (100%)	Δ^8-THC-COOH (88%)

Note. Only substances that cross-reacted at above 50% were reported.

Table 4

Standard Formulations for Linearity Analysis in Human Breast Milk

STOCKS	CONCENTRATION	VOLUME OF DILUTION INTO 5mL BREAST MILK
STOCK	1 mg/mL	
A	1 µg/mL	5 µL STOCK
B	1 ng/mL	5 µL A

STANDARD CONCENTRATION (ng/mL)	RATIO	VOLUME OF DILUTION INTO 2mL BREAST MILK
0.25	B/5	400 µL B
0.5	B/2	1000 µL B
2	A/500	4 µL A
2.5	A/400	5 µL A
4	A/250	8 µL A
5	A/200	10 µL A
10	A/100	20 µL A
16	A/62.5	32 µL A
20	A/50	40 µL A
25	A/40	50 µL A
30	A/33.33	60 µL A
40	A/25	80 µL A
50	A/200	100 µL A
100	A/100	200 µL A
200	A/5	400 µL A
250	A/4	500 µL A
500	A/2	1000 µL A
1000	A	A
5000	STOCK/200	10 µL STOCK

Table 5

Standard Formulations for Linearity Analysis in EIA Buffer

STOCKS	CONCENTRATION	VOLUME OF DILUTION INTO 5mL EIA BUFFER
STOCK	1 mg/mL	
A	1 µg/mL	5 µL STOCK
B	1 ng/mL	5 µL A

STANDARD CONCENTRATION (ng/mL)	RATIO	VOLUME OF DILUTION INTO 2mL EIA BUFFER
0.05	B/20	100 µL B
0.1	B/10	200 µL B
0.2	B/5	400 µL B
0.3	B/3.33	600 µL B
0.5	B/2.5	800 µL B
0.8	B/1.25	1600 µL B
1	B	B
2	A/500	4 µL A
5	A/200	10 µL A
10	A/100	20 µL A
20	A/50	40 µL A
50	A/200	100 µL A
100	A/100	200 µL A
500	A/2	1000 µL A
1000	A	A

Table 6

Formulation of Multi-Drug Calibrators.

Group 1 Cutoff Calibrator		
Assay	**Calibrator**	**Cutoff Level (ng/mL)**
Amphetamine Ultra	d-Amphetamine	50 ng/mL
Cocaine/BZE	Benzoylecgonine	30 ng/mL
Hydromorphone	Hydromorphone	0.25 ng/mL
Group 2 Cutoff Calibrator		
Assay	**Calibrator**	**Cutoff Level (ng/mL)**
Methamphetamine/MDMA	d-Methamphetamine	50 ng/mL
Oxycodone/Oxymorphone	Oxycodone	30 ng/mL
THC	Δ^9-THC-COOH	20 ng/mL
Group 3 Cutoff Calibrator		
Assay	**Calibrator**	**Cutoff Level (ng/mL)**
Benzodiazepine Group	Oxazepam	50 ng/mL
Cotinine	Cotinine	50 ng/mL
Opiate Group	Morphine	30 ng/mL
Group 4 Cutoff Calibrator		
Assay	**Calibrator**	**Cutoff Level (ng/mL)**
Amphetamine Ultra	d-Amphetamine	50 ng/mL
Cotinine	Cotinine	50 ng/mL
Oxycodone/Oxymorphone	Oxycodone	30 ng/mL
Group 5 Cutoff Calibrator		
Assay	**Calibrator**	**Cutoff Level (ng/mL)**
Benzodiazepine Group	Oxazepam	50 ng/mL
Cocaine/BZE	Benzoylecgonine	30 ng/mL
Opiate Group	Hydromorphone	30 ng/mL
THC	Δ^9-THC-COOH	20 ng/mL
Group 6 Cutoff Calibrator		
Assay	**Calibrator**	**Cutoff Level (ng/mL)**
Benzodiazepine Group	Oxazepam	50 ng/mL
Cocaine/BZE	Benzoylecgonine	50 ng/mL
Opiate Group	Hydromorphone	50 ng/mL
THC	Δ^9-THC-COOH	20 ng/mL

Table 7

Sample Preparation for the First and Second Accuracy Validations

ASSAY	ANALYTE	-50% CUTOFF CONCENTRATION (ng/mL)	VOLUME OF 1 µg/mL SOLUTION INTO 1000µL EIA BUFFER
Amphetamine Ultra	d-Amphetamine	25	25µL
Benzodiazepine Group	Oxazepam	25	25µL
Cocaine/BZE	BZE	15	15µL
Cotinine	Cotinine	25	25µL
Opiate Group	Morphine	15	15µL
Oxycodone/Oxymorphone	Oxycodone	15	15µL
THC	Δ^9-THC-COOH	10	10µL

ASSAY	ANALYTE	CUTOFF CONCENTRATION (ng/mL)	VOLUME OF 1 µg/mL SOLUTION INTO 1000µL EIA BUFFER
Amphetamine Ultra	d-Amphetamine	50	50µL
Benzodiazepine Group	Oxazepam	50	50µL
Cocaine/BZE	BZE	30	30µL
Cotinine	Cotinine	50	50µL
Opiate Group	Morphine	30	30µL
Oxycodone/Oxymorphone	Oxycodone	30	30µL
THC	Δ^9-THC-COOH	20	20µL

ASSAY	ANALYTE	+50% CUTOFF CONCENTRATION (ng/mL)	VOLUME OF 1 µg/mL SOLUTION INTO 1000µL EIA BUFFER
Amphetamine Ultra	d-Amphetamine	75	75µL
Benzodiazepine Group	Oxazepam	75	75µL
Cocaine/BZE	BZE	45	45µL
Cotinine	Cotinine	75	75µL
Opiate Group	Morphine	45	45µL
Oxycodone/Oxymorphone	Oxycodone	45	45µL
THC	Δ^9-THC-COOH	30	30µL

Table 8

Sample Preparation for the Third Accuracy Validation

ASSAY	ANALYTE	-50% CUTOFF CONCENTRATION (ng/mL)	VOLUME OF 1 µg/mL SOLUTION INTO 1000µL BREAST MILK
Amphetamine Ultra	d-Amphetamine	25	25µL
Benzodiazepine Group	Oxazepam	25	25µL
Cocaine/BZE	BZE	25	25µL
Cotinine	Cotinine	25	25µL
Opiate Group	Morphine	25	25µL
Oxycodone/Oxymorphone	Oxycodone	15	15µL
THC	Δ^9-THC-COOH	10	10µL

ASSAY	ANALYTE	CUTOFF CONCENTRATION (ng/mL)	VOLUME OF 1 µg/mL SOLUTION INTO 1000µL BREAST MILK
Amphetamine Ultra	d-Amphetamine	50	50µL
Benzodiazepine Group	Oxazepam	50	50µL
Cocaine/BZE	BZE	50	50µL
Cotinine	Cotinine	50	50µL
Opiate Group	Morphine	50	50µL
Oxycodone/Oxymorphone	Oxycodone	30	30µL
THC	Δ^9-THC-COOH	20	20µL

ASSAY	ANALYTE	+50% CUTOFF CONCENTRATION (ng/mL)	VOLUME OF 1 µg/mL SOLUTION INTO 1000µL BREAST MILK
Amphetamine Ultra	d-Amphetamine	75	75µL
Benzodiazepine Group	Oxazepam	75	75µL
Cocaine/BZE	BZE	75	75µL
Cotinine	Cotinine	75	75µL
Opiate Group	Morphine	75	75µL
Oxycodone/Oxymorphone	Oxycodone	45	45µL
THC	Δ^9-THC-COOH	30	30µL

Table 9

Comparison of Sample Dilutions on Matrix Interference for Each Assay

ASSAY	SAMPLE	Neat	1:2	1:5	1:10	1:20	1:50	EIA Buffer
		AVERAGE ABSORBANCE VALUES						
Amphetamine Ultra	Prolacta Sample #1	1.033	1.023	1.238	1.451	1.472	1.557	
	Prolacta Sample #2	1.971	1.676	1.592	1.529	1.425	1.541	
	Prolacta Sample #3	0.994	1.019	2.360	1.962	1.735	1.767	
	Prolacta Sample #4	0.943	1.024	1.200	1.333	1.666	1.760	
	In-House Sample #1	1.054	1.298	1.410	1.409	1.469	1.550	
	Average	1.199	1.208	1.560	1.537	1.553	1.635	1.841
	Standard Deviation	0.416	0.288	0.473	0.248	0.170	0.160	
	% CV	34.7%	23.9%	30.3%	16.1%	10.9%	9.8%	
	Matrix Interference	34.9%	34.4%	15.3%	16.5%	15.6%	11.2%	
Benzodiazepine Group	Prolacta Sample #1	0.800	0.910	1.040	1.146	1.287	1.461	
	Prolacta Sample #2	1.004	1.024	1.197	1.250	1.358	1.515	
	Prolacta Sample #3	0.933	1.023	1.244	1.310	1.422	1.489	
	Prolacta Sample #4	0.915	1.023	1.159	1.257	1.427	1.522	
	In-House Sample #1	1.061	1.212	1.287	1.403	1.491	1.552	
	Average	0.942	1.038	1.185	1.273	1.397	1.507	1.710
	Standard Deviation	0.095	0.109	0.097	0.091	0.077	0.044	
	% CV	10.1%	10.5%	8.2%	7.2%	5.5%	2.9%	
	Matrix Interference	44.9%	39.3%	30.7%	25.5%	18.3%	11.9%	
Cocaine/BZE	Prolacta Sample #1	0.849	1.131	1.332	1.427	1.467	1.567	
	Prolacta Sample #2	0.875	1.209	1.353	1.453	1.491	1.525	
	Prolacta Sample #3	0.810	1.026	1.111	1.446	1.448	1.548	
	Prolacta Sample #4	0.835	1.090	1.312	1.413	1.464	1.510	
	In-House Sample #1	0.910	1.215	1.434	1.430	1.486	1.562	
	Average	0.856	1.134	1.308	1.434	1.471	1.542	1.632
	Standard Deviation	0.046	0.078	0.116	0.028	0.024	0.031	
	% CV	5.3%	6.8%	8.9%	2.0%	1.7%	2.0%	
	Matrix Interference	47.6%	30.5%	19.8%	12.2%	9.9%	5.5%	
Cotinine	Prolacta Sample #1	1.935	2.192	2.771	2.390	2.258	2.171	
	Prolacta Sample #2	1.736	1.684	1.931	2.087	2.711	2.792	
	Prolacta Sample #3	1.973	2.207	1.760	1.843	1.919	2.089	
	Prolacta Sample #4	1.605	1.820	1.796	1.985	1.741	1.741	
	In-House Sample #1	1.761	1.792	1.841	1.851	1.883	2.008	
	Average	1.802	1.939	2.019	2.031	2.102	2.160	2.290
	Standard Deviation	0.160	0.266	0.407	0.233	0.378	0.378	
	% CV	8.9%	13.7%	20.1%	11.4%	18.0%	17.5%	
	Matrix Interference	21.3%	15.3%	11.8%	11.3%	8.2%	5.7%	

Table 9, continued

ASSAY	SAMPLE	Neat	1:2	1:5	1:10	1:20	1:50	EIA Buffer
		DILUTION						
		AVERAGE ABSORBANCE VALUES						
Opiate Group	Prolacta Sample #1	1.061	1.289	1.496	1.665	1.737	1.866	
	Prolacta Sample #2	1.127	1.328	1.367	1.588	1.625	1.680	
	Prolacta Sample #3	1.114	1.279	1.559	1.580	1.658	1.645	
	Prolacta Sample #4	0.963	1.248	1.508	1.626	1.646	1.635	
	In-House Sample #1	0.944	1.301	1.507	1.529	1.621	1.692	
	Average	1.042	1.288	1.487	1.597	1.657	1.703	1.927
	Standard Deviation	0.081	0.055	0.096	0.058	0.055	0.096	
	% CV	7.8%	4.3%	6.5%	3.7%	3.3%	5.6%	
	Matrix Interference	46.0%	33.2%	22.8%	17.1%	14.0%	11.6%	
Oxycodone/Oxymorphone	Prolacta Sample #1	1.396	1.431	1.611	1.670	1.736	1.750	
	Prolacta Sample #2	1.555	1.482	1.650	1.646	1.642	1.702	
	Prolacta Sample #3	1.435	1.509	1.615	1.608	1.716	1.748	
	Prolacta Sample #4	1.381	1.485	1.560	1.659	1.692	1.778	
	In-House Sample #1	1.475	1.420	1.621	1.636	1.750	1.767	
	Average	1.448	1.466	1.611	1.641	1.707	1.749	1.900
	Standard Deviation	0.070	0.062	0.044	0.032	0.040	0.029	
	% CV	4.8%	4.2%	2.7%	2.0%	2.4%	1.7%	
	Matrix Interference	23.8%	22.9%	15.2%	13.6%	10.2%	8.0%	
THC	Prolacta Sample #1	0.910	0.623	0.706	0.677	0.725	1.149	
	Prolacta Sample #2	1.244	0.820	1.133	0.897	0.691	1.391	
	Prolacta Sample #3	0.332	0.367	1.308	0.762	0.971	1.622	
	Prolacta Sample #4	0.304	0.519	0.420	0.628	1.664	1.647	
	In-House Sample #1	1.038	0.510	0.561	0.777	0.964	1.372	
	Average	0.765	0.630	0.825	0.744	1.003	1.417	2.903
	Standard Deviation	0.427	0.350	0.361	0.203	0.440	0.307	
	% CV	55.8%	55.6%	43.8%	27.3%	43.9%	21.7%	
	Matrix Interference	73.6%	78.3%	71.6%	74.4%	65.5%	51.2%	

Table 10

Optimal Breast Milk Dilutions for Each Kit

ASSAY	DILUTION
Amphetamine Ultra	1:10
Benzodiazepine Group	1:10
Cocaine/BZE	1:5
Cotinine	1:5
Opiate Group	1:5
Oxycodone/Oxymorphone	1:20
THC (Δ^9-THC-COOH)	1:100

Table 11

Linearity of Standards for the Amphetamine Ultra Assay

				EIA Buffer				
STD (ng/mL)	**A 1**	**A 2**	**A Avg.**	**%B/B$_0$**	**Backfit**	**%Error**	**logCONC**	**LOGIT**
0	1.744	1.752	1.748	100.00				
0.2	1.571	1.474	1.523	87.10	0.17	15.34	-0.70	1.91
2	1.255	1.063	1.159	66.30	1.71	14.69	0.30	0.68
5	0.979	0.869	0.924	52.86	4.89	2.12	0.70	0.11
10	0.781	0.697	0.739	42.28	10.87	8.72	1.00	-0.31
20	0.583	0.485	0.534	30.55	28.27	41.33	1.30	-0.82
50	0.406	0.331	0.369	21.08	71.97	43.94	1.70	-1.32
500	0.204	0.172	0.188	10.76	319.82	36.04	2.70	-2.12
I-50:	6.07	ng/ml	**Slope:**	-1.23				
R=	0.9931		**Intercept:**	0.96				

				Human Breast Milk (1:10 dilution)				
STD (ng/mL)	**A 1**	**A 2**	**A Avg.**	**%B/B$_0$**	**Backfit**	**%Error**	**logCONC**	**LOGIT**
0	1.671	1.610	1.641	100.00				
2	1.618	1.570	1.594	97.17	1.12	43.99	0.30	3.53
20	1.317	1.272	1.295	78.91	22.39	11.94	1.30	1.32
50	1.016	1.060	1.038	63.27	63.88	27.77	1.70	0.54
100	0.817	0.794	0.806	49.10	139.93	39.93	2.00	-0.04
200	0.592	0.613	0.603	36.73	278.11	39.05	2.30	-0.54
500	0.421	0.393	0.407	24.81	596.87	19.37	2.70	-1.11
5000	0.177	0.144	0.161	9.78	2686.95	46.26	3.70	-2.22
I-50:	133.29	ng/ml	**Slope:**	-1.70				
R=	0.9860		**Intercept:**	3.62				
Approximate 70-30% B/B$_0$ Range: 40-350 ng/mL								

Note: A = Absorbance Value

Table 12

Linearity of Standards for the Benzodiazepine Group Assay

STD (ng/mL)	A 1	A 2	A Avg.	%B/B$_0$	Backfit	%Error	logCONC	LOGIT
EIA Buffer								
0	1.763	1.657	1.710	100.00				
0.2	1.409	1.349	1.379	80.64	0.18	8.66	-0.70	1.43
1	1.325	1.072	1.199	70.09	0.62	37.77	0.00	0.85
2	0.901	0.875	0.888	51.93	3.24	61.84	0.30	0.08
5	0.751	0.721	0.736	43.04	6.93	38.59	0.70	-0.28
20	0.512	0.621	0.567	33.13	17.03	14.86	1.30	-0.70
100	0.326	0.279	0.303	17.69	100.83	0.83	2.00	-1.54
500	0.187	0.140	0.164	9.56	456.85	8.63	2.70	-2.25
I-50: 3.82 ng/ml			**Slope:** -1.08					
R= 0.9932			**Intercept:** 0.63					

STD (ng/mL)	A 1	A 2	A Avg.	%B/B$_0$	Backfit	%Error	logCONC	LOGIT
Milk (1:10 dilution)								
0	1.513	1.518	1.516	100.00				
2	1.334	1.314	1.324	87.36	1.11	44.40	0.30	1.93
10	1.053	1.003	1.028	67.83	10.90	9.03	1.00	0.75
20	0.992	0.824	0.908	59.91	21.13	5.66	1.30	0.40
50	0.551	0.644	0.598	39.43	104.49	108.98	1.70	-0.43
200	0.488	0.446	0.467	30.81	216.68	8.34	2.30	-0.81
1000	0.242	0.252	0.247	16.30	1063.36	6.34	3.00	-1.64
5000	0.139	0.159	0.149	9.83	3242.19	35.16	3.70	-2.22
I-50: 45.76 ng/ml			**Slope:** -1.20					
R= 0.9879			**Intercept:** 1.99					
Approximate 70-30% B/B$_0$ Range: 10-200 ng/mL								

Note: A = Absorbance Value

Table 13
Linearity of Standards for the Cocaine/BZE Assay

EIA Buffer								
STD (ng/mL)	**A 1**	**A 2**	**A Avg.**	**%B/B$_0$**	**Backfit**	**%Error**	**logCONC**	**LOGIT**
0	1.795	1.792	1.794	100.00				
0.1	1.764	1.761	1.763	98.27	0.10	0.75	-1.00	4.04
0.5	1.645	1.626	1.636	91.19	0.49	1.54	-0.30	2.34
1	1.474	1.411	1.443	80.43	1.17	17.34	0.00	1.41
2	1.394	1.254	1.324	73.82	1.67	16.41	0.30	1.04
5	0.823	0.767	0.795	44.33	5.49	9.80	0.70	-0.23
10	0.650	0.529	0.590	32.87	8.67	13.28	1.00	-0.71
20	0.282	0.272	0.277	15.44	21.91	9.57	1.30	-1.70
I-50:	4.43	ng/ml	**Slope:**	-2.45				
R=	0.9976		**Intercept:**	1.58				

Milk (1:5 dilution)								
STD (ng/mL)	**A 1**	**A 2**	**A Avg.**	**%B/B$_0$**	**Backfit**	**%Error**	**logCONC**	**LOGIT**
0	1.631	1.611	1.621	100.00				
0.5	1.506	1.608	1.557	96.05	0.75	49.79	-0.30	3.19
2.5	1.425	1.495	1.460	90.07	2.39	4.20	0.40	2.20
5	1.411	1.412	1.412	87.08	3.40	32.03	0.70	1.91
10	1.243	1.145	1.194	73.66	9.58	4.25	1.00	1.03
25	0.989	0.996	0.993	61.23	18.77	24.92	1.40	0.46
50	0.876	0.767	0.822	50.68	31.14	37.72	1.70	0.03
100	0.260	0.255	0.258	15.89	229.02	129.02	2.00	-1.67
I-50:	32.15	ng/ml	**Slope:**	-1.95				
R=	0.9689		**Intercept:**	2.95				
Approximate 70-30% B/B$_0$ Range: 14-75 ng/mL								

Note: A = Absorbance Value

Table 14
Linearity of Standards for the Cotinine Assay

STD (ng/mL)	A 1	A 2	A Avg.	%B/B$_0$	Backfit	%Error	logCONC	LOGIT
EIA Buffer								
0	2.107	2.006	2.057	100.00				
0.05	1.962	1.880	1.921	93.41	0.01	70.11	-1.30	2.65
0.1	1.923	1.766	1.845	89.69	0.06	41.78	-1.00	2.16
0.5	1.666	1.475	1.571	76.37	0.92	83.67	-0.30	1.17
1	1.404	1.309	1.357	65.96	3.82	281.52	0.00	0.66
5	1.158	1.052	1.105	53.73	15.88	217.59	0.70	0.15
100	1.023	0.997	1.010	49.11	26.59	73.41	2.00	-0.04
1000	0.434	0.428	0.431	20.96	971.28	2.87	3.00	-1.33
I-50: 24.08 ng/ml			**Slope:** -0.83					
R= 0.9584			**Intercept:** 1.14					

STD (ng/mL)	A 1	A 2	A Avg.	%B/B$_0$	Backfit	%Error	logCONC	LOGIT
Milk (1:5 dilution)								
0	1.824	1.875	1.850	100.00				
0.25	1.742	1.761	1.752	94.70	0.14	42.99	-0.60	2.88
0.5	1.681	1.730	1.706	92.21	0.36	27.56	-0.30	2.47
2.5	1.517	1.503	1.510	81.64	3.33	33.38	0.40	1.49
5	1.410	1.423	1.417	76.59	6.69	33.79	0.70	1.19
25	1.034	1.067	1.051	56.80	52.81	111.22	1.40	0.27
500	0.580	0.575	0.578	31.22	587.95	17.59	2.70	-0.79
5000	0.350	0.343	0.347	18.73	2731.71	45.37	3.70	-1.47
I-50: 98.19 ng/ml			**Slope:** -1.02					
R= 0.9904			**Intercept:** 2.02					
Approximate 70-30% B/B$_0$ Range: 10-500 ng/mL								

Note: A = Absorbance Value

Table 15

Linearity of Standards for the Opiate Group Assay

EIA Buffer								
STD (ng/mL)	A 1	A 2	A Avg.	%B/B$_0$	Backfit	%Error	logCONC	LOGIT
0	2.348	2.441	2.395	100.00				
0.1	2.219	2.040	2.130	88.93	0.18	83.22	-1.00	2.08
0.5	2.108	1.899	2.004	83.67	0.41	17.88	-0.30	1.63
1	1.909	1.785	1.847	77.14	0.87	13.11	0.00	1.22
2	1.923	1.748	1.836	76.65	0.91	54.40	0.30	1.19
10	1.189	0.998	1.094	45.67	10.50	5.04	1.00	-0.17
20	0.910	0.766	0.838	35.00	23.35	16.75	1.30	-0.62
50	0.620	0.473	0.547	22.82	68.38	36.76	1.70	-1.22
I-50:	7.69	ng/ml	**Slope:**	-1.28				
R=	0.9805		**Intercept:**	1.14				

Milk (1:5 dilution)								
STD (ng/mL)	A 1	A 2	A Avg.	%B/B$_0$	Backfit	%Error	logCONC	LOGIT
0	1.964	1.857	1.911	100.00				
0.5	1.824	1.825	1.825	95.50	0.64	27.07	-0.30	3.05
2.5	1.709	1.671	1.690	88.46	2.70	8.03	0.40	2.04
5	1.667	1.589	1.628	85.21	4.05	18.99	0.70	1.75
10	1.572	1.501	1.537	80.42	6.55	34.47	1.00	1.41
50	0.936	0.882	0.909	47.58	56.04	12.09	1.70	-0.10
100	0.705	0.628	0.667	34.89	118.56	18.56	2.00	-0.62
250	0.452	0.452	0.452	23.66	258.15	3.26	2.40	-1.17
I-50:	48.83	ng/ml	**Slope:**	-1.62				
R=	0.9944		**Intercept:**	2.74				
Approximate 70-30% B/B$_0$ Range: 25-175 ng/mL								

Note: A = Absorbance Value

Table 16

Linearity of Standards for the Oxycodone/Oxymorphone Assay

				EIA Buffer				
STD (ng/mL)	**A 1**	**A 2**	**A Avg.**	**%B/B$_0$**	**Backfit**	**%Error**	**logCONC**	**LOGIT**
0	1.685	1.586	1.636	100.00				
0.2	1.657	1.478	1.568	95.84	0.13	34.48	-0.70	3.14
0.5	1.340	1.270	1.305	79.79	0.50	0.96	-0.30	1.37
0.8	1.001	1.004	1.003	61.30	0.99	23.20	-0.10	0.46
1	0.959	0.824	0.892	54.51	1.22	21.61	0.00	0.18
2	0.483	0.413	0.448	27.39	2.90	45.25	0.30	-0.97
5	0.237	0.190	0.214	13.05	5.82	16.32	0.70	-1.90
10	0.198	0.207	0.203	12.38	6.09	39.12	1.00	-1.96
I-50:	1.39	ng/ml	**Slope:**	-3.06				
R=	0.9706		**Intercept:**	0.44				

				Milk (1:20 dilution)				
STD (ng/mL)	**A 1**	**A 2**	**A Avg.**	**%B/B$_0$**	**Backfit**	**%Error**	**logCONC**	**LOGIT**
0	1.619	1.619	1.619	100.00				
4	1.376	1.376	1.376	84.99	3.46	13.61	0.60	1.73
10	1.167	1.167	1.167	72.08	7.37	26.26	1.00	0.95
16	0.823	0.823	0.823	50.83	17.84	11.47	1.20	0.03
20	0.703	0.706	0.705	43.51	23.69	18.46	1.30	-0.26
40	0.347	0.347	0.347	21.43	64.53	61.32	1.60	-1.30
100	0.224	0.224	0.224	13.84	107.62	7.62	2.00	-1.83
200	0.180	0.180	0.180	11.12	136.95	31.53	2.30	-2.08
I-50:	18.42	ng/ml	**Slope:**	-2.39				
R=	0.9764		**Intercept:**	3.02				
Approximate 70-30% B/B$_0$ Range: 10-40 ng/mL								

Note: A = Absorbance Value

Table 17

Linearity of Standards for the THC Assay

EIA Buffer								
STD (ng/mL)	**A 1**	**A 2**	**A Avg.**	**%B/B$_0$**	**Backfit**	**%Error**	**logCONC**	**LOGIT**
0	1.842	1.852	1.847	100.00				
0.05	1.637	1.708	1.673	90.55	0.04	22.04	-1.30	2.26
0.1	1.489	1.425	1.457	78.88	0.10	3.29	-1.00	1.32
0.2	1.205	1.072	1.139	61.64	0.25	23.58	-0.70	0.47
0.3	1.077	0.995	1.036	56.09	0.31	4.46	-0.52	0.24
0.5	0.775	0.806	0.791	42.80	0.54	8.98	-0.30	-0.29
1	0.544	0.533	0.539	29.16	1.01	1.12	0.00	-0.89
5	0.167	0.169	0.168	9.10	4.37	12.70	0.70	-2.30
I-50:	0.40	ng/ml	**Slope:**	-2.23				
R=	0.9952		**Intercept:**	-0.88				

Milk (1:100 dilution)								
STD (ng/mL)	**A 1**	**A 2**	**A Avg.**	**%B/B$_0$**	**Backfit**	**%Error**	**logCONC**	**LOGIT**
0	1.801	1.795	1.798	100.00				
5	1.682	1.593	1.638	91.07	3.14	37.11	0.70	2.32
10	1.326	1.367	1.347	74.89	10.76	7.57	1.00	1.09
20	1.003	0.933	0.968	53.84	27.51	37.53	1.30	0.15
30	0.819	0.824	0.822	45.69	38.13	27.10	1.48	-0.17
50	0.770	0.801	0.786	43.69	41.35	17.30	1.70	-0.25
100	0.343	0.312	0.328	18.21	144.03	44.03	2.00	-1.50
500	0.178	0.120	0.149	8.29	354.98	29.00	2.70	-2.40
I-50:	32.08	ng/ml	**Slope:**	-2.30				
R=	.9770		**Intercept:**	3.47				
Approximate 70-30% B/B$_0$ Range: 13-75 ng/mL								

Note: A = Absorbance Value

Table 18

Matrix Interference of Breast Milk Compared to EIA Buffer When Diluted

ASSAY/ CALIBRATOR	Dilution	EIA A (0 ng/mL)	Milk A (0 ng/mL)	Matrix Interference
Amphetamine Ultra (d-Amphetamine)	1:10	1.748	1.641	6%
Benzodiazepine Group (Oxazepam)	1:10	1.710	1.516	11%
Cocaine/BZE (Benzoylecgonine)	1:5	1.794	1.621	10%
Cotinine (Cotinine)	1:5	2.057	1.850	10%
Opiate Group (Hydromorphone)	1:5	2.395	1.911	20%
Oxycodone/ Oxymorphone (Oxycodone)	1:20	1.636	1.619	1%
THC (Δ^9-THC-COOH)	1:100	1.847	1.798	3%

Note: A = Absorbance Value

Table 19

Range of %B/B_0 Values From the Second and Third Validations

	%B/B$_0$							
ASSAY	**Drift #2**	**Precision #2-1**	**Precision #2-2**	**Accuracy #2**	**AVG**	**% CV**	**MIN**	**MAX**
Amphetamine Ultra	74.17	76.82	74.98	72.67	74.66	1.73	72.67	76.82
Benzodiazepine Group	45.18	46.04	48.41	43.91	45.89	1.90	43.91	48.41
Cocaine/BZE	80.12	82.26	85.43	85.54	83.34	2.63	80.12	85.54
Cotinine	58.10	78.57	82.90	66.78	71.59	11.28	58.10	82.90
Opiate Group	87.98	78.25	75.48	82.43	81.03	5.44	75.48	87.98
Oxycodone/ Oxymorphone	72.05	63.44	60.28	59.66	63.86	5.71	59.66	72.05
THC	76.27	80.73	74.10	68.50	74.90	5.08	68.50	80.73

	%B/B$_0$							
ASSAY	**Drift #3**	**Precision #3-1**	**Precision #3-2**	**Accuracy #3**	**AVG**	**% CV**	**MIN**	**MAX**
Amphetamine Ultra	71.48	74.85	73.34	68.84	72.13	2.59	68.84	74.85
Benzodiazepine Group	63.62	44.49	49.09	51.69	52.22	8.16	44.49	63.62
Cocaine/BZE	44.55	41.84	34.53	39.26	40.05	4.26	34.53	44.55
Cotinine	54.82	54.21	53.85	54.28	54.29	0.40	53.85	54.82
Opiate Group	62.39	60.19	56.12	56.50	58.80	3.02	56.12	62.39
Oxycodone/ Oxymorphone	59.38	58.98	59.57	64.62	60.64	2.67	58.98	64.62
THC	72.55	71.40	75.75	75.20	73.72	2.08	71.40	75.75

Note: The %B/B$_0$ for the drift run from validation #3 was 91.09%. The drift passed, but the %B/B$_0$ was noted to be unusually high. When the THC calibrators were analyzed again, the %B/B$_0$ was 72.55%. As this falls within the normal range for the calibrators used for this validation, this value has been reported in this table for comparison purposes.

Table 20

Comparison of Multi-Drug and Single Drug Calibrators

ASSAY	Negative A	Multi-Drug Avg. A	Single Drug Avg. A	% Difference	%B/B$_0$ for Multi-Drug Calibrator	%B/B$_0$ for Single Drug Calibrator
Amphetamine Ultra	2.431	1.937	1.981	2.3%	80%	81%
Benzodiazepine Group	1.948	1.102	0.941	14.6%	57%	48%
Cocaine/BZE	1.969	1.261	1.126	10.7%	64%	57%
Cotinine	2.774	1.888	1.792	5.1%	68%	65%
Opiate Group	1.813	1.253	1.201	4.2%	69%	66%
Oxycodone/ Oxymorphone	2.516	1.778	1.875	5.5%	71%	75%
THC	2.129	1.731	1.785	3.1%	81%	84%

Note: A = Absorbance Value

Table 21

Stability of Multi-Drug Calibrators in Human Breast Milk

Group 4 Cutoff Standard							
	%B/B$_0$ OF CUTOFF						
ASSAY	**Day 0**	**Day 2**	**Day 4**	**Day 25**	**Day 31**	**AVG.**	**STD. DEV.**	**% CV**
Amphetamine Ultra	65	81	63	70	67	69.1	7.2	10%
Cotinine	70	57	58	53	50	57.4	7.7	13%
Oxycodone/ Oxymorphone	56	74	67	64	73	66.6	7.2	11%

Group 5 Cutoff Standard							
	%B/B$_0$ OF CUTOFF						
ASSAY	**Day 0**	**Day 2**	**Day 4**	**Day 25**	**Day 31**	**AVG.**	**STD. DEV.**	**% CV**
Benzodiazepine Group	48	43	49	47	45	46.4	2.1	5%
Cocaine/BZE	55	48	54	68	49	54.5	8.0	15%
Opiate Group	54	54	54	64	57	56.7	4.1	7%
THC	41	41	41	37	43	40.5	2.2	5%

Table 22

Single Readings of Ten Individual Wells

	ASSAY						
	Amphetamine Ultra	Benzodiazepine Group	Cocaine/BZE	Cotinine	Opiate Group	Oxycodone/ Oxymorphone	THC
A Values	1.617	1.751	1.508	2.288	1.692	2.493	1.498
	1.679	1.708	1.492	2.182	1.633	2.444	1.578
	1.614	1.769	1.648	2.187	1.644	2.479	1.595
	1.723	1.844	1.501	2.278	1.754	2.456	1.690
	1.702	1.904	1.524	2.249	1.734	2.510	1.660
	1.640	1.850	1.726	2.196	1.605	2.411	1.519
	1.596	1.809	1.707	2.226	1.600	2.456	1.513
	1.608	1.749	1.672	2.191	1.527	2.457	1.547
	1.547	1.767	1.643	2.214	1.416	2.461	1.540
	1.681	1.794	1.730	2.207	1.394	2.453	1.653
AVG.	1.641	1.795	1.615	2.222	1.600	2.462	1.579
STD. DEV.	0.055	0.058	0.098	0.038	0.122	0.027	0.068
NEG A Avg.	1.748	1.981	1.898	2.900	1.808	2.492	1.801
C/O A Avg.	1.277	0.767	1.071	1.547	1.195	1.399	1.093
% Change Between AVG. and NEG A	6.5%	10.4%	17.5%	30.5%	13.0%	1.2%	14.0%
%B/B$_0$ STD (CO/NEG)	73.1%	38.7%	56.4%	53.3%	66.1%	56.1%	60.7%
%B/B$_0$ (CO/AVG.)	77.8%	42.7%	66.3%	69.6%	74.7%	56.8%	69.2%
%B/B$_0$ DIFF.	6.5%	10.4%	17.5%	30.5%	13.0%	1.2%	14.0%

Note: A = Absorbance Value

Table 23

Multiple Readings of a Single Well

	ASSAY						
	Amphetamine Ultra	Benzodiazepine Group	Cocaine/BZE	Cotinine	Opiate Group	Oxycodone/ Oxymorphone	THC
A Values	1.577	1.767	1.401	1.823	1.711	2.346	1.513
	1.568	1.755	1.390	1.805	1.702	2.330	1.503
	1.559	1.756	1.383	1.795	1.696	2.313	1.494
	1.552	1.743	1.373	1.778	1.687	2.292	1.485
	1.543	1.727	1.365	1.766	1.680	2.285	1.476
	1.535	1.719	1.357	1.754	1.671	2.276	1.464
	1.526	1.705	1.347	1.737	1.664	2.254	1.455
	1.517	1.696	1.338	1.724	1.655	2.244	1.445
	1.510	1.756	1.690	1.714	1.650	2.229	1.436
	1.489	1.663	1.309	1.702	1.643	2.199	1.411
AVG.	1.538	1.729	1.395	1.760	1.676	2.277	1.468
STD. DEV.	0.028	0.033	0.107	0.041	0.023	0.046	0.032
NEG A Avg.	1.569	1.790	1.707	2.560	1.743	2.280	1.591
C/O A Avg.	1.144	0.682	0.960	1.171	1.158	1.250	0.975
% Change Between AVG. and NEG A	2.0%	3.6%	22.4%	45.4%	4.0%	0.2%	8.4%
%B/B_0 STD (CO/NEG)	72.9%	38.1%	56.2%	45.7%	66.4%	54.8%	61.3%
%B/B_0 (CO/AVG.)	74.4%	39.4%	68.8%	66.5%	69.1%	54.9%	66.4%
%B/B_0 DIFF.	2.0%	3.6%	22.4%	45.4%	4.0%	0.2%	8.4%

Note: A = Absorbance Value

Table 24

Drift Validation Data From Three Separate Validation Runs

ASSAY	RUN	First wells			Last wells			AVG. %B/B$_0$	STD. DEV.	% CV
		NEG A	C/O A	%B/B$_0$	NEG A	C/O A	%B/B$_0$			
Amphetamine Ultra	1	1.590	1.081	67.99	1.616	1.121	69.37	68.68	0.98	**1.42**
	2	1.181	0.876	74.17	1.416	1.064	75.14	74.66	0.68	**0.92**
	3	1.420	1.015	71.48	1.421	1.046	73.61	72.54	1.51	**2.08**
Benzodiazepine Group	1	2.368	1.092	46.11	2.515	1.263	50.22	48.17	2.90	**6.02**
	2	1.618	0.731	45.18	1.848	0.867	46.92	46.05	1.23	**2.67**
	3	1.813	1.154	63.62	1.924	1.048	54.47	59.05	6.47	**10.96**
Cocaine/BZE	1	1.684	1.147	68.11	1.705	1.269	74.43	71.27	4.47	**6.27**
	2	1.454	1.165	80.12	1.449	1.180	81.44	80.78	0.93	**1.15**
	3	1.714	1.004	58.55	1.775	1.127	63.49	61.02	3.50	**5.73**
Cotinine	1	2.441	1.284	52.60	2.385	1.355	56.81	54.71	2.98	**5.44**
	2	2.976	1.729	58.10	2.961	1.801	60.82	59.46	1.93	**3.24**
	3	3.274	1.795	54.82	3.115	1.898	60.93	57.87	4.32	**7.47**
Opiate Group	1	1.780	1.060	59.55	1.604	0.983	61.28	60.42	1.23	**2.03**
	2a	1.423	1.252	87.98	1.378	1.178	85.49	86.73	1.77	**2.04**
	2b	1.581	1.144	72.36	1.407	1.177	83.65	78.01	7.99	**10.24**
	3	1.467	0.915	62.39	1.609	0.841	52.27	57.33	7.16	**12.49**
Oxycodone/ Oxymorphone	1	2.499	0.801	32.05	2.344	0.892	38.05	35.05	4.24	**12.11**
	2	2.487	1.792	72.05	2.392	1.766	73.83	72.94	1.25	**1.72**
	3	2.083	1.237	59.38	2.059	1.258	61.10	60.24	1.22	**2.02**
THC	1	2.036	1.160	56.97	1.974	1.305	66.11	61.54	6.46	**10.50**
	2	1.749	1.334	76.27	1.169	0.998	85.37	80.82	6.43	**7.96**
	3	1.481	1.349	91.09	1.415	1.269	89.68	90.38	0.99	**1.10**

Note: A = Absorbance Value

Table 25

Precision Validation Data From Three Different Validation Runs

ASSAY	RUN	AVG. NEG A	STD. DEV.	% CV	AVG. C/O A	STD. DEV.	% CV
Amphetamine Ultra	1-1	1.649	0.07	**4.02**	1.159	0.05	**4.26**
	1-2	1.320	0.05	**3.69**	1.019	0.05	**4.53**
	2-1	1.432	0.07	**5.00**	1.095	0.07	**6.16**
	2-2	1.287	0.07	**5.39**	0.963	0.07	**7.33**
	3-1	1.379	0.03	**2.29**	1.046	0.04	**4.02**
	3-2	1.491	0.06	**3.71**	1.113	0.04	**3.21**
Benzodiazepine Group	1-1	2.431	0.06	**2.46**	1.187	0.06	**5.24**
	1-2	2.377	0.04	**1.59**	1.155	0.08	**7.01**
	2-1	2.009	0.08	**4.20**	0.868	0.08	**8.94**
	2-2	2.120	0.11	**5.02**	0.822	0.04	**4.72**
	3-1	1.730	0.02	**1.32**	0.801	0.04	**5.55**
	3-2	1.774	0.05	**2.74**	0.816	0.03	**3.92**
Cocaine/BZE	1-1	1.603	0.07	**4.58**	1.240	0.08	**6.86**
	1-2	1.619	0.15	**8.98**	1.219	0.14	**11.44**
	2-1	1.283	0.11	**8.79**	1.074	0.09	**8.70**
	2-2	1.316	0.14	**10.92**	1.130	0.13	**11.56**
	3-1	1.273	0.05	**3.80**	0.514	0.03	**5.42**
	3-2	1.242	0.07	**5.78**	0.486	0.03	**5.91**
Cotinine	1-1	2.325	0.12	**5.30**	1.282	0.05	**3.98**
	1-2	2.138	0.13	**6.29**	1.294	0.07	**5.51**
	2-1	3.009	0.07	**2.44**	2.382	0.03	**1.25**
	2-2	3.012	0.05	**1.61**	2.404	0.10	**4.34**
	3-1	3.189	0.09	**2.79**	1.795	0.06	**3.19**
	3-2	3.323	0.13	**3.82**	1.855	0.10	**5.13**
Opiate Group	1-1	1.859	0.09	**4.86**	1.154	0.08	**7.30**
	1-2	1.829	0.12	**6.30**	1.201	0.07	**5.43**
	2-1	1.545	0.06	**4.10**	1.445	0.08	**5.48**
	2-2	1.223	0.05	**4.21**	1.107	0.11	**9.53**
	3-1	1.452	0.08	**5.25**	0.864	0.05	**5.34**
	3-2	1.559	0.11	**6.87**	0.876	0.07	**7.70**
Oxycodone/ Oxymorphone	1-1	2.484	0.06	**2.48**	0.787	0.03	**4.32**
	1-2	2.399	0.06	**2.39**	0.772	0.04	**4.70**
	2-1	2.360	0.10	**4.14**	2.179	0.14	**6.38**
	2-2	1.436	0.08	**5.59**	1.223	0.10	**8.28**
	3-1	2.012	0.07	**3.47**	1.296	0.03	**2.31**
	3-2	2.116	0.02	**1.16**	1.348	0.03	**2.33**
THC	1-1	2.032	0.06	**2.75**	1.284	0.07	**5.67**
	1-2	2.049	0.07	**3.22**	1.294	0.05	**4.02**
	2-1	1.718	0.08	**4.79**	1.663	0.10	**5.86**
	2-2	1.411	0.08	**6.02**	1.336	0.11	**8.15**
	3-1	1.458	0.07	**4.98**	1.131	0.03	**2.74**
	3-2	1.575	0.09	**5.50**	1.232	0.05	**4.17**

Note: Runs are categorized by validation number, then run number.
Note: A = Absorbance Value

Table 26
Accuracy Validation Data for Three Separate Validation Runs

ASSAY	RUN	NEG A	C/O A	Average A			Correct Results (%)		
				-50% C/O	C/O	+50% C/O	-50% C/O	C/O	50% C/O
Amphetamine Ultra	1	1.466	0.901	1.142	0.987	0.916	100	67	33
	2	1.760	1.279	1.426	1.176	1.005	100	22	100
	3	1.641	1.154	1.259	1.035	0.888	100	0	100
Benzodiazepine Group	1	2.303	1.075	0.753	0.828	0.721	0	0	100
	2	1.963	0.862	1.036	0.835	0.688	100	22	100
	3	2.033	1.097	1.281	0.991	0.930	100	17	100
Cocaine/BZE	1	1.429	0.956	1.072	0.956	0.739	89	44	100
	2	1.949	1.099	1.302	0.895	0.494	78	11	100
	3	1.316	0.498	0.807	0.500	0.327	100	33	100
Cotinine	1	2.363	1.324	1.900	1.850	1.892	0	0	0
	2	3.164	2.113	2.335	2.016	1.843	100	11	100
	3	3.258	1.753	1.918	1.581	1.473	100	0	100
Opiate Group	1	2.039	1.045	1.675	1.641	1.593	0	0	0
	2	1.389	1.145	1.169	0.929	0.780	56	0	100
	3	1.586	0.888	1.002	0.857	0.721	100	50	100
Oxycodone/ Oxymorphone	1	2.622	0.964	1.487	1.185	0.897	100	100	89
	2	2.330	1.390	1.828	1.377	1.047	100	44	89
	3	2.007	1.231	1.657	1.280	0.948	100	100	100
THC	1	1.742	1.036	0.802	0.978	0.884	0	11	100
	2	1.930	1.322	1.561	1.305	1.246	100	22	100
	3	1.375	1.061	1.229	1.054	0.933	100	50	100

Note: A = Absorbance Value

Table 27

Final Kit Calibrators, Dilutions, and Cutoff Levels

KIT	CALIBRATOR	DILUTION	CUTOFF LEVEL
Amphetamine Ultra	d-Amphetamine	1:10	50 ng/mL
Benzodiazepine Group	Oxazepam	1:10	50 ng/mL
Cocaine/BZE	Benzoylecgonine (BZE)	1:5	50 ng/mL
Cotinine	Cotinine	1:5	50 ng/mL
Opiate Group	Hydromorphone	1:5	50 ng/mL
Oxycodone/ Oxymorphone	Oxycodone	1:20	30 ng/mL
THC	Δ^9-THC-COOH	1:100	20 ng/mL

Figures

Figure 1

Standard Curves in EIA Buffer and Human Breast Milk for the Amphetamine Ultra Assay
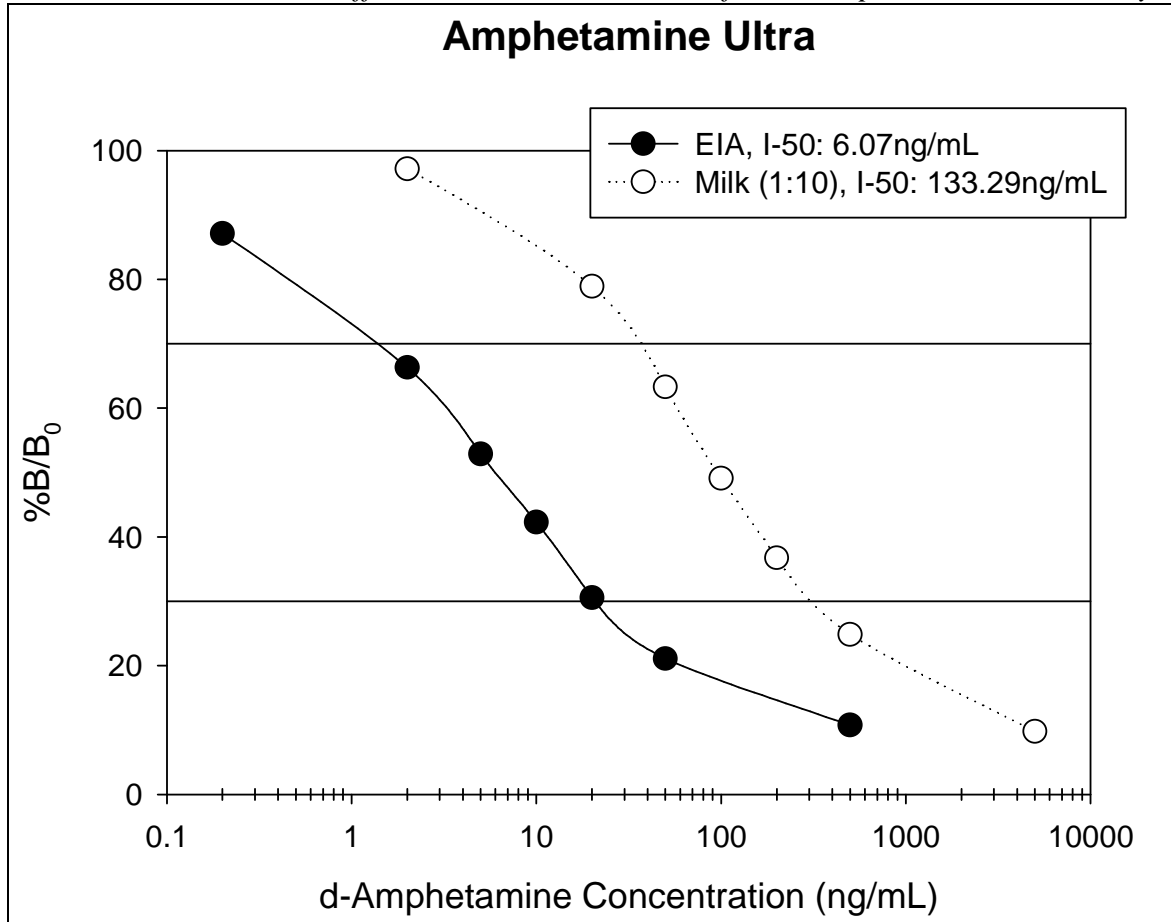
Figure 2

Standard Curves in EIA Buffer and Human Breast Milk for the Benzodiazepine Group Assay
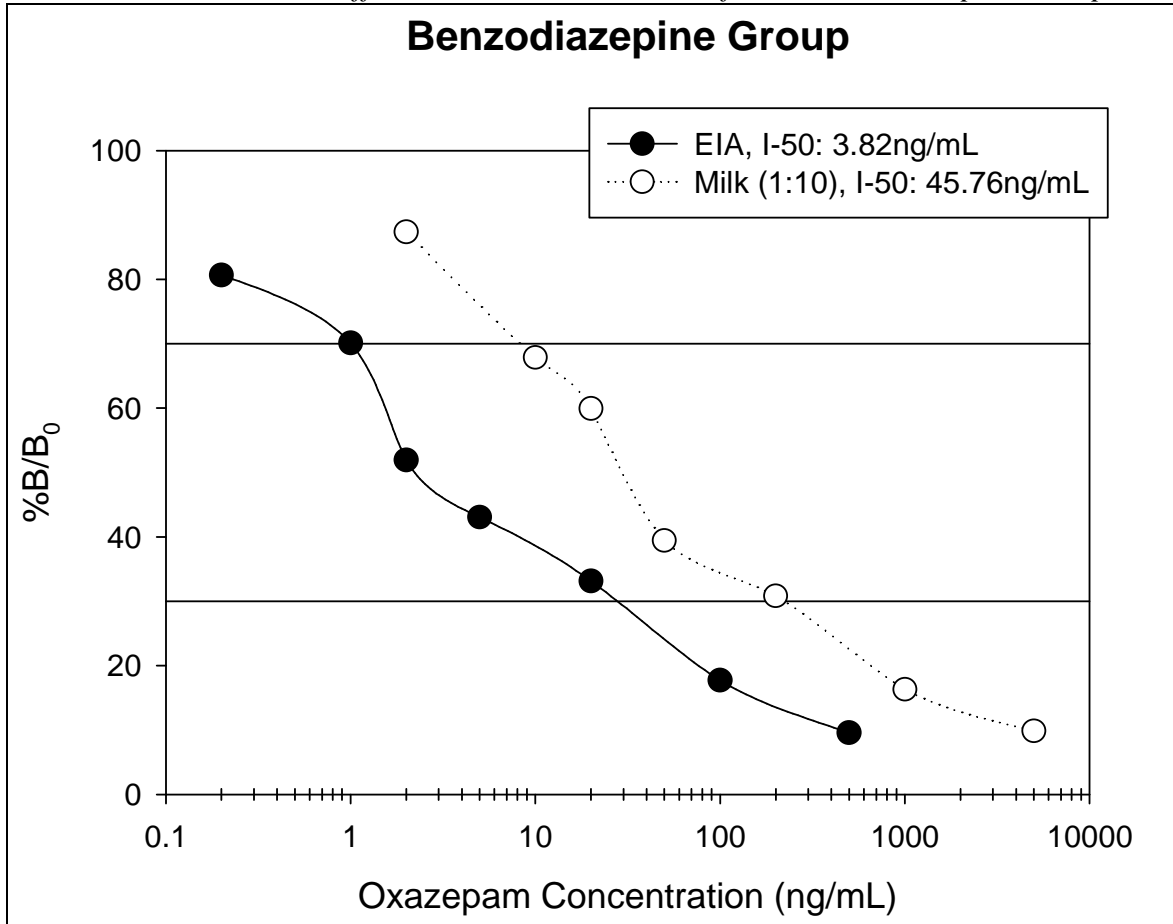
Figure 3
Standard Curves in EIA Buffer and Human Breast Milk for the Cocaine/BZE Assay
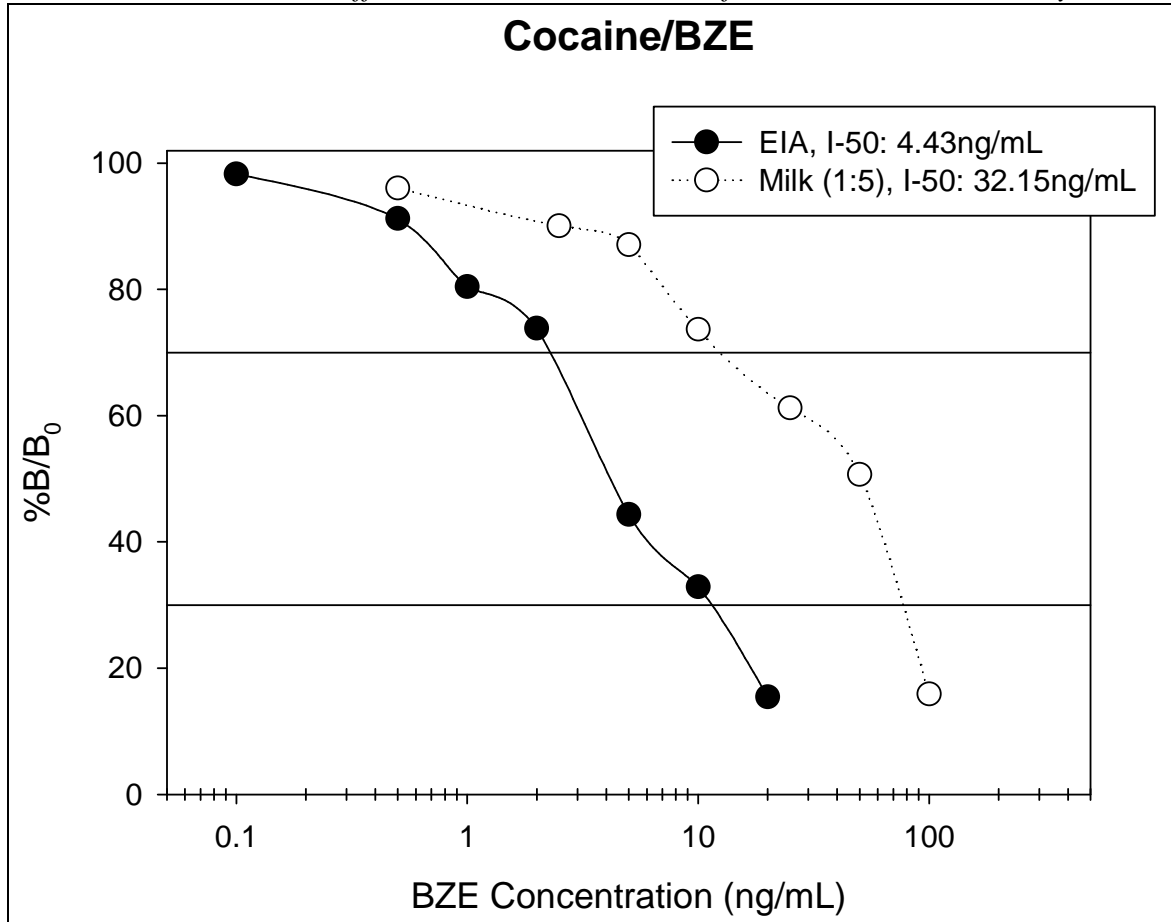
Figure 4

Standard Curves in EIA Buffer and Human Breast Milk for the Cotinine Assay
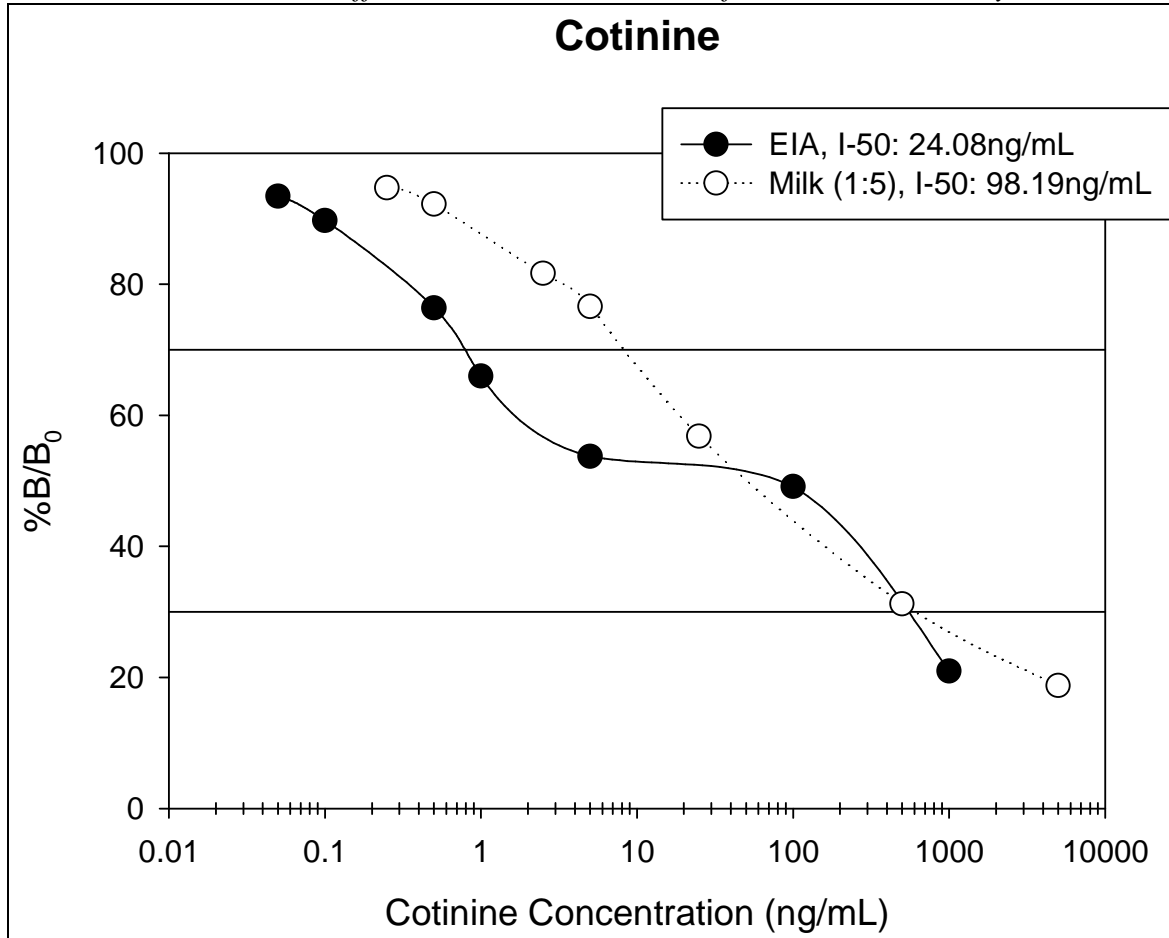
Figure 5

Standard Curves in EIA Buffer and Human Breast Milk for the Opiate Group Assay
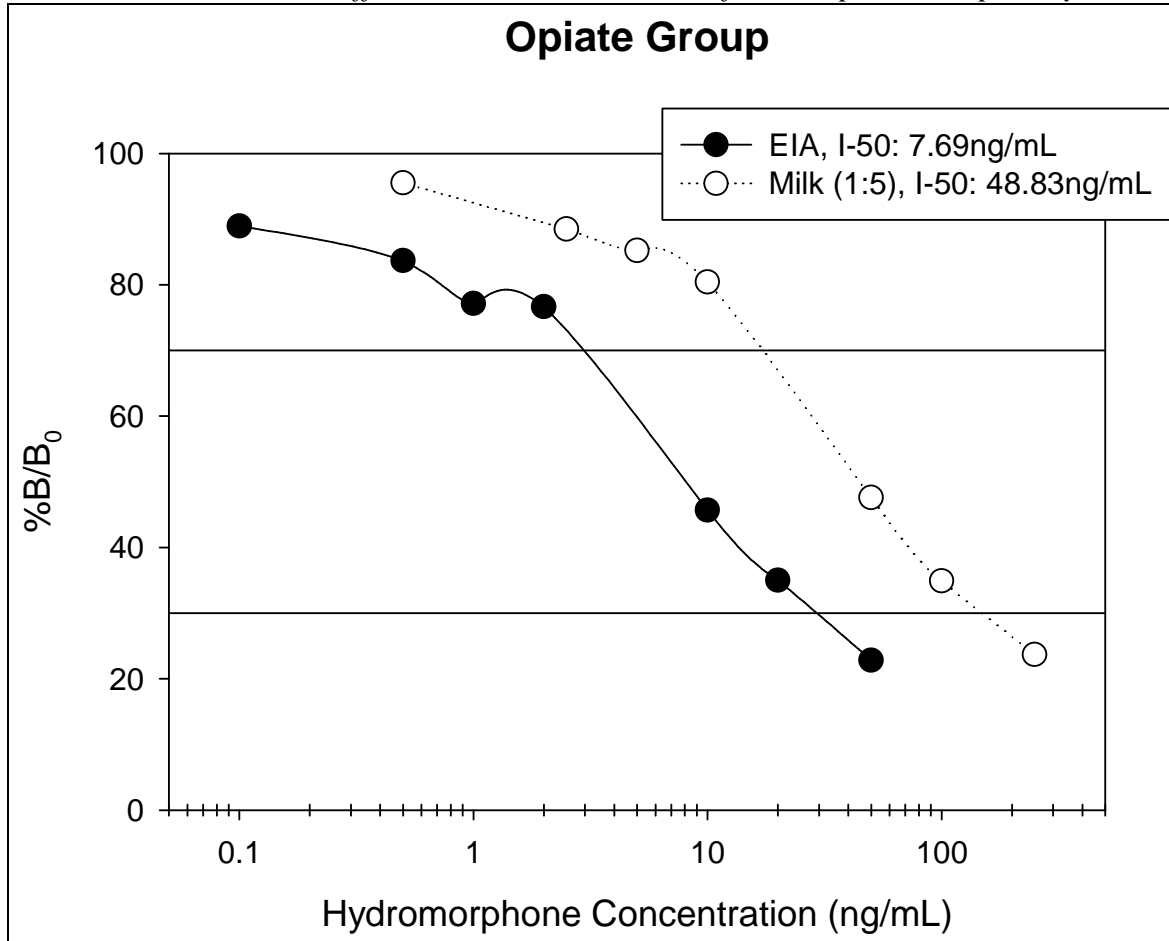
Figure 6

Standard Curves in EIA Buffer and Human Breast Milk for the Oxycodone/Oxymorphone Assay
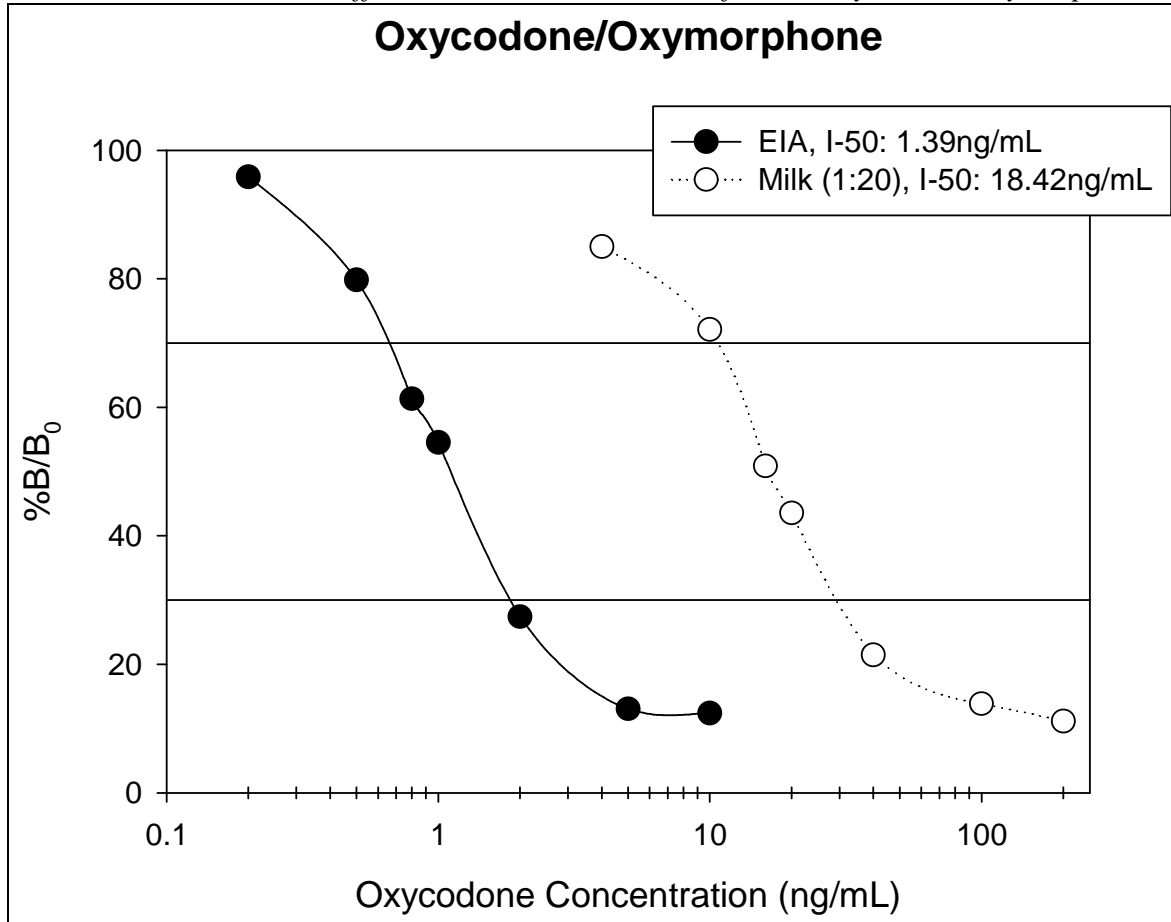
Figure 7
Standard Curves in EIA Buffer and Human Breast Milk for the THC kit
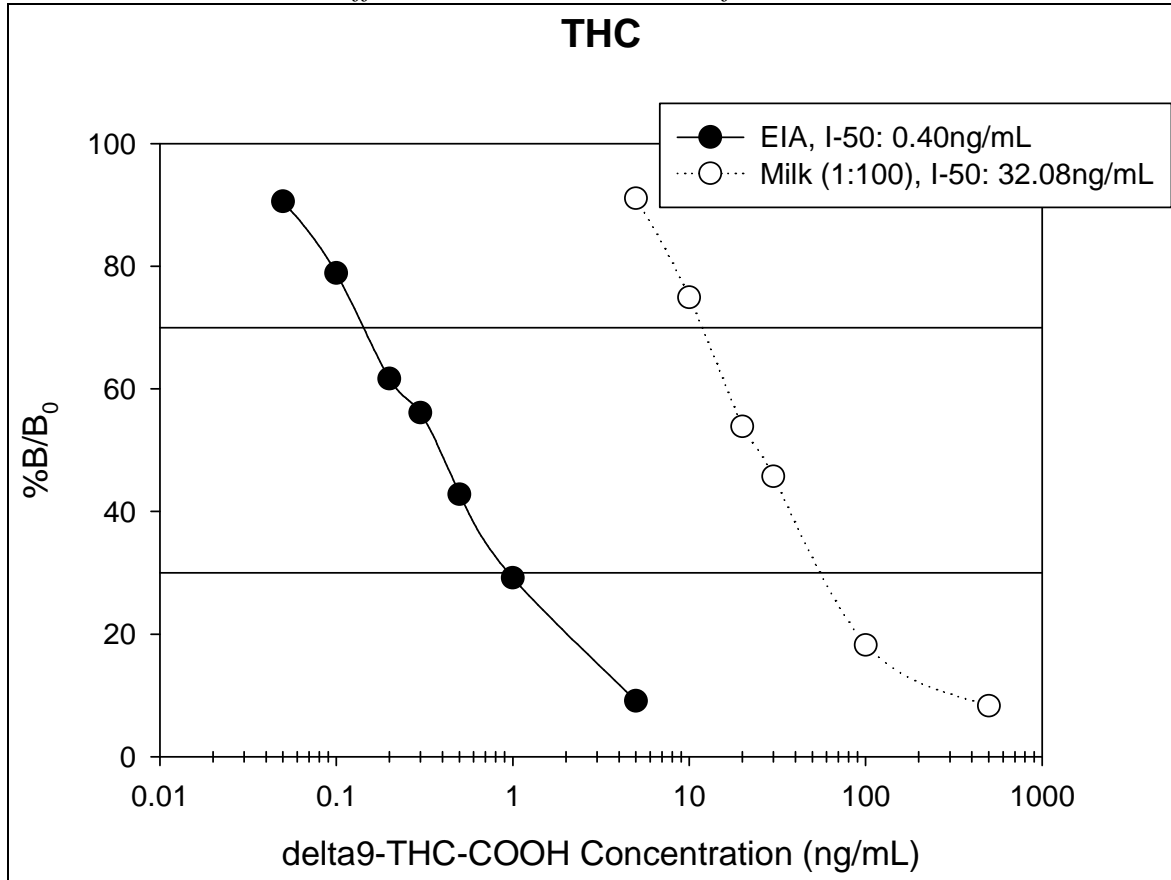
Appendix A

NMS Labs Testing Summary Sheet for Drugs of Abuse Screen

Test Summary Sheet for:

Drugs of Abuse Screen (9 Panel), Fluid

▲ NMS
LABS

Effective Date*: 1/6/2012

The following test codes are contained in this document:

1.	1864FL	Drugs of Abuse Screen (9 Panel), Fluid
2.	5684FL	Amphetamines Confirmation, Fluid
3.	5651FL	Barbiturates Confirmation, Fluid
4.	5641FL	Benzodiazepines Confirmation, Fluid
5.	5646FL	Cannabinoids Confirmation, Fluid
6.	5637FL	Cocaine and Metabolites Confirmation, Fluid
7.	5682FL	Methadone and Metabolite Confirmation, Fluid
8.	5645FL	Opiates - Free (Unconjugated) Confirmation, Fluid
9.	5657FL	Phencyclidine Confirmation, Fluid
10.	5633FL	Propoxyphene and Metabolite Confirmation, Fluid

The CPT Codes provided in this document are based on AMA
guidlines and are for informational purposes only. NMS Labs
does not assume responsibility for billing errors due to
reliance on the CPT Codes listed in this document.

*The information contained in this document represents database configurations, as they will appear on the
effective date listed above.

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1.	1864FL	Drugs of Abuse Screen (9 Panel), Fluid

Scope of Analysis:	Amphetamines [ELISA], Barbiturates [ELISA], Benzodiazepines [ELISA], Cannabinoids [ELISA], Cocaine / Metabolites [ELISA], Methadone [ELISA], Opiates [ELISA], Phencyclidine [ELISA], Propoxyphene [ELISA]
Method(s):	Enzyme-Linked Immunosorbent Assay (ELISA)
Purpose:	Drug of Abuse Monitoring; Forensic Analysis; Screening for a Class of Drugs and Quantitation of Positive Findings
Category:	Hypnotic, Sedative, Stimulant, Stimulant, Anorexogenic, Anxiolytic, Sedative, Analgesic, Narcotic Analgesic, Hallucinogen
Specimen Requirements:	7 mL Fluid
Minimum Volume:	3.2 mL
Special Handling:	None
Specimen Container:	NMS Labs has no experimental or literature-based data regarding the choice of specific specimen collection containers for this test.
Transport Temperature:	Refrigerated
Light Protection:	Not Required
Rejection Criteria:	None
Stability:	Room Temperature: Undetermined
	Refrigerated: Undetermined
	Frozen (-20 °C): Undetermined

Method:	**Enzyme-Linked Immunosorbent Assay (ELISA)**
Set-Up Days / TAT:	Monday-Saturday 2nd Shift 1 day (after set-up)
CPT Code:	80101x9

Compound Name / Alias	Units	RL
Opiates	ng/mL	20
Cocaine / Metabolites	ng/mL	20
Benzodiazepines	ng/mL	100
Cannabinoids	ng/mL	10
Amphetamines	ng/mL	20
Barbiturates	mcg/mL	0.04
Methadone	ng/mL	25
Phencyclidine Angel Dust; PCP; Sherm	ng/mL	10
Propoxyphene	ng/mL	50

Associated Confirmation Tests

[Amphetamines-reflex]	5684FL	Amphetamines Confirmation, Fluid

v.10

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3701 Welsh Road, Willow Grove, PA 19090
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nms@nmslabs.com

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Associated Confirmation Tests

[Barbiturates]	5651FL	Barbiturates Confirmation, Fluid
[Benzodiazepines]	5641FL	Benzodiazepines Confirmation, Fluid
[Cannabinoids]	5646FL	Cannabinoids Confirmation, Fluid
[Cocaine / Metabolites]	5637FL	Cocaine and Metabolites Confirmation, Fluid
[Methadone]	5682FL	Methadone and Metabolite Confirmation, Fluid
[Opiates-reflex]	5645FL	Opiates - Free (Unconjugated) Confirmation, Fluid
[Phencyclidine]	5657FL	Phencyclidine Confirmation, Fluid
[Propoxyphene]	5633FL	Propoxyphene and Metabolite Confirmation, Fluid

2.   5684FL   Amphetamines Confirmation, Fluid

Scope of Analysis:	Amphetamine [LC-MS/MS], Ephedrine [LC-MS/MS], MDA [LC-MS/MS], MDEA [LC-MS/MS], MDMA [LC-MS/MS], Methamphetamine [LC-MS/MS], Methylephedrine [LC-MS/MS], Norpseudoephedrine [LC-MS/MS], Phendimetrazine [LC-MS/MS], Phenmetrazine [LC-MS/MS], Phentermine [LC-MS/MS], Phenylpropanolamine [LC-MS/MS], Pseudoephedrine [LC-MS/MS], Selegiline [LC-MS/MS]
Method(s):	High Performance Liquid Chromatography/Tandem Mass Spectrometry (LC-MS/MS)
Purpose:	Confirmation of Positive Screen
Category:	Antihistamine, Decongestant, Stimulant, Stimulant, Anorexogenic, Appetite Suppressant, Bronchodilator, Stimulant, Decongestant, Stimulant
Specimen Requirements:	1 mL Fluid
Minimum Volume:	0.4 mL
Special Handling:	None
Specimen Container:	NMS Labs has no experimental or literature-based data regarding the choice of specific specimen collection containers for this test.
Transport Temperature:	Refrigerated
Light Protection:	Not Required
Rejection Criteria:	None
Stability:	Room Temperature: Undetermined
	Refrigerated: Undetermined
	Frozen (-20 °C): Undetermined

Method:	**High Performance Liquid Chromatography/Tandem Mass Spectrometry (LC-MS/MS)**
Set-Up Days / TAT:	Monday-Friday 2nd Shift 3 days (after set-up)
CPT Code:	82145

Compound Name / Alias	Units	RL
Ephedrine	ng/mL	5.0
Methylephedrine	ng/mL	5.0
Pseudoephedrine	ng/mL	5.0
Phenylpropanolamine Norephedrine; PPA	ng/mL	5.0
Norpseudoephedrine Cathine	ng/mL	5.0

Reference Comment
Norpseudoephedrine is a metabolite of Pseudoephedrine.

Amphetamine	ng/mL	5.0
Phentermine Adipex-P®; Ionamin®; Pro-Fast®	ng/mL	10

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3701 Welsh Road, Willow Grove, PA 19090
800-522-6671
nms@nmslabs.com

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Compound Name / Alias	Units	RL
Methamphetamine	ng/mL	5.0

Reference Comment

This test reports Methamphetamine as the total of the
undifferentiated d and l enantiomers. The ratio of
these enantiomers is important in determining whether
the source of Methamphetamine is from over the counter
medications, prescribed medication or controlled
substances.
Call lab for further information on d to l enantiomer
ratio determination.

Compound Name / Alias	Units	RL
MDA Adam; Methylenedioxyamphetamine	ng/mL	5.0
MDMA Ecstasy; Methylenedioxymethamphetamine	ng/mL	5.0
MDEA Eve; Methylenedioxyethylamphetamine	ng/mL	10
Selegiline Eldepryl®	ng/mL	5.0
Phendimetrazine Bontril®; Prelu-2®	ng/mL	10
Phenmetrazine Preludin®	ng/mL	5.0

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3. 5651FL   Barbiturates Confirmation, Fluid

Scope of Analysis:	Amobarbital [GC/MS], Butabarbital [GC/MS], Butalbital [GC/MS], Pentobarbital [GC/MS], Phenobarbital [GC/MS], Secobarbital [GC/MS]
Method(s):	Gas Chromatography/Mass Spectrometry (GC/MS)
Purpose:	Confirmation of Positive Screen
Category:	Hypnotic, Sedative, Anticonvulsant, Sedative
Specimen Requirements:	2 mL Fluid
Minimum Volume:	0.7 mL
Special Handling:	None
Specimen Container:	NMS Labs has no experimental or literature-based data regarding the choice of specific specimen collection containers for this test.
Transport Temperature:	Refrigerated
Light Protection:	Not Required
Rejection Criteria:	None
Stability:	Room Temperature: Undetermined
	Refrigerated: Undetermined
	Frozen (-20 °C): Undetermined

Method:	**Gas Chromatography/Mass Spectrometry (GC/MS)**
Set-Up Days / TAT:	Tuesday Thursday 2nd Shift 3 days (after set-up)
CPT Code:	82205

Compound Name / Alias	Units	RL
Butabarbital Butisol Sodium	mcg/mL	0.2

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800-522-6671
nms@nmslabs.com

Compound Name / Alias	Units	RL
Butalbital	mcg/mL	0.2
Amobarbital	mcg/mL	0.2
Pentobarbital	mcg/mL	0.2
Secobarbital Seconal®	mcg/mL	0.2
Phenobarbital Luminal®	mcg/mL	0.2

Reference Comment
No reference data available.

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4. 5641FL   Benzodiazepines Confirmation, Fluid

Scope of Analysis:	7-Amino Clonazepam [LC-MS/MS], Alpha-Hydroxyalprazolam [LC-MS/MS], Alprazolam [LC-MS/MS], Chlordiazepoxide [LC-MS/MS], Clobazam [LC-MS/MS], Clonazepam [LC-MS/MS], Desalkylflurazepam [LC-MS/MS], Diazepam [LC-MS/MS], Estazolam [LC-MS/MS], Flurazepam [LC-MS/MS], Hydroxyethylflurazepam [LC-MS/MS], Hydroxytriazolam [LC-MS/MS], Lorazepam [LC-MS/MS], Midazolam [LC-MS/MS], Nordiazepam [LC-MS/MS], Oxazepam [LC-MS/MS], Temazepam [LC-MS/MS], Triazolam [LC-MS/MS]
Method(s):	High Performance Liquid Chromatography/Tandem Mass Spectrometry (LC-MS/MS)
Purpose:	Confirmation of Positive Screen
Category:	Hypnotic, Sedative, Anxiolytic, Tranquilizer, Anxiolytic, Sedative, Anticonvulsant
Specimen Requirements:	1 mL Fluid
Minimum Volume:	0.4 mL
Special Handling:	None
Specimen Container:	NMS Labs has no experimental or literature-based data regarding the choice of specific specimen collection containers for this test.
Transport Temperature:	Refrigerated
Light Protection:	Not Required
Rejection Criteria:	None
Stability:	Room Temperature: Undetermined
	Refrigerated: Undetermined
	Frozen (-20 °C): Undetermined

Method:	High Performance Liquid Chromatography/Tandem Mass Spectrometry (LC-MS/MS)
Set-Up Days / TAT:	Monday-Friday 3 days (after set-up)
CPT Code:	80154

Compound Name / Alias	Units	RL
Diazepam Valium®	ng/mL	20
Nordiazepam	ng/mL	20
Oxazepam Serax®	ng/mL	20
Temazepam Normison®; Restoril®	ng/mL	20

Compound Name / Alias	Units	RL
Clobazam Frisium®; Urbanyl®	ng/mL	20
Chlordiazepoxide Librium®	ng/mL	20
Lorazepam Ativan®	ng/mL	5.0
Clonazepam Klonopin®	ng/mL	2.0
7-Amino Clonazepam Clonazepam Metabolite	ng/mL	5.0
Alprazolam Xanax®	ng/mL	5.0
Alpha-Hydroxyalprazolam Alprazolam Metabolite	ng/mL	5.0
Midazolam Versed®	ng/mL	5.0
Triazolam Halcion®	ng/mL	2.0
Hydroxytriazolam Triazolam Metabolite	ng/mL	5.0
Hydroxyethylflurazepam Flurazepam Metabolite	ng/mL	5.0
Desalkylflurazepam Flurazepam Metabolite	ng/mL	5.0
Flurazepam Dalmane®	ng/mL	2.0
Estazolam ProSom®	ng/mL	5.0

Reference Comment
No reference data available.

5. 5646FL Cannabinoids Confirmation, Fluid

Scope of Analysis: 11-Hydroxy Delta-9 THC [GC-GC-GC/MS], Delta-9 Carboxy THC [GC-GC-GC/MS], Delta-9 THC [GC-GC-GC/MS]
Method(s): Multi-dimensional Gas Chromatography/Mass Spectrometry (GC-GC-GC/MS)
Purpose: Confirmation of Positive Screen
Category: Hallucinogen
Specimen Requirements: 2 mL Fluid
Minimum Volume: 0.7 mL
Special Handling: None

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3701 Welsh Road, Willow Grove, PA 19090
800-522-6671
nms@nmslabs.com

Specimen Container:	NMS Labs has no experimental or literature-based data regarding the choice of specific specimen collection containers for this test.
Transport Temperature:	Refrigerated
Light Protection:	Not Required
Rejection Criteria:	None
Stability:	Room Temperature: Undetermined
	Refrigerated: Undetermined
	Frozen (-20 °C): Undetermined

Method:	Multi-dimensional Gas Chromatography/Mass Spectrometry (GC-GC-GC/MS)
Set-Up Days / TAT:	Monday-Friday 2nd Shift 4 days (after set-up)
CPT Code:	82542

Compound Name / Alias	Units	RL
Delta-9 THC Active Ingredient of Marijuana	ng/mL	1.0
Delta-9 Carboxy THC Inactive Metabolite	ng/mL	5.0
11-Hydroxy Delta-9 THC Active Metabolite	ng/mL	5.0

Reference Comment
No reference data available.

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6. 5637FL   Cocaine and Metabolites Confirmation, Fluid

Scope of Analysis:	Benzoylecgonine [GC/MS], Cocaethylene [GC/MS], Cocaine [GC/MS]
Method(s):	Gas Chromatography/Mass Spectrometry (GC/MS)
Purpose:	Confirmation of Positive Screen
Category:	Stimulant
Specimen Requirements:	2 mL Fluid
Minimum Volume:	0.7 mL
Special Handling:	None
Specimen Container:	NMS Labs has no experimental or literature-based data regarding the choice of specific specimen collection containers for this test.
Transport Temperature:	Refrigerated
Light Protection:	Not Required
Rejection Criteria:	None
Stability:	Room Temperature: Undetermined
	Refrigerated: Undetermined
	Frozen (-20 °C): Undetermined

Method:	Gas Chromatography/Mass Spectrometry (GC/MS)
Set-Up Days / TAT:	Monday-Friday 2nd Shift 3 days (after set-up)
CPT Code:	82520

Compound Name / Alias	Units	RL
Cocaine	ng/mL	20
Cocaethylene Cocaine/Ethanol By-Product	ng/mL	20
Benzoylecgonine Cocaine Degradation Product	ng/mL	50

Reference Comment
No reference data available.

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3701 Welsh Road, Willow Grove, PA 19090
800-522-6671
nms@nmslabs.com

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7.	5682FL	Methadone and Metabolite Confirmation, Fluid

Scope of Analysis:	EDDP [GC/MS], Methadone [GC/MS]
Method(s):	Gas Chromatography/Mass Spectrometry (GC/MS)
Purpose:	Confirmation of Positive Screen
Category:	Narcotic Analgesic
Specimen Requirements:	2 mL Fluid
Minimum Volume:	0.7 mL
Special Handling:	None
Specimen Container:	NMS Labs has no experimental or literature-based data regarding the choice of specific specimen collection containers for this test.
Transport Temperature:	Refrigerated
Light Protection:	Not Required
Rejection Criteria:	None
Stability:	Room Temperature: Undetermined
	Refrigerated: Undetermined
	Frozen (-20 °C): Undetermined

Method:	**Gas Chromatography/Mass Spectrometry (GC/MS)**
Set-Up Days / TAT:	Tuesday Thursday 2nd Shift 3 days (after set-up)
CPT Code:	83840

Compound Name / Alias	Units	RL
Methadone Dolophine®	ng/mL	50
EDDP Methadone Metabolite	ng/mL	50

Reference Comment
No reference data available.

8.	5645FL	Opiates - Free (Unconjugated) Confirmation, Fluid

Scope of Analysis:	6-Monoacetylmorphine - Free [GC/MS], Codeine - Free [GC/MS], Dihydrocodeine / Hydrocodol - Free [GC/MS], Hydrocodone - Free [GC/MS], Hydromorphone - Free [GC/MS], Morphine - Free [GC/MS], Oxycodone - Free [GC/MS], Oxymorphone - Free [GC/MS]
Method(s):	Gas Chromatography/Mass Spectrometry (GC/MS)
Purpose:	Confirmation of Positive Screen
Category:	Narcotic Analgesic
Specimen Requirements:	3 mL Fluid
Minimum Volume:	1.2 mL
Special Handling:	N/A
Specimen Container:	N/A
Transport Temperature:	N/A
Light Protection:	Not Required
Rejection Criteria:	N/A
Stability:	Room Temperature: Undetermined
	Refrigerated: Undetermined
	Frozen (-20 °C): Undetermined

Method:	**Gas Chromatography/Mass Spectrometry (GC/MS)**
Set-Up Days / TAT:	Monday-Friday 2nd Shift 4 days (after set-up)
CPT Code:	83925

Compound Name / Alias	Units	RL
Dihydrocodeine / Hydrocodol - Free	ng/mL	10

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3701 Welsh Road, Willow Grove, PA 19090
800-522-6671
nms@nmslabs.com

Compound Name / Alias	Units	RL
Codeine - Free	ng/mL	10
Morphine - Free	ng/mL	10
Hydrocodone - Free Dicodid®	ng/mL	10
6-Monoacetylmorphine - Free 6-MAM; Heroin Metabolite	ng/mL	10
Hydromorphone - Free Dilaudid®; Hydrocodone Metabolite	ng/mL	10
Oxycodone - Free OxyContin®; Roxicodone®	ng/mL	10
Oxymorphone - Free Numorphan®; Opana®; Oxycodone Metabolite	ng/mL	10

Reference Comment
No reference data available.

9.	5657FL	Phencyclidine Confirmation, Fluid

Scope of Analysis:	Phencyclidine [GC/MS]
Method(s):	Gas Chromatography/Mass Spectrometry (GC/MS)
Purpose:	Confirmation of Positive Screen
Category:	Hallucinogen
Specimen Requirements:	3 mL Fluid
Minimum Volume:	1.2 mL
Special Handling:	None
Specimen Container:	NMS Labs has no experimental or literature-based data regarding the choice of specific specimen collection containers for this test.
Transport Temperature:	Refrigerated
Light Protection:	Not Required
Rejection Criteria:	None
Stability:	Room Temperature: Undetermined
	Refrigerated: Undetermined
	Frozen (-20 °C): Undetermined

Method:	Gas Chromatography/Mass Spectrometry (GC/MS)
Set-Up Days / TAT:	Monday Thursday 4 days (after set-up)
CPT Code:	83992

Compound Name / Alias	Units	RL
Phencyclidine Angel Dust; PCP; Sherm	ng/mL	5.0

Reference Comment
No reference data available.

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800-522-6671
nms@nmslabs.com

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10.	5633FL	**Propoxyphene and Metabolite Confirmation, Fluid**

Scope of Analysis:	Norpropoxyphene [GC/MS], Propoxyphene [GC/MS]
Method(s):	Gas Chromatography/Mass Spectrometry (GC/MS)
Purpose:	Confirmation of Positive Screen
Category:	Analgesic
Specimen Requirements:	2 mL Fluid
Minimum Volume:	0.7 mL
Special Handling:	None
Specimen Container:	NMS Labs has no experimental or literature-based data regarding the choice of specific specimen collection containers for this test.
Transport Temperature:	Refrigerated
Light Protection:	Not Required
Rejection Criteria:	None
Stability:	Room Temperature: Undetermined
	Refrigerated: Undetermined
	Frozen (-20 °C): Undetermined

Method:	**Gas Chromatography/Mass Spectrometry (GC/MS)**
Set-Up Days / TAT:	Monday Wednesday 2nd Shift 3 days (after set-up)
CPT Code:	82542

Compound Name / Alias	Units	RL
Propoxyphene Darvon®	mcg/mL	0.1
Norpropoxyphene Propoxyphene Metabolite	mcg/mL	0.1

Reference Comment

No reference data available.

Appendix B

NMS Labs Toxicology Report

NMS Labs

3701 Welsh Road, PO Box 433A, Willow Grove, PA 19090-0437
Phone: (215) 657-4900 Fax: (215) 657-2972
e-mail: nms@nmslabs.com
Robert A. Middleberg, PhD, DABFT, DABCC-TC, Laboratory Director

Toxicology Report

Report Issued   01/18/2012 11:01

Patient Name	165510-01
Patient ID	165510-01
Chain	12010161
Age	Not Given
Gender	Not Given
Workorder	12010161

To: 60972
Analytical Research Laboratories
Attn: Phil Kemp, Ph.D.
840 Research Pkwy - Ste 546
Oklahoma City, OK 73104

Page 1 of 2

Positive Findings:

None Detected

See Detailed Findings section for additional information

Testing Requested:

Analysis Code	Description
1864FL	Drugs of Abuse Screen (9 Panel), Fluid
3150FL	Nicotine and Metabolite, Fluid

Specimens Received:

ID	Tube/Container	Volume/ Mass	Collection Date/Time	Matrix Source	Miscellaneous Information
001	Silver Glass Container	10 mL	Not Given	Fluid	

All sample volumes/weights are approximations.

Specimens received on 01/11/2012.

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CONFIDENTIAL   Workorder   12010161
                      Chain   12010161
                      Patient ID   165510-01

Page 2 of 2

Detailed Findings:
Examination of the specimen(s) submitted did not reveal any positive findings of toxicological significance by procedures outlined in the accompanying Analysis Summary.

Chain of custody documentation has been maintained for the analyses performed by NMS Labs.

Unless alternate arrangements are made by you, the remainder of the submitted specimens will be discarded six (6) weeks from the date of this report; and generated data will be discarded five (5) years from the date the analyses were performed.

Workorder 12010161 was electronically signed on 01/18/2012 10:06 by:

Lee M. Blum, Ph.D., DABFT
Forensic Toxicologist

Analysis Summary and Reporting Limits:

Acode 1864FL - Drugs of Abuse Screen (9 Panel), Fluid

-Analysis by Enzyme-Linked Immunosorbent Assay (ELISA) for:

Compound	Rpt. Limit	Compound	Rpt. Limit
Amphetamines	20 ng/mL	Methadone	25 ng/mL
Barbiturates	0.040 mcg/mL	Opiates	20 ng/mL
Benzodiazepines	100 ng/mL	Phencyclidine	10 ng/mL
Cannabinoids	10 ng/mL	Propoxyphene	50 ng/mL
Cocaine / Metabolites	20 ng/mL		

Acode 3150FL - Nicotine and Metabolite, Fluid

-Analysis by High Performance Liquid Chromatography/Tandem Mass Spectrometry (LC-MS/MS) for:

Compound	Rpt. Limit	Compound	Rpt. Limit
Cotinine	5.0 ng/mL	Nicotine	2.5 ng/mL

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NMS Labs
3701 Welsh Road, PO Box 433A, Willow Grove, PA 19090-0437
Phone: (215) 657-4900   Fax: (215) 657-2972
e-mail: nms@nmslabs.com
Robert A. Middleberg, PhD, DABFT, DABCC-TC, Laboratory Director

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Toxicology Report

Report Issued   01/18/2012 18:01

To: **60972**
Analytical Research Laboratories
Attn: Phil Kemp, Ph.D.
840 Research Pkwy - Ste 546
Oklahoma City, OK   73104

Patient Name	165510-02
Patient ID	165510-02
Chain	12010164
Age	Not Given
Gender	Not Given
Workorder	12010164

Page 1 of 2

Positive Findings:

None Detected

See Detailed Findings section for additional information

Testing Requested:

Analysis Code	Description
1864FL	Drugs of Abuse Screen (9 Panel), Fluid
3150FL	Nicotine and Metabolite, Fluid

Specimens Received:

ID	Tube/Container	Volume/ Mass	Collection Date/Time	Matrix Source	Miscellaneous Information
001	Silver Glass Container	10 mL	Not Given	Fluid	

All sample volumes/weights are approximations.

Specimens received on 01/11/2012.

v.8

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Workorder	12010164
Chain	12010164
Patient ID	165510-02

Page 2 of 2

Detailed Findings:

Examination of the specimen(s) submitted did not reveal any positive findings of toxicological significance by procedures outlined in the accompanying Analysis Summary.

Chain of custody documentation has been maintained for the analyses performed by NMS Labs.

Unless alternate arrangements are made by you, the remainder of the submitted specimens will be discarded six (6) weeks from the date of this report; and generated data will be discarded five (5) years from the date the analyses were performed.

Workorder 12010164 was electronically signed on 01/18/2012 17:52 by:

Daniel S. Isenschmid, Ph.D., D-ABFT
Forensic Toxicologist

Analysis Summary and Reporting Limits:

Acode 1864FL - Drugs of Abuse Screen (9 Panel), Fluid

-Analysis by Enzyme-Linked Immunosorbent Assay (ELISA) for:

Compound	Rpt. Limit	Compound	Rpt. Limit
Amphetamines	20 ng/mL	Methadone	25 ng/mL
Barbiturates	0.040 mcg/mL	Opiates	20 ng/mL
Benzodiazepines	100 ng/mL	Phencyclidine	10 ng/mL
Cannabinoids	10 ng/mL	Propoxyphene	50 ng/mL
Cocaine / Metabolites	20 ng/mL		

Acode 3150FL - Nicotine and Metabolite, Fluid

-Analysis by High Performance Liquid Chromatography/Tandem Mass Spectrometry (LC-MS/MS) for:

Compound	Rpt. Limit	Compound	Rpt. Limit
Cotinine	5.0 ng/mL	Nicotine	2.5 ng/mL

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Toxicology Report

Report Issued   01/18/2012 18:01

To: **60972**
Analytical Research Laboratories
Attn: Phil Kemp, Ph.D.
840 Research Pkwy - Ste 546
Oklahoma City, OK   73104

Patient Name	165510-03
Patient ID	165510-03
Chain	12010167
Age	Not Given
Gender	Not Given
Workorder	12010167

Page 1 of 2

Positive Findings:

None Detected

See Detailed Findings section for additional information

Testing Requested:

Analysis Code	Description
1864FL	Drugs of Abuse Screen (9 Panel), Fluid
3150FL	Nicotine and Metabolite, Fluid

Specimens Received:

ID	Tube/Container	Volume/ Mass	Collection Date/Time	Matrix Source	Miscellaneous Information
001	Silver Glass Container	10 mL	Not Given	Fluid	

All sample volumes/weights are approximations.

Specimens received on 01/11/2012.

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Workorder	12010167
Chain	12010167
Patient ID	165510-03

Page 2 of 2

Detailed Findings:
Examination of the specimen(s) submitted did not reveal any positive findings of toxicological significance by procedures outlined in the accompanying Analysis Summary.

Chain of custody documentation has been maintained for the analyses performed by NMS Labs.

Unless alternate arrangements are made by you, the remainder of the submitted specimens will be discarded six (6) weeks from the date of this report; and generated data will be discarded five (5) years from the date the analyses were performed.

Workorder 12010167 was electronically
signed on 01/18/2012 17:52 by:

Daniel S. Isenschmid, Ph.D., D-ABFT
Forensic Toxicologist

Analysis Summary and Reporting Limits:

Acode 1864FL - Drugs of Abuse Screen (9 Panel), Fluid

-Analysis by Enzyme-Linked Immunosorbent Assay (ELISA) for:

Compound	Rpt. Limit	Compound	Rpt. Limit
Amphetamines	20 ng/mL	Methadone	25 ng/mL
Barbiturates	0.040 mcg/mL	Opiates	20 ng/mL
Benzodiazepines	100 ng/mL	Phencyclidine	10 ng/mL
Cannabinoids	10 ng/mL	Propoxyphene	50 ng/mL
Cocaine / Metabolites	20 ng/mL		

Acode 3150FL - Nicotine and Metabolite, Fluid

-Analysis by High Performance Liquid Chromatography/Tandem Mass Spectrometry (LC-MS/MS) for:

Compound	Rpt. Limit	Compound	Rpt. Limit
Cotinine	5.0 ng/mL	Nicotine	2.5 ng/mL

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NMS Labs
3701 Welsh Road, PO Box 433A, Willow Grove, PA 19090-0437
Phone: (215) 657-4900   Fax: (215) 657-2972
e-mail: nms@nmslabs.com
Robert A. Middleberg, PhD, DABFT, DABCC-TC, Laboratory Director

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Toxicology Report

Report Issued   01/18/2012 18:01

Patient Name	165510-04
Patient ID	165510-04
Chain	12010169
Age	Not Given
Gender	Not Given
Workorder	12010169

To: 60972
Analytical Research Laboratories
Attn: Phil Kemp, Ph.D.
840 Research Pkwy - Ste 546
Oklahoma City, OK   73104

Page 1 of 2

Positive Findings:

None Detected

See Detailed Findings section for additional information

Testing Requested:

Analysis Code	Description
1864FL	Drugs of Abuse Screen (9 Panel), Fluid
3150FL	Nicotine and Metabolite, Fluid

Specimens Received:

ID	Tube/Container	Volume/Mass	Collection Date/Time	Matrix Source	Miscellaneous Information
001	Silver Glass Container	10 mL	Not Given	Fluid	

All sample volumes/weights are approximations.

Specimens received on 01/11/2012.

v.8

Workorder	12010169
Chain	12010169
Patient ID	165510-04

Page 2 of 2

Detailed Findings:
Examination of the specimen(s) submitted did not reveal any positive findings of toxicological significance by procedures outlined in the accompanying Analysis Summary.

Chain of custody documentation has been maintained for the analyses performed by NMS Labs.

Unless alternate arrangements are made by you, the remainder of the submitted specimens will be discarded six (6) weeks from the date of this report; and generated data will be discarded five (5) years from the date the analyses were performed.

Workorder 12010169 was electronically
signed on 01/18/2012 17:52 by:

Daniel S. Isenschmid, Ph.D., D-ABFT
Forensic Toxicologist

Analysis Summary and Reporting Limits:

Acode 1864FL - Drugs of Abuse Screen (9 Panel), Fluid

-Analysis by Enzyme-Linked Immunosorbent Assay (ELISA) for:

Compound	Rpt. Limit	Compound	Rpt. Limit
Amphetamines	20 ng/mL	Methadone	25 ng/mL
Barbiturates	0.040 mcg/mL	Opiates	20 ng/mL
Benzodiazepines	100 ng/mL	Phencyclidine	10 ng/mL
Cannabinoids	10 ng/mL	Propoxyphene	50 ng/mL
Cocaine / Metabolites	20 ng/mL		

Acode 3150FL - Nicotine and Metabolite, Fluid

-Analysis by High Performance Liquid Chromatography/Tandem Mass Spectrometry (LC-MS/MS) for:

Compound	Rpt. Limit	Compound	Rpt. Limit
Cotinine	5.0 ng/mL	Nicotine	2.5 ng/mL

v.8

▲NMS
LABS

NMS Labs
3701 Welsh Road, PO Box 433A, Willow Grove, PA 19090-0437
Phone: (215) 657-4900   Fax: (215) 657-2972
e-mail: nms@nmslabs.com
Robert A. Middleberg, PhD, DABFT, DABCC-TC, Laboratory Director

CONFIDENTIAL

Supplemental Report

Report Issued   01/25/2012 14:00
Last Report Issued   01/18/2012 18:01

To: 60972
Analytical Research Laboratories
Attn: Phil Kemp, Ph.D.
840 Research Pkwy - Ste 546
Oklahoma City, OK 73104

Patient Name	165510-04
Patient ID	165510-04
Chain	12010169
Age	Not Given
Gender	Not Given
Workorder	12010169

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Positive Findings:

None Detected

See Detailed Findings section for additional information

Testing Requested:

Analysis Code	Description
1864FL	Drugs of Abuse Screen (9 Panel), Fluid
3150FL	Nicotine and Metabolite, Fluid

Tests Not Performed:

Part or all of the requested testing was unable to be performed. Refer to the **Analysis Summary and Reporting Limits** section for details.

Specimens Received:

ID	Tube/Container	Volume/ Mass	Collection Date/Time	Matrix Source	Miscellaneous Information
001	Silver Glass Container	10 mL	Not Given	Fluid	

All sample volumes/weights are approximations.
Specimens received on 01/11/2012.

▲NMS
LABS

Workorder	12010169
Chain	12010169
Patient ID	165510-04

Page 2 of 4

Detailed Findings:
Examination of the specimen(s) submitted did not reveal any positive findings of toxicological significance by procedures outlined in the accompanying Analysis Summary.

Chain of custody documentation has been maintained for the analyses performed by NMS Labs.

Unless alternate arrangements are made by you, the remainder of the submitted specimens will be discarded six (6) weeks from the date of this report; and generated data will be discarded five (5) years from the date the analyses were performed.

Workorder 12010169 was electronically signed on 01/25/2012 13:42 by:

Daniel S. Isenschmid, Ph.D., D-ABFT
Forensic Toxicologist

Analysis Summary and Reporting Limits:

Acode 1864FL - Drugs of Abuse Screen (9 Panel), Fluid

-Analysis by Enzyme-Linked Immunosorbent Assay (ELISA) for:

Compound	Rpt. Limit	Compound	Rpt. Limit
Amphetamines	20 ng/mL	Methadone	25 ng/mL
Barbiturates	0.040 mcg/mL	Opiates	20 ng/mL
Benzodiazepines	100 ng/mL	Phencyclidine	10 ng/mL
Cannabinoids	10 ng/mL	Propoxyphene	50 ng/mL
Cocaine / Metabolites	20 ng/mL		

Acode 3150FL - Nicotine and Metabolite, Fluid

-Analysis by High Performance Liquid Chromatography/Tandem Mass Spectrometry (LC-MS/MS) for:

Compound	Rpt. Limit	Compound	Rpt. Limit
Cotinine	5.0 ng/mL	Nicotine	2.5 ng/mL

Acode 5633FL - Propoxyphene and Metabolite Confirmation, Fluid

-Analysis by Gas Chromatography/Mass Spectrometry (GC/MS) for:

Compound	Rpt. Limit	Compound	Rpt. Limit
Norpropoxyphene	0.10 mcg/mL	Propoxyphene	0.10 mcg/mL

Acode 5637FL - Cocaine and Metabolites Confirmation, Fluid

-Analysis by Gas Chromatography/Mass Spectrometry (GC/MS) for:

Compound	Rpt. Limit	Compound	Rpt. Limit
Benzoylecgonine	50 ng/mL	Cocaine	20 ng/mL
Cocaethylene	20 ng/mL		

Acode 5641FL - Benzodiazepines Confirmation, Fluid

-Analysis by High Performance Liquid Chromatography/Tandem Mass Spectrometry (LC-MS/MS) for:

NMS
LABS

Workorder 12010169
Chain 12010169
Patient ID 165510-04

Page 3 of 4

Analysis Summary and Reporting Limits:

Compound	Rpt. Limit	Compound	Rpt. Limit
7-Amino Clonazepam	5.0 ng/mL	Flurazepam	2.0 ng/mL
Alpha-Hydroxyalprazolam	5.0 ng/mL	Hydroxyethylflurazepam	5.0 ng/mL
Alprazolam	5.0 ng/mL	Hydroxytriazolam	5.0 ng/mL
Chlordiazepoxide	20 ng/mL	Lorazepam	5.0 ng/mL
Clobazam	20 ng/mL	Midazolam	5.0 ng/mL
Clonazepam	2.0 ng/mL	Nordiazepam	20 ng/mL
Desalkylflurazepam	5.0 ng/mL	Oxazepam	20 ng/mL
Diazepam	20 ng/mL	Temazepam	20 ng/mL
Estazolam	5.0 ng/mL	Triazolam	2.0 ng/mL

Acode 5645FL - Opiates - Free (Unconjugated) Confirmation, Fluid

-Analysis by Gas Chromatography/Mass Spectrometry (GC/MS) for:

Compound	Rpt. Limit	Compound	Rpt. Limit
6-Monoacetylmorphine - Free	10 ng/mL	Hydromorphone - Free	10 ng/mL
Codeine - Free	10 ng/mL	Morphine - Free	10 ng/mL
Dihydrocodeine / Hydrocodol - Free	10 ng/mL	Oxycodone - Free	10 ng/mL
Hydrocodone - Free	10 ng/mL	Oxymorphone - Free	10 ng/mL

Acode 5646FL - Cannabinoids Confirmation, Fluid

-Analysis by Multi-dimensional Gas Chromatography/Mass Spectrometry (GC-GC-GC/MS) for:

Compound	Rpt. Limit	Compound	Rpt. Limit
11-Hydroxy Delta-9 THC	N/A	Delta-9 THC	N/A
Delta-9 Carboxy THC	N/A		

Testing Not Performed: Test was canceled due to [Sample Matrix Problem].

Acode 5651FL - Barbiturates Confirmation, Fluid

-Analysis by Gas Chromatography/Mass Spectrometry (GC/MS) for:

Compound	Rpt. Limit	Compound	Rpt. Limit
Amobarbital	0.20 mcg/mL	Pentobarbital	0.20 mcg/mL
Butabarbital	0.20 mcg/mL	Phenobarbital	0.20 mcg/mL
Butalbital	0.20 mcg/mL	Secobarbital	0.20 mcg/mL

Acode 5657FL - Phencyclidine Confirmation, Fluid

-Analysis by Gas Chromatography/Mass Spectrometry (GC/MS) for:

Compound	Rpt. Limit	Compound	Rpt. Limit
Phencyclidine	5.0 ng/mL		

Acode 5682FL - Methadone and Metabolite Confirmation, Fluid

-Analysis by Gas Chromatography/Mass Spectrometry (GC/MS) for:

Compound	Rpt. Limit	Compound	Rpt. Limit
EDDP	50 ng/mL	Methadone	50 ng/mL

Acode 5684FL - Amphetamines Confirmation, Fluid

v.8

▲ NMS
LABS

Workorder 12010169
Chain 12010169
Patient ID 165510-04

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Analysis Summary and Reporting Limits:

-Analysis by High Performance Liquid Chromatography/Tandem Mass Spectrometry (LC-MS/MS) for:

Compound	Rpt. Limit	Compound	Rpt. Limit
Amphetamine	5.0 ng/mL	Norpseudoephedrine	5.0 ng/mL
Ephedrine	5.0 ng/mL	Phendimetrazine	10 ng/mL
MDA	5.0 ng/mL	Phenmetrazine	5.0 ng/mL
MDEA	10 ng/mL	Phentermine	10 ng/mL
MDMA	5.0 ng/mL	Phenylpropanolamine	5.0 ng/mL
Methamphetamine	5.0 ng/mL	Pseudoephedrine	5.0 ng/mL
Methylephedrine	5.0 ng/mL	Selegiline	5.0 ng/mL

v.8

Appendix C

ELISA Results for Multi-Drug and Single Drug Calibrator Comparison

Kit, Plate, and Reagent Lot Data

Date: 04/05/2012

ASSAY	Amphetamine Ultra	Benzodiazepine Group	Cocaine/BZE	Cotinine	Opiate Group	Oxycodone/ Oxymorphone	THC
Kit #	AUF-0047B	BGF-0061B	BZF-0078B	CTI-0034	MOF-0056B	OXF-0037B	TCF-0055B
Kit Exp. Date	1/30/2013	1/23/2013	2/22/2013	7/10/2012	2/22/2013	1/16/2013	2/9/2013
Plate #	120119	120119	120116FAM	1102211	120213F	111103F	120208
Plate Exp. Date	1/19/2014	1/19/2014	1/16/2014	2/21/2013	2/13/2014	11/3/2013	2/8/2014
C/O & NEG lot #	111212-WB	110811-WB	111110-WB	026	110715-WB	120117-WB	110826-WB
C/O & NEG Exp. Date	1/8/2013	12/28/2012	11/9/2012	-	1/10/2013	1/16/2013	12/26/2012
CONJ lot #	036	050	055	034	044	028	044
CONJ Exp.	1/30/2013	1/23/2013	2/22/2013	-	2/22/2013	1/16/2013	2/9/2013

Acid Stop, EIA Buffer, K-Blue, Distilled Water, and Neogen Wash Buffer were prepared on 04/05/2012
Negative and Cutoff Calibrators were prepared 04/05/2012

TEST NO.   :
TEST NAME   : AMPHETAMINE ULTRA
PLATE   : OpiACCURACY abcotCALCOMP 120405

W/L MODE   : SINGLE   DATE   : 4/5/2012
TEST FILTER   : 450 nm   TIME   : 4:41:02 PM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : AMPHETAMINE ULTRA, ,
Plate Lot Data   : OxyACCURACY abcotCALCOMP 120405, ,
Reagent Lot Data   : Acid Stop, ,
                    : AMPHETAMINE ULTRA CONJUGATE, ,
                    : EIA Buffer, ,
                    : K-Blue, ,
                    : AMPHETAMINE ULTRA CUTOFF, ,
                    : AMPHETAMINE ULTRA NEGATIVE, ,
                    : GROUP 1 CUTOFF, ,
                    : GROUP 1 NEGATIVE, ,
                    : Distilled Water, ,
                    : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.430>1.936

+ equation   = CO
                    = 1.937
- equation   = CO
                    = 1.937

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Amphetamine C/O]	G5	1.981	1.981	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A5	2.563	2.431	0.187	7.674%	NC1
	B5	2.299				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C5	1.915	1.937	0.031	1.595%	CO1
	D5	1.959				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E5	2.350	2.350	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F5	1.680	1.680	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	2.563	*****	*****	*****	*****	*****	*****	*****
B	*****	*****	*****	*****	2.299	*****	*****	*****	*****	*****	*****	*****
C	*****	*****	*****	*****	1.915	*****	*****	*****	*****	*****	*****	*****
D	*****	*****	*****	*****	1.959	*****	*****	*****	*****	*****	*****	*****
E	*****	*****	*****	*****	2.350	*****	*****	*****	*****	*****	*****	*****
F	*****	*****	*****	*****	1.680	*****	*****	*****	*****	*****	*****	*****
G	*****	*****	*****	*****	1.981	*****	*****	*****	*****	*****	*****	*****
H	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

TEST NO.   :
TEST NAME   : BENZODIAZEPINE GROUP
PLATE   : OpiACCURACY abcotCALCOMP 120405

W/L MODE   : SINGLE   DATE   : 4/5/2012
TEST FILTER   : 450 nm   TIME   : 4:41:02 PM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : BENZODIAZEPINE GROUP, ,
Plate Lot Data   : OxyACCURACY abcotCALCOMP 120405, ,
Reagent Lot Data   : Acid Stop, ,
                    : BENZODIAZEPINE GROUP CONJUGATE, ,
                    : EIA Buffer, ,
                    : K-Blue, ,
                    : BENZODIAZEPINE GROUP CUTOFF, ,
                    : BENZODIAZEPINE GROUP NEGATIVE, ,
                    : GROUP 2 CUTOFF, ,
                    : GROUP 2 NEGATIVE, ,
                    : Distilled Water, ,
                    : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.947>1.101

+ equation   = CO
                    = 1.102
- equation   = CO
                    = 1.102

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Benzodiazepine C/O]	G6	0.941	0.941	*****	*****	POS

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A6	1.888	1.947	0.084	4.338%	NC1
	B6	2.007				

Page 5 (top left)

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C6	1.033	1.102	0.098	8.858%	CO1
	D6	1.171				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E6	1.566	1.566	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F6	0.595	0.595	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

Page 6 (top right)

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	*****	1.888	*****	*****	*****	*****	*****	*****
B	*****	*****	*****	*****	*****	2.007	*****	*****	*****	*****	*****	*****
C	*****	*****	*****	*****	*****	1.033	*****	*****	*****	*****	*****	*****
D	*****	*****	*****	*****	*****	1.171	*****	*****	*****	*****	*****	*****
E	*****	*****	*****	*****	*****	1.566	*****	*****	*****	*****	*****	*****
F	*****	*****	*****	*****	*****	0.595	*****	*****	*****	*****	*****	*****
G	*****	*****	*****	*****	*****	0.941	*****	*****	*****	*****	*****	*****
H	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Page 7 (bottom left)

TEST NO. :
TEST NAME : COCAINE-BZE
PLATE : OpiACCURACY abcotCALCOMP 120405

W/L MODE	: SINGLE	DATE	: 4/5/2012
TEST FILTER	: 450 nm	TIME	: 4:41:02 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : COCAINE-BZE, ,
Plate Lot Data : OxyACCURACY abcotCALCOMP 120405, ,
Reagent Lot Data : Acid Stop, ,
: COCAINE/BZE CONJUGATE, ,
: EIA Buffer, ,
: K-Blue, ,
: COCAINE/BZE CUTOFF, ,
: COCAINE/BZE NEGATIVE, ,
: GROUP 2 CUTOFF, ,
: GROUP 2 NEGATIVE, ,
: Distilled Water, ,
: Neogen Wash Buffer, ,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.968>1.261

+ equation   = CO
                  = 1.261
- equation   = CO
                  = 1.261

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Cocaine C/O]	G7	1.126	1.126	*****	*****	POS

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A7	1.997	1.969	0.040	2.040%	NC1
	B7	1.941				

Page 8 (bottom right)

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C7	1.315	1.261	0.077	6.107%	CO1
	D7	1.207				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E7	1.403	1.403	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F7	0.713	0.713	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

Panel 1

Plate ID: OpiACCURACY abcotCALCOMP 120405   COCAINE/BZE

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	*****	*****	1.997	*****	*****	*****	*****	*****
B	*****	*****	*****	*****	*****	*****	1.941	*****	*****	*****	*****	*****
C	*****	*****	*****	*****	*****	*****	1.315	*****	*****	*****	*****	*****
D	*****	*****	*****	*****	*****	*****	1.207	*****	*****	*****	*****	*****
E	*****	*****	*****	*****	*****	*****	1.403	*****	*****	*****	*****	*****
F	*****	*****	*****	*****	*****	*****	0.713	*****	*****	*****	*****	*****
G	*****	*****	*****	*****	*****	*****	1.126	*****	*****	*****	*****	*****
H	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Panel 2

Plate ID: OpiACCURACY abcotCALCOMP 120405   OPIATE GROUP

TEST NO.	:
TEST NAME	: OPIATE GROUP
PLATE	: OpiACCURACY abcotCALCOMP 120405

W/L MODE	: SINGLE	DATE	: 4/5/2012
TEST FILTER	: 450 nm	TIME	: 4:41:02 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data   : OPIATE GROUP, ,
Plate Lot Data   : OxyACCURACY abcotCALCOMP 120405, ,
Reagent Lot Data : Acid Stop, ,
                  : EIA Buffer, ,
                  : K-Blue, ,
                  : OPIATE GROUP CONJUGATE, ,
                  : GROUP 2 CUTOFF, ,
                  : GROUP 2 NEGATIVE, ,
                  : OPIATE GROUP CUTOFF, ,
                  : OPIATE GROUP NEGATIVE, ,
                  : Distilled Water, ,
                  : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO		1.812>1.253
+ equation	= CO	
	= 1.253	
- equation	= CO	
	= 1.253	

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Opiate C/O]	G8	1.201	1.201	*****	*****	POS

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A8	1.868	1.812	0.078	4.326%	NC1
	B8	1.757				

Panel 3

Plate ID: OpiACCURACY abcotCALCOMP 120405   OPIATE GROUP

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C8	1.315	1.253	0.087	6.976%	CO1
	D8	1.191				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E8	1.959	1.959	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F8	1.052	1.052	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

Panel 4

Plate ID: OpiACCURACY abcotCALCOMP 120405   OPIATE GROUP

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	*****	*****	*****	1.868	*****	*****	*****	*****
B	*****	*****	*****	*****	*****	*****	*****	1.757	*****	*****	*****	*****
C	*****	*****	*****	*****	*****	*****	*****	1.315	*****	*****	*****	*****
D	*****	*****	*****	*****	*****	*****	*****	1.191	*****	*****	*****	*****
E	*****	*****	*****	*****	*****	*****	*****	1.959	*****	*****	*****	*****
F	*****	*****	*****	*****	*****	*****	*****	1.052	*****	*****	*****	*****
G	*****	*****	*****	*****	*****	*****	*****	1.201	*****	*****	*****	*****
H	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Panel 1 (Page 13 of 21)

Plate ID: OpiACCURACY abcotCALCOMP 120405   THC

TEST NO.   :
TEST NAME   : THC
PLATE   : OpiACCURACY abcotCALCOMP 120405

W/L MODE   : SINGLE   DATE   : 4/5/2012
TEST FILTER   : 450 nm   TIME   : 4:41:02 PM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : THC, ,
Plate Lot Data   : OxyACCURACY abcotCALCOMP 120405, ,
Reagent Lot Data : Acid Stop, ,
                           : EIA Buffer, ,
                           : K-Blue, ,
                           : THC CONJUGATE, ,
                           : GROUP 2 CUTOFF, ,
                           : GROUP 2 NEGATIVE, ,
                           : THC CUTOFF, ,
                           : THC NEGATIVE, ,
                           : Distilled Water, ,
                           : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.129>1.730

+ equation   = CO
                       = 1.730
- equation   = CO
                       = 1.730

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[THC C/O]	G9	1.785	1.785	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A9	2.370	2.129	0.340	15.990%	NC1
	B9	1.888				

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Panel 2 (Page 14 of 21)

Plate ID: OpiACCURACY abcotCALCOMP 120405   THC

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C9	1.781	1.730	0.072	4.135%	CO1
	D9	1.680				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E9	2.404	2.404	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F9	1.367	1.367	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

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Panel 3 (Page 15 of 21)

Plate ID: OpiACCURACY abcotCALCOMP 120405   THC

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	*****	*****	*****	*****	2.370	*****	*****	*****
B	*****	*****	*****	*****	*****	*****	*****	*****	1.888	*****	*****	*****
C	*****	*****	*****	*****	*****	*****	*****	*****	1.781	*****	*****	*****
D	*****	*****	*****	*****	*****	*****	*****	*****	1.680	*****	*****	*****
E	*****	*****	*****	*****	*****	*****	*****	*****	2.404	*****	*****	*****
F	*****	*****	*****	*****	*****	*****	*****	*****	1.367	*****	*****	*****
G	*****	*****	*****	*****	*****	*****	*****	*****	1.785	*****	*****	*****
H	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

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Panel 4 (Page 16 of 21)

REVELATION DSX 6.15

TEST NO.   :
TEST NAME   : OXYCODONE-OXYMORPHONE
PLATE   : OxyCALCOMP 120405

W/L MODE   : SINGLE   DATE   : 4/5/2012
TEST FILTER   : 450 nm   TIME   : 4:01:03 PM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : OXYCODONE-OXYMORPHONE, ,
Plate Lot Data   : OxyCALCOMP120405, ,
Reagent Lot Data : Acid Stop, ,
                           : EIA Buffer, ,
                           : K-Blue, ,
                           : OXYCODONE/OXYMORPHONE CONJUGATE, ,
                           : GROUP 1 CUTOFF, ,
                           : GROUP 1 NEGATIVE, ,
                           : OXYCODONE/OXYMORPHONE CUTOFF, ,
                           : OXYCODONE/OXYMORPHONE NEGATIVE, ,
                           : Distilled Water, ,
                           : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.515>1.777

+ equation   = CO
                       = 1.778
- equation   = CO
                       = 1.778

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Oxycodone C/O]	G1	1.875	1.875	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	2.514	2.516	0.003	0.108%	NC1
	B1	2.518				

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Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C1	1.910	1.778	0.188	10.551%	CO1
	D1	1.645				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E1	2.572	2.572	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F1	1.277	1.277	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

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	1	2	3	4	5	6	7	8	9	10	11	12
A	2.514	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	2.518	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.910	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.645	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	2.572	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.277	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.875	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

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REVELATION DSX 6.15

TEST NO.	:
TEST NAME	: COTININE
PLATE	: CotCALCOMP 120405

W/L MODE	: SINGLE	DATE	: 4/5/2012
TEST FILTER	: 450 nm	TIME	: 3:31:35 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data	: COTININE, ,
Plate Lot Data	: CotCALCOMP 120405, ,
Reagent Lot Data	: Acid Stop, ,
	: COTININE CONJUGATE, ,
	: EIA Buffer, ,
	: K-Blue, ,
	: COTININE CUTOFF, ,
	: COTININE NEGATIVE, ,
	: GROUP 1 CUTOFF, ,
	: GROUP 1 NEGATIVE, ,
	: Distilled Water, ,
	: Neogen Wash Buffer, ,

OVER limit	: 3.500
Calculation mode	: Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.773>1.887

+ equation	= CO
	= 1.887
- equation	= CO
	= 1.887

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Cotinine C/O]	G1	1.792	1.792	*****	*****	POS

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	2.868	2.774	0.134	4.827%	NC1
	B1	2.679				

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Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C1	1.904	1.887	0.023	1.244%	CO1
	D1	1.871				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E1	2.534	2.534	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F1	1.507	1.507	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	2.868	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	2.679	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.904	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.871	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	2.534	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.507	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.792	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

Appendix D

ELISA Results for Variability Between Single and Multiple Readings

Kit, Plate, and Reagent Lot Data

Date: 03/23/2012

ASSAY	Amphetamine Ultra	Benzodiazepine Group	Cocaine/BZE	Cotinine	Opiate Group	Oxycodone/ Oxymorphone	THC
Kit #	AUF-0047B	BGF-0061B	BZF-0078B	CTI-0034	MOF-0055B*	OXF-0037B	TCF-0055B
Kit Exp. Date	1/30/2013	1/23/2013	2/22/2013	7/10/2012	2/22/2013	1/16/2013	2/9/2013
Plate #	120119	120119	120116FAM	1102211	120213F	111103F	120208
Plate Exp. Date	1/19/2014	1/19/2014	1/16/2014	2/21/2013	2/13/2014	11/3/2013	2/8/2014
C/O & NEG lot #	111212-WB	110811-WB	111110-WB	026	110715-WB	120117-WB	110826-WB
C/O & NEG Exp. Date	1/8/2013	12/28/2012	11/9/2012	-	1/10/2013	1/16/2013	12/26/2012
CONJ lot #	036	050	055	034	044	028	044
CONJ Exp.	1/30/2013	1/23/2013	2/22/2013	-	2/22/2013	1/16/2013	2/9/2013

*This kit lot number was found to be defective. No results could be obtained.
Acid Stop, EIA Buffer, K-Blue, Distilled Water, and Neogen Wash Buffer were prepared on 03/23/2012
Negative and Cutoff Calibrators were prepared 03/23/2012

Kit, Plate, and Reagent Lot Data

Date: 04/06/2012

ASSAY	Amphetamine Ultra	Benzodiazepine Group	Cocaine/BZE	Cotinine	Opiate Group	Oxycodone/ Oxymorphone	THC
Kit #	AUF-0047B	BGF-0061B	BZF-0078B	CTI-0034	MOF-0056B	OXF-0037B	TCF-0055B
Kit Exp. Date	1/30/2013	1/23/2013	2/22/2013	7/10/2012	2/22/2013	1/16/2013	2/9/2013
Plate #	120119	120119	120116FAM	1102211	120213F	111103F	120208
Plate Exp. Date	1/19/2014	1/19/2014	1/16/2014	2/21/2013	2/13/2014	11/3/2013	2/8/2014
C/O & NEG lot #	111212-WB	110811-WB	111110-WB	026	110715-WB	120117-WB	110826-WB
C/O & NEG Exp. Date	1/8/2013	12/28/2012	11/9/2012	-	1/10/2013	1/16/2013	12/26/2012
CONJ lot #	036	050	055	034	044	028	044
CONJ Exp.	1/30/2013	1/23/2013	2/22/2013	-	2/22/2013	1/16/2013	2/9/2013

Acid Stop, EIA Buffer, K-Blue, Distilled Water, and Neogen Wash Buffer were prepared on 04/06/2012
Negative and Cutoff Calibrators were prepared 04/06/2012

Panel 1 (Page 1 of 46)

REVELATION DSX 6.15

TEST NO.   :
TEST NAME   : AMPHETAMINE ULTRA 10
PLATE   : StandardDeviationPlate1

W/L MODE   : SINGLE   DATE   : 3/23/2012
TEST FILTER   : 450 nm   TIME   : 12:03:45 PM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : AMPHETAMINE ULTRA 10, ,
Plate Lot Data   : AmpOxyBenzCocOpiTHC, 120323,
Reagent Lot Data   : Acid Stop, ,
                    : AMPHETAMINE ULTRA CONJUGATE, ,
                    : BENZODIAZEPINE GROUP CONJUGATE, ,
                    : COCAINE/BZE CONJUGATE, ,
                    : EIA Buffer, ,
                    : K-Blue, ,
                    : OPIATE GROUP CONJUGATE, ,
                    : OXYCODONE/OXYMORPHONE CONJUGATE, ,
                    : THC CONJUGATE, ,
                    : GROUP 1 CUTOFF, ,
                    : GROUP 1 NEGATIVE, ,
                    : Distilled Water, ,
                    : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.747>1.277

+ equation   = CO
                    = 1.277
- equation   = CO
                    = 1.277

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Blank Milk]	E1	1.617	1.641	0.055	3.323%	NEG
	F1	1.679				
	G1	1.614				
	H1	1.723				
	A2	1.702				
	B2	1.640				

Panel 2 (Page 2 of 46)

	D2	1.608
	E2	1.547
	F2	1.681

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	1.756	1.748	0.012	0.689%	NC1
	B1	1.739				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C1	1.258	1.277	0.027	2.143%	CO1
	D1	1.296				

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

Panel 3 (Page 3 of 46)

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.756	1.702	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.739	1.640	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.258	1.596	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.296	1.608	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.617	1.547	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.679	1.681	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.614	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.723	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Panel 4 (Page 4 of 46)

TEST NO.   :
TEST NAME   : OXYCODONE-OXYMORPHONE 10
PLATE   : StandardDeviationPlate1

W/L MODE   : SINGLE   DATE   : 3/23/2012
TEST FILTER   : 450 nm   TIME   : 12:03:45 PM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : OXYCODONE-OXYMORPHONE 10, ,
Plate Lot Data   : AmpOxyBenzCocOpiTHC, 120323,
Reagent Lot Data   : Acid Stop, ,
                    : EIA Buffer, ,
                    : K-Blue, ,
                    : OXYCODONE/OXYMORPHONE CONJUGATE, ,
                    : GROUP 1 CUTOFF, ,
                    : GROUP 1 NEGATIVE, ,
                    : Distilled Water, ,
                    : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.492>1.399

+ equation   = CO
                    = 1.399
- equation   = CO
                    = 1.399

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Blank Milk]	E3	2.493	2.471	0.038	1.527%	NEG
	F3	2.444				
	G3	2.479				
	H3	2.546				
	A4	2.510				
	B4	2.411				
	C4	2.456				
	D4	2.457				
	E4	2.461				
	F4	2.453				

Top Left Panel

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A3	2.522	2.492	0.042	1.678%	NC1
	B3	2.462				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C3	1.484	1.399	0.120	8.569%	CO1
	D3	1.314				

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	2.522	2.510	*****	*****	*****	*****	*****	*****	*****	*****
B	*****	*****	2.462	2.411	*****	*****	*****	*****	*****	*****	*****	*****
C	*****	*****	1.484	2.456	*****	*****	*****	*****	*****	*****	*****	*****
D	*****	*****	1.314	2.457	*****	*****	*****	*****	*****	*****	*****	*****
E	*****	*****	2.493	2.461	*****	*****	*****	*****	*****	*****	*****	*****
F	*****	*****	2.444	2.453	*****	*****	*****	*****	*****	*****	*****	*****
G	*****	*****	2.479	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	*****	*****	2.546	*****	*****	*****	*****	*****	*****	*****	*****	*****

Top Right Panel

TEST NO.	:
TEST NAME	: BENZODIAZEPINE GROUP 10
PLATE	: StandardDeviationPlate1

W/L MODE	: SINGLE	DATE	: 3/23/2012
TEST FILTER	: 450 nm	TIME	: 12:03:45 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data	: BENZODIAZEPINE GROUP 10, ,
Plate Lot Data	: AmpOxyBenzCocOpiTHC, 120323,
Reagent Lot Data	: Acid Stop, ,
	: BENZODIAZEPINE GROUP CONJUGATE, ,
	: EIA Buffer, ,
	: K-Blue, ,
	: GROUP 2 CUTOFF, ,
	: GROUP 2 NEGATIVE, ,
	: Distilled Water, ,
	: Neogen Wash Buffer, ,

OVER limit	: 3.500
Calculation mode	: Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.981>0.766

+ equation	= CO
	= 0.767
- equation	= CO
	= 0.767

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Blank Milk]	E5	1.751	1.794	0.058	3.258%	NEG
	F5	1.708				
	G5	1.769				
	H5	1.844				
	A6	1.904				
	B6	1.850				
	C6	1.809				
	D6	1.749				
	E6	1.767				
	F6	1.794				

Bottom Left Panel

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A5	1.987	1.981	0.008	0.410%	NC1
	B5	1.976				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C5	0.774	0.767	0.010	1.279%	CO1
	D5	0.760				

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	1.987	1.904	*****	*****	*****	*****	*****	*****
B	*****	*****	*****	*****	1.976	1.850	*****	*****	*****	*****	*****	*****
C	*****	*****	*****	*****	0.774	1.809	*****	*****	*****	*****	*****	*****
D	*****	*****	*****	*****	0.760	1.749	*****	*****	*****	*****	*****	*****
E	*****	*****	*****	*****	1.751	1.767	*****	*****	*****	*****	*****	*****
F	*****	*****	*****	*****	1.708	1.794	*****	*****	*****	*****	*****	*****
G	*****	*****	*****	*****	1.769	*****	*****	*****	*****	*****	*****	*****
H	*****	*****	*****	*****	1.844	*****	*****	*****	*****	*****	*****	*****

Bottom Right Panel

TEST NO.	:
TEST NAME	: COCAINE-BZE 10
PLATE	: StandardDeviationPlate1

W/L MODE	: SINGLE	DATE	: 3/23/2012
TEST FILTER	: 450 nm	TIME	: 12:03:45 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data	: COCAINE-BZE 10, ,
Plate Lot Data	: AmpOxyBenzCocOpiTHC, 120323,
Reagent Lot Data	: Acid Stop, ,
	: COCAINE/BZE CONJUGATE, ,
	: EIA Buffer, ,
	: K-Blue, ,
	: GROUP 2 CUTOFF, ,
	: GROUP 2 NEGATIVE, ,
	: Distilled Water, ,
	: Neogen Wash Buffer, ,

OVER limit	: 3.500
Calculation mode	: Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.898>1.070

+ equation	= CO
	= 1.071
- equation	= CO
	= 1.071

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Blank Milk]	E7	1.508	1.615	0.098	6.088%	NEG
	F7	1.492				
	G7	1.648				
	H7	1.501				
	A8	1.524				
	B8	1.726				
	C8	1.707				
	D8	1.672				
	E8	1.643				
	F8	1.730				

Plate ID: StandardDeviationPlate1   COCAINE/BZE

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A7	1.927	1.898	0.041	2.168%	NC1
	B7	1.869				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C7	1.107	1.071	0.051	4.794%	CO1
	D7	1.035				

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	*****	*****	1.927	1.524	*****	*****	*****	*****
B	*****	*****	*****	*****	*****	*****	1.869	1.726	*****	*****	*****	*****
C	*****	*****	*****	*****	*****	*****	1.107	1.707	*****	*****	*****	*****
D	*****	*****	*****	*****	*****	*****	1.035	1.672	*****	*****	*****	*****
E	*****	*****	*****	*****	*****	*****	1.508	1.643	*****	*****	*****	*****
F	*****	*****	*****	*****	*****	*****	1.492	1.730	*****	*****	*****	*****
G	*****	*****	*****	*****	*****	*****	1.648	*****	*****	*****	*****	*****
H	*****	*****	*****	*****	*****	*****	1.501	*****	*****	*****	*****	*****

Plate ID: StandardDeviationPlate1   THC

TEST NO.	:
TEST NAME	: THC 10
PLATE	: StandardDeviationPlate1

W/L MODE	: SINGLE	DATE	: 3/23/2012
TEST FILTER	: 450 nm	TIME	: 12:03:45 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data	: THC 10, ,
Plate Lot Data	: AmpOxyBenzCocOpiTHC, 120323,
Reagent Lot Data	: Acid Stop, ,
	: EIA Buffer, ,
	: K-Blue, ,
	: THC CONJUGATE, ,
	: GROUP 2 CUTOFF, ,
	: GROUP 2 NEGATIVE, ,
	: Distilled Water, ,
	: Neogen Wash Buffer, ,

OVER limit	: 3.500
Calculation mode	: Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.800>1.093

+ equation	= CO
	= 1.093
- equation	= CO
	= 1.093

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Blank Milk]	E11	1.498	1.579	0.068	4.308%	NEG
	F11	1.578				
	G11	1.595				
	H11	1.690				
	A12	1.660				
	B12	1.519				
	C12	1.513				
	D12	1.547				
	E12	1.540				
	F12	1.653				

Plate ID: StandardDeviationPlate1   THC

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A11	1.854	1.801	0.076	4.204%	NC1
	B11	1.747				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C11	1.138	1.093	0.064	5.860%	CO1
	D11	1.048				

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.854	1.660
B	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.747	1.519
C	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.138	1.513
D	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.048	1.547
E	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.498	1.540
F	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.578	1.653
G	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.595	*****
H	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.690	*****

REVELATION DSX 6.15

TEST NO.	:
TEST NAME	: COTININE 10
PLATE	: StandardDeviationPlate2

W/L MODE	: SINGLE	DATE	: 3/23/2012
TEST FILTER	: 450 nm	TIME	: 11:06:53 AM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data	: COTININE 10, ,
Plate Lot Data	: Cot, 120323,
Reagent Lot Data	: Acid Stop, ,
	: COTININE CONJUGATE, ,
	: EIA Buffer, ,
	: K-Blue, ,
	: GROUP 1 CUTOFF, ,
	: GROUP 1 NEGATIVE, ,
	: Distilled Water, ,
	: Neogen Wash Buffer, ,

OVER limit	: 3.500
Calculation mode	: Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.900>1.547

+ equation	= CO
	= 1.547
- equation	= CO
	= 1.547

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Blank Milk]	E1	2.288	2.222	0.038	1.713%	NEG
	F1	2.182				
	G1	2.187				
	H1	2.278				
	A2	2.249				
	B2	2.196				
	C2	2.226				
	D2	2.191				
	E2	2.214				
	F2	2.207				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	2.888	2.900	0.017	0.589%	NC1
	B1	2.912				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C1	1.568	1.547	0.029	1.898%	CO1
	D1	1.526				

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	2.888	2.249	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	2.912	2.196	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.568	2.226	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.526	2.191	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	2.288	2.214	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	2.182	2.207	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	2.187	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	2.278	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

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REVELATION DSX 6.15

TEST NO. :
TEST NAME : OPIATE GROUP 10
PLATE : OPI10 CALCOMPAmpOxyBenzCocOpiTHC 120406

W/L MODE	: SINGLE	DATE	: 4/6/2012
TEST FILTER	: 450 nm	TIME	: 5:05:54 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : OPIATE GROUP 10, ,
Plate Lot Data : OPI10 CALCOMPAmpOxyBenzCocOpiTHC 120406, ,
Reagent Lot Data : Acid Stop, ,
: AMPHETAMINE ULTRA CONJUGATE, ,
: BENZODIAZEPINE GROUP CONJUGATE, ,
: COCAINE/BZE CONJUGATE, ,
: EIA Buffer, ,
: K-Blue, ,
: OPIATE GROUP CONJUGATE, ,
: OXYCODONE/OXYMORPHONE CONJUGATE, ,
: THC CONJUGATE, ,
: GROUP 2 CUTOFF, ,
: GROUP 2 NEGATIVE, ,
: Distilled Water, ,
: Neogen Wash Buffer, ,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.807>1.195

+ equation   = CO
                    = 1.195
- equation   = CO
                    = 1.195

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[NEG]	E1	1.692	1.600	0.122	7.650%	NEG
	F1	1.633				
	G1	1.644				
	H1	1.754				
	A2	1.734				
	B2	1.605				

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D2	1.527
E2	1.416
F2	1.394

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	1.924	1.808	0.164	9.098%	NC1
	B1	1.691				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C1	1.229	1.195	0.048	4.029%	CO1
	D1	1.161				

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

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	1	2	3	4	5	6	7	8	9	10	11	12
A	1.924	1.734	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.691	1.605	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.229	1.600	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.161	1.527	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.692	1.416	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.633	1.394	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.644	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.754	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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REVELATION DSX 6.15

Name : Analytical Research Laboratories
Address : 840 Research Parkway Suite 546
: Oklahoma City, OK 73104
Phone : (405)271-1144
FAX :

TEST NO. :
TEST NAME : Read Plate
PLATE : Amp1

W/L MODE : SINGLE DATE : 3/23/2012
TEST FILTER : 450 nm TIME : 12:29:39 PM
REF. FILTER : * OPERATOR : admin

Kit Lot Data : Read Plate, ,
Plate Lot Data : Test_15, ,

OVER limit : 3.500
Calculation mode : Endpoint

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.618	1.577	2.370	2.346	1.845	1.767	1.778	1.401	0.105	0.093	1.687	1.513
B	1.606	1.521	2.323	2.260	1.838	1.711	1.725	1.594	0.097	0.085	1.593	1.385
C	1.156	1.477	1.365	2.286	0.708	1.683	1.019	1.577	0.093	0.084	1.045	1.384
D	1.194	1.481	1.203	2.281	0.696	1.621	0.949	1.538	0.089	0.088	0.961	1.414
E	1.465	1.422	2.340	2.303	1.622	1.627	1.394	1.511	0.091	0.084	1.368	1.404
F	1.554	1.546	2.285	2.302	1.577	1.662	1.372	1.599	0.091	0.085	1.444	1.511
G	1.443	0.038	2.302	0.044	1.626	0.043	1.515	0.042	0.087	0.044	1.459	0.041
H	1.573	0.045	2.338	0.041	1.698	0.043	1.377	0.042	0.091	0.048	1.543	0.042

***** Indicates an unread well or value out of range

REVELATION DSX 6.15

Name : Analytical Research Laboratories
Address : 840 Research Parkway Suite 546
: Oklahoma City, OK 73104
Phone : (405)271-1144
FAX :

TEST NO. :
TEST NAME : Read Plate
PLATE : Amp2

W/L MODE : SINGLE DATE : 3/23/2012
TEST FILTER : 450 nm TIME : 12:31:13 PM
REF. FILTER : * OPERATOR : admin

Kit Lot Data : Read Plate, ,
Plate Lot Data : Test_16, ,

OVER limit : 3.500
Calculation mode : Endpoint

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.607	1.568	2.345	2.330	1.831	1.755	1.766	1.390	0.105	0.093	1.678	1.503
B	1.593	1.512	2.301	2.243	1.827	1.701	1.714	1.584	0.097	0.085	1.584	1.377
C	1.148	1.472	1.357	2.284	0.704	1.674	1.014	1.569	0.093	0.084	1.039	1.376
D	1.188	1.475	1.196	2.268	0.692	1.614	0.944	1.528	0.089	0.088	0.956	1.405
E	1.457	1.415	2.318	2.285	1.611	1.615	1.385	1.502	0.091	0.084	1.360	1.396
F	1.546	1.537	2.258	2.280	1.564	1.650	1.364	1.586	0.091	0.085	1.436	1.500
G	1.435	0.037	2.276	0.044	1.616	0.043	1.503	0.042	0.088	0.044	1.451	0.041
H	1.564	0.045	2.313	0.041	1.684	0.043	1.368	0.042	0.091	0.048	1.534	0.042

***** Indicates an unread well or value out of range

REVELATION DSX 6.15

Name : Analytical Research Laboratories
Address : 840 Research Parkway Suite 546
: Oklahoma City, OK 73104
Phone : (405)271-1144
FAX :

TEST NO. :
TEST NAME : Read Plate
PLATE : Amp3

W/L MODE : SINGLE DATE : 3/23/2012
TEST FILTER : 450 nm TIME : 12:32:42 PM
REF. FILTER : * OPERATOR : admin

Kit Lot Data : Read Plate, ,
Plate Lot Data : Test_17, ,

OVER limit : 3.500
Calculation mode : Endpoint

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.599	1.559	2.333	2.313	1.820	1.745	1.756	1.383	0.105	0.093	1.667	1.494
B	1.585	1.505	2.287	2.230	1.816	1.693	1.705	1.576	0.097	0.085	1.574	1.367
C	1.142	1.463	1.349	2.269	0.700	1.666	1.009	1.561	0.094	0.085	1.033	1.367
D	1.182	1.467	1.190	2.255	0.688	1.605	0.939	1.520	0.089	0.088	0.950	1.396
E	1.450	1.406	2.309	2.270	1.602	1.607	1.378	1.494	0.091	0.084	1.353	1.386
F	1.538	1.528	2.248	2.269	1.554	1.642	1.356	1.578	0.091	0.085	1.429	1.492
G	1.427	0.037	2.266	0.044	1.605	0.044	1.495	0.043	0.088	0.044	1.442	0.041
H	1.556	0.045	2.297	0.041	1.674	0.043	1.360	0.042	0.091	0.048	1.526	0.042

***** Indicates an unread well or value out of range

REVELATION DSX 6.15

Name : Analytical Research Laboratories
Address : 840 Research Parkway Suite 546
: Oklahoma City, OK 73104
Phone : (405)271-1144
FAX :

TEST NO. :
TEST NAME : Read Plate
PLATE : Amp4

W/L MODE : SINGLE DATE : 3/23/2012
TEST FILTER : 450 nm TIME : 12:34:13 PM
REF. FILTER : * OPERATOR : admin

Kit Lot Data : Read Plate, ,
Plate Lot Data : Test_18, ,

OVER limit : 3.500
Calculation mode : Endpoint

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.592	1.552	2.320	2.292	1.808	1.733	1.743	1.373	0.105	0.093	1.656	1.485
B	1.577	1.498	2.274	2.212	1.804	1.681	1.694	1.565	0.097	0.085	1.564	1.360
C	1.136	1.456	1.342	2.247	0.695	1.655	1.003	1.551	0.094	0.085	1.028	1.359
D	1.175	1.459	1.183	2.242	0.684	1.596	0.933	1.511	0.089	0.088	0.945	1.387
E	1.444	1.400	2.301	2.256	1.593	1.597	1.369	1.484	0.091	0.084	1.344	1.377
F	1.532	1.523	2.232	2.255	1.545	1.630	1.347	1.567	0.091	0.084	1.420	1.482
G	1.422	0.037	2.250	0.044	1.593	0.044	1.484	0.043	0.087	0.044	1.434	0.041
H	1.550	0.045	2.275	0.041	1.662	0.044	1.351	0.042	0.091	0.049	1.517	0.042

***** Indicates an unread well or value out of range

REVELATION DSX 6.15

Name : Analytical Research Laboratories
Address : 840 Research Parkway Suite 546
: Oklahoma City, OK 73104
Phone : (405)271-1144
FAX :

TEST NO. :
TEST NAME : Read Plate
PLATE : Amp5

W/L MODE : SINGLE   DATE : 3/23/2012
TEST FILTER : 450 nm   TIME : 12:35:50 PM
REF. FILTER : *   OPERATOR : admin

Kit Lot Data : Read Plate, ,
Plate Lot Data : Test_19, ,

OVER limit : 3.500
Calculation mode : Endpoint

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.584	1.543	2.308	2.285	1.798	1.727	1.734	1.365	0.106	0.093	1.644	1.476
B	1.568	1.489	2.265	2.201	1.796	1.674	1.685	1.556	0.097	0.085	1.553	1.350
C	1.129	1.449	1.335	2.231	0.691	1.648	0.997	1.543	0.094	0.085	1.021	1.350
D	1.169	1.452	1.176	2.227	0.679	1.588	0.927	1.502	0.089	0.088	0.938	1.378
E	1.436	1.392	2.286	2.244	1.584	1.588	1.361	1.476	0.091	0.084	1.334	1.368
F	1.523	1.515	2.215	2.239	1.534	1.624	1.340	1.558	0.091	0.084	1.411	1.473
G	1.414	0.036	2.235	0.044	1.584	0.044	1.476	0.043	0.087	0.044	1.424	0.041
H	1.540	0.045	2.258	0.040	1.651	0.044	1.342	0.042	0.090	0.049	1.507	0.042

***** Indicates an unread well or value out of range

REVELATION DSX 6.15

Name : Analytical Research Laboratories
Address : 840 Research Parkway Suite 546
: Oklahoma City, OK 73104
Phone : (405)271-1144
FAX :

TEST NO. :
TEST NAME : Read Plate
PLATE : Amp6

W/L MODE : SINGLE   DATE : 3/23/2012
TEST FILTER : 450 nm   TIME : 12:37:27 PM
REF. FILTER : *   OPERATOR : admin

Kit Lot Data : Read Plate, ,
Plate Lot Data : Test_20, ,

OVER limit : 3.500
Calculation mode : Endpoint

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.573	1.535	2.292	2.276	1.787	1.719	1.725	1.357	0.106	0.093	1.632	1.464
B	1.560	1.483	2.256	2.191	1.786	1.664	1.676	1.548	0.097	0.085	1.542	1.340
C	1.122	1.442	1.327	2.221	0.686	1.638	0.991	1.534	0.094	0.085	1.014	1.341
D	1.162	1.444	1.168	2.210	0.674	1.578	0.921	1.493	0.089	0.088	0.933	1.369
E	1.427	1.384	2.272	2.224	1.573	1.580	1.353	1.469	0.091	0.084	1.325	1.360
F	1.515	1.505	2.210	2.237	1.525	1.614	1.332	1.550	0.091	0.084	1.401	1.462
G	1.405	0.036	2.227	0.044	1.574	0.044	1.467	0.043	0.087	0.044	1.414	0.041
H	1.530	0.045	2.253	0.040	1.643	0.044	1.334	0.042	0.091	0.049	1.495	0.042

***** Indicates an unread well or value out of range

REVELATION DSX 6.15

Name : Analytical Research Laboratories
Address : 840 Research Parkway Suite 546
: Oklahoma City, OK 73104
Phone : (405)271-1144
FAX :

TEST NO. :
TEST NAME : Read Plate
PLATE : Amp7

W/L MODE : SINGLE   DATE : 3/23/2012
TEST FILTER : 450 nm   TIME : 12:39:09 PM
REF. FILTER : *   OPERATOR : admin

Kit Lot Data : Read Plate, ,
Plate Lot Data : Test_21, ,

OVER limit : 3.500
Calculation mode : Endpoint

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.562	1.526	2.285	2.254	1.776	1.705	1.712	1.347	0.106	0.093	1.622	1.455
B	1.548	1.474	2.241	2.168	1.773	1.652	1.666	1.538	0.097	0.085	1.532	1.332
C	1.115	1.432	1.319	2.202	0.681	1.628	0.984	1.525	0.094	0.085	1.008	1.333
D	1.154	1.435	1.161	2.196	0.669	1.568	0.915	1.484	0.089	0.088	0.926	1.360
E	1.418	1.375	2.265	2.214	1.563	1.567	1.344	1.458	0.091	0.084	1.316	1.351
F	1.504	1.497	2.188	2.215	1.513	1.602	1.322	1.539	0.091	0.084	1.391	1.453
G	1.396	0.036	2.210	0.044	1.562	0.044	1.457	0.043	0.087	0.044	1.405	0.041
H	1.521	0.046	2.225	0.040	1.629	0.044	1.324	0.042	0.090	0.049	1.486	0.042

***** Indicates an unread well or value out of range

REVELATION DSX 6.15

Name : Analytical Research Laboratories
Address : 840 Research Parkway Suite 546
: Oklahoma City, OK 73104
Phone : (405)271-1144
FAX :

TEST NO. :
TEST NAME : Read Plate
PLATE : Amp8

W/L MODE : SINGLE   DATE : 3/23/2012
TEST FILTER : 450 nm   TIME : 12:40:43 PM
REF. FILTER : *   OPERATOR : admin

Kit Lot Data : Read Plate, ,
Plate Lot Data : Test_22, ,

OVER limit : 3.500
Calculation mode : Endpoint

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.555	1.517	2.276	2.244	1.766	1.696	1.702	1.338	0.106	0.093	1.610	1.445
B	1.540	1.465	2.238	2.158	1.763	1.646	1.656	1.530	0.097	0.085	1.521	1.323
C	1.108	1.426	1.312	2.197	0.677	1.622	0.978	1.515	0.094	0.085	1.001	1.324
D	1.148	1.427	1.154	2.182	0.665	1.559	0.909	1.475	0.089	0.088	0.920	1.352
E	1.411	1.367	2.253	2.198	1.554	1.559	1.336	1.450	0.091	0.084	1.309	1.343
F	1.496	1.488	2.180	2.205	1.504	1.594	1.314	1.531	0.091	0.084	1.383	1.443
G	1.389	0.036	2.198	0.044	1.553	0.044	1.447	0.043	0.087	0.044	1.394	0.041
H	1.513	0.045	2.216	0.039	1.620	0.044	1.315	0.043	0.090	0.049	1.475	0.042

***** Indicates an unread well or value out of range

REVELATION DSX 6.15

Name	: Analytical Research Laboratories
Address	: 840 Research Parkway Suite 546
	: Oklahoma City, OK 73104
Phone	: (405)271-1144
FAX	:

TEST NO.	:		
TEST NAME	: Read Plate		
PLATE	: Amp9		
W/L MODE	: SINGLE	DATE	: 3/23/2012
TEST FILTER	: 450 nm	TIME	: 12:42:12 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : Read Plate, ,
Plate Lot Data : Test_23, ,

OVER limit : 3.500
Calculation mode : Endpoint

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.544	1.510	2.253	2.229	1.756	1.687	1.690	1.331	0.106	0.093	1.597	1.436
B	1.530	1.457	2.213	2.147	1.755	1.635	1.646	1.521	0.097	0.085	1.511	1.315
C	1.101	1.417	1.303	2.177	0.672	1.610	0.972	1.508	0.094	0.085	0.995	1.317
D	1.141	1.420	1.146	2.171	0.661	1.551	0.904	1.468	0.089	0.088	0.915	1.343
E	1.403	1.360	2.232	2.185	1.544	1.551	1.328	1.442	0.091	0.084	1.299	1.334
F	1.488	1.480	2.160	2.192	1.496	1.585	1.306	1.521	0.091	0.084	1.373	1.434
G	1.380	0.036	2.176	0.044	1.542	0.044	1.438	0.043	0.087	0.044	1.385	0.041
H	1.504	0.046	2.187	0.038	1.610	0.044	1.307	0.043	0.090	0.049	1.466	0.042

***** Indicates an unread well or value out of range

REVELATION DSX 6.15

Name	: Analytical Research Laboratories
Address	: 840 Research Parkway Suite 546
	: Oklahoma City, OK 73104
Phone	: (405)271-1144
FAX	:

TEST NO.	:		
TEST NAME	: Read Plate		
PLATE	: Amp10		
W/L MODE	: SINGLE	DATE	: 3/23/2012
TEST FILTER	: 450 nm	TIME	: 12:46:29 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : Read Plate, ,
Plate Lot Data : Test_24, ,

OVER limit : 3.500
Calculation mode : Endpoint

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.522	1.489	2.231	2.199	1.729	1.663	1.667	1.309	0.105	0.093	1.571	1.411
B	1.509	1.438	2.196	2.123	1.729	1.611	1.622	1.497	0.097	0.085	1.486	1.291
C	1.083	1.398	1.284	2.149	0.660	1.588	0.956	1.483	0.094	0.084	0.978	1.294
D	1.123	1.400	1.128	2.134	0.648	1.527	0.888	1.445	0.089	0.088	0.899	1.321
E	1.382	1.341	2.214	2.152	1.520	1.526	1.306	1.420	0.091	0.083	1.277	1.312
F	1.467	1.460	2.130	2.163	1.472	1.561	1.285	1.499	0.091	0.084	1.352	1.410
G	1.360	0.036	2.156	0.044	1.518	0.044	1.415	0.043	0.087	0.044	1.363	0.041
H	1.484	0.046	2.161	0.037	1.584	0.044	1.285	0.043	0.090	0.049	1.440	0.043

***** Indicates an unread well or value out of range

REVELATION DSX 6.15

Name	: Analytical Research Laboratories
Address	: 840 Research Parkway Suite 546
	: Oklahoma City, OK 73104
Phone	: (405)271-1144
FAX	:

TEST NO.	:		
TEST NAME	: Read Plate		
PLATE	: Cot1		
W/L MODE	: SINGLE	DATE	: 3/23/2012
TEST FILTER	: 450 nm	TIME	: 12:12:11 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : Read Plate, ,
Plate Lot Data : Test_5, ,

OVER limit : 3.500
Calculation mode : Endpoint

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	2.602	1.823	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	2.640	1.786	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.229	1.820	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.198	1.765	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.874	1.803	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.769	1.784	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.772	0.040	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.832	0.046	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

REVELATION DSX 6.15

Name	: Analytical Research Laboratories
Address	: 840 Research Parkway Suite 546
	: Oklahoma City, OK 73104
Phone	: (405)271-1144
FAX	:

TEST NO.	:		
TEST NAME	: Read Plate		
PLATE	: Cot2		
W/L MODE	: SINGLE	DATE	: 3/23/2012
TEST FILTER	: 450 nm	TIME	: 12:13:49 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : Read Plate, ,
Plate Lot Data : Test_6, ,

OVER limit : 3.500
Calculation mode : Endpoint

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	2.573	1.805	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	2.623	1.775	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.219	1.804	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.189	1.757	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.858	1.790	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.760	1.772	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.762	0.041	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.822	0.046	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

REVELATION DSX 6.15

Name	: Analytical Research Laboratories
Address	: 840 Research Parkway Suite 546
	: Oklahoma City, OK 73104
Phone	: (405)271-1144
FAX	:

TEST NO.	:		
TEST NAME	: Read Plate		
PLATE	: Cot3		
W/L MODE	: SINGLE	DATE	: 3/23/2012
TEST FILTER	: 450 nm	TIME	: 12:15:24 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : Read Plate, ,
Plate Lot Data : Test_7, ,

OVER limit : 3.500
Calculation mode : Endpoint

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	2.567	1.795	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	2.635	1.766	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.210	1.792	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.181	1.742	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.850	1.782	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.754	1.765	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.752	0.040	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.813	0.046	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

REVELATION DSX 6.15

Name	: Analytical Research Laboratories
Address	: 840 Research Parkway Suite 546
	: Oklahoma City, OK 73104
Phone	: (405)271-1144
FAX	:

TEST NO.	:		
TEST NAME	: Read Plate		
PLATE	: Cot4		
W/L MODE	: SINGLE	DATE	: 3/23/2012
TEST FILTER	: 450 nm	TIME	: 12:17:04 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : Read Plate, ,
Plate Lot Data : Test_8, ,

OVER limit : 3.500
Calculation mode : Endpoint

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	2.539	1.778	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	2.593	1.751	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.201	1.777	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.171	1.730	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.836	1.765	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.739	1.751	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.740	0.040	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.799	0.046	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

REVELATION DSX 6.15

Name	: Analytical Research Laboratories
Address	: 840 Research Parkway Suite 546
	: Oklahoma City, OK 73104
Phone	: (405)271-1144
FAX	:

TEST NO.	:		
TEST NAME	: Read Plate		
PLATE	: Cot5		
W/L MODE	: SINGLE	DATE	: 3/23/2012
TEST FILTER	: 450 nm	TIME	: 12:19:06 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : Read Plate, ,
Plate Lot Data : Test_9, ,

OVER limit : 3.500
Calculation mode : Endpoint

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	2.548	1.766	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	2.604	1.740	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.190	1.765	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.161	1.715	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.822	1.753	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.728	1.740	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.729	0.041	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.787	0.046	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

REVELATION DSX 6.15

Name	: Analytical Research Laboratories
Address	: 840 Research Parkway Suite 546
	: Oklahoma City, OK 73104
Phone	: (405)271-1144
FAX	:

TEST NO.	:		
TEST NAME	: Read Plate		
PLATE	: Cot6		
W/L MODE	: SINGLE	DATE	: 3/23/2012
TEST FILTER	: 450 nm	TIME	: 12:20:42 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : Read Plate, ,
Plate Lot Data : Test_10, ,

OVER limit : 3.500
Calculation mode : Endpoint

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	2.527	1.754	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	2.586	1.728	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.181	1.753	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.152	1.706	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.814	1.746	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.719	1.731	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.719	0.040	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.776	0.046	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

REVELATION DSX 6.15

Name : Analytical Research Laboratories
Address : 840 Research Parkway Suite 546
: Oklahoma City, OK 73104
Phone : (405)271-1144
FAX :

TEST NO. :
TEST NAME : Read Plate
PLATE : Cot7

W/L MODE : SINGLE   DATE : 3/23/2012
TEST FILTER : 450 nm   TIME : 12:22:56 PM
REF. FILTER : *   OPERATOR : admin

Kit Lot Data : Read Plate, ,
Plate Lot Data : Test_11, ,

OVER limit : 3.500
Calculation mode : Endpoint

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	2.503	1.737	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	2.572	1.712	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.169	1.736	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.139	1.687	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.794	1.725	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.702	1.713	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.701	0.040	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.759	0.046	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

REVELATION DSX 6.15

Name : Analytical Research Laboratories
Address : 840 Research Parkway Suite 546
: Oklahoma City, OK 73104
Phone : (405)271-1144
FAX :

TEST NO. :
TEST NAME : Read Plate
PLATE : Cot8

W/L MODE : SINGLE   DATE : 3/23/2012
TEST FILTER : 450 nm   TIME : 12:24:27 PM
REF. FILTER : *   OPERATOR : admin

Kit Lot Data : Read Plate, ,
Plate Lot Data : Test_12, ,

OVER limit : 3.500
Calculation mode : Endpoint

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	2.489	1.724	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	2.548	1.702	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.160	1.727	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.131	1.680	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.784	1.717	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.692	1.702	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.688	0.040	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.744	0.046	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

REVELATION DSX 6.15

Name : Analytical Research Laboratories
Address : 840 Research Parkway Suite 546
: Oklahoma City, OK 73104
Phone : (405)271-1144
FAX :

TEST NO. :
TEST NAME : Read Plate
PLATE : Cot9

W/L MODE : SINGLE   DATE : 3/23/2012
TEST FILTER : 450 nm   TIME : 12:26:08 PM
REF. FILTER : *   OPERATOR : admin

Kit Lot Data : Read Plate, ,
Plate Lot Data : Test_13, ,

OVER limit : 3.500
Calculation mode : Endpoint

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	2.495	1.714	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	2.548	1.690	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.150	1.715	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.123	1.667	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.774	1.707	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.685	1.694	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.679	0.041	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.735	0.046	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

REVELATION DSX 6.15

Name : Analytical Research Laboratories
Address : 840 Research Parkway Suite 546
: Oklahoma City, OK 73104
Phone : (405)271-1144
FAX :

TEST NO. :
TEST NAME : Read Plate
PLATE : Cot10

W/L MODE : SINGLE   DATE : 3/23/2012
TEST FILTER : 450 nm   TIME : 12:27:40 PM
REF. FILTER : *   OPERATOR : admin

Kit Lot Data : Read Plate, ,
Plate Lot Data : Test_14, ,

OVER limit : 3.500
Calculation mode : Endpoint

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	2.472	1.702	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	2.527	1.679	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.142	1.703	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.114	1.658	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.764	1.696	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.672	1.683	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.667	0.041	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.722	0.046	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

REVELATION DSX 6.15

Name	: Analytical Research Laboratories
Address	: 840 Research Parkway Suite 546
	: Oklahoma City, OK 73104
Phone	: (405)271-1144
FAX	:

TEST NO.	:		
TEST NAME	: Read Plate		
PLATE	: Opi 1		
W/L MODE	: SINGLE	DATE	: 4/6/2012
TEST FILTER	: 450 nm	TIME	: 5:12:44 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : Read Plate, ,
Plate Lot Data : Opi 1, ,

OVER limit : 3.500
Calculation mode : Endpoint

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.898	1.711	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.660	1.587	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.213	1.563	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.146	1.505	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.671	1.399	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.616	1.379	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.625	0.036	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.736	0.036	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

REVELATION DSX 6.15

Name	: Analytical Research Laboratories
Address	: 840 Research Parkway Suite 546
	: Oklahoma City, OK 73104
Phone	: (405)271-1144
FAX	:

TEST NO.	:		
TEST NAME	: Read Plate		
PLATE	: Opi 2		
W/L MODE	: SINGLE	DATE	: 4/6/2012
TEST FILTER	: 450 nm	TIME	: 5:14:30 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : Read Plate, ,
Plate Lot Data : Opi 2, ,

OVER limit : 3.500
Calculation mode : Endpoint

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.886	1.702	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.652	1.581	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.209	1.557	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.142	1.499	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.663	1.393	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.608	1.373	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.618	0.036	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.726	0.037	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

REVELATION DSX 6.15

Name	: Analytical Research Laboratories
Address	: 840 Research Parkway Suite 546
	: Oklahoma City, OK 73104
Phone	: (405)271-1144
FAX	:

TEST NO.	:		
TEST NAME	: Read Plate		
PLATE	: Opi 3		
W/L MODE	: SINGLE	DATE	: 4/6/2012
TEST FILTER	: 450 nm	TIME	: 5:16:14 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : Read Plate, ,
Plate Lot Data : Opi 3, ,

OVER limit : 3.500
Calculation mode : Endpoint

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.885	1.696	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.647	1.572	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.204	1.551	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.137	1.492	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.659	1.388	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.603	1.368	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.614	0.036	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.722	0.037	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

REVELATION DSX 6.15

Name	: Analytical Research Laboratories
Address	: 840 Research Parkway Suite 546
	: Oklahoma City, OK 73104
Phone	: (405)271-1144
FAX	:

TEST NO.	:		
TEST NAME	: Read Plate		
PLATE	: Opi 4		
W/L MODE	: SINGLE	DATE	: 4/6/2012
TEST FILTER	: 450 nm	TIME	: 5:17:56 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : Read Plate, ,
Plate Lot Data : Opi 4, ,

OVER limit : 3.500
Calculation mode : Endpoint

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.873	1.687	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.639	1.565	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.199	1.544	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.132	1.486	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.652	1.381	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.597	1.361	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.608	0.036	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.714	0.036	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

REVELATION DSX 6.15

Name	: Analytical Research Laboratories
Address	: 840 Research Parkway Suite 546
	: Oklahoma City, OK 73104
Phone	: (405)271-1144
FAX	:

TEST NO.	:		
TEST NAME	: Read Plate		
PLATE	: Opi 5		
W/L MODE	: SINGLE	DATE	: 4/6/2012
TEST FILTER	: 450 nm	TIME	: 5:19:36 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data	: Read Plate, ,
Plate Lot Data	: Opi 5, ,
OVER limit	: 3.500
Calculation mode	: Endpoint

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.864	1.680	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.632	1.559	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.194	1.537	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.128	1.482	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.645	1.376	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.591	1.356	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.600	0.036	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.706	0.036	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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REVELATION DSX 6.15

Name	: Analytical Research Laboratories
Address	: 840 Research Parkway Suite 546
	: Oklahoma City, OK 73104
Phone	: (405)271-1144
FAX	:

TEST NO.	:		
TEST NAME	: Read Plate		
PLATE	: Opi 6		
W/L MODE	: SINGLE	DATE	: 4/6/2012
TEST FILTER	: 450 nm	TIME	: 5:21:29 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data	: Read Plate, ,
Plate Lot Data	: Opi 6, ,
OVER limit	: 3.500
Calculation mode	: Endpoint

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.856	1.671	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.624	1.552	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.189	1.531	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.122	1.473	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.638	1.369	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.583	1.349	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.592	0.036	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.698	0.036	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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REVELATION DSX 6.15

Name	: Analytical Research Laboratories
Address	: 840 Research Parkway Suite 546
	: Oklahoma City, OK 73104
Phone	: (405)271-1144
FAX	:

TEST NO.	:		
TEST NAME	: Read Plate		
PLATE	: Opi 7		
W/L MODE	: SINGLE	DATE	: 4/6/2012
TEST FILTER	: 450 nm	TIME	: 5:23:29 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data	: Read Plate, ,
Plate Lot Data	: Opi 7, ,
OVER limit	: 3.500
Calculation mode	: Endpoint

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.841	1.664	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.615	1.544	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.182	1.523	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.115	1.465	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.626	1.360	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.572	1.341	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.581	0.036	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.682	0.037	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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REVELATION DSX 6.15

Name	: Analytical Research Laboratories
Address	: 840 Research Parkway Suite 546
	: Oklahoma City, OK 73104
Phone	: (405)271-1144
FAX	:

TEST NO.	:		
TEST NAME	: Read Plate		
PLATE	: Opi 8		
W/L MODE	: SINGLE	DATE	: 4/6/2012
TEST FILTER	: 450 nm	TIME	: 5:25:10 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data	: Read Plate, ,
Plate Lot Data	: Opi 8, ,
OVER limit	: 3.500
Calculation mode	: Endpoint

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.836	1.655	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.609	1.536	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.178	1.516	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.111	1.459	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.622	1.355	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.568	1.334	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.576	0.036	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.680	0.036	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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REVELATION DSX 6.15

Name	: Analytical Research Laboratories
Address	: 840 Research Parkway Suite 546
	: Oklahoma City, OK 73104
Phone	: (405)271-1144
FAX	:

TEST NO.	:
TEST NAME	: Read Plate
PLATE	: Opi 9

W/L MODE	: SINGLE	DATE	: 4/6/2012
TEST FILTER	: 450 nm	TIME	: 5:26:42 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : Read Plate, ,
Plate Lot Data : Opi 9, ,

OVER limit : 3.500
Calculation mode : Endpoint

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.831	1.650	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.602	1.530	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.173	1.510	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.107	1.454	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.619	1.351	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.566	1.331	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.573	0.036	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.681	0.037	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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REVELATION DSX 6.15

Name	: Analytical Research Laboratories
Address	: 840 Research Parkway Suite 546
	: Oklahoma City, OK 73104
Phone	: (405)271-1144
FAX	:

TEST NO.	:
TEST NAME	: Read Plate
PLATE	: Opi 10

W/L MODE	: SINGLE	DATE	: 4/6/2012
TEST FILTER	: 450 nm	TIME	: 5:28:16 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : Read Plate, ,
Plate Lot Data : Opi 10, ,

OVER limit : 3.500
Calculation mode : Endpoint

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.820	1.643	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.596	1.523	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.168	1.504	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.102	1.446	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.613	1.345	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.559	1.324	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.563	0.036	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.665	0.037	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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Appendix E

ELISA Results for Validation #1

Kit, Plate, and Reagent Lot Data

Date: 02/08/2012

ASSAY	Amphetamine Ultra	Benzodiazepine Group	Cocaine/BZE	Cotinine	Opiate Group	Oxycodone/ Oxymorphone	THC
Kit #	AUF-0046	BGF-0060	BZF-0073	CTI-0031	MOF-0055	OXF-0036	TCF-0054
Kit Exp. Date	1/8/2013	12/28/2012	11/9/2012	4/23/2012	1/5/2014	1/16/2013	12/26/2012
Plate #	111214	111205	111121F	1102211	120105F	110506F	111221
Plate Exp. Date	12/14/2013	12/5/2013	11/21/2013	2/21/2013	1/5/2014	5/6/2013	12/21/2013
C/O & NEG lot #	111212-WB	110811-WB	111110-WB	24	110715-WB	120117-WB	110826-WB
C/O & NEG Exp. Date	1/8/2013	12/28/2012	11/9/2012	-	1/10/2013	1/16/2013	12/26/2012
CONJ lot #	035	049	053	032	043	028	043
CONJ Exp.	1/8/2013	12/28/2012	11/9/2012	-	1/10/2013	1/16/2013	12/26/2012

Acid Stop, EIA Buffer, K-Blue, Distilled Water, and Neogen Wash Buffer were prepared on 02/08/2012
Negative and Cutoff Calibrators were prepared 02/08/2012

Kit, Plate, and Reagent Lot Data

Date: 02/09/2012

ASSAY	Amphetamine Ultra	Benzodiazepine Group	Cocaine/BZE	Cotinine	Opiate Group	Oxycodone/ Oxymorphone	THC
Kit #	AUF-0046	BGF-0060	BZF-0073	CTI-0031	MOF-0055	OXF-0036	TCF-0054
Kit Exp. Date	1/8/2013	12/28/2012	11/9/2012	4/23/2012	1/5/2014	1/16/2013	12/26/2012
Plate #	111214	111205	111121F	1102211	120105F	110506F	111221
Plate Exp. Date	12/14/2013	12/5/2013	11/21/2013	2/21/2013	1/5/2014	5/6/2013	12/21/2013
C/O & NEG lot #	111212-WB	110811-WB	111110-WB	24	110715-WB	120117-WB	110826-WB
C/O & NEG Exp. Date	1/8/2013	12/28/2012	11/9/2012	-	1/10/2013	1/16/2013	12/26/2012
CONJ lot #	035	049	053	032	043	028	043
CONJ Exp.	1/8/2013	12/28/2012	11/9/2012	-	1/10/2013	1/16/2013	12/26/2012

Acid Stop, EIA Buffer, K-Blue, Distilled Water, and Neogen Wash Buffer were prepared on 02/09/2012
Negative and Cutoff Calibrators were prepared 02/09/2012

REVELATION DSX 6.15

TEST NO.   :
TEST NAME   : AMPHETAMINE ULTRA
PLATE   : Test_2

W/L MODE   : SINGLE   DATE   : 2/8/2012
TEST FILTER   : 450 nm   TIME   : 12:56:04 PM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : AMPHETAMINE ULTRA, AUF-0046/111214, 1-8-13/12-14-13
Plate Lot Data   : DriftAmpCocHydro2812, ,
Reagent Lot Data   : Acid Stop, 120208,
                    : AMPHETAMINE ULTRA CONJUGATE, 035, 1-8-13
                    : COCAINE/BZE CONJUGATE, 053, 11-9-12
                    : EIA Buffer, 120208,
                    : HYDROMORPHONE CONJUGATE, 011, 8-21-12
                    : K-Blue, 120208,
                    : AMPHETAMINE ULTRA CUTOFF, 111212-WB, 1-8-13
                    : AMPHETAMINE ULTRA NEGATIVE, 111212-WB, 1-8-13
                    : GROUP 1 CUTOFF, 120208,
                    : GROUP 1 NEGATIVE, 120208,
                    : Distilled Water, 120208,
                    : Neogen Wash Buffer, 120208,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.589>1.080

+ equation   = CO
                    = 1.081
- equation   = CO
                    = 1.081

	1	2	3	4	5	6	7	8	9	10	11	12
A	NC1	NEG	NEG									
B	CO1	NEG	NEG									
C	NNC1	NEG	NEG									
D	NCO1	NEG	NEG									
E	NEG	NEG	NEG									
F	NEG	NEG	NEG									
G	NEG	NEG	NEG									
H	NEG	NEG	NEG									

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[1]	E1	1.704	1.704	*****	*****	NEG
[2]	F1	1.576	1.576	*****	*****	NEG
[3]	G1	1.701	1.701	*****	*****	NEG
[4]	H1	1.730	1.730	*****	*****	NEG
[5]	A2	1.638	1.638	*****	*****	NEG
[6]	B2	1.598	1.598	*****	*****	NEG
[7]	C2	1.736	1.736	*****	*****	NEG
[8]	D2	1.709	1.709	*****	*****	NEG
[9]	E2	1.612	1.612	*****	*****	NEG
[10]	F2	1.741	1.741	*****	*****	NEG
[11]	G2	1.630	1.630	*****	*****	NEG
[12]	H2	1.801	1.801	*****	*****	NEG
[13]	A3	1.704	1.704	*****	*****	NEG
[14]	B3	1.758	1.758	*****	*****	NEG
[15]	C3	1.681	1.681	*****	*****	NEG
[16]	D3	1.649	1.649	*****	*****	NEG
[17]	E3	1.644	1.644	*****	*****	NEG
[18]	F3	1.701	1.701	*****	*****	NEG
[Group 1 Negative]	G3	1.616	1.616	*****	*****	NEG
[Group 1 Cutoff]	H3	1.121	1.121	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	1.590	1.590	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B1	1.081	1.081	*****	*****	CO1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	C1	1.819	1.819	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	D1	1.075	1.075	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
    0 Indicates an equivocal response
    * Indicates an unread well or value out of range
    # Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.590	1.638	1.704	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.081	1.598	1.758	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.819	1.736	1.681	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.075	1.709	1.649	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.704	1.612	1.644	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.576	1.741	1.701	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.701	1.630	1.616	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.730	1.801	1.121	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

TEST NO.   :
TEST NAME   : COCAINE-BZE
PLATE   : Test_2

W/L MODE   : SINGLE   DATE   : 2/8/2012
TEST FILTER   : 450 nm   TIME   : 12:56:04 PM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : COCAINE-BZE, BZF-0073/111121F, 11-9-12/11-21-13
Plate Lot Data   : DriftAmpCocHydro2812, ,
Reagent Lot Data   : Acid Stop, 120208,
                         : COCAINE/BZE CONJUGATE, 053, 11-9-12
                         : EIA Buffer, 120208,
                         : K-Blue, 120208,
                         : COCAINE/BZE CUTOFF, 111110-WB, 11-9-12
                         : COCAINE/BZE NEGATIVE, 111110-WB, 11-9-12
                         : GROUP 1 CUTOFF, 120208,
                         : GROUP 1 NEGATIVE, 120208,
                         : Distilled Water, 120208,
                         : Neogen Wash Buffer, 120208,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.684>1.146

+ equation   = CO
                  = 1.147
- equation   = CO
                  = 1.147

	1	2	3	4	5	6	7	8	9	10	11	12
A				NC1	NEG	NEG						
B				CO1	NEG	NEG						
C				NNC1	NEG	NEG						
D				NCO1	NEG	NEG						
E				NEG	NEG	NEG						
F				NEG	NEG	NEG						
G				NEG	NEG	NEG						
H				NEG	NEG	NEG						

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[1]	E4	1.547	1.547	*****	*****	NEG
[2]	F4	1.547	1.547	*****	*****	NEG
[3]	G4	1.573	1.573	*****	*****	NEG
[4]	H4	1.516	1.516	*****	*****	NEG
[5]	A5	1.590	1.590	*****	*****	NEG
[6]	B5	1.557	1.557	*****	*****	NEG
[7]	C5	1.553	1.553	*****	*****	NEG
[8]	D5	1.519	1.519	*****	*****	NEG
[9]	E5	1.581	1.581	*****	*****	NEG
[10]	F5	1.516	1.516	*****	*****	NEG
[11]	G5	1.486	1.486	*****	*****	NEG
[12]	H5	1.483	1.483	*****	*****	NEG
[13]	A6	1.651	1.651	*****	*****	NEG
[14]	B6	1.721	1.721	*****	*****	NEG
[15]	C6	1.726	1.726	*****	*****	NEG
[16]	D6	1.719	1.719	*****	*****	NEG
[17]	E6	1.684	1.684	*****	*****	NEG
[18]	F6	1.672	1.672	*****	*****	NEG
[Group 1 Negative]	G6	1.705	1.705	*****	*****	NEG
[Group 1 Cutoff]	H6	1.269	1.269	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A4	1.684	1.684	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B4	1.147	1.147	*****	*****	CO1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	C4	0.848	0.848	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	D4	0.406	0.406	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	1.684	1.590	1.651	*****	*****	*****	*****	*****	*****
B	*****	*****	*****	1.147	1.557	1.721	*****	*****	*****	*****	*****	*****
C	*****	*****	*****	0.848	1.553	1.726	*****	*****	*****	*****	*****	*****
D	*****	*****	*****	0.406	1.519	1.719	*****	*****	*****	*****	*****	*****
E	*****	*****	*****	1.547	1.581	1.684	*****	*****	*****	*****	*****	*****
F	*****	*****	*****	1.547	1.516	1.672	*****	*****	*****	*****	*****	*****
G	*****	*****	*****	1.573	1.486	1.705	*****	*****	*****	*****	*****	*****
H	*****	*****	*****	1.516	1.483	1.269	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

REVELATION DSX 6.15

TEST NO.	:
TEST NAME	: BENZODIAZEPINE GROUP
PLATE	: DriftBenzOpi2812

W/L MODE	: SINGLE	DATE	: 2/8/2012
TEST FILTER	: 450 nm	TIME	: 1:25:20 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data	: BENZODIAZEPINE GROUP, BGF-0060/111205, 12-28-12/12-5-13
Plate Lot Data	: DriftBenzOpi2812, ,
Reagent Lot Data	: Acid Stop, 120208,
	: BENZODIAZEPINE GROUP CONJUGATE, 049, 12-28-12
	: EIA Buffer, 120208,
	: K-Blue, 120208,
	: OPIATE GROUP CONJUGATE, 043, 1-10-13
	: BENZODIAZEPINE GROUP CUTOFF, 110811-WB, 12-28-12
	: BENZODIAZEPINE GROUP NEGATIVE, 110811-WB, 12-28-12
	: GROUP 3 CUTOFF, 120208,
	: GROUP 3 NEGATIVE, 120208,
	: Distilled Water, 120208,
	: Neogen Wash Buffer, 120208,

OVER limit	: 3.500
Calculation mode	: Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.368>1.092

+ equation	= CO	
	= 1.092	
- equation	= CO	
	= 1.092	

	1	2	3	4	5	6	7	8	9	10	11	12
A	NC1	NEG	NEG									
B	CO1	NEG	NEG									
C	NNC1	NEG	NEG									
D	NCO1	NEG	NEG									
E	NEG	NEG	NEG									
F	NEG	NEG	NEG									
G	NEG	NEG	NEG									
H	NEG	NEG	NEG									

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[1]	E1	2.410	2.410	*****	*****	NEG
[2]	F1	2.402	2.402	*****	*****	NEG
[3]	G1	2.448	2.448	*****	*****	NEG
[4]	H1	2.589	2.589	*****	*****	NEG
[5]	A2	2.362	2.362	*****	*****	NEG
[6]	B2	2.386	2.386	*****	*****	NEG
[7]	C2	2.403	2.403	*****	*****	NEG
[8]	D2	2.400	2.400	*****	*****	NEG
[9]	E2	2.463	2.463	*****	*****	NEG
[10]	F2	2.451	2.451	*****	*****	NEG
[11]	G2	2.407	2.407	*****	*****	NEG
[12]	H2	2.572	2.572	*****	*****	NEG
[13]	A3	2.460	2.460	*****	*****	NEG
[14]	B3	2.491	2.491	*****	*****	NEG
[15]	C3	2.400	2.400	*****	*****	NEG
[16]	D3	2.463	2.463	*****	*****	NEG
[17]	E3	2.435	2.435	*****	*****	NEG
[18]	F3	2.371	2.371	*****	*****	NEG
[Group 3 Negative]	G3	2.515	2.515	*****	*****	NEG
[Group 3 Cutoff]	H3	1.263	1.263	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	2.368	2.368	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B1	1.092	1.092	*****	*****	CO1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	C1	1.681	1.681	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	D1	0.647	0.647	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
\# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	2.368	2.362	2.460	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.092	2.386	2.491	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.681	2.403	2.400	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	0.647	2.400	2.463	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	2.410	2.463	2.435	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	2.402	2.451	2.371	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	2.448	2.407	2.515	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	2.589	2.572	1.263	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

TEST NO.   :
TEST NAME   : OPIATE GROUP
PLATE   : DriftBenzOpi2812

W/L MODE   : SINGLE   DATE   : 2/8/2012
TEST FILTER   : 450 nm   TIME   : 1:25:20 PM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : OPIATE GROUP, MOF-0055/120105F, 1-10-13/1-5-14
Plate Lot Data   : DriftBenzOpi2812, ,
Reagent Lot Data   : Acid Stop, 120208,
                   : EIA Buffer, 120208,
                   : K-Blue, 120208,
                   : OPIATE GROUP CONJUGATE, 043, 1-10-13
                   : GROUP 3 CUTOFF, 120208,
                   : GROUP 3 NEGATIVE, 120208,
                   : OPIATE GROUP CUTOFF, 110715-WB, 1-10-13
                   : OPIATE GROUP NEGATIVE, 110715-WB, 1-10-13
                   : Distilled Water, 120208,
                   : Neogen Wash Buffer, 120208,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.779>1.059

+ equation   = CO
                   = 1.060
- equation   = CO
                   = 1.060

	1	2	3	4	5	6	7	8	9	10	11	12
A				NC1	NEG	NEG						
B				CO1	NEG	NEG						
C				NNC1	NEG	NEG						
D				NCO1	NEG	NEG						
E				NEG	NEG	NEG						
F				NEG	NEG	NEG						
G				NEG	NEG	NEG						
H				NEG	NEG	POS						

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[1]	E4	1.765	1.765	*****	*****	NEG
[2]	F4	1.771	1.771	*****	*****	NEG
[3]	G4	1.748	1.748	*****	*****	NEG
[4]	H4	1.848	1.848	*****	*****	NEG
[5]	A5	1.765	1.765	*****	*****	NEG
[6]	B5	1.739	1.739	*****	*****	NEG
[7]	C5	1.714	1.714	*****	*****	NEG
[8]	D5	1.693	1.693	*****	*****	NEG
[9]	E5	1.733	1.733	*****	*****	NEG
[10]	F5	1.698	1.698	*****	*****	NEG
[11]	G5	1.707	1.707	*****	*****	NEG
[12]	H5	1.804	1.804	*****	*****	NEG
[13]	A6	1.718	1.718	*****	*****	NEG
[14]	B6	1.710	1.710	*****	*****	NEG
[15]	C6	1.664	1.664	*****	*****	NEG
[16]	D6	1.594	1.594	*****	*****	NEG
[17]	E6	1.587	1.587	*****	*****	NEG
[18]	F6	1.612	1.612	*****	*****	NEG
[Group 3 Negative]	G6	1.604	1.604	*****	*****	NEG
[Group 3 Cutoff]	H6	0.983	0.983	*****	*****	POS

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A4	1.780	1.780	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B4	1.060	1.060	*****	*****	CO1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	C4	1.813	1.813	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	D4	0.978	0.978	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	1.780	1.765	1.718	*****	*****	*****	*****	*****	*****
B	*****	*****	*****	1.060	1.739	1.710	*****	*****	*****	*****	*****	*****
C	*****	*****	*****	1.813	1.714	1.664	*****	*****	*****	*****	*****	*****
D	*****	*****	*****	0.978	1.693	1.594	*****	*****	*****	*****	*****	*****
E	*****	*****	*****	1.765	1.733	1.587	*****	*****	*****	*****	*****	*****
F	*****	*****	*****	1.771	1.698	1.612	*****	*****	*****	*****	*****	*****
G	*****	*****	*****	1.748	1.707	1.604	*****	*****	*****	*****	*****	*****
H	*****	*****	*****	1.848	1.804	0.983	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

REVELATION DSX 6.15

TEST NO. :
TEST NAME : COTININE
PLATE : DriftCot2812

W/L MODE : SINGLE   DATE : 2/8/2012
TEST FILTER : 450 nm   TIME : 12:03:44 PM
REF. FILTER : *   OPERATOR : admin

Kit Lot Data : COTININE, CTI-0031/1102211, 4-23-12/2-21-13
Plate Lot Data : DriftCot2812, ,
Reagent Lot Data : Acid Stop, 120208,
    : COTININE CONJUGATE, 032,
    : EIA Buffer, 120208,
    : K-Blue, 120208,
    : COTININE CUTOFF, 024,
    : COTININE NEGATIVE, 024,
    : GROUP 3 CUTOFF, 120208,
    : GROUP 3 NEGATIVE, 120208,
    : Distilled Water, 120208,
    : Neogen Wash Buffer, 120208,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.440>1.283

+ equation   = CO
            = 1.284
- equation   = CO
            = 1.284

	1	2	3	4	5	6	7	8	9	10	11	12
A	NC1	NEG	NEG									
B	CO1	NEG	NEG									
C	NNC1	NEG	NEG									
D	NCO1	NEG	NEG									
E	NEG	NEG	NEG									
F	NEG	NEG	NEG									
G	NEG	NEG	NEG									
H	NEG	NEG	NEG									

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[1]	E1	2.193	2.193	*****	*****	NEG
[2]	F1	2.237	2.237	*****	*****	NEG
[3]	G1	2.282	2.282	*****	*****	NEG
[4]	H1	2.408	2.408	*****	*****	NEG
[5]	A2	2.497	2.497	*****	*****	NEG
[6]	B2	2.320	2.320	*****	*****	NEG
[7]	C2	2.315	2.315	*****	*****	NEG
[8]	D2	2.290	2.290	*****	*****	NEG
[9]	E2	2.315	2.315	*****	*****	NEG
[10]	F2	2.354	2.354	*****	*****	NEG
[11]	G2	2.407	2.407	*****	*****	NEG
[12]	H2	2.485	2.485	*****	*****	NEG
[13]	A3	2.525	2.525	*****	*****	NEG
[14]	B3	2.270	2.270	*****	*****	NEG
[15]	C3	2.259	2.259	*****	*****	NEG
[16]	D3	2.282	2.282	*****	*****	NEG
[17]	E3	2.295	2.295	*****	*****	NEG
[18]	F3	2.337	2.337	*****	*****	NEG
[Group 3 Negative]	G3	2.382	2.382	*****	*****	NEG
[Group 3 Cutoff]	H3	1.355	1.355	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	2.441	2.441	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B1	1.284	1.284	*****	*****	CO1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	C1	0.522	0.522	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	D1	0.244	0.244	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	2.441	2.497	2.525	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.284	2.320	2.270	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	0.522	2.315	2.259	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	0.244	2.290	2.282	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	2.193	2.315	2.295	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	2.237	2.354	2.337	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	2.282	2.407	2.382	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	2.408	2.485	1.355	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

TEST NO.   :
TEST NAME   : OXYCODONE-OXYMORPHONE
PLATE   : DriftMAmpOxyTHC2812

W/L MODE   : SINGLE   DATE   : 2/8/2012
TEST FILTER   : 450 nm   TIME   : 1:11:02 PM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : OXYCODONE-OXYMORPHONE, OXF-0036/110506F, 1-16-13/5-6-13
Plate Lot Data   : DriftMAmpOxyTHC2812, ,
Reagent Lot Data : Acid Stop, 120208,
                       : EIA Buffer, 120208,
                       : K-Blue, 120208,
                       : OXYCODONE/OXYMORPHONE CONJUGATE, 028, 1-16-13
                       : GROUP 2 CUTOFF, 120208,
                       : GROUP 2 NEGATIVE, 120208,
                       : OXYCODONE/OXYMORPHONE CUTOFF, 120117-WB, 1-16-13
                       : OXYCODONE/OXYMORPHONE NEGATIVE, 120117-WB, 1-16-13
                       : Distilled Water, 120208,
                       : Neogen Wash Buffer, 120208,

OVER limit   : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.498>0.800

+ equation   = CO
                         = 0.801
- equation   = CO
                         = 0.801

	1	2	3	4	5	6	7	8	9	10	11	12
A				NC1	NEG	NEG						
B				CO1	NEG	NEG						
C				NNC1	NEG	NEG						
D				NCO1	NEG	NEG						
E				NEG	NEG	NEG						
F				NEG	NEG	NEG						
G				NEG	NEG	NEG						
H				NEG	NEG	NEG						

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[1]	E4	2.503	2.503	*****	*****	NEG
[2]	F4	2.496	2.496	*****	*****	NEG
[3]	G4	2.455	2.455	*****	*****	NEG
[4]	H4	2.542	2.542	*****	*****	NEG
[5]	A5	2.388	2.388	*****	*****	NEG
[6]	B5	2.338	2.338	*****	*****	NEG
[7]	C5	2.334	2.334	*****	*****	NEG
[8]	D5	2.326	2.326	*****	*****	NEG
[9]	E5	2.342	2.342	*****	*****	NEG
[10]	F5	2.335	2.335	*****	*****	NEG
[11]	G5	2.314	2.314	*****	*****	NEG
[12]	H5	2.339	2.339	*****	*****	NEG
[13]	A6	2.354	2.354	*****	*****	NEG
[14]	B6	2.391	2.391	*****	*****	NEG
[15]	C6	2.308	2.308	*****	*****	NEG
[16]	D6	2.330	2.330	*****	*****	NEG
[17]	E6	2.340	2.340	*****	*****	NEG
[18]	F6	2.327	2.327	*****	*****	NEG
[Group 2 Negative]	G6	2.344	2.344	*****	*****	NEG
[Group 2 Cutoff]	H6	0.892	0.892	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A4	2.499	2.499	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B4	0.801	0.801	*****	*****	CO1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	C4	2.438	2.438	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	D4	1.203	1.203	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
  0 Indicates an equivocal response
  * Indicates an unread well or value out of range
  # Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	2.499	2.388	2.354	*****	*****	*****	*****	*****	*****
B	*****	*****	*****	0.801	2.338	2.391	*****	*****	*****	*****	*****	*****
C	*****	*****	*****	2.438	2.334	2.308	*****	*****	*****	*****	*****	*****
D	*****	*****	*****	1.203	2.326	2.330	*****	*****	*****	*****	*****	*****
E	*****	*****	*****	2.503	2.342	2.340	*****	*****	*****	*****	*****	*****
F	*****	*****	*****	2.496	2.335	2.327	*****	*****	*****	*****	*****	*****
G	*****	*****	*****	2.455	2.314	2.344	*****	*****	*****	*****	*****	*****
H	*****	*****	*****	2.542	2.339	0.892	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

TEST NO.   :
TEST NAME   : THC
PLATE   : DriftMAmpOxyTHC2812

W/L MODE   : SINGLE   DATE   : 2/8/2012
TEST FILTER   : 450 nm   TIME   : 1:11:02 PM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : THC, TCF-0054/111221, 12-26-12/12-21-13
Plate Lot Data   : DriftMAmpOxyTHC2812, ,
Reagent Lot Data   : Acid Stop, 120208,
                      : EIA Buffer, 120208,
                      : K-Blue, 120208,
                      : THC CONJUGATE, 043, 12-26-12
                      : GROUP 2 CUTOFF, 120208,
                      : GROUP 2 NEGATIVE, 120208,
                      : THC CUTOFF, 110826-WB, 12-26-12
                      : THC NEGATIVE, 110826-WB, 12-26-12
                      : Distilled Water, 120208,
                      : Neogen Wash Buffer, 120208,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.035>1.159

+ equation   = CO
                      = 1.160
- equation   = CO
                      = 1.160

	1	2	3	4	5	6	7	8	9	10	11	12
A							NC1	NEG	NEG			
B							CO1	NEG	NEG			
C							NNC1	NEG	NEG			
D							NCO1	NEG	NEG			
E							NEG	NEG	NEG			
F							NEG	NEG	NEG			
G							NEG	NEG	NEG			
H							NEG	NEG	NEG			

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[1]	E7	1.932	1.932	*****	*****	NEG
[2]	F7	1.951	1.951	*****	*****	NEG
[3]	G7	1.951	1.951	*****	*****	NEG
[4]	H7	2.045	2.045	*****	*****	NEG
[5]	A8	2.102	2.102	*****	*****	NEG
[6]	B8	2.012	2.012	*****	*****	NEG
[7]	C8	1.971	1.971	*****	*****	NEG
[8]	D8	1.939	1.939	*****	*****	NEG
[9]	E8	1.926	1.926	*****	*****	NEG
[10]	F8	1.985	1.985	*****	*****	NEG
[11]	G8	2.034	2.034	*****	*****	NEG
[12]	H8	2.036	2.036	*****	*****	NEG
[13]	A9	2.092	2.092	*****	*****	NEG
[14]	B9	2.093	2.093	*****	*****	NEG
[15]	C9	2.069	2.069	*****	*****	NEG
[16]	D9	2.035	2.035	*****	*****	NEG
[17]	E9	2.023	2.023	*****	*****	NEG
[18]	F9	2.015	2.015	*****	*****	NEG
[Group 2 Negative]	G9	1.974	1.974	*****	*****	NEG
[Group 2 Cutoff]	H9	1.305	1.305	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A7	2.036	2.036	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B7	1.160	1.160	*****	*****	CO1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	C7	1.911	1.911	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	D7	0.819	0.819	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	*****	*****	2.036	2.102	2.092	*****	*****	*****
B	*****	*****	*****	*****	*****	*****	1.160	2.012	2.093	*****	*****	*****
C	*****	*****	*****	*****	*****	*****	1.911	1.971	2.069	*****	*****	*****
D	*****	*****	*****	*****	*****	*****	0.819	1.939	2.035	*****	*****	*****
E	*****	*****	*****	*****	*****	*****	1.932	1.926	2.023	*****	*****	*****
F	*****	*****	*****	*****	*****	*****	1.951	1.985	2.015	*****	*****	*****
G	*****	*****	*****	*****	*****	*****	1.951	2.034	1.974	*****	*****	*****
H	*****	*****	*****	*****	*****	*****	2.045	2.036	1.305	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

REVELATION DSX 6.15

TEST NO.   :
TEST NAME   : AMPHETAMINE ULTRA
PLATE   : Precision1AmpCocHydro2812

W/L MODE   : SINGLE   DATE   : 2/8/2012
TEST FILTER   : 450 nm   TIME   : 4:21:15 PM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : AMPHETAMINE ULTRA, AUF-0046/111214, 1-8-13/12-14-13
Plate Lot Data   : Precision1AmpCocHydro2812, ,
Reagent Lot Data : Acid Stop, 120208,
                  : AMPHETAMINE ULTRA CONJUGATE, 035, 1-8-13
                  : COCAINE/BZE CONJUGATE, 053, 11-9-12
                  : HYDROMORPHONE CONJUGATE, 011, 8-21-12
                  : K-Blue, 120208,
                  : AMPHETAMINE ULTRA CUTOFF, 111212-WB, 1-8-13
                  : AMPHETAMINE ULTRA NEGATIVE, 111212-WB, 1-8-13
                  : GROUP 1 CUTOFF, 120208,
                  : GROUP 1 NEGATIVE, 120208,
                  : Distilled Water, 120208,
                  : Neogen Wash Buffer, 120208,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.742>1.155

+ equation   = CO
                  = 1.156
- equation   = CO
                  = 1.156

	1	2	3	4	5	6	7	8	9	10	11	12
A	NC1	NEG	NEG									
B	CO1	NEG	POS									
C	NNC1	NEG	NEG									
D	NCO1	NEG	POS									
E	NEG	NEG	NEG									
F	POS	NEG	POS									
G	NEG	NEG	NEG									
H	NEG	POS	NEG									

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Group 1 Neg #1]	E1	1.742	1.742	*****	*****	NEG
[Group 1 CO #1]	F1	1.153	1.153	*****	*****	POS
[Group 1 Neg #2]	G1	1.686	1.686	*****	*****	NEG
[Group 1 CO #2]	H1	1.242	1.242	*****	*****	NEG
[Group 1 Neg #3]	A2	1.694	1.694	*****	*****	NEG
[Group 1 CO #3]	B2	1.198	1.198	*****	*****	NEG
[Group 1 Neg #4]	C2	1.601	1.601	*****	*****	NEG
[Group 1 CO #4]	D2	1.177	1.177	*****	*****	NEG
[Group 1 Neg #5]	E2	1.636	1.636	*****	*****	NEG
[Group 1 CO #5]	F2	1.177	1.177	*****	*****	NEG
[Group 1 Neg #6]	G2	1.654	1.654	*****	*****	NEG
[Group 1 CO #6]	H2	1.154	1.154	*****	*****	POS
[Group 1 Neg #7]	A3	1.678	1.678	*****	*****	NEG
[Group 1 CO #7]	B3	1.107	1.107	*****	*****	POS
[Group 1 Neg #8]	C3	1.589	1.589	*****	*****	NEG
[Group 1 CO #8]	D3	1.063	1.063	*****	*****	POS
[Group 1 Neg #9]	E3	1.570	1.570	*****	*****	NEG
[Group 1 CO #9]	F3	1.121	1.121	*****	*****	POS
[Group 1 Neg #10]	G3	1.549	1.549	*****	*****	NEG
[Group 1 CO #10]	H3	1.203	1.203	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	1.743	1.743	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B1	1.156	1.156	*****	*****	CO1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	C1	1.727	1.727	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	D1	1.107	1.107	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.743	1.694	1.678	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.156	1.198	1.107	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.727	1.601	1.589	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.107	1.177	1.063	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.742	1.636	1.570	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.153	1.177	1.121	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.686	1.654	1.549	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.242	1.154	1.203	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Panel 1 (Page 33 of 112)

```
TEST NO.            :
TEST NAME           : COCAINE-BZE
PLATE               : Precision1AmpCocHydro2812

W/L MODE            : SINGLE          DATE        : 2/8/2012
TEST FILTER         : 450 nm          TIME        : 4:21:15 PM
REF. FILTER         : *               OPERATOR    : admin

Kit Lot Data        : COCAINE-BZE, BZF-0073/111121F, 11-9-12/11-21-13
Plate Lot Data      : Precision1AmpCocHydro2812, ,
Reagent Lot Data    : Acid Stop, 120208,
                    : COCAINE/BZE CONJUGATE, 053, 11-9-12
                    : K-Blue, 120208,
                    : COCAINE/BZE CUTOFF, 111110-WB, 11-9-12
                    : COCAINE/BZE NEGATIVE, 111110-WB, 11-9-12
                    : GROUP 1 CUTOFF, 120208,
                    : GROUP 1 NEGATIVE, 120208,
                    : Distilled Water, 120208,
                    : Neogen Wash Buffer, 120208,

OVER limit          : 3.500
Calculation mode    : Endpoint
```

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.567>1.171

+ equation   = CO
                  = 1.171
- equation   = CO
                  = 1.171

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Panel 2 (Page 34 of 112)

	1	2	3	4	5	6	7	8	9	10	11	12
A				NC1	NEG	NEG						
B				CO1	NEG	POS						
C				NNC1	NEG	NEG						
D				NCO1	NEG	POS						
E				NEG	NEG	NEG						
F				NEG	NEG	POS						
G				NEG	NEG	NEG						
H				NEG	NEG	NEG						

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Group 1 Neg #1]	E4	1.618	1.618	*****	*****	NEG
[Group 1 CO #1]	F4	1.301	1.301	*****	*****	NEG
[Group 1 Neg #2]	G4	1.657	1.657	*****	*****	NEG
[Group 1 CO #2]	H4	1.302	1.302	*****	*****	NEG
[Group 1 Neg #3]	A5	1.647	1.647	*****	*****	NEG
[Group 1 CO #3]	B5	1.239	1.239	*****	*****	NEG
[Group 1 Neg #4]	C5	1.674	1.674	*****	*****	NEG
[Group 1 CO #4]	D5	1.308	1.308	*****	*****	NEG
[Group 1 Neg #5]	E5	1.679	1.679	*****	*****	NEG
[Group 1 CO #5]	F5	1.348	1.348	*****	*****	NEG
[Group 1 Neg #6]	G5	1.696	1.696	*****	*****	NEG
[Group 1 CO #6]	H5	1.320	1.320	*****	*****	NEG
[Group 1 Neg #7]	A6	1.550	1.550	*****	*****	NEG
[Group 1 CO #7]	B6	1.094	1.094	*****	*****	POS
[Group 1 Neg #8]	C6	1.492	1.492	*****	*****	NEG
[Group 1 CO #8]	D6	1.139	1.139	*****	*****	POS
[Group 1 Neg #9]	E6	1.509	1.509	*****	*****	NEG
[Group 1 CO #9]	F6	1.165	1.165	*****	*****	POS
[Group 1 Neg #10]	G6	1.538	1.538	*****	*****	NEG
[Group 1 CO #10]	H6	1.249	1.249	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A4	1.568	1.568	*****	*****	NC1

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Panel 3 (Page 35 of 112)

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B4	1.171	1.171	*****	*****	CO1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	C4	0.877	0.877	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	D4	0.475	0.475	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

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Panel 4 (Page 36 of 112)

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	1.568	1.647	1.550	*****	*****	*****	*****	*****	*****
B	*****	*****	*****	1.171	1.239	1.094	*****	*****	*****	*****	*****	*****
C	*****	*****	*****	0.877	1.674	1.492	*****	*****	*****	*****	*****	*****
D	*****	*****	*****	0.475	1.308	1.139	*****	*****	*****	*****	*****	*****
E	*****	*****	*****	1.618	1.679	1.509	*****	*****	*****	*****	*****	*****
F	*****	*****	*****	1.301	1.348	1.165	*****	*****	*****	*****	*****	*****
G	*****	*****	*****	1.657	1.696	1.538	*****	*****	*****	*****	*****	*****
H	*****	*****	*****	1.302	1.320	1.249	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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REVELATION DSX 6.15

TEST NO.   :
TEST NAME   : BENZODIAZEPINE GROUP
PLATE   : PrecisionBenzOpi2812

W/L MODE   : SINGLE   DATE   : 2/8/2012
TEST FILTER   : 450 nm   TIME   : 4:50:32 PM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : BENZODIAZEPINE GROUP, BGF-0060/111205, 12-28-12/12-5-13
Plate Lot Data   : Precision1BenzOpi2812, ,
Reagent Lot Data   : Acid Stop, 120208,
                     : BENZODIAZEPINE GROUP CONJUGATE, 049, 12-28-12
                     : K-Blue, 120208,
                     : OPIATE GROUP CONJUGATE, 043, 1-10-13
                     : BENZODIAZEPINE GROUP CUTOFF, 110811-WB, 12-28-12
                     : BENZODIAZEPINE GROUP NEGATIVE, 110811-WB, 12-28-12
                     : GROUP 3 CUTOFF, 120208,
                     : GROUP 3 NEGATIVE, 120208,
                     : Distilled Water, 120208,
                     : Neogen Wash Buffer, 120208,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.499>1.219

+ equation   = CO
                    = 1.219
- equation   = CO
                    = 1.219

	1	2	3	4	5	6	7	8	9	10	11	12
A	NC1	NEG	NEG									
B	CO1	POS	POS									
C	NNC1	NEG	NEG									
D	NCO1	POS	POS									
E	NEG	NEG	NEG									
F	NEG	POS	POS									
G	NEG	NEG	NEG									
H	NEG	NEG	NEG									

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Group 3 Neg #1]	E1	2.469	2.469	*****	*****	NEG
[Group 3 CO #1]	F1	2.044	2.044	*****	*****	NEG
[Group 3 Neg #2]	G1	2.509	2.509	*****	*****	NEG
[Group 3 CO #2]	H1	2.572	2.572	*****	*****	NEG
[Group 3 Neg #3]	A2	2.458	2.458	*****	*****	NEG
[Group 3 CO #3]	B2	1.179	1.179	*****	*****	POS
[Group 3 Neg #4]	C2	2.383	2.383	*****	*****	NEG
[Group 3 CO #4]	D2	1.156	1.156	*****	*****	POS
[Group 3 Neg #5]	E2	2.373	2.373	*****	*****	NEG
[Group 3 CO #5]	F2	1.201	1.201	*****	*****	POS
[Group 3 Neg #6]	G2	2.458	2.458	*****	*****	NEG
[Group 3 CO #6]	H2	1.264	1.264	*****	*****	NEG
[Group 3 Neg #7]	A3	2.401	2.401	*****	*****	NEG
[Group 3 CO #7]	B3	1.150	1.150	*****	*****	POS
[Group 3 Neg #8]	C3	2.398	2.398	*****	*****	NEG
[Group 3 CO #8]	D3	1.062	1.062	*****	*****	POS
[Group 3 Neg #9]	E3	2.320	2.320	*****	*****	NEG
[Group 3 CO #9]	F3	1.185	1.185	*****	*****	POS
[Group 3 Neg #10]	G3	2.446	2.446	*****	*****	NEG
[Group 3 CO #10]	H3	1.263	1.263	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	2.499	2.499	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B1	1.219	1.219	*****	*****	CO1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	C1	1.689	1.689	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	D1	0.655	0.655	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
  0 Indicates an equivocal response
  * Indicates an unread well or value out of range
  # Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	2.499	2.458	2.401	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.219	1.179	1.150	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.689	2.383	2.398	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	0.655	1.156	1.062	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	2.469	2.373	2.320	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	2.044	1.201	1.185	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	2.509	2.458	2.446	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	2.572	1.264	1.263	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

TEST NO.   :
TEST NAME   : OPIATE GROUP
PLATE   : PrecisionBenzOpi2812

W/L MODE   : SINGLE   DATE   : 2/8/2012
TEST FILTER : 450 nm   TIME   : 4:50:32 PM
REF. FILTER : *   OPERATOR : admin

Kit Lot Data   : OPIATE GROUP, MOF-0055/120105F, 1-10-13/1-5-14
Plate Lot Data   : Precision1BenzOpi2812, ,
Reagent Lot Data : Acid Stop, 120208,
                  : K-Blue, 120208,
                  : OPIATE GROUP CONJUGATE, 043, 1-10-13
                  : GROUP 3 CUTOFF, 120208,
                  : GROUP 3 NEGATIVE, 120208,
                  : OPIATE GROUP CUTOFF, 110715-WB, 1-10-13
                  : OPIATE GROUP NEGATIVE, 110715-WB, 1-10-13
                  : Distilled Water, 120208,
                  : Neogen Wash Buffer, 120208,

OVER limit   : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.863>1.230

+ equation   = CO
                = 1.231
- equation   = CO
                = 1.231

	1	2	3	4	5	6	7	8	9	10	11	12
A				NC1	NEG	NEG						
B				CO1	POS	POS						
C				NNC1	NEG	NEG						
D				NCO1	POS	POS						
E				NEG	NEG	NEG						
F				NEG	POS	POS						
G				NEG	NEG	NEG						
H				NEG	POS	NEG						

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Group 3 Neg #1]	E4	1.893	1.893	*****	*****	NEG
[Group 3 CO #1]	F4	1.810	1.810	*****	*****	NEG
[Group 3 Neg #2]	G4	1.887	1.887	*****	*****	NEG
[Group 3 CO #2]	H4	1.847	1.847	*****	*****	NEG
[Group 3 Neg #3]	A5	2.002	2.002	*****	*****	NEG
[Group 3 CO #3]	B5	1.083	1.083	*****	*****	POS
[Group 3 Neg #4]	C5	1.682	1.682	*****	*****	NEG
[Group 3 CO #4]	D5	1.029	1.029	*****	*****	POS
[Group 3 Neg #5]	E5	1.880	1.880	*****	*****	NEG
[Group 3 CO #5]	F5	1.072	1.072	*****	*****	POS
[Group 3 Neg #6]	G5	1.915	1.915	*****	*****	NEG
[Group 3 CO #6]	H5	1.216	1.216	*****	*****	POS
[Group 3 Neg #7]	A6	1.894	1.894	*****	*****	NEG
[Group 3 CO #7]	B6	1.209	1.209	*****	*****	POS
[Group 3 Neg #8]	C6	1.804	1.804	*****	*****	NEG
[Group 3 CO #8]	D6	1.086	1.086	*****	*****	POS
[Group 3 Neg #9]	E6	1.724	1.724	*****	*****	NEG
[Group 3 CO #9]	F6	1.214	1.214	*****	*****	POS
[Group 3 Neg #10]	G6	1.901	1.901	*****	*****	NEG
[Group 3 CO #10]	H6	1.245	1.245	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A4	1.863	1.863	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B4	1.231	1.231	*****	*****	CO1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	C4	1.736	1.736	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	D4	1.125	1.125	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	1.863	2.002	1.894	*****	*****	*****	*****	*****	*****
B	*****	*****	*****	1.231	1.083	1.209	*****	*****	*****	*****	*****	*****
C	*****	*****	*****	1.736	1.682	1.804	*****	*****	*****	*****	*****	*****
D	*****	*****	*****	1.125	1.029	1.086	*****	*****	*****	*****	*****	*****
E	*****	*****	*****	1.893	1.880	1.724	*****	*****	*****	*****	*****	*****
F	*****	*****	*****	1.810	1.072	1.214	*****	*****	*****	*****	*****	*****
G	*****	*****	*****	1.887	1.915	1.901	*****	*****	*****	*****	*****	*****
H	*****	*****	*****	1.847	1.216	1.245	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

REVELATION DSX 6.15

TEST NO.	:
TEST NAME	: COTININE
PLATE	: Precision1Cot2812

W/L MODE	: SINGLE	DATE	: 2/8/2012
TEST FILTER	: 450 nm	TIME	: 3:29:57 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : COTININE, CTI-0031/1102211, 4-23-12/2-21-13
Plate Lot Data : Precision1Cot2812, ,
Reagent Lot Data : Acid Stop, 120208,
: COTININE CONJUGATE, 032,
: K-Blue, 120208,
: COTININE CUTOFF, 024,
: COTININE NEGATIVE, 024,
: GROUP 3 CUTOFF, 120208,
: GROUP 3 NEGATIVE, 120208,
: Distilled Water, 120208,
: Neogen Wash Buffer, 120208,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.492>1.310

+ equation	= CO
	= 1.311
- equation	= CO
	= 1.311

	1	2	3	4	5	6	7	8	9	10	11	12
A	NC1	NEG	NEG									
B	CO1	POS	POS									
C	NNC1	NEG	NEG									
D	NCO1	POS	POS									
E	NEG	NEG	NEG									
F	NEG	POS	POS									
G	NEG	NEG	NEG									
H	NEG	NEG	NEG									

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Group 3 Neg #1]	E1	2.105	2.105	*****	*****	NEG
[Group 3 CO #1]	F1	2.065	2.065	*****	*****	NEG
[Group 3 Neg #2]	G1	2.295	2.295	*****	*****	NEG
[Group 3 CO #2]	H1	2.447	2.447	*****	*****	NEG
[Group 3 Neg #3]	A2	2.515	2.515	*****	*****	NEG
[Group 3 CO #3]	B2	1.297	1.297	*****	*****	POS
[Group 3 Neg #4]	C2	2.309	2.309	*****	*****	NEG
[Group 3 CO #4]	D2	1.261	1.261	*****	*****	POS
[Group 3 Neg #5]	E2	2.250	2.250	*****	*****	NEG
[Group 3 CO #5]	F2	1.206	1.206	*****	*****	POS
[Group 3 Neg #6]	G2	2.253	2.253	*****	*****	NEG
[Group 3 CO #6]	H2	1.350	1.350	*****	*****	NEG
[Group 3 Neg #7]	A3	2.478	2.478	*****	*****	NEG
[Group 3 CO #7]	B3	1.289	1.289	*****	*****	POS
[Group 3 Neg #8]	C3	2.312	2.312	*****	*****	NEG
[Group 3 CO #8]	D3	1.252	1.252	*****	*****	POS
[Group 3 Neg #9]	E3	2.268	2.268	*****	*****	NEG
[Group 3 CO #9]	F3	1.224	1.224	*****	*****	POS
[Group 3 Neg #10]	G3	2.297	2.297	*****	*****	NEG
[Group 3 CO #10]	H3	1.350	1.350	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	2.492	2.492	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B1	1.311	1.311	*****	*****	CO1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	C1	0.541	0.541	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	D1	0.251	0.251	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	2.492	2.515	2.478	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.311	1.297	1.289	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	0.541	2.309	2.312	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	0.251	1.261	1.252	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	2.105	2.250	2.268	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	2.065	1.206	1.224	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	2.295	2.253	2.297	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	2.447	1.350	1.350	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

TEST NO.   :
TEST NAME   : OXYCODONE-OXYMORPHONE
PLATE   : PrecisionMAmpOxyTHC2812

W/L MODE   : SINGLE   DATE   : 2/8/2012
TEST FILTER   : 450 nm   TIME   : 4:37:22 PM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : OXYCODONE-OXYMORPHONE, OXF-0036/110506F, 1-16-13/5-6-13
Plate Lot Data   : Precision1MAmpOxyTHC2812, ,
Reagent Lot Data   : Acid Stop, 120208,
                        : K-Blue, 120208,
                        : OXYCODONE/OXYMORPHONE CONJUGATE, 028, 1-16-13
                        : GROUP 2 CUTOFF, 120208,
                        : GROUP 2 NEGATIVE, 120208,
                        : OXYCODONE/OXYMORPHONE CUTOFF, 120117-WB, 1-16-13
                        : OXYCODONE/OXYMORPHONE NEGATIVE, 120117-WB, 1-16-13
                        : Distilled Water, 120208,
                        : Neogen Wash Buffer, 120208,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.529>0.812

+ equation   = CO
                    = 0.813
- equation   = CO
                    = 0.813

	1	2	3	4	5	6	7	8	9	10	11	12
A				NC1	NEG	NEG						
B				CO1	POS	NEG						
C				NNC1	NEG	NEG						
D				NCO1	POS	POS						
E				NEG	NEG	NEG						
F				NEG	POS	NEG						
G				NEG	NEG	NEG						
H				POS	POS	POS						

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Group 2 Neg #1]	E4	2.358	2.358	*****	*****	NEG
[Group 2 CO #1]	F4	2.384	2.384	*****	*****	NEG
[Group 2 Neg #2]	G4	2.436	2.436	*****	*****	NEG
[Group 2 CO #2]	H4	0.778	0.778	*****	*****	POS
[Group 2 Neg #3]	A5	2.523	2.523	*****	*****	NEG
[Group 2 CO #3]	B5	0.767	0.767	*****	*****	POS
[Group 2 Neg #4]	C5	2.413	2.413	*****	*****	NEG
[Group 2 CO #4]	D5	0.740	0.740	*****	*****	POS
[Group 2 Neg #5]	E5	2.539	2.539	*****	*****	NEG
[Group 2 CO #5]	F5	0.797	0.797	*****	*****	POS
[Group 2 Neg #6]	G5	2.489	2.489	*****	*****	NEG
[Group 2 CO #6]	H5	0.769	0.769	*****	*****	POS
[Group 2 Neg #7]	A6	2.563	2.563	*****	*****	NEG
[Group 2 CO #7]	B6	0.855	0.855	*****	*****	NEG
[Group 2 Neg #8]	C6	2.468	2.468	*****	*****	NEG
[Group 2 CO #8]	D6	0.752	0.752	*****	*****	POS
[Group 2 Neg #9]	E6	2.479	2.479	*****	*****	NEG
[Group 2 CO #9]	F6	0.814	0.814	*****	*****	NEG
[Group 2 Neg #10]	G6	2.523	2.523	*****	*****	NEG
[Group 2 CO #10]	H6	0.784	0.784	*****	*****	POS

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A4	2.529	2.529	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B4	0.813	0.813	*****	*****	CO1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	C4	2.401	2.401	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	D4	1.164	1.164	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	2.529	2.523	2.563	*****	*****	*****	*****	*****	*****
B	*****	*****	*****	0.813	0.767	0.855	*****	*****	*****	*****	*****	*****
C	*****	*****	*****	2.401	2.413	2.468	*****	*****	*****	*****	*****	*****
D	*****	*****	*****	1.164	0.740	0.752	*****	*****	*****	*****	*****	*****
E	*****	*****	*****	2.358	2.539	2.479	*****	*****	*****	*****	*****	*****
F	*****	*****	*****	2.384	0.797	0.814	*****	*****	*****	*****	*****	*****
G	*****	*****	*****	2.436	2.489	2.523	*****	*****	*****	*****	*****	*****
H	*****	*****	*****	0.778	0.769	0.784	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

TEST NO. :
TEST NAME : THC
PLATE : PrecisionMAmpOxyTHC2812

W/L MODE : SINGLE   DATE   : 2/8/2012
TEST FILTER : 450 nm   TIME   : 4:37:22 PM
REF. FILTER : *   OPERATOR : admin

Kit Lot Data   : THC, TCF-0054/111221, 12-26-12/12-21-13
Plate Lot Data : Precision1MAmpOxyTHC2812, ,
Reagent Lot Data : Acid Stop, 120208,
                : K-Blue, 120208,
                : THC CONJUGATE, 043, 12-26-12
                : GROUP 2 CUTOFF, 120208,
                : GROUP 2 NEGATIVE, 120208,
                : THC CUTOFF, 110826-WB, 12-26-12
                : THC NEGATIVE, 110826-WB, 12-26-12
                : Distilled Water, 120208,
                : Neogen Wash Buffer, 120208,

OVER limit   : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.089>1.232

+ equation   = CO
                  = 1.232
- equation   = CO
                  = 1.232

	1	2	3	4	5	6	7	8	9	10	11	12
A							NC1	NEG	NEG			
B							CO1	NEG	NEG			
C							NNC1	NEG	NEG			
D							NCO1	NEG	NEG			
E							NEG	NEG	NEG			
F							NEG	POS	NEG			
G							NEG	NEG	NEG			
H							NEG	NEG	NEG			

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Group 2 Neg #1]	E7	2.024	2.024	*****	*****	NEG
[Group 2 CO #1]	F7	1.958	1.958	*****	*****	NEG
[Group 2 Neg #2]	G7	1.985	1.985	*****	*****	NEG
[Group 2 CO #2]	H7	1.337	1.337	*****	*****	NEG
[Group 2 Neg #3]	A8	2.175	2.175	*****	*****	NEG
[Group 2 CO #3]	B8	1.245	1.245	*****	*****	NEG
[Group 2 Neg #4]	C8	2.018	2.018	*****	*****	NEG
[Group 2 CO #4]	D8	1.257	1.257	*****	*****	NEG
[Group 2 Neg #5]	E8	2.026	2.026	*****	*****	NEG
[Group 2 CO #5]	F8	1.207	1.207	*****	*****	POS
[Group 2 Neg #6]	G8	2.031	2.031	*****	*****	NEG
[Group 2 CO #6]	H8	1.291	1.291	*****	*****	NEG
[Group 2 Neg #7]	A9	2.005	2.005	*****	*****	NEG
[Group 2 CO #7]	B9	1.296	1.296	*****	*****	NEG
[Group 2 Neg #8]	C9	2.023	2.023	*****	*****	NEG
[Group 2 CO #8]	D9	1.262	1.262	*****	*****	NEG
[Group 2 Neg #9]	E9	1.993	1.993	*****	*****	NEG
[Group 2 CO #9]	F9	1.249	1.249	*****	*****	NEG
[Group 2 Neg #10]	G9	1.982	1.982	*****	*****	NEG
[Group 2 CO #10]	H9	1.463	1.463	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A7	2.090	2.090	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B7	1.232	1.232	*****	*****	CO1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	C7	1.973	1.973	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	D7	0.840	0.840	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	*****	*****	2.090	2.175	2.005	*****	*****	*****
B	*****	*****	*****	*****	*****	*****	1.232	1.245	1.296	*****	*****	*****
C	*****	*****	*****	*****	*****	*****	1.973	2.018	2.023	*****	*****	*****
D	*****	*****	*****	*****	*****	*****	0.840	1.257	1.262	*****	*****	*****
E	*****	*****	*****	*****	*****	*****	2.024	2.026	1.993	*****	*****	*****
F	*****	*****	*****	*****	*****	*****	1.958	1.207	1.249	*****	*****	*****
G	*****	*****	*****	*****	*****	*****	1.985	2.031	1.982	*****	*****	*****
H	*****	*****	*****	*****	*****	*****	1.337	1.291	1.463	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

REVELATION DSX 6.15

TEST NO.   :
TEST NAME   : AMPHETAMINE ULTRA
PLATE   : Precision2AmpCocHydro2912

W/L MODE   : SINGLE   DATE   : 2/9/2012
TEST FILTER   : 450 nm   TIME   : 11:36:25 AM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : AMPHETAMINE ULTRA, AUF-0046/111214, 1-8-13/12-14-13
Plate Lot Data   : Precision2AmpCocHydro2912, ,
Reagent Lot Data   : Acid Stop, 120209,
                     : AMPHETAMINE ULTRA CONJUGATE, 035, 1-8-13
                     : COCAINE/BZE CONJUGATE, 053, 11-9-12
                     : HYDROMORPHONE CONJUGATE, 011, 8-21-12
                     : K-Blue, 120209,
                     : AMPHETAMINE ULTRA CUTOFF, 111212-WB, 1-8-13
                     : AMPHETAMINE ULTRA NEGATIVE, 111212-WB, 1-8-13
                     : GROUP 1 CUTOFF, 120209,
                     : GROUP 1 NEGATIVE, 120209,
                     : Distilled Water, 120209,
                     : Neogen Wash Buffer, 120209,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.286>1.012

+ equation   = CO
                     = 1.013
- equation   = CO
                     = 1.013

	1	2	3	4	5	6	7	8	9	10	11	12
A	NC1	NEG	NEG									
B	CO1	NEG	NEG									
C	NNC1	NEG	NEG									
D	NCO1	NEG	POS									
E	NEG	NEG	NEG									
F	POS	NEG	POS									
G	NEG	NEG	NEG									
H	NEG	NEG	POS									

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Group 1 Neg #1]	E1	1.255	1.255	*****	*****	NEG
[Group 1 CO #1]	F1	0.983	0.983	*****	*****	POS
[Group 1 Neg #2]	G1	1.378	1.378	*****	*****	NEG
[Group 1 CO #2]	H1	1.047	1.047	*****	*****	NEG
[Group 1 Neg #3]	A2	1.342	1.342	*****	*****	NEG
[Group 1 CO #3]	B2	1.055	1.055	*****	*****	NEG
[Group 1 Neg #4]	C2	1.375	1.375	*****	*****	NEG
[Group 1 CO #4]	D2	1.092	1.092	*****	*****	NEG
[Group 1 Neg #5]	E2	1.341	1.341	*****	*****	NEG
[Group 1 CO #5]	F2	1.026	1.026	*****	*****	NEG
[Group 1 Neg #6]	G2	1.395	1.395	*****	*****	NEG
[Group 1 CO #6]	H2	1.067	1.067	*****	*****	NEG
[Group 1 Neg #7]	A3	1.313	1.313	*****	*****	NEG
[Group 1 CO #7]	B3	1.034	1.034	*****	*****	NEG
[Group 1 Neg #8]	C3	1.273	1.273	*****	*****	NEG
[Group 1 CO #8]	D3	0.969	0.969	*****	*****	POS
[Group 1 Neg #9]	E3	1.275	1.275	*****	*****	NEG
[Group 1 CO #9]	F3	0.943	0.943	*****	*****	POS
[Group 1 Neg #10]	G3	1.287	1.287	*****	*****	NEG
[Group 1 CO #10]	H3	0.978	0.978	*****	*****	POS

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	1.286	1.286	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B1	1.013	1.013	*****	*****	CO1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	C1	1.363	1.363	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	D1	0.906	0.906	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
    0 Indicates an equivocal response
    * Indicates an unread well or value out of range
    # Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.286	1.342	1.313	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.013	1.055	1.034	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.363	1.375	1.273	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	0.906	1.092	0.969	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.255	1.341	1.275	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	0.983	1.026	0.943	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.378	1.395	1.287	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.047	1.067	0.978	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

TEST NO. :
TEST NAME : COCAINE-BZE
PLATE : Precision2AmpCocHydro2912

W/L MODE : SINGLE DATE : 2/9/2012
TEST FILTER : 450 nm TIME : 11:36:25 AM
REF. FILTER : * OPERATOR : admin

Kit Lot Data : COCAINE-BZE, BZF-0073/111121F, 11-9-12/11-21-13
Plate Lot Data : Precision2AmpCocHydro2912, ,
Reagent Lot Data : Acid Stop, 120209,
: COCAINE/BZE CONJUGATE, 053, 11-9-12
: K-Blue, 120209,
: COCAINE/BZE CUTOFF, 111110-WB, 11-9-12
: COCAINE/BZE NEGATIVE, 111110-WB, 11-9-12
: GROUP 1 CUTOFF, 120209,
: GROUP 1 NEGATIVE, 120209,
: Distilled Water, 120209,
: Neogen Wash Buffer, 120209,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.756>1.335

+ equation   = CO
             = 1.336
- equation   = CO
             = 1.336

	1	2	3	4	5	6	7	8	9	10	11	12
A				NC1	NEG	NEG						
B				CO1	POS	POS						
C				NNC1	NEG	NEG						
D				NCO1	POS	POS						
E				NEG	POS	NEG						
F				NEG	POS	POS						
G				NEG	NEG	NEG						
H				NEG	POS	POS						

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Group 1 Neg #1]	E4	1.764	1.764	*****	*****	NEG
[Group 1 CO #1]	F4	1.356	1.356	*****	*****	NEG
[Group 1 Neg #2]	G4	1.804	1.804	*****	*****	NEG
[Group 1 CO #2]	H4	1.387	1.387	*****	*****	NEG
[Group 1 Neg #3]	A5	1.552	1.552	*****	*****	NEG
[Group 1 CO #3]	B5	1.143	1.143	*****	*****	POS
[Group 1 Neg #4]	C5	1.515	1.515	*****	*****	NEG
[Group 1 CO #4]	D5	0.920	0.920	*****	*****	POS
[Group 1 Neg #5]	E5	1.312	1.312	*****	*****	POS
[Group 1 CO #5]	F5	1.105	1.105	*****	*****	POS
[Group 1 Neg #6]	G5	1.480	1.480	*****	*****	NEG
[Group 1 CO #6]	H5	1.108	1.108	*****	*****	POS
[Group 1 Neg #7]	A6	1.630	1.630	*****	*****	NEG
[Group 1 CO #7]	B6	1.223	1.223	*****	*****	POS
[Group 1 Neg #8]	C6	1.643	1.643	*****	*****	NEG
[Group 1 CO #8]	D6	1.236	1.236	*****	*****	POS
[Group 1 Neg #9]	E6	1.648	1.648	*****	*****	NEG
[Group 1 CO #9]	F6	1.299	1.299	*****	*****	POS
[Group 1 Neg #10]	G6	1.702	1.702	*****	*****	NEG
[Group 1 CO #10]	H6	1.301	1.301	*****	*****	POS

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A4	1.756	1.756	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B4	1.336	1.336	*****	*****	CO1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	C4	0.935	0.935	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	D4	0.505	0.505	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	1.756	1.552	1.630	*****	*****	*****	*****	*****	*****
B	*****	*****	*****	1.336	1.143	1.223	*****	*****	*****	*****	*****	*****
C	*****	*****	*****	0.935	1.515	1.643	*****	*****	*****	*****	*****	*****
D	*****	*****	*****	0.505	0.920	1.236	*****	*****	*****	*****	*****	*****
E	*****	*****	*****	1.764	1.312	1.648	*****	*****	*****	*****	*****	*****
F	*****	*****	*****	1.356	1.105	1.299	*****	*****	*****	*****	*****	*****
G	*****	*****	*****	1.804	1.480	1.702	*****	*****	*****	*****	*****	*****
H	*****	*****	*****	1.387	1.108	1.301	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

REVELATION DSX 6.15

TEST NO.	:
TEST NAME	: BENZODIAZEPINE GROUP
PLATE	: Precision2BenzOpi2912

W/L MODE	: SINGLE	DATE	: 2/9/2012
TEST FILTER	: 450 nm	TIME	: 12:07:46 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : BENZODIAZEPINE GROUP, BGF-0060/111205, 12-28-12/12-5-13
Plate Lot Data : Precision2BenzOpi2912, ,
Reagent Lot Data : Acid Stop, 120209,
: BENZODIAZEPINE GROUP CONJUGATE, 049, 12-28-12
: K-Blue, 120209,
: OPIATE GROUP CONJUGATE, 043, 1-10-13
: BENZODIAZEPINE GROUP CUTOFF, 110811-WB, 12-28-12
: BENZODIAZEPINE GROUP NEGATIVE, 110811-WB, 12-28-12
: GROUP 3 CUTOFF, 120209,
: GROUP 3 NEGATIVE, 120209,
: Distilled Water, 120209,
: Neogen Wash Buffer, 120209,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.368>1.132

+ equation   = CO
               = 1.133
- equation   = CO
               = 1.133

	1	2	3	4	5	6	7	8	9	10	11	12
A	NC1	NEG	NEG									
B	CO1	NEG	POS									
C	NNC1	NEG	NEG									
D	NCO1	POS	POS									
E	NEG	NEG	NEG									
F	NEG	NEG	POS									
G	NEG	NEG	NEG									
H	NEG	NEG	NEG									

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Group 3 Neg #1]	E1	2.399	2.399	*****	*****	NEG
[Group 3 CO #1]	F1	2.438	2.438	*****	*****	NEG
[Group 3 Neg #2]	G1	2.391	2.391	*****	*****	NEG
[Group 3 CO #2]	H1	2.451	2.451	*****	*****	NEG
[Group 3 Neg #3]	A2	2.391	2.391	*****	*****	NEG
[Group 3 CO #3]	B2	1.177	1.177	*****	*****	NEG
[Group 3 Neg #4]	C2	2.367	2.367	*****	*****	NEG
[Group 3 CO #4]	D2	1.117	1.117	*****	*****	POS
[Group 3 Neg #5]	E2	2.398	2.398	*****	*****	NEG
[Group 3 CO #5]	F2	1.214	1.214	*****	*****	NEG
[Group 3 Neg #6]	G2	2.438	2.438	*****	*****	NEG
[Group 3 CO #6]	H2	1.322	1.322	*****	*****	NEG
[Group 3 Neg #7]	A3	2.340	2.340	*****	*****	NEG
[Group 3 CO #7]	B3	1.104	1.104	*****	*****	POS
[Group 3 Neg #8]	C3	2.291	2.291	*****	*****	NEG
[Group 3 CO #8]	D3	1.031	1.031	*****	*****	POS
[Group 3 Neg #9]	E3	2.370	2.370	*****	*****	NEG
[Group 3 CO #9]	F3	1.130	1.130	*****	*****	POS
[Group 3 Neg #10]	G3	2.396	2.396	*****	*****	NEG
[Group 3 CO #10]	H3	1.164	1.164	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	2.369	2.369	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B1	1.133	1.133	*****	*****	CO1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	C1	1.606	1.606	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	D1	0.647	0.647	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	2.369	2.391	2.340	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.133	1.177	1.104	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.606	2.367	2.291	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	0.647	1.117	1.031	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	2.399	2.398	2.370	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	2.438	1.214	1.130	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	2.391	2.438	2.396	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	2.451	1.322	1.164	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

TEST NO.   :
TEST NAME   : OPIATE GROUP
PLATE   : Precision2BenzOpi2912

W/L MODE   : SINGLE   DATE   : 2/9/2012
TEST FILTER   : 450 nm   TIME   : 12:07:46 PM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : OPIATE GROUP, MOF-0055/120105F, 1-10-13/1-15-14
Plate Lot Data   : Precision2BenzOpi2912, ,
Reagent Lot Data   : Acid Stop, 120209,
                     : K-Blue, 120209,
                     : OPIATE GROUP CONJUGATE, 043, 1-10-13
                     : GROUP 3 CUTOFF, 120209,
                     : GROUP 3 NEGATIVE, 120209,
                     : OPIATE GROUP CUTOFF, 110715-WB, 1-10-13
                     : OPIATE GROUP NEGATIVE, 110715-WB, 1-10-13
                     : Distilled Water, 120209,
                     : Neogen Wash Buffer, 120209,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.886>1.211

+ equation   = CO
                     = 1.211
- equation   = CO
                     = 1.211

	1	2	3	4	5	6	7	8	9	10	11	12
A				NC1	NEG	NEG						
B				CO1	POS	NEG						
C				NNC1	NEG	NEG						
D				NCO1	POS	NEG						
E				NEG	NEG	NEG						
F				NEG	POS	NEG						
G				NEG	NEG	NEG						
H				NEG	POS	NEG						

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Group 3 Neg #1]	E4	1.924	1.924	*****	*****	NEG
[Group 3 CO #1]	F4	1.818	1.818	*****	*****	NEG
[Group 3 Neg #2]	G4	1.898	1.898	*****	*****	NEG
[Group 3 CO #2]	H4	1.937	1.937	*****	*****	NEG
[Group 3 Neg #3]	A5	1.883	1.883	*****	*****	NEG
[Group 3 CO #3]	B5	1.094	1.094	*****	*****	POS
[Group 3 Neg #4]	C5	1.646	1.646	*****	*****	NEG
[Group 3 CO #4]	D5	1.146	1.146	*****	*****	POS
[Group 3 Neg #5]	E5	1.586	1.586	*****	*****	NEG
[Group 3 CO #5]	F5	1.130	1.130	*****	*****	POS
[Group 3 Neg #6]	G5	1.867	1.867	*****	*****	NEG
[Group 3 CO #6]	H5	1.198	1.198	*****	*****	POS
[Group 3 Neg #7]	A6	1.920	1.920	*****	*****	NEG
[Group 3 CO #7]	B6	1.243	1.243	*****	*****	NEG
[Group 3 Neg #8]	C6	1.888	1.888	*****	*****	NEG
[Group 3 CO #8]	D6	1.235	1.235	*****	*****	NEG
[Group 3 Neg #9]	E6	1.865	1.865	*****	*****	NEG
[Group 3 CO #9]	F6	1.262	1.262	*****	*****	NEG
[Group 3 Neg #10]	G6	1.753	1.753	*****	*****	NEG
[Group 3 CO #10]	H6	1.289	1.289	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A4	1.887	1.887	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B4	1.211	1.211	*****	*****	CO1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	C4	1.982	1.982	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	D4	1.166	1.166	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
    0 Indicates an equivocal response
    * Indicates an unread well or value out of range
    # Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	1.887	1.883	1.920	*****	*****	*****	*****	*****	*****
B	*****	*****	*****	1.211	1.094	1.243	*****	*****	*****	*****	*****	*****
C	*****	*****	*****	1.982	1.646	1.888	*****	*****	*****	*****	*****	*****
D	*****	*****	*****	1.166	1.146	1.235	*****	*****	*****	*****	*****	*****
E	*****	*****	*****	1.924	1.586	1.865	*****	*****	*****	*****	*****	*****
F	*****	*****	*****	1.818	1.130	1.262	*****	*****	*****	*****	*****	*****
G	*****	*****	*****	1.898	1.867	1.753	*****	*****	*****	*****	*****	*****
H	*****	*****	*****	1.937	1.198	1.289	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

REVELATION DSX 6.15

TEST NO.	:
TEST NAME	: COTININE
PLATE	: Precision2Cot2912

W/L MODE	: SINGLE	DATE	: 2/9/2012
TEST FILTER	: 450 nm	TIME	: 10:45:08 AM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data   : COTININE, CTI-0031/1102211, 4-23-12/2-21-13
Plate Lot Data : Precision2Cot2912, ,
Reagent Lot Data : Acid Stop, 120209,
               : COTININE CONJUGATE, 032,
               : K-Blue, 120209,
               : COTININE CUTOFF, 024,
               : COTININE NEGATIVE, 024,
               : GROUP 3 CUTOFF, 120209,
               : GROUP 3 NEGATIVE, 120209,
               : Distilled Water, 120209,
               : Neogen Wash Buffer, 120209,

OVER limit   : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.238>1.259

+ equation   = CO
                    = 1.260
- equation   = CO
                    = 1.260

	1	2	3	4	5	6	7	8	9	10	11	12
A	NC1	NEG	NEG									
B	CO1	POS	NEG									
C	NNC1	NEG	NEG									
D	NCO1	POS	NEG									
E	NEG	NEG	NEG									
F	NEG	POS	NEG									
G	NEG	NEG	NEG									
H	NEG	NEG	NEG									

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Group 3 Neg #1]	E1	1.904	1.904	*****	*****	NEG
[Group 3 CO #1]	F1	1.981	1.981	*****	*****	NEG
[Group 3 Neg #2]	G1	2.031	2.031	*****	*****	NEG
[Group 3 CO #2]	H1	2.197	2.197	*****	*****	NEG
[Group 3 Neg #3]	A2	2.246	2.246	*****	*****	NEG
[Group 3 CO #3]	B2	1.248	1.248	*****	*****	POS
[Group 3 Neg #4]	C2	2.059	2.059	*****	*****	NEG
[Group 3 CO #4]	D2	1.216	1.216	*****	*****	POS
[Group 3 Neg #5]	E2	1.985	1.985	*****	*****	NEG
[Group 3 CO #5]	F2	1.181	1.181	*****	*****	POS
[Group 3 Neg #6]	G2	2.052	2.052	*****	*****	NEG
[Group 3 CO #6]	H2	1.312	1.312	*****	*****	NEG
[Group 3 Neg #7]	A3	2.258	2.258	*****	*****	NEG
[Group 3 CO #7]	B3	1.377	1.377	*****	*****	NEG
[Group 3 Neg #8]	C3	2.219	2.219	*****	*****	NEG
[Group 3 CO #8]	D3	1.332	1.332	*****	*****	NEG
[Group 3 Neg #9]	E3	2.214	2.214	*****	*****	NEG
[Group 3 CO #9]	F3	1.341	1.341	*****	*****	NEG
[Group 3 Neg #10]	G3	2.309	2.309	*****	*****	NEG
[Group 3 CO #10]	H3	1.382	1.382	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	2.238	2.238	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B1	1.260	1.260	*****	*****	CO1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	C1	0.565	0.565	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	D1	0.269	0.269	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
    0 Indicates an equivocal response
    * Indicates an unread well or value out of range
    # Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	2.238	2.246	2.258	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.260	1.248	1.377	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	0.565	2.059	2.219	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	0.269	1.216	1.332	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.904	1.985	2.214	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.981	1.181	1.341	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	2.031	2.052	2.309	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	2.197	1.312	1.382	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

TEST NO. :
TEST NAME : OXYCODONE-OXYMORPHONE
PLATE : Precision2MAmpOxyTHC2912

W/L MODE : SINGLE   DATE : 2/9/2012
TEST FILTER : 450 nm   TIME : 11:52:34 AM
REF. FILTER : *   OPERATOR : admin

Kit Lot Data : OXYCODONE-OXYMORPHONE, OXF-0036/110506F, 1-16-13/5-6-13
Plate Lot Data : Precision2MAmpOxyTHC2912, ,
Reagent Lot Data : Acid Stop, 120209,
: K-Blue, 120209,
: OXYCODONE/OXYMORPHONE CONJUGATE, 028, 1-16-13
: GROUP 2 CUTOFF, 120209,
: GROUP 2 NEGATIVE, 120209,
: OXYCODONE/OXYMORPHONE CUTOFF, 120117-WB, 1-16-13
: OXYCODONE/OXYMORPHONE NEGATIVE, 120117-WB, 1-16-13
: Distilled Water, 120209,
: Neogen Wash Buffer, 120209,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.414>0.765

+ equation   = CO
     = 0.766
- equation   = CO
     = 0.766

	1	2	3	4	5	6	7	8	9	10	11	12
A				NC1	NEG	NEG						
B				CO1	NEG	NEG						
C				NNC1	NEG	NEG						
D				NCO1	NEG	POS						
E				NEG	NEG	NEG						
F				NEG	NEG	NEG						
G				NEG	NEG	NEG						
H				POS	POS	POS						

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Group 2 Neg #1]	E4	2.278	2.278	*****	*****	NEG
[Group 2 CO #1]	F4	2.322	2.322	*****	*****	NEG
[Group 2 Neg #2]	G4	2.370	2.370	*****	*****	NEG
[Group 2 CO #2]	H4	0.757	0.757	*****	*****	POS
[Group 2 Neg #3]	A5	2.434	2.434	*****	*****	NEG
[Group 2 CO #3]	B5	0.781	0.781	*****	*****	NEG
[Group 2 Neg #4]	C5	2.389	2.389	*****	*****	NEG
[Group 2 CO #4]	D5	0.815	0.815	*****	*****	NEG
[Group 2 Neg #5]	E5	2.490	2.490	*****	*****	NEG
[Group 2 CO #5]	F5	0.769	0.769	*****	*****	NEG
[Group 2 Neg #6]	G5	2.429	2.429	*****	*****	NEG
[Group 2 CO #6]	H5	0.727	0.727	*****	*****	POS
[Group 2 Neg #7]	A6	2.446	2.446	*****	*****	NEG
[Group 2 CO #7]	B6	0.769	0.769	*****	*****	NEG
[Group 2 Neg #8]	C6	2.345	2.345	*****	*****	NEG
[Group 2 CO #8]	D6	0.741	0.741	*****	*****	POS
[Group 2 Neg #9]	E6	2.428	2.428	*****	*****	NEG
[Group 2 CO #9]	F6	0.850	0.850	*****	*****	NEG
[Group 2 Neg #10]	G6	2.371	2.371	*****	*****	NEG
[Group 2 CO #10]	H6	0.748	0.748	*****	*****	POS

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A4	2.414	2.414	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B4	0.766	0.766	*****	*****	CO1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	C4	2.363	2.363	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	D4	1.031	1.031	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	2.414	2.434	2.446	*****	*****	*****	*****	*****	*****
B	*****	*****	*****	0.766	0.781	0.769	*****	*****	*****	*****	*****	*****
C	*****	*****	*****	2.363	2.389	2.345	*****	*****	*****	*****	*****	*****
D	*****	*****	*****	1.031	0.815	0.741	*****	*****	*****	*****	*****	*****
E	*****	*****	*****	2.278	2.490	2.428	*****	*****	*****	*****	*****	*****
F	*****	*****	*****	2.322	0.769	0.850	*****	*****	*****	*****	*****	*****
G	*****	*****	*****	2.370	2.429	2.371	*****	*****	*****	*****	*****	*****
H	*****	*****	*****	0.757	0.727	0.748	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

TEST NO. :
TEST NAME : THC
PLATE : Precision2MAmpOxyTHC2912

W/L MODE : SINGLE DATE : 2/9/2012
TEST FILTER : 450 nm TIME : 11:52:34 AM
REF. FILTER : * OPERATOR : admin

Kit Lot Data : THC, TCF-0054/111221, 12-26-12/12-21-13
Plate Lot Data : Precision2MAmpOxyTHC2912, ,
Reagent Lot Data : Acid Stop, 120209,
: K-Blue, 120209,
: THC CONJUGATE, 043, 12-26-12
: GROUP 2 CUTOFF, 120209,
: GROUP 2 NEGATIVE, 120209,
: THC CUTOFF, 110826-WB, 12-26-12
: THC NEGATIVE, 110826-WB, 12-26-12
: Distilled Water, 120209,
: Neogen Wash Buffer, 120209,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.097>1.266

+ equation   = CO
                    = 1.267
- equation   = CO
                    = 1.267

Plate ID: Precision2MAmpOxyTHC2912   THC

	1	2	3	4	5	6	7	8	9	10	11	12
A							NC1	NEG	NEG			
B							CO1	POS	NEG			
C							NNC1	NEG	NEG			
D							NCO1	POS	NEG			
E							NEG	NEG	NEG			
F							NEG	NEG	NEG			
G							NEG	NEG	NEG			
H							POS	NEG	NEG			

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Group 2 Neg #1]	E7	2.005	2.005	*****	*****	NEG
[Group 2 CO #1]	F7	2.001	2.001	*****	*****	NEG
[Group 2 Neg #2]	G7	2.021	2.021	*****	*****	NEG
[Group 2 CO #2]	H7	1.220	1.220	*****	*****	POS
[Group 2 Neg #3]	A8	2.166	2.166	*****	*****	NEG
[Group 2 CO #3]	B8	1.235	1.235	*****	*****	POS
[Group 2 Neg #4]	C8	1.963	1.963	*****	*****	NEG
[Group 2 CO #4]	D8	1.257	1.257	*****	*****	POS
[Group 2 Neg #5]	E8	1.958	1.958	*****	*****	NEG
[Group 2 CO #5]	F8	1.280	1.280	*****	*****	NEG
[Group 2 Neg #6]	G8	2.067	2.067	*****	*****	NEG
[Group 2 CO #6]	H8	1.326	1.326	*****	*****	NEG
[Group 2 Neg #7]	A9	2.129	2.129	*****	*****	NEG
[Group 2 CO #7]	B9	1.390	1.390	*****	*****	NEG
[Group 2 Neg #8]	C9	2.076	2.076	*****	*****	NEG
[Group 2 CO #8]	D9	1.312	1.312	*****	*****	NEG
[Group 2 Neg #9]	E9	2.042	2.042	*****	*****	NEG
[Group 2 CO #9]	F9	1.337	1.337	*****	*****	NEG
[Group 2 Neg #10]	G9	2.009	2.009	*****	*****	NEG
[Group 2 CO #10]	H9	1.319	1.319	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A7	2.098	2.098	*****	*****	NC1

Plate ID: Precision2MAmpOxyTHC2912   THC

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B7	1.267	1.267	*****	*****	CO1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	C7	1.999	1.999	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	D7	0.828	0.828	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

Plate ID: Precision2MAmpOxyTHC2912   THC

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	*****	*****	2.098	2.166	2.129	*****	*****	*****
B	*****	*****	*****	*****	*****	*****	1.267	1.235	1.390	*****	*****	*****
C	*****	*****	*****	*****	*****	*****	1.999	1.963	2.076	*****	*****	*****
D	*****	*****	*****	*****	*****	*****	0.828	1.257	1.312	*****	*****	*****
E	*****	*****	*****	*****	*****	*****	2.005	1.958	2.042	*****	*****	*****
F	*****	*****	*****	*****	*****	*****	2.001	1.280	1.337	*****	*****	*****
G	*****	*****	*****	*****	*****	*****	2.021	2.067	2.009	*****	*****	*****
H	*****	*****	*****	*****	*****	*****	1.220	1.326	1.319	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

REVELATION DSX 6.15

TEST NO.	:
TEST NAME	: AMPHETAMINE ULTRA ACCURACY
PLATE	: AccuracyAmpCocHydro2912

W/L MODE	: SINGLE	DATE		: 2/9/2012
TEST FILTER	: 450 nm	TIME		: 3:59:28 PM
REF. FILTER	: *	OPERATOR		: admin

Kit Lot Data : AMPHETAMINE ULTRA ACCURACY, AUF-0046/111214, 1-8-13/12-14-13
Plate Lot Data : AccuracyAmpCocHydro2912, ,
Reagent Lot Data : Acid Stop, 120209,
: AMPHETAMINE ULTRA CONJUGATE, 035, 1-8-13
: COCAINE/BZE CONJUGATE, 053, 11-9-12
: EIA Buffer, 120209,
: HYDROMORPHONE CONJUGATE, 011, 8-21-12
: K-Blue, 120209,
: AMPHETAMINE ULTRA CUTOFF, 111212-WB, 1-8-13
: AMPHETAMINE ULTRA NEGATIVE, 111212-WB, 1-8-13
: GROUP 1 CUTOFF, 120209,
: GROUP 1 NEGATIVE, 120209,
: Distilled Water, 120209,
: Neogen Wash Buffer, 120209,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.465>0.900

+ equation   = CO
                    = 0.901
- equation   = CO
                    = 0.901

	1	2	3	4	5	6	7	8	9	10	11	12
A	NC1	NEG	NEG	NEG								
B	CO1	NEG	NEG	NEG								
C	NNC1	NEG	NEG	NEG								
D	NCO1	NEG	NEG	NEG								
E	NEG	NEG	NEG	NEG								
F	NEG	NEG	NEG	NEG								
G	NEG	NEG	NEG	NEG								
H	NEG	NEG	NEG									

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Amphetamine -50%]	E1	1.014	1.142	0.134	11.758%	NEG
	F1	0.990				
	G1	1.025				
	H1	1.071				
	A2	1.166				
	B2	1.153				
	C2	1.163				
	D2	1.355				
	E2	1.340				
[Amphetamine CO]	F2	1.081	0.987	0.157	15.916%	NEG
	G2	1.039				
	H2	1.351				
	A3	0.938				
	B3	0.957				
	C3	0.894				
	D3	0.847				
	E3	0.930				
	F3	0.849				
[Amphetamine +50%]	G3	0.915	0.916	0.073	7.922%	NEG
	H3	1.069				
	A4	0.971				
	B4	0.823				
	C4	0.939				
	D4	0.902				
	E4	0.901				
	F4	0.871				
	G4	0.851				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	1.466	1.466	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B1	0.901	0.901	*****	*****	CO1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	C1	1.353	1.353	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	D1	0.902	0.902	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.466	1.166	0.938	0.971	*****	*****	*****	*****	*****	*****	*****	*****
B	0.901	1.153	0.957	0.823	*****	*****	*****	*****	*****	*****	*****	*****
C	1.353	1.163	0.894	0.939	*****	*****	*****	*****	*****	*****	*****	*****
D	0.902	1.355	0.847	0.902	*****	*****	*****	*****	*****	*****	*****	*****
E	1.014	1.340	0.930	0.901	*****	*****	*****	*****	*****	*****	*****	*****
F	0.990	1.081	0.849	0.871	*****	*****	*****	*****	*****	*****	*****	*****
G	1.025	1.039	0.915	0.851	*****	*****	*****	*****	*****	*****	*****	*****
H	1.071	1.351	1.069	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

TEST NO.   :
TEST NAME   : COCAINE-BZE ACCURACY
PLATE   : AccuracyAmpCocHydro2912

W/L MODE   : SINGLE   DATE   : 2/9/2012
TEST FILTER   : 450 nm   TIME   : 3:59:28 PM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : COCAINE-BZE ACCURACY, BZF-0073/111121F, 11-9-12/11-21-13
Plate Lot Data   : AccuracyAmpCocHydro2912, ,
Reagent Lot Data : Acid Stop, 120209, ,
                  : COCAINE/BZE CONJUGATE, 053, 11-9-12
                  : EIA Buffer, 120209,
                  : K-Blue, 120209,
                  : COCAINE/BZE CUTOFF, 111110-WB, 11-9-12
                  : COCAINE/BZE NEGATIVE, 111110-WB, 11-9-12
                  : GROUP 1 CUTOFF, 120209,
                  : GROUP 1 NEGATIVE, 120209,
                  : Distilled Water, 120209,
                  : Neogen Wash Buffer, 120209,

OVER limit   : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.428>0.956

+ equation   = CO
                  = 0.956
- equation   = CO
                  = 0.956

	1	2	3	4	5	6	7	8	9	10	11	12
A					NC1	NEG	POS	POS				
B					CO1	NEG	POS	POS				
C					NNC1	NEG	POS	POS				
D					NCO1	NEG	POS	POS				
E					NEG	NEG	POS	POS				
F					NEG	POS	POS	POS				
G					NEG	POS	POS	POS				
H					NEG	POS	POS					

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Cocaine -50%]	E5	1.170	1.072	0.088	8.251%	NEG
	F5	1.084				
	G5	0.919				
	H5	1.155				
	A6	0.970				
	B6	1.033				
	C6	1.039				
	D6	1.152				
	E6	1.130				
[Cocaine CO]	F6	1.055	0.956	0.070	7.352%	POS
	G6	1.005				
	H6	1.048				
	A7	0.990				
	B7	0.913				
	C7	0.919				
	D7	0.920				
	E7	0.886				
	F7	0.864				
[Cocaine +50%]	G7	0.763	0.739	0.032	4.274%	POS
	H7	0.704				
	A8	0.790				
	B8	0.749				
	C8	0.758				
	D8	0.686				
	E8	0.747				
	F8	0.729				
	G8	0.726				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A5	1.429	1.429	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B5	0.956	0.956	*****	*****	CO1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	C5	0.815	0.815	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	D5	0.402	0.402	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	1.429	0.970	0.990	0.790	*****	*****	*****	*****
B	*****	*****	*****	*****	0.956	1.033	0.913	0.749	*****	*****	*****	*****
C	*****	*****	*****	*****	0.815	1.039	0.919	0.758	*****	*****	*****	*****
D	*****	*****	*****	*****	0.402	1.152	0.920	0.686	*****	*****	*****	*****
E	*****	*****	*****	*****	1.170	1.130	0.886	0.747	*****	*****	*****	*****
F	*****	*****	*****	*****	1.084	1.055	0.864	0.729	*****	*****	*****	*****
G	*****	*****	*****	*****	0.919	1.005	0.763	0.726	*****	*****	*****	*****
H	*****	*****	*****	*****	1.155	1.048	0.704	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

REVELATION DSX 6.15

TEST NO.   :
TEST NAME   : BENZODIAZEPINE GROUP ACCURACY
PLATE   : AccuracyBenzOpi2912

W/L MODE   : SINGLE   DATE   : 2/9/2012
TEST FILTER   : 450 nm   TIME   : 4:40:51 PM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : BENZODIAZEPINE GROUP ACCURACY, BGF-0060/111205, 12-28-12/12-5-13
Plate Lot Data   : AccuracyBenzOpi2912, ,
Reagent Lot Data : Acid Stop, 120209,
                          : BENZODIAZEPINE GROUP CONJUGATE, 049, 12-28-12
                          : EIA Buffer, 120209,
                          : K-Blue, 120209,
                          : OPIATE GROUP CONJUGATE, 043, 1-10-13
                          : BENZODIAZEPINE GROUP CUTOFF, 110811-WB, 12-28-12
                          : BENZODIAZEPINE GROUP NEGATIVE, 110811-WB, 12-28-12
                          : GROUP 3 CUTOFF, 120209,
                          : GROUP 3 NEGATIVE, 120209,
                          : Distilled Water, 120209,
                          : Neogen Wash Buffer, 120209,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.302>1.075

+ equation   = CO
                          = 1.075
- equation   = CO
                          = 1.075

	1	2	3	4	5	6	7	8	9	10	11	12
A	NC1	POS	POS	POS								
B	CO1	POS	POS	POS								
C	NNC1	POS	POS	POS								
D	NCO1	POS	POS	POS								
E	POS	POS	POS	POS								
F	POS	POS	POS	POS								
G	POS	POS	POS	POS								
H	POS	POS	POS									

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Benzodiaz -50%]	E1	0.736	0.753	0.040	5.319%	POS
	F1	0.731				
	G1	0.746				
	H1	0.807				
	A2	0.730				
	B2	0.729				
	C2	0.697				
	D2	0.791				
	E2	0.811				
[Benzodiaz CO]	F2	0.837	0.828	0.067	8.057%	POS
	G2	0.849				
	H2	0.967				
	A3	0.727				
	B3	0.800				
	C3	0.809				
	D3	0.797				
	E3	0.791				
	F3	0.873				
[Benzodiaz +50%]	G3	0.796	0.721	0.034	4.788%	POS
	H3	0.710				
	A4	0.685				
	B4	0.726				
	C4	0.694				
	D4	0.689				
	E4	0.713				
	F4	0.746				
	G4	0.727				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	2.303	2.303	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B1	1.075	1.075	*****	*****	CO1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	C1	1.486	1.486	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	D1	0.575	0.575	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	2.303	0.730	0.727	0.685	*****	*****	*****	*****	*****	*****	*****	*****
B	1.075	0.729	0.800	0.726	*****	*****	*****	*****	*****	*****	*****	*****
C	1.486	0.697	0.809	0.694	*****	*****	*****	*****	*****	*****	*****	*****
D	0.575	0.791	0.797	0.689	*****	*****	*****	*****	*****	*****	*****	*****
E	0.736	0.811	0.791	0.713	*****	*****	*****	*****	*****	*****	*****	*****
F	0.731	0.837	0.873	0.746	*****	*****	*****	*****	*****	*****	*****	*****
G	0.746	0.849	0.796	0.727	*****	*****	*****	*****	*****	*****	*****	*****
H	0.807	0.967	0.710	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

REVELATION DSX 6.15

TEST NO.	:
TEST NAME	: COTININE ACCURACY
PLATE	: AccuracyCot2912

W/L MODE	: SINGLE	DATE		: 2/9/2012
TEST FILTER	: 450 nm	TIME		: 3:11:20 PM
REF. FILTER	: *	OPERATOR		: admin

Kit Lot Data : COTININE ACCURACY, CTI-0031/1102211, 4-23-12/2-21-13
Plate Lot Data : AccuracyCot2912, ,
Reagent Lot Data : Acid Stop, 120209,
: COTININE CONJUGATE, 032,
: EIA Buffer, 120209,
: K-Blue, 120209,
: COTININE CUTOFF, 024,
: COTININE NEGATIVE, 024,
: GROUP 3 CUTOFF, 120209,
: GROUP 3 NEGATIVE, 120209,
: Distilled Water, 120209,
: Neogen Wash Buffer, 120209,

OVER limit	: 3.500
Calculation mode	: Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.362>1.323

+ equation	= CO
	= 1.324
- equation	= CO
	= 1.324

	1	2	3	4	5	6	7	8	9	10	11	12
A	NC1	NEG	NEG	NEG								
B	CO1	NEG	NEG	NEG								
C	NNC1	NEG	NEG	NEG								
D	NCO1	NEG	NEG	NEG								
E	NEG	NEG	NEG	NEG								
F	NEG	NEG	NEG	NEG								
G	NEG	NEG	NEG	NEG								
H	NEG	NEG	NEG									

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Cotinine -50%]	E1	1.973	1.900	0.119	6.260%	NEG
	F1	1.980				
	G1	1.983				
	H1	2.073				
	A2	1.969				
	B2	1.758				
	C2	1.810				
	D2	1.794				
	E2	1.757				
[Cotinine CO]	F2	1.775	1.850	0.084	4.540%	NEG
	G2	1.837				
	H2	1.917				
	A3	2.034				
	B3	1.875				
	C3	1.834				
	D3	1.816				
	E3	1.797				
	F3	1.763				
[Cotinine +50%]	G3	1.801	1.892	0.079	4.163%	NEG
	H3	1.919				
	A4	2.057				
	B4	1.920				
	C4	1.927				
	D4	1.879				
	E4	1.853				
	F4	1.796				
	G4	1.876				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	2.363	2.363	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B1	1.324	1.324	*****	*****	CO1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	C1	0.523	0.523	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	D1	0.228	0.228	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	2.363	1.969	2.034	2.057	*****	*****	*****	*****	*****	*****	*****	*****
B	1.324	1.758	1.875	1.920	*****	*****	*****	*****	*****	*****	*****	*****
C	0.523	1.810	1.834	1.927	*****	*****	*****	*****	*****	*****	*****	*****
D	0.228	1.794	1.816	1.879	*****	*****	*****	*****	*****	*****	*****	*****
E	1.973	1.757	1.797	1.853	*****	*****	*****	*****	*****	*****	*****	*****
F	1.980	1.775	1.763	1.796	*****	*****	*****	*****	*****	*****	*****	*****
G	1.983	1.837	1.801	1.876	*****	*****	*****	*****	*****	*****	*****	*****
H	2.073	1.917	1.919		*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

TEST NO.   :
TEST NAME   : OPIATE GROUP ACCURACY
PLATE   : AccuracyBenzOpi2912

W/L MODE   : SINGLE   DATE   : 2/9/2012
TEST FILTER   : 450 nm   TIME   : 4:40:51 PM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : OPIATE GROUP ACCURACY, MOF-0055/120105F, 1-10-13/1-5-14
Plate Lot Data   : AccuracyBenzOpi2912, ,
Reagent Lot Data   : Acid Stop, 120209,
                          : EIA Buffer, 120209,
                          : K-Blue, 120209,
                          : OPIATE GROUP CONJUGATE, 043, 1-10-13
                          : GROUP 3 CUTOFF, 120209,
                          : GROUP 3 NEGATIVE, 120209,
                          : OPIATE GROUP CUTOFF, 110715-WB, 1-10-13
                          : OPIATE GROUP NEGATIVE, 110715-WB, 1-10-13
                          : Distilled Water, 120209,
                          : Neogen Wash Buffer, 120209,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.039>1.044

+ equation   = CO
                          = 1.045
- equation   = CO
                          = 1.045

	1	2	3	4	5	6	7	8	9	10	11	12
A					NC1	NEG	NEG	NEG				
B					CO1	NEG	NEG	NEG				
C					NNC1	NEG	NEG	NEG				
D					NCO1	NEG	NEG	NEG				
E					NEG	NEG	NEG	NEG				
F					NEG	NEG	NEG	NEG				
G					NEG	NEG	NEG	NEG				
H					NEG	NEG	NEG					

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Opiate -50%]	E5	1.684	1.675	0.072	4.285%	NEG
	F5	1.648				
	G5	1.719				
	H5	1.731				
	A6	1.769				
	B6	1.595				
	C6	1.737				
	D6	1.552				
	E6	1.643				
[Opiate CO]	F6	1.686	1.641	0.105	6.369%	NEG
	G6	1.705				
	H6	1.770				
	A7	1.676				
	B7	1.678				
	C7	1.561				
	D7	1.481				
	E7	1.489				
	F7	1.725				
[Opiate +50%]	G7	1.707	1.593	0.099	6.192%	NEG
	H7	1.639				
	A8	1.547				
	B8	1.693				
	C8	1.640				
	D8	1.445				
	E8	1.647				
	F8	1.440				
	G8	1.575				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A5	2.039	2.039	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B5	1.045	1.045	*****	*****	CO1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	C5	1.915	1.915	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	D5	1.040	1.040	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
   0 Indicates an equivocal response
   * Indicates an unread well or value out of range
   # Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	2.039	1.769	1.676	1.547	*****	*****	*****	*****
B	*****	*****	*****	*****	1.045	1.595	1.678	1.693	*****	*****	*****	*****
C	*****	*****	*****	*****	1.915	1.737	1.561	1.640	*****	*****	*****	*****
D	*****	*****	*****	*****	1.040	1.552	1.481	1.445	*****	*****	*****	*****
E	*****	*****	*****	*****	1.684	1.643	1.489	1.647	*****	*****	*****	*****
F	*****	*****	*****	*****	1.648	1.686	1.725	1.440	*****	*****	*****	*****
G	*****	*****	*****	*****	1.719	1.705	1.707	1.575	*****	*****	*****	*****
H	*****	*****	*****	*****	1.731	1.770	1.639	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

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```
TEST NO.            :
TEST NAME           : OXYCODONE-OXYMORPHONE ACCURACY
PLATE               : AccuracyMAmpOxyTHC2912

W/L MODE            : SINGLE          DATE        : 2/9/2012
TEST FILTER         : 450 nm          TIME        : 4:13:44 PM
REF. FILTER         : *               OPERATOR    : admin

Kit Lot Data        : OXYCODONE-OXYMORPHONE ACCURACY, OXF-0036/110506F, 1-16-13/5-6-13
Plate Lot Data      : AccuracyMAmpOxyTHC2912, ,
Reagent Lot Data    : Acid Stop, 120209, ,
                    : EIA Buffer, 120209,
                    : K-Blue, 120209,
                    : OXYCODONE/OXYMORPHONE CONJUGATE, 028, 1-16-13
                    : GROUP 2 CUTOFF, 120209,
                    : GROUP 2 NEGATIVE, 120209,
                    : OXYCODONE/OXYMORPHONE CUTOFF, 120117-WB, 1-16-13
                    : OXYCODONE/OXYMORPHONE NEGATIVE, 120117-WB, 1-16-13
                    : Distilled Water, 120209,
                    : Neogen Wash Buffer, 120209,

OVER limit          : 3.500
Calculation mode    : Endpoint
```

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.622>0.963

+ equation	= CO
	= 0.964
- equation	= CO
	= 0.964

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	1	2	3	4	5	6	7	8	9	10	11	12
A					NC1	NEG	NEG	POS				
B					CO1	NEG	NEG	POS				
C					NNC1	NEG	NEG	POS				
D					NCO1	NEG	NEG	POS				
E					NEG	NEG	NEG	POS				
F					NEG	NEG	NEG	POS				
G					NEG	NEG	POS	POS				
H					NEG	NEG	POS					

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Oxycodone -50%]	E5	1.574	1.488	0.079	5.318%	NEG
	F5	1.430				
	G5	1.504				
	H5	1.523				
	A6	1.564				
	B6	1.524				
	C6	1.486				
	D6	1.313				
	E6	1.469				
[Oxycodone CO]	F6	1.290	1.185	0.067	5.684%	NEG
	G6	1.123				
	H6	1.250				
	A7	1.241				
	B7	1.191				
	C7	1.194				
	D7	1.120				
	E7	1.169				
	F7	1.088				
[Oxycodone +50%]	G7	0.928	0.897	0.057	6.389%	POS
	H7	0.887				
	A8	0.894				
	B8	0.851				
	C8	0.840				
	D8	0.882				
	E8	0.904				
	F8	0.855				
	G8	1.030				

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Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A5	2.622	2.622	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B5	0.964	0.964	*****	*****	CO1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	C5	2.533	2.533	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	D5	1.263	1.263	*****	*****	NCO1

```
[...]   Indicates manual entry if Sample ID is bracketed
*****   Indicates an unread well or value out of range
  0     Indicates an equivocal response
  *     Indicates an unread well or value out of range
  #     Indicates combined data
```

DATA MATRIX/TABLE : OD

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	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	2.622	1.564	1.241	0.894	*****	*****	*****	*****
B	*****	*****	*****	*****	0.964	1.524	1.191	0.851	*****	*****	*****	*****
C	*****	*****	*****	*****	2.533	1.486	1.194	0.840	*****	*****	*****	*****
D	*****	*****	*****	*****	1.263	1.313	1.120	0.882	*****	*****	*****	*****
E	*****	*****	*****	*****	1.574	1.469	1.169	0.904	*****	*****	*****	*****
F	*****	*****	*****	*****	1.430	1.290	1.088	0.855	*****	*****	*****	*****
G	*****	*****	*****	*****	1.504	1.123	0.928	1.030	*****	*****	*****	*****
H	*****	*****	*****	*****	1.523	1.250	0.887	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Page 1 (top-left)

TEST NO. :
TEST NAME : THC ACCURACY
PLATE : AccuracyMAmpOxyTHC2912

W/L MODE : SINGLE   DATE   : 2/9/2012
TEST FILTER : 450 nm   TIME   : 4:13:44 PM
REF. FILTER : *   OPERATOR : admin

Kit Lot Data : THC ACCURACY, TCF-0054/111221, 12-26-12/12-21-13
Plate Lot Data : AccuracyMAmpOxyTHC2912, ,
Reagent Lot Data : Acid Stop, 120209,
: EIA Buffer, 120209,
: K-Blue, 120209,
: THC CONJUGATE, 043, 12-26-12
: GROUP 2 CUTOFF, 120209,
: GROUP 2 NEGATIVE, 120209,
: THC CUTOFF, 110826-WB, 12-26-12
: THC NEGATIVE, 110826-WB, 12-26-12
: Distilled Water, 120209,
: Neogen Wash Buffer, 120209,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.742>1.035

+ equation   = CO
                    = 1.036
- equation   = CO
                    = 1.036

Page 2 (top-right)

	1	2	3	4	5	6	7	8	9	10	11	12
A									NC1	POS	POS	POS
B									CO1	POS	POS	POS
C									NNC1	POS	POS	POS
D									NCO1	POS	POS	POS
E									POS	POS	POS	POS
F									POS	POS	POS	POS
G									POS	POS	POS	POS
H									POS	POS	POS	

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[THC -50%]	E9	0.792	0.802	0.073	9.087%	POS
	F9	0.719				
	G9	0.760				
	H9	0.797				
	A10	0.929				
	B10	0.844				
	C10	0.840				
	D10	0.690				
	E10	0.844				
[THC CO]	F10	1.067	0.978	0.075	7.713%	POS
	G10	1.007				
	H10	1.034				
	A11	1.010				
	B11	0.999				
	C11	0.968				
	D11	0.970				
	E11	0.946				
	F11	0.802				
[THC +50%]	G11	1.028	0.884	0.130	14.720%	POS
	H11	0.714				
	A12	1.007				
	B12	0.923				
	C12	0.917				
	D12	0.808				
	E12	0.927				
	F12	0.656				
	G12	0.977				

Page 3 (bottom-left)

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A9	1.742	1.742	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B9	1.036	1.036	*****	*****	CO1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	C9	1.635	1.635	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	D9	0.688	0.688	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

Page 4 (bottom-right)

Plate ID: AccuracyMAmpOxyTHC2912   THC

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	*****	*****	*****	*****	1.742	0.929	1.010	1.007
B	*****	*****	*****	*****	*****	*****	*****	*****	1.036	0.844	0.999	0.923
C	*****	*****	*****	*****	*****	*****	*****	*****	1.635	0.840	0.968	0.917
D	*****	*****	*****	*****	*****	*****	*****	*****	0.688	0.690	0.970	0.808
E	*****	*****	*****	*****	*****	*****	*****	*****	0.792	0.844	0.946	0.927
F	*****	*****	*****	*****	*****	*****	*****	*****	0.719	1.067	0.802	0.656
G	*****	*****	*****	*****	*****	*****	*****	*****	0.760	1.007	1.028	0.977
H	*****	*****	*****	*****	*****	*****	*****	*****	0.797	1.034	0.714	*****

***** Indicates an unread well or value out of range

Dynex Technologies

Appendix F

ELISA Results for Validation #2

Kit, Plate, and Reagent Lot Data

Date: 03/06/2012

ASSAY	Amphetamine Ultra	Benzodiazepine Group	Cocaine/BZE	Cotinine	Opiate Group	Oxycodone/ Oxymorphone	THC
Kit #	AUF-0046	BGF-0060	BZF-0073	CTI-0031	MOF-0055	OXF-0036	TCF-0054
Kit Exp. Date	1/8/2013	12/28/2012	11/9/2012	4/23/2012	1/5/2014	1/16/2013	12/26/2012
Plate #	111214	111205	111121F	1102211	120105F	110506F	111221
Plate Exp. Date	12/14/2013	12/5/2013	11/21/2013	2/21/2013	1/5/2014	5/6/2013	12/21/2013
C/O & NEG lot #	111212-WB	110811-WB	111110-WB	24	110715-WB	120117-WB	110826-WB
C/O & NEG Exp. Date	1/8/2013	12/28/2012	11/9/2012	-	1/10/2013	1/16/2013	12/26/2012
CONJ lot #	035	049	053	032	043	028	043
CONJ Exp.	1/8/2013	12/28/2012	11/9/2012	-	1/10/2013	1/16/2013	12/26/2012

Acid Stop, EIA Buffer, K-Blue, Distilled Water, and Neogen Wash Buffer were prepared on 03/06/2012
Negative and Cutoff Calibrators were prepared 03/06/2012

Kit, Plate, and Reagent Lot Data

Date: 03/07/2012

ASSAY	Amphetamine Ultra	Benzodiazepine Group	Cocaine/BZE	Cotinine	Opiate Group	Oxycodone/ Oxymorphone	THC
Kit #	AUF-0046	BGF-0060	BZF-0073	CTI-0031	MOF-0055	OXF-0036	TCF-0054
Kit Exp. Date	1/8/2013	12/28/2012	11/9/2012	4/23/2012	1/5/2014	1/16/2013	12/26/2012
Plate #	111214	111205	111121F	1102211	120105F	110506F	111221
Plate Exp. Date	12/14/2013	12/5/2013	11/21/2013	2/21/2013	1/5/2014	5/6/2013	12/21/2013
C/O & NEG lot #	111212-WB	110811-WB	111110-WB	24	110715-WB	120117-WB	110826-WB
C/O & NEG Exp. Date	1/8/2013	12/28/2012	11/9/2012	-	1/10/2013	1/16/2013	12/26/2012
CONJ lot #	035	049	053	032	043	028	043
CONJ Exp.	1/8/2013	12/28/2012	11/9/2012	-	1/10/2013	1/16/2013	12/26/2012

Acid Stop, EIA Buffer, K-Blue, Distilled Water, and Neogen Wash Buffer were prepared on 03/07/2012
Negative and Cutoff Calibrators were prepared 03/07/2012

Kit, Plate, and Reagent Lot Data

Date: 03/08/2012

ASSAY	Amphetamine Ultra	Benzodiazepine Group	Cocaine/BZE	Cotinine	Opiate Group	Oxycodone/ Oxymorphone	THC
Kit #	AUF-0046	BGF-0060	BZF-0073	CTI-0031	MOF-0055	OXF-0036	TCF-0054
Kit Exp. Date	1/8/2013	12/28/2012	11/9/2012	4/23/2012	1/5/2014	1/16/2013	12/26/2012
Plate #	111214	111205	111121F	1102211	120105F	110506F	111221
Plate Exp. Date	12/14/2013	12/5/2013	11/21/2013	2/21/2013	1/5/2014	5/6/2013	12/21/2013
C/O & NEG lot #	111212-WB	110811-WB	111110-WB	24	110715-WB	120117-WB	110826-WB
C/O & NEG Exp. Date	1/8/2013	12/28/2012	11/9/2012	-	1/10/2013	1/16/2013	12/26/2012
CONJ lot #	035	049	053	032	043	028	043
CONJ Exp.	1/8/2013	12/28/2012	11/9/2012	-	1/10/2013	1/16/2013	12/26/2012

Acid Stop, EIA Buffer, K-Blue, Distilled Water, and Neogen Wash Buffer were prepared on 03/08/2012
Negative and Cutoff Calibrators were prepared 03/08/2012

REVELATION DSX 6.15

TEST NO.	:
TEST NAME	: AMPHETAMINE ULTRA
PLATE	: Drift AmpOxy120306

W/L MODE	: SINGLE	DATE	: 3/6/2012
TEST FILTER	: 450 nm	TIME	: 5:53:08 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : AMPHETAMINE ULTRA, ,
Plate Lot Data : Drift AmpOxy120306, ,
Reagent Lot Data : Acid Stop, ,
: AMPHETAMINE ULTRA CONJUGATE, ,
: EIA Buffer, ,
: K-Blue, ,
: OXYCODONE/OXYMORPHONE CONJUGATE, ,
: AMPHETAMINE ULTRA CUTOFF, ,
: AMPHETAMINE ULTRA NEGATIVE, ,
: GROUP 1 CUTOFF, ,
: GROUP 1 NEGATIVE, ,
: Distilled Water, ,
: Neogen Wash Buffer, ,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.180>0.875

+ equation   = CO
                    = 0.875
- equation   = CO
                    = 0.875

	1	2	3	4	5	6	7	8	9	10	11	12
A	NC1	NEG	NEG									
B	CO1	NEG	NEG									
C	CO1	NEG	NEG									
D	NNC1	NEG	NEG									
E	NCO1	NEG	NEG									
F	NEG	NEG	NEG									
G	NEG	NEG	NEG									
H	NEG	NEG	NEG									

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Blank 1]	F1	1.365	1.365	*****	*****	NEG
[Blank 2]	G1	1.348	1.348	*****	*****	NEG
[Blank 3]	H1	1.400	1.400	*****	*****	NEG
[Blank 4]	A2	1.844	1.844	*****	*****	NEG
[Blank 5]	B2	1.711	1.711	*****	*****	NEG
[Blank 6]	C2	1.596	1.596	*****	*****	NEG
[Blank 7]	D2	1.449	1.449	*****	*****	NEG
[Blank 8]	E2	1.374	1.374	*****	*****	NEG
[Blank 9]	F2	1.206	1.206	*****	*****	NEG
[Blank 10]	G2	1.449	1.449	*****	*****	NEG
[Blank 11]	H2	1.492	1.492	*****	*****	NEG
[Blank 12]	A3	1.245	1.245	*****	*****	NEG
[Blank 13]	B3	1.812	1.812	*****	*****	NEG
[Blank 14]	C3	1.628	1.628	*****	*****	NEG
[Blank 15]	D3	1.045	1.045	*****	*****	NEG
[Blank 16]	E3	1.757	1.757	*****	*****	NEG
[Blank 17]	F3	1.699	1.699	*****	*****	NEG
[Group 1 NEG]	G3	1.416	1.416	*****	*****	NEG
[Group 1 CO]	H3	1.064	1.064	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	1.181	1.181	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B1	0.881	0.875	0.008	0.906%	CO1
	C1	0.870				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	D1	1.352	1.352	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	E1	1.089	1.089	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.181	1.844	1.245	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	0.881	1.711	1.812	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	0.870	1.596	1.628	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.352	1.449	1.045	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.089	1.374	1.757	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.365	1.206	1.699	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.348	1.449	1.416	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.400	1.492	1.064	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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TEST NO.           :
TEST NAME          : OXYCODONE-OXYMORPHONE
PLATE              : Drift AmpOxy120306

W/L MODE           : SINGLE          DATE       : 3/6/2012
TEST FILTER        : 450 nm          TIME       : 5:53:08 PM
REF. FILTER        : *               OPERATOR   : admin

Kit Lot Data       : OXYCODONE-OXYMORPHONE, ,
Plate Lot Data     : Drift AmpOxy120306, ,
Reagent Lot Data   : Acid Stop, ,
                   : EIA Buffer, ,
                   : K-Blue, ,
                   : OXYCODONE/OXYMORPHONE CONJUGATE, ,
                   : GROUP 1 CUTOFF, ,
                   : GROUP 1 NEGATIVE, ,
                   : OXYCODONE/OXYMORPHONE CUTOFF, ,
                   : OXYCODONE/OXYMORPHONE NEGATIVE, ,
                   : Distilled Water, ,
                   : Neogen Wash Buffer, ,

OVER limit         : 3.500
Calculation mode   : Endpoint
```

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.296>1.277

+ equation   = CO
                = 1.278
- equation   = CO
                = 1.278

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	1	2	3	4	5	6	7	8	9	10	11	12
A				NC1	NEG	NEG						
B				CO1	NEG	NEG						
C				CO1	NEG	NEG						
D				NNC1	NEG	NEG						
E				NCO1	NEG	NEG						
F				NEG	NEG	NEG						
G				NEG	NEG	NEG						
H				NEG	NEG	NEG						

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Blank 1]	F4	2.139	2.139	*****	*****	NEG
[Blank 2]	G4	2.389	2.389	*****	*****	NEG
[Blank 3]	H4	2.405	2.405	*****	*****	NEG
[Blank 4]	A5	2.340	2.340	*****	*****	NEG
[Blank 5]	B5	2.183	2.183	*****	*****	NEG
[Blank 6]	C5	2.279	2.279	*****	*****	NEG
[Blank 7]	D5	2.117	2.117	*****	*****	NEG
[Blank 8]	E5	2.110	2.110	*****	*****	NEG
[Blank 9]	F5	2.190	2.190	*****	*****	NEG
[Blank 10]	G5	2.098	2.098	*****	*****	NEG
[Blank 11]	H5	2.352	2.352	*****	*****	NEG
[Blank 12]	A6	2.421	2.421	*****	*****	NEG
[Blank 13]	B6	2.331	2.331	*****	*****	NEG
[Blank 14]	C6	2.200	2.200	*****	*****	NEG
[Blank 15]	D6	2.269	2.269	*****	*****	NEG
[Blank 16]	E6	2.215	2.215	*****	*****	NEG
[Blank 17]	F6	2.269	2.269	*****	*****	NEG
[Group 1 NEG]	G6	1.982	1.982	*****	*****	NEG
[Group 1 CO]	H6	1.419	1.419	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A4	2.297	2.297	*****	*****	NC1

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Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B4	1.415	1.278	0.194	15.203%	CO1
	C4	1.140				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	D4	2.253	2.253	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	E4	0.883	0.883	*****	*****	NCO1

```
[...]  Indicates manual entry if Sample ID is bracketed
*****  Indicates an unread well or value out of range
  0    Indicates an equivocal response
  *    Indicates an unread well or value out of range
  #    Indicates combined data
```

DATA MATRIX/TABLE : OD

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	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	2.297	2.340	2.421	*****	*****	*****	*****	*****	*****
B	*****	*****	*****	1.415	2.183	2.331	*****	*****	*****	*****	*****	*****
C	*****	*****	*****	1.140	2.279	2.200	*****	*****	*****	*****	*****	*****
D	*****	*****	*****	2.253	2.117	2.269	*****	*****	*****	*****	*****	*****
E	*****	*****	*****	0.883	2.110	2.215	*****	*****	*****	*****	*****	*****
F	*****	*****	*****	2.139	2.190	2.269	*****	*****	*****	*****	*****	*****
G	*****	*****	*****	2.389	2.098	1.982	*****	*****	*****	*****	*****	*****
H	*****	*****	*****	2.405	2.352	1.419	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

REVELATION DSX 6.15

TEST NO.	:
TEST NAME	: BENZODIAZEPINE GROUP
PLATE	: Drift BenzCocOpiTHC120306

W/L MODE	: SINGLE	DATE	: 3/6/2012
TEST FILTER	: 450 nm	TIME	: 5:45:34 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : BENZODIAZEPINE GROUP, ,
Plate Lot Data : Drift BenzCocOpiTHC120306 , ,
Reagent Lot Data : Acid Stop, ,
: BENZODIAZEPINE GROUP CONJUGATE, ,
: COCAINE/BZE CONJUGATE, ,
: EIA Buffer, ,
: K-Blue, ,
: OPIATE GROUP CONJUGATE, ,
: THC CONJUGATE, ,
: BENZODIAZEPINE GROUP CUTOFF, ,
: BENZODIAZEPINE GROUP NEGATIVE, ,
: GROUP 2 CUTOFF, ,
: GROUP 2 NEGATIVE, ,
: Distilled Water, ,
: Neogen Wash Buffer, ,

OVER limit	: 3.500
Calculation mode	: Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.618>0.731

+ equation	= CO	
	= 0.731	
- equation	= CO	
	= 0.731	

	1	2	3	4	5	6	7	8	9	10	11	12
A	NC1	NEG	NEG									
B	CO1	NEG	NEG									
C	CO1	NEG	NEG									
D	NNC1	NEG	NEG									
E	NCO1	NEG	NEG									
F	NEG	NEG	NEG									
G	NEG	NEG	NEG									
H	NEG	NEG	NEG									

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Blank 1]	F1	1.943	1.943	*****	*****	NEG
[Blank 2]	G1	1.890	1.890	*****	*****	NEG
[Blank 3]	H1	1.901	1.901	*****	*****	NEG
[Blank 4]	A2	2.002	2.002	*****	*****	NEG
[Blank 5]	B2	2.145	2.145	*****	*****	NEG
[Blank 6]	C2	2.067	2.067	*****	*****	NEG
[Blank 7]	D2	1.910	1.910	*****	*****	NEG
[Blank 8]	E2	1.931	1.931	*****	*****	NEG
[Blank 9]	F2	1.897	1.897	*****	*****	NEG
[Blank 10]	G2	2.249	2.249	*****	*****	NEG
[Blank 11]	H2	2.057	2.057	*****	*****	NEG
[Blank 12]	A3	1.910	1.910	*****	*****	NEG
[Blank 13]	B3	1.875	1.875	*****	*****	NEG
[Blank 14]	C3	1.758	1.758	*****	*****	NEG
[Blank 15]	D3	1.815	1.815	*****	*****	NEG
[Blank 16]	E3	2.171	2.171	*****	*****	NEG
[Blank 17]	F3	2.134	2.134	*****	*****	NEG
[Group 2 NEG]	G3	1.848	1.848	*****	*****	NEG
[Group 2 CO]	H3	0.867	0.867	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	1.618	1.618	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B1	0.608	0.731	0.174	23.834%	CO1
	C1	0.854				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	D1	1.313	1.313	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	E1	0.388	0.388	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.618	2.002	1.910	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	0.608	2.145	1.875	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	0.854	2.067	1.758	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.313	1.910	1.815	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	0.388	1.931	2.171	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.943	1.897	2.134	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.890	2.249	1.848	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.901	2.057	0.867	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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TEST NO.   :
TEST NAME   : COCAINE-BZE
PLATE   : Drift BenzCocOpiTHC120306

W/L MODE   : SINGLE   DATE   : 3/6/2012
TEST FILTER   : 450 nm   TIME   : 5:45:34 PM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : COCAINE-BZE, ,
Plate Lot Data   : Drift BenzCocOpiTHC120306 , ,
Reagent Lot Data   : Acid Stop, ,
                     : COCAINE/BZE CONJUGATE, ,
                     : EIA Buffer, ,
                     : K-Blue, ,
                     : COCAINE/BZE CUTOFF, ,
                     : COCAINE/BZE NEGATIVE, ,
                     : GROUP 2 CUTOFF, ,
                     : GROUP 2 NEGATIVE, ,
                     : Distilled Water, ,
                     : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.107>1.029

+ equation   = CO
                     = 1.030
- equation   = CO
                     = 1.030

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	1	2	3	4	5	6	7	8	9	10	11	12
A				NC1	NEG	NEG						
B				CO1	POS	POS						
C				CO1	POS	POS						
D				NNC1	POS	POS						
E				NCO1	POS	POS						
F				NEG	POS	POS						
G				NEG	POS	POS						
H				NEG	POS	POS						

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Blank 1]	F4	1.356	1.356	*****	*****	NEG
[Blank 2]	G4	1.336	1.336	*****	*****	NEG
[Blank 3]	H4	1.399	1.399	*****	*****	NEG
[Blank 4]	A5	1.078	1.078	*****	*****	NEG
[Blank 5]	B5	1.029	1.029	*****	*****	POS
[Blank 6]	C5	0.953	0.953	*****	*****	POS
[Blank 7]	D5	0.932	0.932	*****	*****	POS
[Blank 8]	E5	0.942	0.942	*****	*****	POS
[Blank 9]	F5	0.970	0.970	*****	*****	POS
[Blank 10]	G5	0.925	0.925	*****	*****	POS
[Blank 11]	H5	0.907	0.907	*****	*****	POS
[Blank 12]	A6	1.191	1.191	*****	*****	NEG
[Blank 13]	B6	1.000	1.000	*****	*****	POS
[Blank 14]	C6	0.905	0.905	*****	*****	POS
[Blank 15]	D6	0.982	0.982	*****	*****	POS
[Blank 16]	E6	0.919	0.919	*****	*****	POS
[Blank 17]	F6	0.947	0.947	*****	*****	POS
[Group 2 NEG]	G6	0.841	0.841	*****	*****	POS
[Group 2 CO]	H6	0.582	0.582	*****	*****	POS

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A4	1.107	1.107	*****	*****	NC1

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Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B4	1.021	1.030	0.012	1.209%	CO1
	C4	1.039				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	D4	0.691	0.691	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	E4	0.328	0.328	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

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	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	1.107	1.078	1.191	*****	*****	*****	*****	*****	*****
B	*****	*****	*****	1.021	1.029	1.000	*****	*****	*****	*****	*****	*****
C	*****	*****	*****	1.039	0.953	0.905	*****	*****	*****	*****	*****	*****
D	*****	*****	*****	0.691	0.932	0.982	*****	*****	*****	*****	*****	*****
E	*****	*****	*****	0.328	0.942	0.919	*****	*****	*****	*****	*****	*****
F	*****	*****	*****	1.356	0.970	0.947	*****	*****	*****	*****	*****	*****
G	*****	*****	*****	1.336	0.925	0.841	*****	*****	*****	*****	*****	*****
H	*****	*****	*****	1.399	0.907	0.582	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

TEST NO. :
TEST NAME : OPIATE GROUP
PLATE : Drift BenzCocOpiTHC120306

W/L MODE : SINGLE DATE : 3/6/2012
TEST FILTER : 450 nm TIME : 5:45:34 PM
REF. FILTER : * OPERATOR : admin

Kit Lot Data : OPIATE GROUP, ,
Plate Lot Data : Drift BenzCocOpiTHC120306 , ,
Reagent Lot Data : Acid Stop, ,
: EIA Buffer, ,
: K-Blue, ,
: OPIATE GROUP CONJUGATE, ,
: GROUP 2 CUTOFF, ,
: GROUP 2 NEGATIVE, ,
: OPIATE GROUP CUTOFF, ,
: OPIATE GROUP NEGATIVE, ,
: Distilled Water, ,
: Neogen Wash Buffer, ,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.422>1.251

+ equation   = CO
       = 1.252
- equation   = CO
       = 1.252

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	1	2	3	4	5	6	7	8	9	10	11	12
A							NC1	NEG	NEG			
B							CO1	NEG	NEG			
C							CO1	NEG	NEG			
D							NNC1	NEG	NEG			
E							NCO1	NEG	NEG			
F							NEG	NEG	NEG			
G							NEG	NEG	NEG			
H							NEG	NEG	POS			

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Blank 1]	F7	1.675	1.675	*****	*****	NEG
[Blank 2]	G7	1.661	1.661	*****	*****	NEG
[Blank 3]	H7	1.624	1.624	*****	*****	NEG
[Blank 4]	A8	1.641	1.641	*****	*****	NEG
[Blank 5]	B8	1.467	1.467	*****	*****	NEG
[Blank 6]	C8	1.693	1.693	*****	*****	NEG
[Blank 7]	D8	1.687	1.687	*****	*****	NEG
[Blank 8]	E8	1.691	1.691	*****	*****	NEG
[Blank 9]	F8	1.542	1.542	*****	*****	NEG
[Blank 10]	G8	1.550	1.550	*****	*****	NEG
[Blank 11]	H8	1.553	1.553	*****	*****	NEG
[Blank 12]	A9	1.619	1.619	*****	*****	NEG
[Blank 13]	B9	1.602	1.602	*****	*****	NEG
[Blank 14]	C9	1.433	1.433	*****	*****	NEG
[Blank 15]	D9	1.691	1.691	*****	*****	NEG
[Blank 16]	E9	1.546	1.546	*****	*****	NEG
[Blank 17]	F9	1.674	1.674	*****	*****	NEG
[Group 2 NEG]	G9	1.378	1.378	*****	*****	NEG
[Group 2 CO]	H9	1.178	1.178	*****	*****	POS

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A7	1.423	1.423	*****	*****	NC1

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Plate ID: Drift BenzCocOpiTHC120306 OPIATE GROUP

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B7	1.281	1.252	0.042	3.340%	CO1
	C7	1.222				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	D7	1.799	1.799	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	E7	0.940	0.940	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

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Plate ID: Drift BenzCocOpiTHC120306 OPIATE GROUP

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	*****	*****	1.423	1.641	1.619	*****	*****	*****
B	*****	*****	*****	*****	*****	*****	1.281	1.467	1.602	*****	*****	*****
C	*****	*****	*****	*****	*****	*****	1.222	1.693	1.433	*****	*****	*****
D	*****	*****	*****	*****	*****	*****	1.799	1.687	1.691	*****	*****	*****
E	*****	*****	*****	*****	*****	*****	0.940	1.691	1.546	*****	*****	*****
F	*****	*****	*****	*****	*****	*****	1.675	1.542	1.674	*****	*****	*****
G	*****	*****	*****	*****	*****	*****	1.661	1.550	1.378	*****	*****	*****
H	*****	*****	*****	*****	*****	*****	1.624	1.553	1.178	*****	*****	*****

***** Indicates an unread well or value out of range

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Page 21 (top-left)

Plate ID: Drift BenzCocOpiTHC120306   THC

TEST NO.	:
TEST NAME	: THC
PLATE	: Drift BenzCocOpiTHC120306
W/L MODE	: SINGLE DATE : 3/6/2012
TEST FILTER	: 450 nm TIME : 5:45:34 PM
REF. FILTER	: * OPERATOR : admin

Kit Lot Data : THC, ,
Plate Lot Data : Drift BenzCocOpiTHC120306 , ,
Reagent Lot Data : Acid Stop, ,
: EIA Buffer, ,
: K-Blue, ,
: THC CONJUGATE, ,
: GROUP 2 CUTOFF, ,
: GROUP 2 NEGATIVE, ,
: THC CUTOFF, ,
: THC NEGATIVE, ,
: Distilled Water, ,
: Neogen Wash Buffer, ,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.749>1.333

+ equation	= CO	= 1.334
- equation	= CO	= 1.334

Page 22 (top-right)

Plate ID: Drift BenzCocOpiTHC120306   THC

	1	2	3	4	5	6	7	8	9	10	11	12
A										NC1	NEG	NEG
B										CO1	NEG	POS
C										CO1	POS	POS
D										NNC1	POS	POS
E										NCO1	POS	POS
F										POS	POS	POS
G										NEG	POS	POS
H										NEG	NEG	POS

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Blank 1]	F10	1.181	1.181	*****	*****	POS
[Blank 2]	G10	1.671	1.671	*****	*****	NEG
[Blank 3]	H10	1.760	1.760	*****	*****	NEG
[Blank 4]	A11	1.468	1.468	*****	*****	NEG
[Blank 5]	B11	1.410	1.410	*****	*****	NEG
[Blank 6]	C11	0.955	0.955	*****	*****	POS
[Blank 7]	D11	1.297	1.297	*****	*****	POS
[Blank 8]	E11	1.318	1.318	*****	*****	POS
[Blank 9]	F11	1.274	1.274	*****	*****	POS
[Blank 10]	G11	1.220	1.220	*****	*****	POS
[Blank 11]	H11	1.409	1.409	*****	*****	NEG
[Blank 12]	A12	1.359	1.359	*****	*****	NEG
[Blank 13]	B12	1.323	1.323	*****	*****	POS
[Blank 14]	C12	1.285	1.285	*****	*****	POS
[Blank 15]	D12	1.234	1.234	*****	*****	POS
[Blank 16]	E12	1.251	1.251	*****	*****	POS
[Blank 17]	F12	1.232	1.232	*****	*****	POS
[Group 2 NEG]	G12	1.169	1.169	*****	*****	POS
[Group 2 CO]	H12	0.998	0.998	*****	*****	POS

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A10	1.749	1.749	*****	*****	NC1

Page 23 (bottom-left)

Plate ID: Drift BenzCocOpiTHC120306   THC

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B10	1.286	1.334	0.068	5.071%	CO1
	C10	1.382				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	D10	1.720	1.720	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	E10	0.671	0.671	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

Page 24 (bottom-right)

Plate ID: Drift BenzCocOpiTHC120306   THC

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.749	1.468	1.359
B	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.286	1.410	1.323
C	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.382	0.955	1.285
D	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.720	1.297	1.234
E	*****	*****	*****	*****	*****	*****	*****	*****	*****	0.671	1.318	1.251
F	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.181	1.274	1.232
G	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.671	1.220	1.169
H	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.760	1.409	0.998

***** Indicates an unread well or value out of range

Dynex Technologies

REVELATION DSX 6.15

TEST NO.   :
TEST NAME   : COTININE
PLATE   : Drift Cot120306

W/L MODE   : SINGLE   DATE   : 3/6/2012
TEST FILTER   : 450 nm   TIME   : 4:48:44 PM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : COTININE, ,
Plate Lot Data   : Drift Cot120306, ,
Reagent Lot Data   : Acid Stop, ,
                   : COTININE CONJUGATE, ,
                   : EIA Buffer, ,
                   : K-Blue, ,
                   : COTININE CUTOFF, ,
                   : COTININE NEGATIVE, ,
                   : GROUP 1 CUTOFF, ,
                   : GROUP 1 NEGATIVE, ,
                   : Distilled Water, ,
                   : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.975>1.729

+ equation   = CO
                   = 1.729
- equation   = CO
                   = 1.729

	1	2	3	4	5	6	7	8	9	10	11	12
A	NC1	NEG	NEG									
B	CO1	NEG	NEG									
C	CO1	NEG	NEG									
D	NNC1	NEG	NEG									
E	NCO1	NEG	NEG									
F	NEG	NEG	NEG									
G	NEG	NEG	NEG									
H	NEG	NEG	NEG									

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Blank 1]	F1	2.836	2.836	*****	*****	NEG
[Blank 2]	G1	2.889	2.889	*****	*****	NEG
[Blank 3]	H1	2.919	2.919	*****	*****	NEG
[Blank 4]	A2	2.958	2.958	*****	*****	NEG
[Blank 5]	B2	2.961	2.961	*****	*****	NEG
[Blank 6]	C2	2.997	2.997	*****	*****	NEG
[Blank 7]	D2	3.012	3.012	*****	*****	NEG
[Blank 8]	E2	2.922	2.922	*****	*****	NEG
[Blank 9]	F2	2.920	2.920	*****	*****	NEG
[Blank 10]	G2	3.010	3.010	*****	*****	NEG
[Blank 11]	H2	3.072	3.072	*****	*****	NEG
[Blank 12]	A3	3.012	3.012	*****	*****	NEG
[Blank 13]	B3	2.990	2.990	*****	*****	NEG
[Blank 14]	C3	2.998	2.998	*****	*****	NEG
[Blank 15]	D3	2.965	2.965	*****	*****	NEG
[Blank 16]	E3	2.950	2.950	*****	*****	NEG
[Blank 17]	F3	2.969	2.969	*****	*****	NEG
[Group 1 NEG]	G3	2.961	2.961	*****	*****	NEG
[Group 1 CO]	H3	1.801	1.801	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	2.976	2.976	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B1	1.777	1.729	0.068	3.954%	CO1
	C1	1.681				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	D1	2.175	2.175	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	E1	1.163	1.163	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
    0 Indicates an equivocal response
    * Indicates an unread well or value out of range
    # Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	2.976	2.958	3.012	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.777	2.961	2.990	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.681	2.997	2.998	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	2.175	3.012	2.965	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.163	2.922	2.950	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	2.836	2.920	2.969	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	2.889	3.010	2.961	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	2.919	3.072	1.801	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

REVELATION DSX 6.15

TEST NO.   :
TEST NAME   : COCAINE-BZE
PLATE   : Drift2 CocOpi120308

W/L MODE   : SINGLE   DATE   : 3/8/2012
TEST FILTER   : 450 nm   TIME   : 12:34:36 PM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : COCAINE-BZE, ,
Plate Lot Data   : Drift2 Oxy120308, ,
Reagent Lot Data   : Acid Stop, ,
                   : COCAINE/BZE CONJUGATE, ,
                   : EIA Buffer, ,
                   : K-Blue, ,
                   : OPIATE GROUP CONJUGATE, ,
                   : COCAINE/BZE CUTOFF, ,
                   : COCAINE/BZE NEGATIVE, ,
                   : GROUP 2 CUTOFF, ,
                   : GROUP 2 NEGATIVE, ,
                   : Distilled Water, ,
                   : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.453>1.164

+ equation   = CO
                   = 1.164
- equation   = CO
                   = 1.164

	1	2	3	4	5	6	7	8	9	10	11	12
A	NC1	NEG	NEG									
B	CO1	NEG	NEG									
C	CO1	NEG	NEG									
D	NNC1	NEG	NEG									
E	NCO1	NEG	NEG									
F	NEG	NEG	NEG									
G	NEG	NEG	NEG									
H	NEG	NEG	NEG									

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Blank 1]	F1	1.565	1.565	*****	*****	NEG
[Blank 2]	G1	1.615	1.615	*****	*****	NEG
[Blank 3]	H1	1.578	1.578	*****	*****	NEG
[Blank 4]	A2	1.674	1.674	*****	*****	NEG
[Blank 5]	B2	1.637	1.637	*****	*****	NEG
[Blank 6]	C2	1.668	1.668	*****	*****	NEG
[Blank 7]	D2	1.723	1.723	*****	*****	NEG
[Blank 8]	E2	1.650	1.650	*****	*****	NEG
[Blank 9]	F2	1.711	1.711	*****	*****	NEG
[Blank 10]	G2	1.672	1.672	*****	*****	NEG
[Blank 11]	H2	1.589	1.589	*****	*****	NEG
[Blank 12]	A3	1.721	1.721	*****	*****	NEG
[Blank 13]	B3	1.688	1.688	*****	*****	NEG
[Blank 14]	C3	1.721	1.721	*****	*****	NEG
[Blank 15]	D3	1.700	1.700	*****	*****	NEG
[Blank 16]	E3	1.602	1.602	*****	*****	NEG
[Blank 17]	F3	1.634	1.634	*****	*****	NEG
[Group II NEG]	G3	1.449	1.449	*****	*****	NEG
[Group II CO]	H3	1.180	1.180	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	1.454	1.454	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B1	1.174	1.164	0.013	1.127%	CO1
	C1	1.155				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	D1	0.851	0.851	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	E1	0.463	0.463	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
    0 Indicates an equivocal response
    * Indicates an unread well or value out of range
    # Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.454	1.674	1.721	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.174	1.637	1.688	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.155	1.668	1.721	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	0.851	1.723	1.700	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	0.463	1.650	1.602	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.565	1.711	1.634	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.615	1.672	1.449	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.578	1.589	1.180	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

TEST NO.   :
TEST NAME   : OPIATE GROUP
PLATE   : Drift2 CocOpi120308

W/L MODE   : SINGLE   DATE   : 3/8/2012
TEST FILTER   : 450 nm   TIME   : 12:34:36 PM
REF. FILTER   : *   OPERATOR : admin

Kit Lot Data   : OPIATE GROUP, ,
Plate Lot Data   : Drift2 Oxy120308, ,
Reagent Lot Data : Acid Stop, ,
                           : EIA Buffer, ,
                           : K-Blue, ,
                           : OPIATE GROUP CONJUGATE, ,
                           : GROUP 2 CUTOFF, ,
                           : GROUP 2 NEGATIVE, ,
                           : OPIATE GROUP CUTOFF, ,
                           : OPIATE GROUP NEGATIVE, ,
                           : Distilled Water, ,
                           : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.580>1.143

+ equation   = CO
                          = 1.143
- equation   = CO
                          = 1.143

	1	2	3	4	5	6	7	8	9	10	11	12
A				NC1	NEG	NEG						
B				CO1	NEG	NEG						
C				CO1	NEG	NEG						
D				NNC1	NEG	NEG						
E				NCO1	NEG	NEG						
F				NEG	NEG	NEG						
G				NEG	NEG	NEG						
H				NEG	NEG	NEG						

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Blank 1]	F4	1.698	1.698	*****	*****	NEG
[Blank 2]	G4	1.733	1.733	*****	*****	NEG
[Blank 3]	H4	1.817	1.817	*****	*****	NEG
[Blank 4]	A5	1.783	1.783	*****	*****	NEG
[Blank 5]	B5	1.657	1.657	*****	*****	NEG
[Blank 6]	C5	1.694	1.694	*****	*****	NEG
[Blank 7]	D5	1.696	1.696	*****	*****	NEG
[Blank 8]	E5	1.669	1.669	*****	*****	NEG
[Blank 9]	F5	1.744	1.744	*****	*****	NEG
[Blank 10]	G5	1.762	1.762	*****	*****	NEG
[Blank 11]	H5	1.815	1.815	*****	*****	NEG
[Blank 12]	A6	1.620	1.620	*****	*****	NEG
[Blank 13]	B6	1.613	1.613	*****	*****	NEG
[Blank 14]	C6	1.390	1.390	*****	*****	NEG
[Blank 15]	D6	1.469	1.469	*****	*****	NEG
[Blank 16]	E6	1.610	1.610	*****	*****	NEG
[Blank 17]	F6	1.599	1.599	*****	*****	NEG
[Group II NEG]	G6	1.407	1.407	*****	*****	NEG
[Group II CO]	H6	1.177	1.177	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A4	1.581	1.581	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B4	1.173	1.143	0.042	3.640%	CO1
	C4	1.114				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	D4	1.752	1.752	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	E4	0.859	0.859	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
   0   Indicates an equivocal response
   *   Indicates an unread well or value out of range
   #   Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	1.581	1.783	1.620	*****	*****	*****	*****	*****	*****
B	*****	*****	*****	1.173	1.657	1.613	*****	*****	*****	*****	*****	*****
C	*****	*****	*****	1.114	1.694	1.390	*****	*****	*****	*****	*****	*****
D	*****	*****	*****	1.752	1.696	1.469	*****	*****	*****	*****	*****	*****
E	*****	*****	*****	0.859	1.669	1.610	*****	*****	*****	*****	*****	*****
F	*****	*****	*****	1.698	1.744	1.599	*****	*****	*****	*****	*****	*****
G	*****	*****	*****	1.733	1.762	1.407	*****	*****	*****	*****	*****	*****
H	*****	*****	*****	1.817	1.815	1.177	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

REVELATION DSX 6.15

TEST NO.   :
TEST NAME   : OXYCODONE-OXYMORPHONE
PLATE   : Drift2 Oxy120308

W/L MODE   : SINGLE   DATE   : 3/8/2012
TEST FILTER   : 450 nm   TIME   : 12:21:53 PM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : OXYCODONE-OXYMORPHONE, ,
Plate Lot Data   : Drift2 CocOpi120308, ,
Reagent Lot Data   : Acid Stop, ,
                    : EIA Buffer, ,
                    : K-Blue, ,
                    : OXYCODONE/OXYMORPHONE CONJUGATE, ,
                    : GROUP 1 CUTOFF, ,
                    : GROUP 1 NEGATIVE, ,
                    : OXYCODONE/OXYMORPHONE CUTOFF, ,
                    : OXYCODONE/OXYMORPHONE NEGATIVE, ,
                    : Distilled Water, ,
                    : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.487>1.791

+ equation   = CO
                    = 1.792
- equation   = CO
                    = 1.792

	1	2	3	4	5	6	7	8	9	10	11	12
A	NC1	NEG	NEG									
B	CO1	NEG	NEG									
C	CO1	NEG	NEG									
D	NNC1	NEG	NEG									
E	NCO1	NEG	NEG									
F	NEG	NEG	NEG									
G	NEG	NEG	NEG									
H	NEG	NEG	POS									

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Blank 1]	F1	2.491	2.491	*****	*****	NEG
[Blank 2]	G1	2.554	2.554	*****	*****	NEG
[Blank 3]	H1	2.590	2.590	*****	*****	NEG
[Blank 4]	A2	2.551	2.551	*****	*****	NEG
[Blank 5]	B2	2.467	2.467	*****	*****	NEG
[Blank 6]	C2	2.495	2.495	*****	*****	NEG
[Blank 7]	D2	2.499	2.499	*****	*****	NEG
[Blank 8]	E2	2.647	2.647	*****	*****	NEG
[Blank 9]	F2	2.514	2.514	*****	*****	NEG
[Blank 10]	G2	2.560	2.560	*****	*****	NEG
[Blank 11]	H2	2.634	2.634	*****	*****	NEG
[Blank 12]	A3	2.563	2.563	*****	*****	NEG
[Blank 13]	B3	2.475	2.475	*****	*****	NEG
[Blank 14]	C3	2.572	2.572	*****	*****	NEG
[Blank 15]	D3	2.577	2.577	*****	*****	NEG
[Blank 16]	E3	2.485	2.485	*****	*****	NEG
[Blank 17]	F3	2.605	2.605	*****	*****	NEG
[Group I NEG]	G3	2.392	2.392	*****	*****	NEG
[Group I CO]	H3	1.766	1.766	*****	*****	POS

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	2.487	2.487	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B1	1.825	1.792	0.048	2.661%	CO1
	C1	1.758				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	D1	2.518	2.518	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	E1	1.418	1.418	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
    0 Indicates an equivocal response
    * Indicates an unread well or value out of range
    # Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	2.487	2.551	2.563	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.825	2.467	2.475	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.758	2.495	2.572	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	2.518	2.499	2.577	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.418	2.647	2.485	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	2.491	2.514	2.605	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	2.554	2.560	2.392	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	2.590	2.634	1.766	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

REVELATION DSX 6.15

TEST NO.	:
TEST NAME	: AMPHETAMINE ULTRA
PLATE	: Precision1 AmpOxy 120307

W/L MODE	: SINGLE	DATE	: 3/7/2012		
TEST FILTER	: 450 nm	TIME	: 2:32:12 PM		
REF. FILTER	: *	OPERATOR	: admin		

Kit Lot Data   : AMPHETAMINE ULTRA, ,
Plate Lot Data   : Precision1 AmpOxy 120307, ,
Reagent Lot Data   : Acid Stop, ,
                   : AMPHETAMINE ULTRA CONJUGATE, ,
                   : EIA Buffer, ,
                   : K-Blue, ,
                   : OXYCODONE/OXYMORPHONE CONJUGATE, ,
                   : AMPHETAMINE ULTRA CUTOFF, ,
                   : AMPHETAMINE ULTRA NEGATIVE, ,
                   : GROUP 1 CUTOFF, ,
                   : GROUP 1 NEGATIVE, ,
                   : Distilled Water, ,
                   : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.483>1.139

+ equation	= CO	
	= 1.140	
- equation	= CO	
	= 1.140	

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	1	2	3	4	5	6	7	8	9	10	11	12
A	NC1	NEG	NEG									
B	CO1	NEG	NEG									
C	CO1	POS	POS									
D	NNC1	NEG	NEG									
E	NCO1	POS	POS									
F	NEG	NEG	NEG									
G	POS	POS	POS									
H	NEG	NEG	NEG									

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Group 1 NEG 1]	F1	1.509	1.509	*****	*****	NEG
[Group 1 CO 1]	G1	1.099	1.099	*****	*****	POS
[Group 1 NEG 2]	H1	1.509	1.509	*****	*****	NEG
[Group 1 CO 2]	A2	1.154	1.154	*****	*****	NEG
[Group 1 NEG 3]	B2	1.465	1.465	*****	*****	NEG
[Group 1 CO 3]	C2	1.016	1.016	*****	*****	POS
[Group 1 NEG 4]	D2	1.357	1.357	*****	*****	NEG
[Group 1 CO 4]	E2	1.056	1.056	*****	*****	POS
[Group 1 NEG 5]	F2	1.343	1.343	*****	*****	NEG
[Group 1 CO 5]	G2	1.046	1.046	*****	*****	POS
[Group 1 NEG 6]	H2	1.490	1.490	*****	*****	NEG
[Group 1 CO 6]	A3	1.229	1.229	*****	*****	NEG
[Group 1 NEG 7]	B3	1.450	1.450	*****	*****	NEG
[Group 1 CO 7]	C3	1.131	1.131	*****	*****	POS
[Group 1 NEG 8]	D3	1.347	1.347	*****	*****	NEG
[Group 1 CO 8]	E3	1.089	1.089	*****	*****	POS
[Group 1 NEG 9]	F3	1.359	1.359	*****	*****	NEG
[Group 1 CO 9]	G3	1.036	1.036	*****	*****	POS
[Group 1 NEG 10]	H3	1.491	1.491	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	1.484	1.484	*****	*****	NC1

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Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B1	1.233	1.140	0.132	11.543%	CO1
	C1	1.047				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	D1	1.529	1.529	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	E1	1.034	1.034	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
   0 Indicates an equivocal response
   * Indicates an unread well or value out of range
   # Indicates combined data

DATA MATRIX/TABLE : OD

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	1	2	3	4	5	6	7	8	9	10	11	12
A	1.484	1.154	1.229	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.233	1.465	1.450	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.047	1.016	1.131	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.529	1.357	1.347	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.034	1.056	1.089	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.509	1.343	1.359	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.099	1.046	1.036	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.509	1.490	1.491	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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TEST NO.          :
TEST NAME         : OXYCODONE-OXYMORPHONE
PLATE             : Precision1 AmpOxy 120307

W/L MODE          : SINGLE        DATE       : 3/7/2012
TEST FILTER       : 450 nm        TIME       : 2:32:12 PM
REF. FILTER       : *             OPERATOR   : admin

Kit Lot Data      : OXYCODONE-OXYMORPHONE, ,
Plate Lot Data    : Precision1 AmpOxy 120307, ,
Reagent Lot Data  : Acid Stop, ,
                  : EIA Buffer, ,
                  : K-Blue, ,
                  : OXYCODONE/OXYMORPHONE CONJUGATE, ,
                  : GROUP 1 CUTOFF, ,
                  : GROUP 1 NEGATIVE, ,
                  : OXYCODONE/OXYMORPHONE CUTOFF, ,
                  : OXYCODONE/OXYMORPHONE NEGATIVE, ,
                  : Distilled Water, ,
                  : Neogen Wash Buffer, ,

OVER limit        : 3.500
Calculation mode  : Endpoint
```

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.254>1.430

+ equation   = CO
              = 1.430
- equation   = CO
              = 1.430

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	1	2	3	4	5	6	7	8	9	10	11	12
A				NC1	POS	POS						
B				CO1	NEG	NEG						
C				CO1	NEG	POS						
D				NNC1	NEG	NEG						
E				NCO1	NEG	POS						
F				NEG	NEG	NEG						
G				NEG	NEG	NEG						
H				NEG	NEG	NEG						

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Group 1 NEG 1]	F4	2.342	2.342	*****	*****	NEG
[Group 1 CO 1]	G4	1.524	1.524	*****	*****	NEG
[Group 1 NEG 2]	H4	2.458	2.458	*****	*****	NEG
[Group 1 CO 2]	A5	1.330	1.330	*****	*****	POS
[Group 1 NEG 3]	B5	2.241	2.241	*****	*****	NEG
[Group 1 CO 3]	C5	1.431	1.431	*****	*****	NEG
[Group 1 NEG 4]	D5	2.460	2.460	*****	*****	NEG
[Group 1 CO 4]	E5	1.507	1.507	*****	*****	NEG
[Group 1 NEG 5]	F5	2.307	2.307	*****	*****	NEG
[Group 1 CO 5]	G5	1.533	1.533	*****	*****	NEG
[Group 1 NEG 6]	H5	2.512	2.512	*****	*****	NEG
[Group 1 CO 6]	A6	1.332	1.332	*****	*****	POS
[Group 1 NEG 7]	B6	2.272	2.272	*****	*****	NEG
[Group 1 CO 7]	C6	1.388	1.388	*****	*****	POS
[Group 1 NEG 8]	D6	2.294	2.294	*****	*****	NEG
[Group 1 CO 8]	E6	1.389	1.389	*****	*****	POS
[Group 1 NEG 9]	F6	2.275	2.275	*****	*****	NEG
[Group 1 CO 9]	G6	1.488	1.488	*****	*****	NEG
[Group 1 NEG 10]	H6	2.442	2.442	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A4	2.254	2.254	*****	*****	NC1

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Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B4	1.465	1.430	0.049	3.418%	CO1
	C4	1.395				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	D4	2.487	2.487	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	E4	1.167	1.167	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

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	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	2.254	1.330	1.332	*****	*****	*****	*****	*****	*****
B	*****	*****	*****	1.465	2.241	2.272	*****	*****	*****	*****	*****	*****
C	*****	*****	*****	1.395	1.431	1.388	*****	*****	*****	*****	*****	*****
D	*****	*****	*****	2.487	2.460	2.294	*****	*****	*****	*****	*****	*****
E	*****	*****	*****	1.167	1.507	1.389	*****	*****	*****	*****	*****	*****
F	*****	*****	*****	2.342	2.307	2.275	*****	*****	*****	*****	*****	*****
G	*****	*****	*****	1.524	1.533	1.488	*****	*****	*****	*****	*****	*****
H	*****	*****	*****	2.458	2.512	2.442	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

REVELATION DSX 6.15

TEST NO.   :
TEST NAME   : BENZODIAZEPINE GROUP
PLATE   : Precision1 BenzCocOpiTHC 120307

W/L MODE   : SINGLE   DATE   : 3/7/2012
TEST FILTER   : 450 nm   TIME   : 2:24:51 PM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : BENZODIAZEPINE GROUP, ,
Plate Lot Data   : Precision1 BenzCocOpiTHC 120307, ,
Reagent Lot Data   : Acid Stop, ,
                   : BENZODIAZEPINE GROUP CONJUGATE, ,
                   : COCAINE/BZE CONJUGATE, ,
                   : EIA Buffer, ,
                   : K-Blue, ,
                   : OPIATE GROUP CONJUGATE, ,
                   : THC CONJUGATE, ,
                   : BENZODIAZEPINE GROUP CUTOFF, ,
                   : BENZODIAZEPINE GROUP NEGATIVE, ,
                   : GROUP 2 CUTOFF, ,
                   : GROUP 2 NEGATIVE, ,
                   : Distilled Water, ,
                   : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.056>0.946

+ equation   = CO
                   = 0.947
- equation   = CO
                   = 0.947

	1	2	3	4	5	6	7	8	9	10	11	12
A	NC1	POS	POS									
B	CO1	NEG	NEG									
C	CO1	NEG	POS									
D	NNC1	NEG	NEG									
E	NCO1	POS	POS									
F	NEG	NEG	NEG									
G	POS	POS	POS									
H	NEG	NEG	NEG									

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Group 2 NEG 1]	F1	1.935	1.935	*****	*****	NEG
[Group 2 CO 1]	G1	0.878	0.878	*****	*****	POS
[Group 2 NEG 2]	H1	1.995	1.995	*****	*****	NEG
[Group 2 CO 2]	A2	0.902	0.902	*****	*****	POS
[Group 2 NEG 3]	B2	2.074	2.074	*****	*****	NEG
[Group 2 CO 3]	C2	0.971	0.971	*****	*****	NEG
[Group 2 NEG 4]	D2	2.012	2.012	*****	*****	NEG
[Group 2 CO 4]	E2	0.816	0.816	*****	*****	POS
[Group 2 NEG 5]	F2	2.054	2.054	*****	*****	NEG
[Group 2 CO 5]	G2	0.886	0.886	*****	*****	POS
[Group 2 NEG 6]	H2	2.125	2.125	*****	*****	NEG
[Group 2 CO 6]	A3	0.838	0.838	*****	*****	POS
[Group 2 NEG 7]	B3	2.058	2.058	*****	*****	NEG
[Group 2 CO 7]	C3	0.914	0.914	*****	*****	POS
[Group 2 NEG 8]	D3	1.821	1.821	*****	*****	NEG
[Group 2 CO 8]	E3	0.698	0.698	*****	*****	POS
[Group 2 NEG 9]	F3	1.988	1.988	*****	*****	NEG
[Group 2 CO 9]	G3	0.905	0.905	*****	*****	POS
[Group 2 NEG 10]	H3	2.031	2.031	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	2.057	2.057	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B1	0.903	0.947	0.062	6.554%	CO1
	C1	0.991				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	D1	1.705	1.705	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	E1	0.644	0.644	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	2.057	0.902	0.838	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	0.903	2.074	2.058	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	0.991	0.971	0.914	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.705	2.012	1.821	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	0.644	0.816	0.698	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.935	2.054	1.988	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	0.878	0.886	0.905	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.995	2.125	2.031	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

S

TEST NO.   :
TEST NAME   : OPIATE GROUP
PLATE   : Precision1 BenzCocOpiTHC 120307

W/L MODE   : SINGLE   DATE   : 3/7/2012
TEST FILTER   : 450 nm   TIME   : 2:24:51 PM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : OPIATE GROUP, ,
Plate Lot Data   : Precision1 BenzCocOpiTHC 120307, ,
Reagent Lot Data   : Acid Stop, ,
                            : EIA Buffer, ,
                            : K-Blue, ,
                            : OPIATE GROUP CONJUGATE, ,
                            : GROUP 2 CUTOFF, ,
                            : GROUP 2 NEGATIVE, ,
                            : OPIATE GROUP CUTOFF, ,
                            : OPIATE GROUP NEGATIVE, ,
                            : Distilled Water, ,
                            : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.448>1.132

+ equation   = CO
                            = 1.133
- equation   = CO
                            = 1.133

	1	2	3	4	5	6	7	8	9	10	11	12
A							NC1	NEG	NEG			
B							CO1	NEG	NEG			
C							CO1	NEG	NEG			
D							NNC1	NEG	NEG			
E							NCO1	NEG	NEG			
F							NEG	NEG	NEG			
G							NEG	NEG	NEG			
H							NEG	NEG	NEG			

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Group 2 NEG 1]	F7	1.554	1.554	*****	*****	NEG
[Group 2 CO 1]	G7	1.213	1.213	*****	*****	NEG
[Group 2 NEG 2]	H7	1.647	1.647	*****	*****	NEG
[Group 2 CO 2]	A8	1.295	1.295	*****	*****	NEG
[Group 2 NEG 3]	B8	1.542	1.542	*****	*****	NEG
[Group 2 CO 3]	C8	1.162	1.162	*****	*****	NEG
[Group 2 NEG 4]	D8	1.495	1.495	*****	*****	NEG
[Group 2 CO 4]	E8	1.160	1.160	*****	*****	NEG
[Group 2 NEG 5]	F8	1.486	1.486	*****	*****	NEG
[Group 2 CO 5]	G8	1.179	1.179	*****	*****	NEG
[Group 2 NEG 6]	H8	1.573	1.573	*****	*****	NEG
[Group 2 CO 6]	A9	1.253	1.253	*****	*****	NEG
[Group 2 NEG 7]	B9	1.452	1.452	*****	*****	NEG
[Group 2 CO 7]	C9	1.253	1.253	*****	*****	NEG
[Group 2 NEG 8]	D9	1.505	1.505	*****	*****	NEG
[Group 2 CO 8]	E9	1.202	1.202	*****	*****	NEG
[Group 2 NEG 9]	F9	1.558	1.558	*****	*****	NEG
[Group 2 CO 9]	G9	1.287	1.287	*****	*****	NEG
[Group 2 NEG 10]	H9	1.637	1.637	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A7	1.448	1.448	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B7	1.176	1.133	0.060	5.329%	CO1
	C7	1.090				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	D7	1.672	1.672	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	E7	0.938	0.938	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
    0 Indicates an equivocal response
    * Indicates an unread well or value out of range
    # Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	*****	*****	1.448	1.295	1.253	*****	*****	*****
B	*****	*****	*****	*****	*****	*****	1.176	1.542	1.452	*****	*****	*****
C	*****	*****	*****	*****	*****	*****	1.090	1.162	1.253	*****	*****	*****
D	*****	*****	*****	*****	*****	*****	1.672	1.495	1.505	*****	*****	*****
E	*****	*****	*****	*****	*****	*****	0.938	1.160	1.202	*****	*****	*****
F	*****	*****	*****	*****	*****	*****	1.554	1.486	1.558	*****	*****	*****
G	*****	*****	*****	*****	*****	*****	1.213	1.179	1.287	*****	*****	*****
H	*****	*****	*****	*****	*****	*****	1.647	1.573	1.637	*****	*****	*****

***** Indicates an unread well or value out of range

Plate ID: Precision1 BenzCocOpiTHC 120307   THC

TEST NO.	:
TEST NAME	: THC
PLATE	: Precision1 BenzCocOpiTHC 120307

W/L MODE	: SINGLE	DATE	: 3/7/2012
TEST FILTER	: 450 nm	TIME	: 2:24:51 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data	: THC, ,
Plate Lot Data	: Precision1 BenzCocOpiTHC 120307, ,
Reagent Lot Data	: Acid Stop, ,
	: EIA Buffer, ,
	: K-Blue, ,
	: THC CONJUGATE, ,
	: GROUP 2 CUTOFF, ,
	: GROUP 2 NEGATIVE, ,
	: THC CUTOFF, ,
	: THC NEGATIVE, ,
	: Distilled Water, ,
	: Neogen Wash Buffer, ,

OVER limit	: 3.500
Calculation mode	: Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.624>1.311

+ equation	= CO
	= 1.311
- equation	= CO
	= 1.311

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Plate ID: Precision1 BenzCocOpiTHC 120307   THC

	1	2	3	4	5	6	7	8	9	10	11	12
A										NC1	NEG	NEG
B										CO1	NEG	NEG
C										CO1	NEG	NEG
D										NNC1	NEG	NEG
E										NCO1	NEG	NEG
F										NEG	NEG	NEG
G										POS	NEG	NEG
H										NEG	NEG	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Group 2 NEG 1]	F10	1.574	1.574	*****	*****	NEG
[Group 2 CO 1]	G10	1.284	1.284	*****	*****	POS
[Group 2 NEG 2]	H10	1.789	1.789	*****	*****	NEG
[Group 2 CO 2]	A11	1.516	1.516	*****	*****	NEG
[Group 2 NEG 3]	B11	1.636	1.636	*****	*****	NEG
[Group 2 CO 3]	C11	1.385	1.385	*****	*****	NEG
[Group 2 NEG 4]	D11	1.689	1.689	*****	*****	NEG
[Group 2 CO 4]	E11	1.406	1.406	*****	*****	NEG
[Group 2 NEG 5]	F11	1.665	1.665	*****	*****	NEG
[Group 2 CO 5]	G11	1.434	1.434	*****	*****	NEG
[Group 2 NEG 6]	H11	1.694	1.694	*****	*****	NEG
[Group 2 CO 6]	A12	1.488	1.488	*****	*****	NEG
[Group 2 NEG 7]	B12	1.776	1.776	*****	*****	NEG
[Group 2 CO 7]	C12	1.520	1.520	*****	*****	NEG
[Group 2 NEG 8]	D12	1.764	1.764	*****	*****	NEG
[Group 2 CO 8]	E12	1.330	1.330	*****	*****	NEG
[Group 2 NEG 9]	F12	1.735	1.735	*****	*****	NEG
[Group 2 CO 9]	G12	1.340	1.340	*****	*****	NEG
[Group 2 NEG 10]	H12	1.854	1.854	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A10	1.624	1.624	*****	*****	NC1

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Plate ID: Precision1 BenzCocOpiTHC 120307   THC

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B10	1.315	1.311	0.006	0.421%	CO1
	C10	1.307				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	D10	1.673	1.673	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	E10	0.679	0.679	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
\# Indicates combined data

DATA MATRIX/TABLE : OD

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Plate ID: Precision1 BenzCocOpiTHC 120307   THC

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.624	1.516	1.488
B	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.315	1.636	1.776
C	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.307	1.385	1.520
D	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.673	1.689	1.764
E	*****	*****	*****	*****	*****	*****	*****	*****	*****	0.679	1.406	1.330
F	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.574	1.665	1.735
G	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.284	1.434	1.340
H	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.789	1.694	1.854

***** Indicates an unread well or value out of range

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REVELATION DSX 6.15

TEST NO.	:	
TEST NAME	: COTININE	
PLATE	: Precision1 Cot 120307	

W/L MODE	: SINGLE	DATE		: 3/7/2012	
TEST FILTER	: 450 nm	TIME		: 1:27:50 PM	
REF. FILTER	: *	OPERATOR		: admin	

Kit Lot Data	: COTININE, ,
Plate Lot Data	: Precision1 Cot 120307, ,
Reagent Lot Data	: Acid Stop, ,
	: COTININE CONJUGATE, ,
	: EIA Buffer, ,
	: K-Blue, ,
	: COTININE CUTOFF, ,
	: COTININE NEGATIVE, ,
	: GROUP 1 CUTOFF, ,
	: GROUP 1 NEGATIVE, ,
	: Distilled Water, ,
	: Neogen Wash Buffer, ,

OVER limit	: 3.500
Calculation mode	: Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   3.065>2.409

+ equation	= CO
	= 2.409
- equation	= CO
	= 2.409

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	1	2	3	4	5	6	7	8	9	10	11	12
A	NC1	POS	POS									
B	CO1	NEG	NEG									
C	CO1	POS	POS									
D	NNC1	NEG	NEG									
E	NCO1	POS	POS									
F	NEG	NEG	NEG									
G	POS	POS	NEG									
H	NEG	NEG	NEG									

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Group 1 NEG 1]	F1	3.035	3.035	*****	*****	NEG
[Group 1 CO 1]	G1	2.408	2.408	*****	*****	POS
[Group 1 NEG 2]	H1	2.975	2.975	*****	*****	NEG
[Group 1 CO 2]	A2	2.406	2.406	*****	*****	POS
[Group 1 NEG 3]	B2	2.921	2.921	*****	*****	NEG
[Group 1 CO 3]	C2	2.353	2.353	*****	*****	POS
[Group 1 NEG 4]	D2	2.941	2.941	*****	*****	NEG
[Group 1 CO 4]	E2	2.369	2.369	*****	*****	POS
[Group 1 NEG 5]	F2	2.923	2.923	*****	*****	NEG
[Group 1 CO 5]	G2	2.359	2.359	*****	*****	POS
[Group 1 NEG 6]	H2	2.984	2.984	*****	*****	NEG
[Group 1 CO 6]	A3	2.397	2.397	*****	*****	POS
[Group 1 NEG 7]	B3	3.095	3.095	*****	*****	NEG
[Group 1 CO 7]	C3	2.349	2.349	*****	*****	POS
[Group 1 NEG 8]	D3	3.028	3.028	*****	*****	NEG
[Group 1 CO 8]	E3	2.365	2.365	*****	*****	POS
[Group 1 NEG 9]	F3	3.050	3.050	*****	*****	NEG
[Group 1 CO 9]	G3	2.434	2.434	*****	*****	NEG
[Group 1 NEG 10]	H3	3.139	3.139	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	3.066	3.066	*****	*****	NC1

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Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B1	2.435	2.409	0.037	1.524%	CO1
	C1	2.383				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	D1	2.842	2.842	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	E1	1.949	1.949	*****	*****	NCO1

[...]	Indicates manual entry if Sample ID is bracketed
*****	Indicates an unread well or value out of range
0	Indicates an equivocal response
*	Indicates an unread well or value out of range
#	Indicates combined data

DATA MATRIX/TABLE : OD

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	1	2	3	4	5	6	7	8	9	10	11	12
A	3.066	2.406	2.397	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	2.435	2.921	3.095	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	2.383	2.353	2.349	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	2.842	2.941	3.028	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.949	2.369	2.365	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	3.035	2.923	3.050	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	2.408	2.359	2.434	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	2.975	2.984	3.139	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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REVELATION DSX 6.15

TEST NO.   :
TEST NAME   : AMPHETAMINE ULTRA
PLATE   : Precision2 AmpOxy 120307

W/L MODE   : SINGLE   DATE   : 3/7/2012
TEST FILTER   : 450 nm   TIME   : 7:24:09 PM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : AMPHETAMINE ULTRA, ,
Plate Lot Data   : Precision2 AmpOxy 120307, ,
Reagent Lot Data   : Acid Stop, ,
                   : AMPHETAMINE ULTRA CONJUGATE, ,
                   : EIA Buffer, ,
                   : K-Blue, ,
                   : OXYCODONE/OXYMORPHONE CONJUGATE, ,
                   : AMPHETAMINE ULTRA CUTOFF, ,
                   : AMPHETAMINE ULTRA NEGATIVE, ,
                   : GROUP 1 CUTOFF, ,
                   : GROUP 1 NEGATIVE, ,
                   : Distilled Water, ,
                   : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.405>1.053

+ equation   = CO
                   = 1.053
- equation   = CO
                   = 1.053

	1	2	3	4	5	6	7	8	9	10	11	12
A	NC1	POS	POS									
B	CO1	NEG	NEG									
C	CO1	POS	NEG									
D	NNC1	NEG	NEG									
E	NCO1	POS	POS									
F	NEG	NEG	NEG									
G	POS	POS	POS									
H	NEG	NEG	NEG									

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Group 1 NEG 1]	F1	1.352	1.352	*****	*****	NEG
[Group 1 CO 1]	G1	0.961	0.961	*****	*****	POS
[Group 1 NEG 2]	H1	1.385	1.385	*****	*****	NEG
[Group 1 CO 2]	A2	1.032	1.032	*****	*****	POS
[Group 1 NEG 3]	B2	1.350	1.350	*****	*****	NEG
[Group 1 CO 3]	C2	0.877	0.877	*****	*****	POS
[Group 1 NEG 4]	D2	1.300	1.300	*****	*****	NEG
[Group 1 CO 4]	E2	0.954	0.954	*****	*****	POS
[Group 1 NEG 5]	F2	1.255	1.255	*****	*****	NEG
[Group 1 CO 5]	G2	0.871	0.871	*****	*****	POS
[Group 1 NEG 6]	H2	1.158	1.158	*****	*****	NEG
[Group 1 CO 6]	A3	0.987	0.987	*****	*****	POS
[Group 1 NEG 7]	B3	1.260	1.260	*****	*****	NEG
[Group 1 CO 7]	C3	1.097	1.097	*****	*****	NEG
[Group 1 NEG 8]	D3	1.263	1.263	*****	*****	NEG
[Group 1 CO 8]	E3	0.949	0.949	*****	*****	POS
[Group 1 NEG 9]	F3	1.218	1.218	*****	*****	NEG
[Group 1 CO 9]	G3	0.941	0.941	*****	*****	POS
[Group 1 NEG 10]	H3	1.328	1.328	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	1.405	1.405	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B1	1.079	1.053	0.036	3.451%	CO1
	C1	1.028				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	D1	1.327	1.327	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	E1	0.859	0.859	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
    0 Indicates an equivocal response
    * Indicates an unread well or value out of range
    # Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.405	1.032	0.987	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.079	1.350	1.260	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.028	0.877	1.097	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.327	1.300	1.263	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	0.859	0.954	0.949	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.352	1.255	1.218	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	0.961	0.871	0.941	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.385	1.158	1.328	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

TEST NO.   :
TEST NAME   : OXYCODONE-OXYMORPHONE
PLATE   : Precision2 AmpOxy 120307

W/L MODE   : SINGLE   DATE   : 3/7/2012
TEST FILTER   : 450 nm   TIME   : 7:24:09 PM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : OXYCODONE-OXYMORPHONE, ,
Plate Lot Data   : Precision2 AmpOxy 120307, ,
Reagent Lot Data   : Acid Stop, ,
                     : EIA Buffer, , ,
                     : K-Blue, ,
                     : OXYCODONE/OXYMORPHONE CONJUGATE, ,
                     : GROUP 1 CUTOFF, ,
                     : GROUP 1 NEGATIVE, ,
                     : OXYCODONE/OXYMORPHONE CUTOFF, ,
                     : OXYCODONE/OXYMORPHONE NEGATIVE, ,
                     : Distilled Water, ,
                     : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.076>1.251

+ equation   = CO
                     = 1.251
- equation   = CO
                     = 1.251

	1	2	3	4	5	6	7	8	9	10	11	12
A				NC1	POS	POS						
B				CO1	NEG	NEG						
C				CO1	POS	POS						
D				NNC1	NEG	NEG						
E				NCO1	POS	POS						
F				NEG	NEG	NEG						
G				NEG	NEG	NEG						
H				NEG	NEG	NEG						

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Group 1 NEG 1]	F4	2.167	2.167	*****	*****	NEG
[Group 1 CO 1]	G4	1.320	1.320	*****	*****	NEG
[Group 1 NEG 2]	H4	2.311	2.311	*****	*****	NEG
[Group 1 CO 2]	A5	1.125	1.125	*****	*****	POS
[Group 1 NEG 3]	B5	2.047	2.047	*****	*****	NEG
[Group 1 CO 3]	C5	1.197	1.197	*****	*****	POS
[Group 1 NEG 4]	D5	2.013	2.013	*****	*****	NEG
[Group 1 CO 4]	E5	1.202	1.202	*****	*****	POS
[Group 1 NEG 5]	F5	2.121	2.121	*****	*****	NEG
[Group 1 CO 5]	G5	1.422	1.422	*****	*****	NEG
[Group 1 NEG 6]	H5	2.384	2.384	*****	*****	NEG
[Group 1 CO 6]	A6	1.205	1.205	*****	*****	POS
[Group 1 NEG 7]	B6	2.060	2.060	*****	*****	NEG
[Group 1 CO 7]	C6	1.081	1.081	*****	*****	POS
[Group 1 NEG 8]	D6	2.096	2.096	*****	*****	NEG
[Group 1 CO 8]	E6	1.199	1.199	*****	*****	POS
[Group 1 NEG 9]	F6	2.201	2.201	*****	*****	NEG
[Group 1 CO 9]	G6	1.260	1.260	*****	*****	NEG
[Group 1 NEG 10]	H6	2.390	2.390	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A4	2.076	2.076	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B4	1.306	1.251	0.078	6.206%	CO1
	C4	1.197				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	D4	2.148	2.148	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	E4	0.898	0.898	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	2.076	1.125	1.205	*****	*****	*****	*****	*****	*****
B	*****	*****	*****	1.306	2.047	2.060	*****	*****	*****	*****	*****	*****
C	*****	*****	*****	1.197	1.197	1.081	*****	*****	*****	*****	*****	*****
D	*****	*****	*****	2.148	2.013	2.096	*****	*****	*****	*****	*****	*****
E	*****	*****	*****	0.898	1.202	1.199	*****	*****	*****	*****	*****	*****
F	*****	*****	*****	2.167	2.121	2.201	*****	*****	*****	*****	*****	*****
G	*****	*****	*****	1.320	1.422	1.260	*****	*****	*****	*****	*****	*****
H	*****	*****	*****	2.311	2.384	2.390	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

REVELATION DSX 6.15

TEST NO.	:
TEST NAME	: BENZODIAZEPINE GROUP
PLATE	: Precision2 BenzCocOpiTHC 120307

W/L MODE	: SINGLE	DATE		: 3/7/2012
TEST FILTER	: 450 nm	TIME		: 7:17:03 PM
REF. FILTER	: *	OPERATOR		: admin

Kit Lot Data	: BENZODIAZEPINE GROUP, ,
Plate Lot Data	: Precision2 BenzCocOpiTHC 120307, ,
Reagent Lot Data	: Acid Stop, ,
	: BENZODIAZEPINE GROUP CONJUGATE, ,
	: COCAINE/BZE CONJUGATE, ,
	: EIA Buffer, ,
	: K-Blue, ,
	: OPIATE GROUP CONJUGATE, ,
	: THC CONJUGATE, ,
	: BENZODIAZEPINE GROUP CUTOFF, ,
	: BENZODIAZEPINE GROUP NEGATIVE, ,
	: GROUP 2 CUTOFF, ,
	: GROUP 2 NEGATIVE, ,
	: Distilled Water, ,
	: Neogen Wash Buffer, ,

OVER limit	: 3.500
Calculation mode	: Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO	2.111>1.022

+ equation	= CO	
	= 1.023	
- equation	= CO	
	= 1.023	

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	1	2	3	4	5	6	7	8	9	10	11	12
A	NC1	POS	NEG									
B	CO1	NEG	NEG									
C	CO1	POS	POS									
D	NNC1	NEG	NEG									
E	NCO1	POS	POS									
F	NEG	NEG	NEG									
G	POS	POS	POS									
H	NEG	NEG	NEG									

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Group 2 NEG 1]	F1	2.156	2.156	*****	*****	NEG
[Group 2 CO 1]	G1	0.838	0.838	*****	*****	POS
[Group 2 NEG 2]	H1	2.250	2.250	*****	*****	NEG
[Group 2 CO 2]	A2	0.785	0.785	*****	*****	POS
[Group 2 NEG 3]	B2	1.949	1.949	*****	*****	NEG
[Group 2 CO 3]	C2	0.801	0.801	*****	*****	POS
[Group 2 NEG 4]	D2	2.061	2.061	*****	*****	NEG
[Group 2 CO 4]	E2	0.756	0.756	*****	*****	POS
[Group 2 NEG 5]	F2	2.165	2.165	*****	*****	NEG
[Group 2 CO 5]	G2	0.823	0.823	*****	*****	POS
[Group 2 NEG 6]	H2	2.226	2.226	*****	*****	NEG
[Group 2 CO 6]	A3	2.435	2.435	*****	*****	NEG
[Group 2 NEG 7]	B3	2.011	2.011	*****	*****	NEG
[Group 2 CO 7]	C3	0.870	0.870	*****	*****	POS
[Group 2 NEG 8]	D3	2.036	2.036	*****	*****	NEG
[Group 2 CO 8]	E3	0.859	0.859	*****	*****	POS
[Group 2 NEG 9]	F3	2.091	2.091	*****	*****	NEG
[Group 2 CO 9]	G3	0.843	0.843	*****	*****	POS
[Group 2 NEG 10]	H3	2.254	2.254	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	2.112	2.112	*****	*****	NC1

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Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B1	0.977	1.023	0.064	6.299%	CO1
	C1	1.068				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	D1	1.820	1.820	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	E1	0.656	0.656	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

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	1	2	3	4	5	6	7	8	9	10	11	12
A	2.112	0.785	2.435	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	0.977	1.949	2.011	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.068	0.801	0.870	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.820	2.061	2.036	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	0.656	0.756	0.859	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	2.156	2.165	2.091	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	0.838	0.823	0.843	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	2.250	2.226	2.254	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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TEST NO. :
TEST NAME : COCAINE-BZE
PLATE : Precision2 BenzCocOpiTHC 120307

W/L MODE : SINGLE   DATE : 3/7/2012
TEST FILTER : 450 nm   TIME : 7:17:03 PM
REF. FILTER : *   OPERATOR : admin

Kit Lot Data : COCAINE-BZE, ,
Plate Lot Data : Precision2 BenzCocOpiTHC 120307, ,
Reagent Lot Data : Acid Stop, ,
: COCAINE/BZE CONJUGATE, ,
: EIA Buffer, ,
: K-Blue, ,
: COCAINE/BZE CUTOFF, ,
: COCAINE/BZE NEGATIVE, ,
: GROUP 2 CUTOFF, ,
: GROUP 2 NEGATIVE, ,
: Distilled Water, ,
: Neogen Wash Buffer, ,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.380>1.178

+ equation   = CO
                = 1.179
- equation   = CO
                = 1.179

	1	2	3	4	5	6	7	8	9	10	11	12
A				NC1	NEG	NEG						
B				CO1	NEG	NEG						
C				CO1	NEG	NEG						
D				NNC1	NEG	NEG						
E				NCO1	NEG	POS						
F				NEG	POS	NEG						
G				POS	POS	POS						
H				POS	NEG	NEG						

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Group 2 NEG 1]	F4	1.336	1.336	*****	*****	NEG
[Group 2 CO 1]	G4	0.893	0.893	*****	*****	POS
[Group 2 NEG 2]	H4	1.075	1.075	*****	*****	POS
[Group 2 CO 2]	A5	1.207	1.207	*****	*****	NEG
[Group 2 NEG 3]	B5	1.459	1.459	*****	*****	NEG
[Group 2 CO 3]	C5	1.234	1.234	*****	*****	NEG
[Group 2 NEG 4]	D5	1.483	1.483	*****	*****	NEG
[Group 2 CO 4]	E5	1.234	1.234	*****	*****	NEG
[Group 2 NEG 5]	F5	1.148	1.148	*****	*****	POS
[Group 2 CO 5]	G5	0.988	0.988	*****	*****	POS
[Group 2 NEG 6]	H5	1.188	1.188	*****	*****	NEG
[Group 2 CO 6]	A6	1.453	1.453	*****	*****	NEG
[Group 2 NEG 7]	B6	1.437	1.437	*****	*****	NEG
[Group 2 CO 7]	C6	1.233	1.233	*****	*****	NEG
[Group 2 NEG 8]	D6	1.436	1.436	*****	*****	NEG
[Group 2 CO 8]	E6	1.174	1.174	*****	*****	POS
[Group 2 NEG 9]	F6	1.352	1.352	*****	*****	NEG
[Group 2 CO 9]	G6	1.075	1.075	*****	*****	POS
[Group 2 NEG 10]	H6	1.250	1.250	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A4	1.380	1.380	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B4	1.178	1.179	0.001	0.096%	CO1
	C4	1.180				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	D4	0.853	0.853	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	E4	0.445	0.445	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	1.380	1.207	1.453	*****	*****	*****	*****	*****	*****
B	*****	*****	*****	1.178	1.459	1.437	*****	*****	*****	*****	*****	*****
C	*****	*****	*****	1.180	1.234	1.233	*****	*****	*****	*****	*****	*****
D	*****	*****	*****	0.853	1.483	1.436	*****	*****	*****	*****	*****	*****
E	*****	*****	*****	0.445	1.234	1.174	*****	*****	*****	*****	*****	*****
F	*****	*****	*****	1.336	1.148	1.352	*****	*****	*****	*****	*****	*****
G	*****	*****	*****	0.893	0.988	1.075	*****	*****	*****	*****	*****	*****
H	*****	*****	*****	1.075	1.188	1.250	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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```
TEST NO.           :
TEST NAME          : OPIATE GROUP
PLATE              : Precision2 BenzCocOpiTHC 120307

W/L MODE           : SINGLE          DATE        : 3/7/2012
TEST FILTER        : 450 nm          TIME        : 7:17:03 PM
REF. FILTER        : *               OPERATOR    : admin

Kit Lot Data       : OPIATE GROUP, ,
Plate Lot Data     : Precision2 BenzCocOpiTHC 120307, ,
Reagent Lot Data   : Acid Stop, ,
                   : EIA Buffer, ,
                   : K-Blue, ,
                   : OPIATE GROUP CONJUGATE, ,
                   : GROUP 2 CUTOFF, ,
                   : GROUP 2 NEGATIVE, ,
                   : OPIATE GROUP CUTOFF, ,
                   : OPIATE GROUP NEGATIVE, ,
                   : Distilled Water, ,
                   : Neogen Wash Buffer, ,

OVER limit         : 3.500
Calculation mode   : Endpoint
```

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.565>1.182

+ equation   = CO
                    = 1.182
- equation   = CO
                    = 1.182

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	1	2	3	4	5	6	7	8	9	10	11	12
A							NC1	NEG	NEG			
B							CO1	NEG	NEG			
C							CO1	POS	POS			
D							NNC1	NEG	NEG			
E							NCO1	NEG	POS			
F							NEG	NEG	NEG			
G							POS	POS	POS			
H							NEG	NEG	NEG			

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Group 2 NEG 1]	F7	1.459	1.459	*****	*****	NEG
[Group 2 CO 1]	G7	1.153	1.153	*****	*****	POS
[Group 2 NEG 2]	H7	1.557	1.557	*****	*****	NEG
[Group 2 CO 2]	A8	1.211	1.211	*****	*****	NEG
[Group 2 NEG 3]	B8	1.476	1.476	*****	*****	NEG
[Group 2 CO 3]	C8	1.151	1.151	*****	*****	POS
[Group 2 NEG 4]	D8	1.453	1.453	*****	*****	NEG
[Group 2 CO 4]	E8	1.206	1.206	*****	*****	NEG
[Group 2 NEG 5]	F8	1.500	1.500	*****	*****	NEG
[Group 2 CO 5]	G8	1.169	1.169	*****	*****	POS
[Group 2 NEG 6]	H8	1.556	1.556	*****	*****	NEG
[Group 2 CO 6]	A9	1.787	1.787	*****	*****	NEG
[Group 2 NEG 7]	B9	1.365	1.365	*****	*****	NEG
[Group 2 CO 7]	C9	0.921	0.921	*****	*****	POS
[Group 2 NEG 8]	D9	1.366	1.366	*****	*****	NEG
[Group 2 CO 8]	E9	1.009	1.009	*****	*****	POS
[Group 2 NEG 9]	F9	1.379	1.379	*****	*****	NEG
[Group 2 CO 9]	G9	1.035	1.035	*****	*****	POS
[Group 2 NEG 10]	H9	1.343	1.343	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A7	1.566	1.566	*****	*****	NC1

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Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B7	1.203	1.182	0.029	2.483%	CO1
	C7	1.161				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	D7	1.557	1.557	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	E7	0.896	0.896	*****	*****	NCO1

```
[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
  0  Indicates an equivocal response
  *  Indicates an unread well or value out of range
  #  Indicates combined data
```

DATA MATRIX/TABLE : OD

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	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	*****	*****	1.566	1.211	1.787	*****	*****	*****
B	*****	*****	*****	*****	*****	*****	1.203	1.476	1.365	*****	*****	*****
C	*****	*****	*****	*****	*****	*****	1.161	1.151	0.921	*****	*****	*****
D	*****	*****	*****	*****	*****	*****	1.557	1.453	1.366	*****	*****	*****
E	*****	*****	*****	*****	*****	*****	0.896	1.206	1.009	*****	*****	*****
F	*****	*****	*****	*****	*****	*****	1.459	1.500	1.379	*****	*****	*****
G	*****	*****	*****	*****	*****	*****	1.153	1.169	1.035	*****	*****	*****
H	*****	*****	*****	*****	*****	*****	1.557	1.556	1.343	*****	*****	*****

***** Indicates an unread well or value out of range

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Plate ID: Precision2 BenzCocOpiTHC 120307 THC

```
TEST NO.          :
TEST NAME         : THC
PLATE             : Precision2 BenzCocOpiTHC 120307

W/L MODE          : SINGLE         DATE        : 3/7/2012
TEST FILTER       : 450 nm         TIME        : 7:17:03 PM
REF. FILTER       : *              OPERATOR    : admin

Kit Lot Data      : THC, ,
Plate Lot Data    : Precision2 BenzCocOpiTHC 120307, ,
Reagent Lot Data  : Acid Stop, ,
                  : EIA Buffer, ,
                  : K-Blue, ,
                  : THC CONJUGATE, ,
                  : GROUP 2 CUTOFF, ,
                  : GROUP 2 NEGATIVE, ,
                  : THC CUTOFF, ,
                  : THC NEGATIVE, ,
                  : Distilled Water, ,
                  : Neogen Wash Buffer, ,

OVER limit        : 3.500
Calculation mode  : Endpoint
```

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.713>1.269

+ equation   = CO
                  = 1.270
- equation   = CO
                  = 1.270

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Plate ID: Precision2 BenzCocOpiTHC 120307 THC

	1	2	3	4	5	6	7	8	9	10	11	12
A										NC1	NEG	NEG
B										CO1	NEG	NEG
C										CO1	NEG	NEG
D										NNC1	NEG	NEG
E										NCO1	NEG	NEG
F										NEG	NEG	NEG
G										POS	POS	NEG
H										NEG	NEG	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Group 2 NEG 1]	F10	1.557	1.557	*****	*****	NEG
[Group 2 CO 1]	G10	1.195	1.195	*****	*****	POS
[Group 2 NEG 2]	H10	1.586	1.586	*****	*****	NEG
[Group 2 CO 2]	A11	1.480	1.480	*****	*****	NEG
[Group 2 NEG 3]	B11	1.769	1.769	*****	*****	NEG
[Group 2 CO 3]	C11	1.383	1.383	*****	*****	NEG
[Group 2 NEG 4]	D11	1.587	1.587	*****	*****	NEG
[Group 2 CO 4]	E11	1.274	1.274	*****	*****	NEG
[Group 2 NEG 5]	F11	1.570	1.570	*****	*****	NEG
[Group 2 CO 5]	G11	1.214	1.214	*****	*****	POS
[Group 2 NEG 6]	H11	1.664	1.664	*****	*****	NEG
[Group 2 CO 6]	A12	1.898	1.898	*****	*****	NEG
[Group 2 NEG 7]	B12	1.861	1.861	*****	*****	NEG
[Group 2 CO 7]	C12	1.426	1.426	*****	*****	NEG
[Group 2 NEG 8]	D12	1.678	1.678	*****	*****	NEG
[Group 2 CO 8]	E12	1.436	1.436	*****	*****	NEG
[Group 2 NEG 9]	F12	1.639	1.639	*****	*****	NEG
[Group 2 CO 9]	G12	1.279	1.279	*****	*****	NEG
[Group 2 NEG 10]	H12	1.715	1.715	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A10	1.714	1.714	*****	*****	NC1

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Plate ID: Precision2 BenzCocOpiTHC 120307 THC

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B10	1.248	1.270	0.031	2.446%	CO1
	C10	1.292				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	D10	1.618	1.618	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	E10	0.568	0.568	*****	*****	NCO1

```
[...]  Indicates manual entry if Sample ID is bracketed
*****  Indicates an unread well or value out of range
0      Indicates an equivocal response
*      Indicates an unread well or value out of range
#      Indicates combined data
```

DATA MATRIX/TABLE : OD

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Plate ID: Precision2 BenzCocOpiTHC 120307 THC

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.714	1.480	1.898
B	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.248	1.769	1.861
C	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.292	1.383	1.426
D	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.618	1.587	1.678
E	*****	*****	*****	*****	*****	*****	*****	*****	*****	0.568	1.274	1.436
F	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.557	1.570	1.639
G	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.195	1.214	1.279
H	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.586	1.664	1.715

***** Indicates an unread well or value out of range

Dynex Technologies

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REVELATION DSX 6.15

TEST NO.	:
TEST NAME	: COTININE
PLATE	: Precision2 Cot 120307

W/L MODE	: SINGLE	DATE	: 3/7/2012
TEST FILTER	: 450 nm	TIME	: 6:19:51 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : COTININE, ,
Plate Lot Data : Precision2 Cot 120307, ,
Reagent Lot Data : Acid Stop, ,
: COTININE CONJUGATE, ,
: EIA Buffer, ,
: K-Blue, ,
: COTININE CUTOFF, ,
: COTININE NEGATIVE, ,
: GROUP 1 CUTOFF, ,
: GROUP 1 NEGATIVE, ,
: Distilled Water, ,
: Neogen Wash Buffer, ,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.892>2.397

+ equation   = CO
                     = 2.398
- equation   = CO
                     = 2.398

	1	2	3	4	5	6	7	8	9	10	11	12
A	NC1	NEG	NEG									
B	CO1	NEG	NEG									
C	CO1	POS	NEG									
D	NNC1	NEG	NEG									
E	NCO1	POS	NEG									
F	NEG	NEG	NEG									
G	NEG	POS	NEG									
H	NEG	NEG	NEG									

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Group 1 NEG 1]	F1	2.945	2.945	*****	*****	NEG
[Group 1 CO 1]	G1	2.406	2.406	*****	*****	NEG
[Group 1 NEG 2]	H1	2.992	2.992	*****	*****	NEG
[Group 1 CO 2]	A2	2.435	2.435	*****	*****	NEG
[Group 1 NEG 3]	B2	2.959	2.959	*****	*****	NEG
[Group 1 CO 3]	C2	2.288	2.288	*****	*****	POS
[Group 1 NEG 4]	D2	2.968	2.968	*****	*****	NEG
[Group 1 CO 4]	E2	2.293	2.293	*****	*****	POS
[Group 1 NEG 5]	F2	3.001	3.001	*****	*****	NEG
[Group 1 CO 5]	G2	2.287	2.287	*****	*****	POS
[Group 1 NEG 6]	H2	3.026	3.026	*****	*****	NEG
[Group 1 CO 6]	A3	2.604	2.604	*****	*****	NEG
[Group 1 NEG 7]	B3	3.051	3.051	*****	*****	NEG
[Group 1 CO 7]	C3	2.481	2.481	*****	*****	NEG
[Group 1 NEG 8]	D3	3.093	3.093	*****	*****	NEG
[Group 1 CO 8]	E3	2.413	2.413	*****	*****	NEG
[Group 1 NEG 9]	F3	3.015	3.015	*****	*****	NEG
[Group 1 CO 9]	G3	2.433	2.433	*****	*****	NEG
[Group 1 NEG 10]	H3	3.068	3.068	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	2.892	2.892	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B1	2.444	2.398	0.066	2.759%	CO1
	C1	2.351				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	D1	2.670	2.670	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	E1	1.848	1.848	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	2.892	2.435	2.604	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	2.444	2.959	3.051	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	2.351	2.288	2.481	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	2.670	2.968	3.093	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.848	2.293	2.413	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	2.945	3.001	3.015	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	2.406	2.287	2.433	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	2.992	3.026	3.068	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

REVELATION DSX 6.15

TEST NO.	:
TEST NAME	: AMPHETAMINE ULTRA ACCURACY
PLATE	: Accuracy AmpOxy120308

W/L MODE	: SINGLE	DATE	: 3/8/2012
TEST FILTER	: 450 nm	TIME	: 3:33:08 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data	: AMPHETAMINE ULTRA ACCURACY, ,
Plate Lot Data	: Accuracy AmpOxy120308, ,
Reagent Lot Data	: Acid Stop, ,
	: AMPHETAMINE ULTRA CONJUGATE, ,
	: EIA Buffer, ,
	: K-Blue, ,
	: OXYCODONE/OXYMORPHONE CONJUGATE, ,
	: AMPHETAMINE ULTRA CUTOFF, ,
	: AMPHETAMINE ULTRA NEGATIVE, ,
	: GROUP 1 CUTOFF, ,
	: GROUP 1 NEGATIVE, ,
	: Distilled Water, ,
	: Neogen Wash Buffer, ,

OVER limit	: 3.500
Calculation mode	: Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.760>1.279

+ equation	= CO	
	= 1.279	
- equation	= CO	
	= 1.279	

	1	2	3	4	5	6	7	8	9	10	11	12
A	NC1	NEG	POS	POS								
B	CO1	NEG	POS	POS								
C	CO1	NEG	POS	POS								
D	NNC1	NEG	POS	POS								
E	NCO1	NEG	POS	POS								
F	NEG	NEG	POS	POS								
G	NEG	POS	POS	POS								
H	NEG	POS	POS	POS								

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Amphetamine -50%]	F1	1.358	1.426	0.097	6.809%	NEG
	G1	1.371				
	H1	1.385				
	A2	1.611				
	B2	1.536				
	C2	1.346				
	D2	1.487				
	E2	1.408				
	F2	1.331				
[Amphetamine CO]	G2	1.125	1.176	0.098	8.335%	POS
	H2	1.344				
	A3	1.308				
	B3	1.192				
	C3	1.102				
	D3	1.217				
	E3	1.049				
	F3	1.118				
	G3	1.133				
[Amphetamine +50%]	H3	0.959	1.005	0.062	6.121%	POS
	A4	1.119				
	B4	1.081				
	C4	0.990				
	D4	0.955				
	E4	0.993				
	F4	0.925				
	G4	1.021				
	H4	1.004				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	1.760	1.760	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B1	1.166	1.279	0.160	12.542%	CO1
	C1	1.393				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	D1	1.847	1.847	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	E1	1.149	1.149	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.760	1.611	1.308	1.119	*****	*****	*****	*****	*****	*****	*****	*****
B	1.166	1.536	1.192	1.081	*****	*****	*****	*****	*****	*****	*****	*****
C	1.393	1.346	1.102	0.990	*****	*****	*****	*****	*****	*****	*****	*****
D	1.847	1.487	1.217	0.955	*****	*****	*****	*****	*****	*****	*****	*****
E	1.149	1.408	1.049	0.993	*****	*****	*****	*****	*****	*****	*****	*****
F	1.358	1.331	1.118	0.925	*****	*****	*****	*****	*****	*****	*****	*****
G	1.371	1.125	1.133	1.021	*****	*****	*****	*****	*****	*****	*****	*****
H	1.385	1.344	0.959	1.004	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

TEST NO.   :
TEST NAME   : OXYCODONE-OXYMORPHONE ACCURACY
PLATE   : Accuracy AmpOxy120308

W/L MODE   : SINGLE   DATE   : 3/8/2012
TEST FILTER   : 450 nm   TIME   : 3:33:08 PM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : OXYCODONE-OXYMORPHONE ACCURACY, ,
Plate Lot Data   : Accuracy AmpOxy120308, ,
Reagent Lot Data : Acid Stop, ,
                  : EIA Buffer, ,
                  : K-Blue, ,
                  : OXYCODONE/OXYMORPHONE CONJUGATE, ,
                  : GROUP 1 CUTOFF, ,
                  : GROUP 1 NEGATIVE, ,
                  : OXYCODONE/OXYMORPHONE CUTOFF, ,
                  : OXYCODONE/OXYMORPHONE NEGATIVE, ,
                  : Distilled Water, ,
                  : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.329>1.390

+ equation   = CO
                  = 1.390
- equation   = CO
                  = 1.390

	1	2	3	4	5	6	7	8	9	10	11	12
A					NC1	NEG	POS	POS				
B					CO1	NEG	POS	POS				
C					CO1	NEG	POS	POS				
D					NNC1	NEG	POS	POS				
E					NCO1	NEG	POS	POS				
F					NEG	NEG	POS	POS				
G					NEG	POS	POS	POS				
H					NEG	POS	POS	POS				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Oxycodone -50%]	F5	1.887	1.828	0.059	3.219%	NEG
	G5	1.827				
	H5	1.910				
	A6	1.891				
	B6	1.794				
	C6	1.747				
	D6	1.759				
	E6	1.797				
	F6	1.840				
[Oxycodone CO]	G6	1.423	1.377	0.032	2.296%	POS
	H6	1.392				
	A7	1.414				
	B7	1.362				
	C7	1.329				
	D7	1.343				
	E7	1.368				
	F7	1.363				
	G7	1.395				
[Oxycodone +50%]	H7	1.667	1.047	0.237	22.594%	POS
	A8	0.984				
	B8	0.964				
	C8	0.944				
	D8	0.961				
	E8	1.019				
	F8	0.877				
	G8	0.979				
	H8	1.028				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A5	2.330	2.330	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B5	1.467	1.390	0.108	7.781%	CO1
	C5	1.314				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	D5	2.378	2.378	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	E5	1.161	1.161	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
   0 Indicates an equivocal response
   * Indicates an unread well or value out of range
   # Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	2.330	1.891	1.414	0.984	*****	*****	*****	*****
B	*****	*****	*****	*****	1.467	1.794	1.362	0.964	*****	*****	*****	*****
C	*****	*****	*****	*****	1.314	1.747	1.329	0.944	*****	*****	*****	*****
D	*****	*****	*****	*****	2.378	1.759	1.343	0.961	*****	*****	*****	*****
E	*****	*****	*****	*****	1.161	1.797	1.368	1.019	*****	*****	*****	*****
F	*****	*****	*****	*****	1.887	1.840	1.363	0.877	*****	*****	*****	*****
G	*****	*****	*****	*****	1.827	1.423	1.395	0.979	*****	*****	*****	*****
H	*****	*****	*****	*****	1.910	1.392	1.667	1.028	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

REVELATION DSX 6.15

TEST NO.   :
TEST NAME   : BENZODIAZEPINE GROUP ACCURACY
PLATE   : Accuracy BenzCoc120308

W/L MODE   : SINGLE   DATE   : 3/8/2012
TEST FILTER   : 450 nm   TIME   : 3:13:29 PM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : BENZODIAZEPINE GROUP ACCURACY, ,
Plate Lot Data   : Accuracy BenzCoc120308, ,
Reagent Lot Data   : Acid Stop, ,
                    : BENZODIAZEPINE GROUP CONJUGATE, ,
                    : COCAINE/BZE CONJUGATE, ,
                    : EIA Buffer, ,
                    : K-Blue, ,
                    : BENZODIAZEPINE GROUP CUTOFF, ,
                    : BENZODIAZEPINE GROUP NEGATIVE, ,
                    : GROUP 2 CUTOFF, ,
                    : GROUP 2 NEGATIVE, ,
                    : Distilled Water, ,
                    : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.963>0.861

+ equation   = CO
                    = 0.862
- equation   = CO
                    = 0.862

	1	2	3	4	5	6	7	8	9	10	11	12
A	NC1	NEG	POS	POS								
B	CO1	NEG	POS	POS								
C	CO1	NEG	POS	POS								
D	NNC1	NEG	POS	POS								
E	NCO1	NEG	POS	POS								
F	NEG	NEG	POS	POS								
G	NEG	POS	POS	POS								
H	NEG	POS	POS	POS								

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Benzodiazepine -50%]	F1	1.012	1.036	0.022	2.168%	NEG
	G1	1.037				
	H1	1.067				
	A2	1.076				
	B2	1.026				
	C2	1.028				
	D2	1.010				
	E2	1.030				
	F2	1.034				
[Benzodiazepine CO]	G2	0.832	0.835	0.055	6.609%	POS
	H2	0.934				
	A3	0.873				
	B3	0.761				
	C3	0.802				
	D3	0.761				
	E3	0.862				
	F3	0.856				
	G3	0.837				
[Benzodiazepine +50%]	H3	0.775	0.688	0.051	7.455%	POS
	A4	0.700				
	B4	0.700				
	C4	0.682				
	D4	0.621				
	E4	0.601				
	F4	0.717				
	G4	0.694				
	H4	0.700				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	1.963	1.963	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B1	0.839	0.862	0.032	3.736%	CO1
	C1	0.885				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	D1	1.656	1.656	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	E1	0.642	0.642	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.963	1.076	0.873	0.700	*****	*****	*****	*****	*****	*****	*****	*****
B	0.839	1.026	0.761	0.700	*****	*****	*****	*****	*****	*****	*****	*****
C	0.885	1.028	0.802	0.682	*****	*****	*****	*****	*****	*****	*****	*****
D	1.656	1.010	0.761	0.621	*****	*****	*****	*****	*****	*****	*****	*****
E	0.642	1.030	0.862	0.601	*****	*****	*****	*****	*****	*****	*****	*****
F	1.012	1.034	0.856	0.717	*****	*****	*****	*****	*****	*****	*****	*****
G	1.037	0.832	0.837	0.694	*****	*****	*****	*****	*****	*****	*****	*****
H	1.067	0.934	0.775	0.700	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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```
TEST NO.              :
TEST NAME             : COCAINE-BZE ACCURACY
PLATE                 : Accuracy BenzCoc120308

W/L MODE              : SINGLE          DATE        : 3/8/2012
TEST FILTER           : 450 nm          TIME        : 3:13:29 PM
REF. FILTER           : *               OPERATOR    : admin

Kit Lot Data          : COCAINE-BZE ACCURACY, ,
Plate Lot Data        : Accuracy BenzCoc120308, ,
Reagent Lot Data      : Acid Stop, ,
                      : COCAINE/BZE CONJUGATE, ,
                      : EIA Buffer, ,
                      : K-Blue, ,
                      : COCAINE/BZE CUTOFF, ,
                      : COCAINE/BZE NEGATIVE, ,
                      : GROUP 2 CUTOFF, ,
                      : GROUP 2 NEGATIVE, ,
                      : Distilled Water, ,
                      : Neogen Wash Buffer, ,

OVER limit            : 3.500
Calculation mode      : Endpoint
```

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.258>1.077

+ equation	= CO
	= 1.077
- equation	= CO
	= 1.077

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	1	2	3	4	5	6	7	8	9	10	11	12
A					NC1	NEG	POS	POS				
B					CO1	NEG	POS	POS				
C					CO1	NEG	POS	POS				
D					NNC1	NEG	POS	POS				
E					NCO1	NEG	POS	POS				
F					NEG	NEG	POS	POS				
G					NEG	POS	POS	POS				
H					NEG	POS	POS	POS				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Cocaine -50%]	F5	1.088	1.098	0.061	5.595%	NEG
	G5	1.031				
	H5	1.079				
	A6	1.240				
	B6	1.136				
	C6	1.092				
	D6	1.090				
	E6	1.079				
	F6	1.043				
[Cocaine CO]	G6	0.951	0.917	0.094	10.203%	POS
	H6	0.886				
	A7	1.109				
	B7	1.013				
	C7	0.890				
	D7	0.844				
	E7	0.893				
	F7	0.819				
	G7	0.843				
[Cocaine +50%]	H7	0.792	0.804	0.066	8.255%	POS
	A8	0.923				
	B8	0.868				
	C8	0.792				
	D8	0.832				
	E8	0.806				
	F8	0.714				
	G8	0.716				
	H8	0.794				

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Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A5	1.259	1.259	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B5	1.092	1.077	0.021	1.924%	CO1
	C5	1.063				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	D5	0.812	0.812	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	E5	0.419	0.419	*****	*****	NCO1

```
[...]  Indicates manual entry if Sample ID is bracketed
*****  Indicates an unread well or value out of range
   0   Indicates an equivocal response
   *   Indicates an unread well or value out of range
   #   Indicates combined data
```

DATA MATRIX/TABLE : OD

Page 112 (bottom right)

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	1.259	1.240	1.109	0.923	*****	*****	*****	*****
B	*****	*****	*****	*****	1.092	1.136	1.013	0.868	*****	*****	*****	*****
C	*****	*****	*****	*****	1.063	1.092	0.890	0.792	*****	*****	*****	*****
D	*****	*****	*****	*****	0.812	1.090	0.844	0.832	*****	*****	*****	*****
E	*****	*****	*****	*****	0.419	1.079	0.893	0.806	*****	*****	*****	*****
F	*****	*****	*****	*****	1.088	1.043	0.819	0.714	*****	*****	*****	*****
G	*****	*****	*****	*****	1.031	0.951	0.843	0.716	*****	*****	*****	*****
H	*****	*****	*****	*****	1.079	0.886	0.792	0.794	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

REVELATION DSX 6.15

TEST NO. :
TEST NAME : COTININE ACCURACY
PLATE : Accuracy Cot120308

W/L MODE : SINGLE
TEST FILTER : 450 nm
REF. FILTER : *

DATE : 3/8/2012
TIME : 2:32:13 PM
OPERATOR : admin

Kit Lot Data : COTININE ACCURACY, ,
Plate Lot Data : Accuracy Cot120308, ,
Reagent Lot Data : Acid Stop, ,
: COTININE CONJUGATE, ,
: EIA Buffer, ,
: K-Blue, ,
: COTININE CUTOFF, ,
: COTININE NEGATIVE, ,
: GROUP 1 CUTOFF, ,
: GROUP 1 NEGATIVE, ,
: Distilled Water, ,
: Neogen Wash Buffer, ,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   3.164>2.113

+ equation   = CO
                  = 2.113
- equation   = CO
                  = 2.113

	1	2	3	4	5	6	7	8	9	10	11	12
A	NC1	NEG	POS	POS								
B	CO1	NEG	POS	POS								
C	CO1	NEG	POS	POS								
D	NNC1	NEG	POS	POS								
E	NCO1	NEG	POS	POS								
F	NEG	NEG	POS	POS								
G	NEG	POS	POS	POS								
H	NEG	POS	POS	POS								

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Cotinine -50%]	F1	2.374	2.335	0.082	3.499%	NEG
	G1	2.328				
	H1	2.416				
	A2	2.491				
	B2	2.322				
	C2	2.229				
	D2	2.326				
	E2	2.267				
	F2	2.266				
[Cotinine CO]	G2	1.954	2.016	0.072	3.584%	POS
	H2	2.008				
	A3	2.178				
	B3	2.090				
	C3	1.977				
	D3	1.975				
	E3	1.966				
	F3	1.994				
	G3	2.003				
[Cotinine +50%]	H3	1.893	1.843	0.066	3.590%	POS
	A4	1.983				
	B4	1.830				
	C4	1.859				
	D4	1.822				
	E4	1.809				
	F4	1.742				
	G4	1.814				
	H4	1.839				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	3.164	3.164	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B1	2.188	2.113	0.105	4.976%	CO1
	C1	2.039				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	D1	2.582	2.582	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	E1	1.406	1.406	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	3.164	2.491	2.178	1.983	*****	*****	*****	*****	*****	*****	*****	*****
B	2.188	2.322	2.090	1.830	*****	*****	*****	*****	*****	*****	*****	*****
C	2.039	2.229	1.977	1.859	*****	*****	*****	*****	*****	*****	*****	*****
D	2.582	2.326	1.975	1.822	*****	*****	*****	*****	*****	*****	*****	*****
E	1.406	2.267	1.966	1.809	*****	*****	*****	*****	*****	*****	*****	*****
F	2.374	2.266	1.994	1.742	*****	*****	*****	*****	*****	*****	*****	*****
G	2.328	1.954	2.003	1.814	*****	*****	*****	*****	*****	*****	*****	*****
H	2.416	2.008	1.893	1.839	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

REVELATION DSX 6.15

TEST NO.	:
TEST NAME	: OPIATE GROUP ACCURACY
PLATE	: Accuracy Opi120309

W/L MODE	: SINGLE	DATE	: 3/9/2012
TEST FILTER	: 450 nm	TIME	: 1:43:23 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : OPIATE GROUP ACCURACY, ,
Plate Lot Data : Accuracy Opi120309, ,
Reagent Lot Data : Acid Stop, ,
: EIA Buffer, ,
: K-Blue, ,
: OPIATE GROUP CONJUGATE, ,
: GROUP 2 CUTOFF, ,
: GROUP 2 NEGATIVE, ,
: OPIATE GROUP CUTOFF, ,
: OPIATE GROUP NEGATIVE, ,
: Distilled Water, ,
: Neogen Wash Buffer, ,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO		1.389>1.145
+ equation	= CO	
	= 1.145	
- equation	= CO	
	= 1.145	

	1	2	3	4	5	6	7	8	9	10	11	12
A	NC1	NEG	POS	POS								
B	CO1	NEG	POS	POS								
C	CO1	NEG	POS	POS								
D	NNC1	NEG	POS	POS								
E	NCO1	NEG	POS	POS								
F	NEG	NEG	POS	POS								
G	NEG	POS	POS	POS								
H	NEG	POS	POS	POS								

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Opiate -50%]	F1	1.126	1.169	0.075	6.413%	NEG
	G1	1.311				
	H1	1.153				
	A2	1.131				
	B2	1.199				
	C2	1.216				
	D2	1.083				
	E2	1.224				
	F2	1.081				
[Opiate CO]	G2	0.894	0.929	0.061	6.531%	POS
	H2	1.032				
	A3	0.879				
	B3	0.894				
	C3	0.901				
	D3	0.999				
	E3	0.943				
	F3	0.973				
	G3	0.850				
[Opiate +50%]	H3	0.798	0.780	0.057	7.271%	POS
	A4	0.769				
	B4	0.738				
	C4	0.720				
	D4	0.807				
	E4	0.800				
	F4	0.827				
	G4	0.691				
	H4	0.874				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	1.389	1.389	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B1	1.227	1.145	0.116	10.106%	CO1
	C1	1.063				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	D1	1.654	1.654	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	E1	0.842	0.842	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.389	1.131	0.879	0.769	*****	*****	*****	*****	*****	*****	*****	*****
B	1.227	1.199	0.894	0.738	*****	*****	*****	*****	*****	*****	*****	*****
C	1.063	1.216	0.901	0.720	*****	*****	*****	*****	*****	*****	*****	*****
D	1.654	1.083	0.999	0.807	*****	*****	*****	*****	*****	*****	*****	*****
E	0.842	1.224	0.943	0.800	*****	*****	*****	*****	*****	*****	*****	*****
F	1.126	1.081	0.973	0.827	*****	*****	*****	*****	*****	*****	*****	*****
G	1.311	0.894	0.850	0.691	*****	*****	*****	*****	*****	*****	*****	*****
H	1.153	1.032	0.798	0.874	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

REVELATION DSX 6.15

TEST NO. :
TEST NAME : OPIATE GROUP ACCURACY
PLATE : Accuracy OpiTHC120308

W/L MODE	: SINGLE	DATE	: 3/8/2012
TEST FILTER	: 450 nm	TIME	: 3:23:49 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : OPIATE GROUP ACCURACY, ,
Plate Lot Data : Accuracy OpiTHC120308, ,
Reagent Lot Data : Acid Stop, ,
: EIA Buffer, ,
: K-Blue, ,
: OPIATE GROUP CONJUGATE, ,
: THC CONJUGATE, ,
: GROUP 2 CUTOFF, ,
: GROUP 2 NEGATIVE, ,
: OPIATE GROUP CUTOFF, ,
: OPIATE GROUP NEGATIVE, ,
: Distilled Water, ,
: Neogen Wash Buffer, ,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO		1.415>1.057
+ equation	= CO	
	= 1.057	
- equation	= CO	
	= 1.057	

	1	2	3	4	5	6	7	8	9	10	11	12
A	NC1	NEG	NEG	NEG								
B	CO1	NEG	NEG	NEG								
C	CO1	NEG	NEG	NEG								
D	NNC1	NEG	NEG	NEG								
E	NCO1	NEG	NEG	NEG								
F	NEG	NEG	NEG	NEG								
G	NEG	NEG	NEG	NEG								
H	NEG	NEG	NEG	NEG								

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Opiate -50%]	F1	1.300	1.255	0.077	6.143%	NEG
	G1	1.268				
	H1	1.368				
	A2	1.218				
	B2	1.213				
	C2	1.129				
	D2	1.172				
	E2	1.323				
	F2	1.299				
[Opiate CO]	G2	1.158	1.129	0.068	5.987%	NEG
	H2	1.221				
	A3	1.189				
	B3	1.120				
	C3	1.116				
	D3	1.007				
	E3	1.137				
	F3	1.044				
	G3	1.165				
[Opiate +50%]	H3	1.112	1.077	0.045	4.211%	NEG
	A4	1.091				
	B4	1.108				
	C4	1.080				
	D4	1.062				
	E4	1.099				
	F4	1.070				
	G4	0.966				
	H4	1.106				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	1.416	1.416	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B1	1.136	1.057	0.112	10.594%	CO1
	C1	0.978				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	D1	1.549	1.549	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	E1	0.807	0.807	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.416	1.218	1.189	1.091	*****	*****	*****	*****	*****	*****	*****	*****
B	1.136	1.213	1.120	1.108	*****	*****	*****	*****	*****	*****	*****	*****
C	0.978	1.129	1.116	1.080	*****	*****	*****	*****	*****	*****	*****	*****
D	1.549	1.172	1.007	1.062	*****	*****	*****	*****	*****	*****	*****	*****
E	0.807	1.323	1.137	1.099	*****	*****	*****	*****	*****	*****	*****	*****
F	1.300	1.299	1.044	1.070	*****	*****	*****	*****	*****	*****	*****	*****
G	1.268	1.158	1.165	0.966	*****	*****	*****	*****	*****	*****	*****	*****
H	1.368	1.221	1.112	1.106	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

TEST NO.   :
TEST NAME   : THC ACCURACY
PLATE   : Accuracy OpiTHC120308

W/L MODE   : SINGLE   DATE   : 3/8/2012
TEST FILTER   : 450 nm   TIME   : 3:23:49 PM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : THC ACCURACY, ,
Plate Lot Data   : Accuracy OpiTHC120308, ,
Reagent Lot Data   : Acid Stop, ,
                   : EIA Buffer, ,
                   : K-Blue, ,
                   : THC CONJUGATE, ,
                   : GROUP 2 CUTOFF, ,
                   : GROUP 2 NEGATIVE, ,
                   : THC CUTOFF, ,
                   : THC NEGATIVE, ,
                   : Distilled Water, ,
                   : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.929>1.321

+ equation   = CO
                  = 1.322
- equation   = CO
                  = 1.322

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	1	2	3	4	5	6	7	8	9	10	11	12
A					NC1	NEG	POS	POS				
B					CO1	NEG	POS	POS				
C					CO1	NEG	POS	POS				
D					NNC1	NEG	POS	POS				
E					NCO1	NEG	POS	POS				
F					NEG	NEG	POS	POS				
G					NEG	POS	POS	POS				
H					NEG	POS	POS	POS				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[THC -50%]	F5	1.576	1.561	0.071	4.556%	NEG
	G5	1.535				
	H5	1.652				
	A6	1.693				
	B6	1.571				
	C6	1.484				
	D6	1.529				
	E6	1.515				
	F6	1.493				
[THC CO]	G6	1.228	1.305	0.044	3.347%	POS
	H6	1.314				
	A7	1.368				
	B7	1.367				
	C7	1.285				
	D7	1.283				
	E7	1.313				
	F7	1.284				
	G7	1.301				
[THC +50%]	H7	1.216	1.246	0.043	3.414%	POS
	A8	1.276				
	B8	1.284				
	C8	1.272				
	D8	1.257				
	E8	1.208				
	F8	1.190				
	G8	1.200				
	H8	1.307				

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Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A5	1.930	1.930	*****	*****	NC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	B5	1.405	1.322	0.118	8.923%	CO1
	C5	1.238				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	D5	1.949	1.949	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	E5	0.774	0.774	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

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	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	1.930	1.693	1.368	1.276	*****	*****	*****	*****
B	*****	*****	*****	*****	1.405	1.571	1.367	1.284	*****	*****	*****	*****
C	*****	*****	*****	*****	1.238	1.484	1.285	1.272	*****	*****	*****	*****
D	*****	*****	*****	*****	1.949	1.529	1.283	1.257	*****	*****	*****	*****
E	*****	*****	*****	*****	0.774	1.515	1.313	1.208	*****	*****	*****	*****
F	*****	*****	*****	*****	1.576	1.493	1.284	1.190	*****	*****	*****	*****
G	*****	*****	*****	*****	1.535	1.228	1.301	1.200	*****	*****	*****	*****
H	*****	*****	*****	*****	1.652	1.314	1.216	1.307	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

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Appendix G

ELISA Results for Validation #3

Kit, Plate, and Reagent Lot Data

Date: 03/27/2012

ASSAY	Amphetamine Ultra	Benzodiazepine Group	Cocaine/BZE	Cotinine	Opiate Group	Oxycodone/ Oxymorphone	THC
Kit #	AUF-0047B	BGF-0061B	BZF-0078B	CTI-0034	MOF-0056B	OXF-0037B	TCF-0055B
Kit Exp. Date	1/30/2013	1/23/2013	2/22/2013	7/10/2012	2/22/2013	1/16/2013	2/9/2013
Plate #	120119	120119	120116FAM	1102211	120213F	111103F	120208
Plate Exp. Date	1/19/2014	1/19/2014	1/16/2014	2/21/2013	2/13/2014	11/3/2013	2/8/2014
C/O & NEG lot #	111212-WB	110811-WB	111110-WB	026	110715-WB	120117-WB	110826-WB
C/O & NEG Exp. Date	1/8/2013	12/28/2012	11/9/2012	-	1/10/2013	1/16/2013	12/26/2012
CONJ lot #	036	050	055	034	044	028	044
CONJ Exp.	1/30/2013	1/23/2013	2/22/2013	-	2/22/2013	1/16/2013	2/9/2013

Acid Stop, EIA Buffer, K-Blue, Distilled Water, and Neogen Wash Buffer were prepared on 03/27/2012
Negative and Cutoff Calibrators were prepared 03/27/2012

Kit, Plate, and Reagent Lot Data

Date: 03/28/2012

ASSAY	Amphetamine Ultra	Benzodiazepine Group	Cocaine/BZE	Cotinine	Opiate Group	Oxycodone/ Oxymorphone	THC
Kit #	AUF-0047B	BGF-0061B	BZF-0078B	CTI-0034	MOF-0056B	OXF-0037B	TCF-0055B
Kit Exp. Date	1/30/2013	1/23/2013	2/22/2013	7/10/2012	2/22/2013	1/16/2013	2/9/2013
Plate #	120119	120119	120116FAM	1102211	120213F	111103F	120208
Plate Exp. Date	1/19/2014	1/19/2014	1/16/2014	2/21/2013	2/13/2014	11/3/2013	2/8/2014
C/O & NEG lot #	111212-WB	110811-WB	111110-WB	026	110715-WB	120117-WB	110826-WB
C/O & NEG Exp. Date	1/8/2013	12/28/2012	11/9/2012	-	1/10/2013	1/16/2013	12/26/2012
CONJ lot #	036	050	055	034	044	028	044
CONJ Exp.	1/30/2013	1/23/2013	2/22/2013	-	2/22/2013	1/16/2013	2/9/2013

Acid Stop, EIA Buffer, K-Blue, Distilled Water, and Neogen Wash Buffer were prepared on 03/28/2012
Negative and Cutoff Calibrators were prepared 03/28/2012

Kit, Plate, and Reagent Lot Data

Date: 03/29/2012

ASSAY	Amphetamine Ultra	Benzodiazepine Group	Cocaine/BZE	Cotinine	Opiate Group	Oxycodone/ Oxymorphone	THC
Kit #	AUF-0047B	BGF-0061B	BZF-0078B	CTI-0034	MOF-0056B	OXF-0037B	TCF-0055B
Kit Exp. Date	1/30/2013	1/23/2013	2/22/2013	7/10/2012	2/22/2013	1/16/2013	2/9/2013
Plate #	120119	120119	120116FAM	1102211	120213F	111103F	120208
Plate Exp. Date	1/19/2014	1/19/2014	1/16/2014	2/21/2013	2/13/2014	11/3/2013	2/8/2014
C/O & NEG lot #	111212-WB	110811-WB	111110-WB	026	110715-WB	120117-WB	110826-WB
C/O & NEG Exp. Date	1/8/2013	12/28/2012	11/9/2012	-	1/10/2013	1/16/2013	12/26/2012
CONJ lot #	036	050	055	034	044	028	044
CONJ Exp.	1/30/2013	1/23/2013	2/22/2013	-	2/22/2013	1/16/2013	2/9/2013

Acid Stop, EIA Buffer, K-Blue, Distilled Water, and Neogen Wash Buffer were prepared on 03/29/2012
Negative and Cutoff Calibrators were prepared 03/29/2012

C:\..\DriftAmpOxyBenz120327.DAT   Printed on 3/30/2012 at 11:04:28 PM   Page 1 of 9
Plate ID: DriftAmpOxyBenz120327   AMPHETAMINE ULTRA

REVELATION DSX 6.21

TEST NO.	:	
TEST NAME	: AMPHETAMINE ULTRA	
PLATE	: DriftAmpOxyBenz120327	

W/L MODE	: SINGLE	DATE	: 3/28/2012
TEST FILTER	: 450 nm	TIME	: 4:53:09 AM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data   : AMPHETAMINE ULTRA, AUF-0047B,
Plate Lot Data   : AmpOxyBenz, ,
Reagent Lot Data   : Acid Stop, ,
                    : AMPHETAMINE ULTRA CONJUGATE, ,
                    : BENZODIAZEPINE GROUP CONJUGATE, ,
                    : EIA Buffer, ,
                    : K-Blue, ,
                    : OXYCODONE/OXYMORPHONE CONJUGATE, ,
                    : AMPHETAMINE ULTRA CUTOFF, ,
                    : AMPHETAMINE ULTRA NEGATIVE, ,
                    : GROUP 1 CUTOFF, ,
                    : GROUP 1 NEGATIVE, ,
                    : Distilled Water, ,
                    : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.420>1.015

+ equation	= CO	
	= 1.015	
- equation	= CO	
	= 1.015	

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[1]	G1	1.482	1.482	*****	*****	NEG
[2]	H1	1.503	1.503	*****	*****	NEG
[3]	A2	1.524	1.524	*****	*****	NEG
[4]	B2	1.407	1.407	*****	*****	NEG
[5]	C2	1.476	1.476	*****	*****	NEG
[6]	D2	1.389	1.389	*****	*****	NEG

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C:\..\DriftAmpOxyBenz120327.DAT   Printed on 3/30/2012 at 11:04:28 PM   Page 2 of 9
Plate ID: DriftAmpOxyBenz120327   AMPHETAMINE ULTRA

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[7]	E2	1.391	1.391	*****	*****	NEG
[8]	F2	1.379	1.379	*****	*****	NEG
[9]	G2	1.438	1.438	*****	*****	NEG
[10]	H2	1.471	1.471	*****	*****	NEG
[11]	A3	1.480	1.480	*****	*****	NEG
[12]	B3	1.448	1.448	*****	*****	NEG
[13]	C3	1.372	1.372	*****	*****	NEG
[14]	D3	1.407	1.407	*****	*****	NEG
[15]	E3	1.397	1.397	*****	*****	NEG
[16]	F3	1.361	1.361	*****	*****	NEG
[Group 1 NEG]	G3	1.421	1.421	*****	*****	NEG
[Group 1 Cutoff]	H3	1.046	1.046	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	1.453	1.420	0.047	3.288%	NC1
	B1	1.387				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C1	1.019	1.015	0.005	0.498%	CO1
	D1	1.011				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E1	1.490	1.490	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F1	1.005	1.005	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

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C:\..\DriftAmpOxyBenz120327.DAT   Printed on 3/30/2012 at 11:04:28 PM   Page 3 of 9
Plate ID: DriftAmpOxyBenz120327   AMPHETAMINE ULTRA

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.453	1.524	1.480	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.387	1.407	1.448	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.019	1.476	1.372	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.011	1.389	1.407	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.490	1.391	1.397	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.005	1.379	1.361	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.482	1.438	1.421	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.503	1.471	1.046	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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C:\..\DriftAmpOxyBenz120327.DAT   Printed on 3/30/2012 at 11:04:28 PM   Page 4 of 9
Plate ID: DriftAmpOxyBenz120327   OXYCODONE/OXYMORPHONE

TEST NO.	:	
TEST NAME	: OXYCODONE-OXYMORPHONE	
PLATE	: DriftAmpOxyBenz120327	

W/L MODE	: SINGLE	DATE	: 3/28/2012
TEST FILTER	: 450 nm	TIME	: 4:53:09 AM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data   : OXYCODONE-OXYMORPHONE, OXF-0037B,
Plate Lot Data   : AmpOxyBenz, ,
Reagent Lot Data   : Acid Stop, ,
                    : EIA Buffer, ,
                    : K-Blue, ,
                    : OXYCODONE/OXYMORPHONE CONJUGATE, ,
                    : GROUP 1 CUTOFF, ,
                    : GROUP 1 NEGATIVE, ,
                    : OXYCODONE/OXYMORPHONE CUTOFF, ,
                    : OXYCODONE/OXYMORPHONE NEGATIVE, ,
                    : Distilled Water, ,
                    : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.082>1.236

+ equation	= CO	
	= 1.236	
- equation	= CO	
	= 1.236	

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[1]	G4	2.162	2.162	*****	*****	NEG
[2]	H4	2.184	2.184	*****	*****	NEG
[3]	A5	2.204	2.204	*****	*****	NEG
[4]	B5	2.143	2.143	*****	*****	NEG
[5]	C5	2.139	2.139	*****	*****	NEG
[6]	D5	2.106	2.106	*****	*****	NEG
[7]	E5	2.157	2.157	*****	*****	NEG
[8]	F5	2.151	2.151	*****	*****	NEG
[9]	G5	2.141	2.141	*****	*****	NEG
[10]	H5	2.182	2.182	*****	*****	NEG
[11]	A6	2.199	2.199	*****	*****	NEG

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C:\..\DriftAmpOxyBenz120327.DAT   Printed on 3/30/2012 at 11:04:28 PM   Page 5 of 9
Plate ID: DriftAmpOxyBenz120327   OXYCODONE/OXYMORPHONE

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[12]	B6	2.141	2.141	*****	*****	NEG
[13]	C6	2.133	2.133	*****	*****	NEG
[14]	D6	2.131	2.131	*****	*****	NEG
[15]	E6	2.138	2.138	*****	*****	NEG
[16]	F6	2.144	2.144	*****	*****	NEG
[Group 1 NEG]	G6	2.059	2.059	*****	*****	NEG
[Group 1 Cutoff]	H6	1.258	1.258	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A4	2.117	2.082	0.049	2.344%	NC1
	B4	2.048				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C4	1.342	1.236	0.149	12.045%	CO1
	D4	1.131				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E4	2.162	2.162	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F4	1.151	1.151	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

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C:\..\DriftAmpOxyBenz120327.DAT   Printed on 3/30/2012 at 11:04:28 PM   Page 6 of 9
Plate ID: DriftAmpOxyBenz120327   OXYCODONE/OXYMORPHONE

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	2.117	2.204	2.199	*****	*****	*****	*****	*****	*****
B	*****	*****	*****	2.048	2.143	2.141	*****	*****	*****	*****	*****	*****
C	*****	*****	*****	1.342	2.139	2.133	*****	*****	*****	*****	*****	*****
D	*****	*****	*****	1.131	2.106	2.131	*****	*****	*****	*****	*****	*****
E	*****	*****	*****	2.162	2.157	2.138	*****	*****	*****	*****	*****	*****
F	*****	*****	*****	1.151	2.151	2.144	*****	*****	*****	*****	*****	*****
G	*****	*****	*****	2.162	2.141	2.059	*****	*****	*****	*****	*****	*****
H	*****	*****	*****	2.184	2.182	1.258	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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C:\..\DriftAmpOxyBenz120327.DAT   Printed on 3/30/2012 at 11:04:28 PM   Page 7 of 9
Plate ID: DriftAmpOxyBenz120327   BENZODIAZEPINE GROUP

TEST NO.
TEST NAME : BENZODIAZEPINE GROUP
PLATE : DriftAmpOxyBenz120327

W/L MODE	: SINGLE	DATE	: 3/28/2012
TEST FILTER	: 450 nm	TIME	: 4:53:09 AM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : BENZODIAZEPINE GROUP, BGF-0061B, ,
Plate Lot Data : AmpOxyBenz, ,
Reagent Lot Data : Acid Stop, ,
  : BENZODIAZEPINE GROUP CONJUGATE, ,
  : EIA Buffer, ,
  : K-Blue, ,
  : BENZODIAZEPINE GROUP CUTOFF, ,
  : BENZODIAZEPINE GROUP NEGATIVE, ,
  : GROUP 2 CUTOFF, ,
  : GROUP 2 NEGATIVE, ,
  : Distilled Water, ,
  : Neogen Wash Buffer, ,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.813>1.153

+ equation = CO
  = 1.154
- equation = CO
  = 1.154

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[1]	G7	2.030	2.030	*****	*****	NEG
[2]	H7	2.080	2.080	*****	*****	NEG
[3]	A8	2.056	2.056	*****	*****	NEG
[4]	B8	2.040	2.040	*****	*****	NEG
[5]	C8	2.025	2.025	*****	*****	NEG
[6]	D8	1.971	1.971	*****	*****	NEG
[7]	E8	2.046	2.046	*****	*****	NEG
[8]	F8	2.047	2.047	*****	*****	NEG
[9]	G8	2.038	2.038	*****	*****	NEG
[10]	H8	2.085	2.085	*****	*****	NEG
[11]	A9	2.047	2.047	*****	*****	NEG

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C:\..\DriftAmpOxyBenz120327.DAT   Printed on 3/30/2012 at 11:04:28 PM   Page 8 of 9
Plate ID: DriftAmpOxyBenz120327   BENZODIAZEPINE GROUP

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[12]	B9	2.023	2.023	*****	*****	NEG
[13]	C9	2.033	2.033	*****	*****	NEG
[14]	D9	2.010	2.010	*****	*****	NEG
[15]	E9	2.035	2.035	*****	*****	NEG
[16]	F9	1.983	1.983	*****	*****	NEG
[Group 2 NEG]	G9	1.924	1.924	*****	*****	NEG
[Group 2 Cutoff]	H9	1.048	1.048	*****	*****	POS

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A7	1.763	1.813	0.071	3.922%	NC1
	B7	1.863				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C7	1.157	1.154	0.005	0.410%	CO1
	D7	1.150				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E7	1.396	1.396	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F7	0.535	0.535	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

Top-left panel

C:\..\DriftAmpOxyBenz120327.DAT   Printed on 3/30/2012 at 11:04:28 PM   Page 9 of 9
Plate ID: DriftAmpOxyBenz120327   BENZODIAZEPINE GROUP

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	*****	*****	1.763	2.056	2.047	*****	*****	*****
B	*****	*****	*****	*****	*****	*****	1.863	2.040	2.023	*****	*****	*****
C	*****	*****	*****	*****	*****	*****	1.157	2.025	2.033	*****	*****	*****
D	*****	*****	*****	*****	*****	*****	1.150	1.971	2.010	*****	*****	*****
E	*****	*****	*****	*****	*****	*****	1.396	2.046	2.035	*****	*****	*****
F	*****	*****	*****	*****	*****	*****	0.535	2.047	1.983	*****	*****	*****
G	*****	*****	*****	*****	*****	*****	2.030	2.038	1.924	*****	*****	*****
H	*****	*****	*****	*****	*****	*****	2.080	2.085	1.048	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

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Top-right panel

C:\..\DriftCocOpiTHC120327.DAT   Printed on 3/30/2012 at 11:05:24 PM   Page 1 of 9
Plate ID: DriftCocOpiTHC120327   COCAINE/BZE

REVELATION DSX 6.21

TEST NO.   :
TEST NAME   : COCAINE-BZE
PLATE   : DriftCocOpiTHC120327

W/L MODE   : SINGLE   DATE   : 3/28/2012
TEST FILTER   : 450 nm   TIME   : 5:11:13 AM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : COCAINE-BZE, BZF-0079B,
Plate Lot Data   : CocOpiTHC, ,
Reagent Lot Data : Acid Stop, ,
                  : COCAINE/BZE CONJUGATE, ,
                  : EIA Buffer, ,
                  : K-Blue, ,
                  : OPIATE GROUP CONJUGATE, ,
                  : THC CONJUGATE, ,
                  : COCAINE/BZE CUTOFF, ,
                  : COCAINE/BZE NEGATIVE, ,
                  : GROUP 2 CUTOFF, ,
                  : GROUP 2 NEGATIVE, ,
                  : Distilled Water, ,
                  : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.280>0.570

+ equation   = CO
                  = 0.571
- equation   = CO
                  = 0.571

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[1]	G1	1.704	1.704	*****	*****	NEG
[2]	H1	1.806	1.806	*****	*****	NEG
[3]	A2	1.863	1.863	*****	*****	NEG
[4]	B2	1.762	1.762	*****	*****	NEG
[5]	C2	1.735	1.735	*****	*****	NEG
[6]	D2	1.752	1.752	*****	*****	NEG

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Bottom-left panel

C:\..\DriftCocOpiTHC120327.DAT   Printed on 3/30/2012 at 11:05:24 PM   Page 2 of 9
Plate ID: DriftCocOpiTHC120327   COCAINE/BZE

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[7]	E2	1.490	1.490	*****	*****	NEG
[8]	F2	1.724	1.724	*****	*****	NEG
[9]	G2	1.720	1.720	*****	*****	NEG
[10]	H2	1.959	1.959	*****	*****	NEG
[11]	A3	1.902	1.902	*****	*****	NEG
[12]	B3	1.889	1.889	*****	*****	NEG
[13]	C3	1.828	1.828	*****	*****	NEG
[14]	D3	1.761	1.761	*****	*****	NEG
[15]	E3	1.730	1.730	*****	*****	NEG
[16]	F3	1.706	1.706	*****	*****	NEG
[Group 2 NEG]	G3	1.262	1.262	*****	*****	NEG
[Group 2 Cutoff]	H3	0.426	0.426	*****	*****	POS

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	1.297	1.281	0.023	1.773%	NC1
	B1	1.264				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C1	0.601	0.571	0.043	7.541%	CO1
	D1	0.540				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E1	0.808	0.808	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F1	0.447	0.447	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data
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Bottom-right panel

C:\..\DriftCocOpiTHC120327.DAT   Printed on 3/30/2012 at 11:05:24 PM   Page 3 of 9
Plate ID: DriftCocOpiTHC120327   COCAINE/BZE

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.297	1.863	1.902	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.264	1.762	1.889	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	0.601	1.735	1.828	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	0.540	1.752	1.761	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	0.808	1.490	1.730	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	0.447	1.724	1.706	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.704	1.720	1.262	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.806	1.959	0.426	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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C:\..\DriftCocOpiTHC120327.DAT   Printed on 3/30/2012 at 11:05:24 PM   Page 4 of 9
Plate ID: DriftCocOpiTHC120327   OPIATE GROUP

TEST NO.	:		
TEST NAME	: OPIATE GROUP		
PLATE	: DriftCocOpiTHC120327		
W/L MODE	: SINGLE	DATE	: 3/28/2012
TEST FILTER	: 450 nm	TIME	: 5:11:13 AM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data   : OPIATE GROUP, MOF-0056B,
Plate Lot Data : CocOpiTHC, ,
Reagent Lot Data : Acid Stop, ,
               : EIA Buffer, ,
               : K-Blue, ,
               : OPIATE GROUP CONJUGATE, ,
               : GROUP 2 CUTOFF, ,
               : GROUP 2 NEGATIVE, ,
               : OPIATE GROUP CUTOFF, ,
               : OPIATE GROUP NEGATIVE, ,
               : Distilled Water, ,
               : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO		1.466>0.915
+ equation	= CO	
	= 0.915	
- equation	= CO	
	= 0.915	

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[1]	G4	1.752	1.752	*****	*****	NEG
[2]	H4	1.685	1.685	*****	*****	NEG
[3]	A5	1.752	1.752	*****	*****	NEG
[4]	B5	1.737	1.737	*****	*****	NEG
[5]	C5	1.827	1.827	*****	*****	NEG
[6]	D5	1.684	1.684	*****	*****	NEG
[7]	E5	1.771	1.771	*****	*****	NEG
[8]	F5	1.496	1.496	*****	*****	NEG
[9]	G5	1.742	1.742	*****	*****	NEG
[10]	H5	1.627	1.627	*****	*****	NEG
[11]	A6	1.719	1.719	*****	*****	NEG

C:\..\DriftCocOpiTHC120327.DAT   Printed on 3/30/2012 at 11:05:24 PM   Page 5 of 9
Plate ID: DriftCocOpiTHC120327   OPIATE GROUP

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[12]	B6	1.725	1.725	*****	*****	NEG
[13]	C6	1.804	1.804	*****	*****	NEG
[14]	D6	1.737	1.737	*****	*****	NEG
[15]	E6	1.733	1.733	*****	*****	NEG
[16]	F6	1.795	1.795	*****	*****	NEG
[Group 2 NEG]	G6	1.609	1.609	*****	*****	NEG
[Group 2 Cutoff]	H6	0.841	0.841	*****	*****	POS

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A4	1.352	1.467	0.162	11.053%	NC1
	B4	1.581				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C4	0.841	0.915	0.105	11.436%	CO1
	D4	0.989				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E4	1.698	1.698	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F4	0.939	0.939	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

C:\..\DriftCocOpiTHC120327.DAT   Printed on 3/30/2012 at 11:05:24 PM   Page 6 of 9
Plate ID: DriftCocOpiTHC120327   OPIATE GROUP

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	1.352	1.752	1.719	*****	*****	*****	*****	*****	*****
B	*****	*****	*****	1.581	1.737	1.725	*****	*****	*****	*****	*****	*****
C	*****	*****	*****	0.841	1.827	1.804	*****	*****	*****	*****	*****	*****
D	*****	*****	*****	0.989	1.684	1.737	*****	*****	*****	*****	*****	*****
E	*****	*****	*****	1.698	1.771	1.733	*****	*****	*****	*****	*****	*****
F	*****	*****	*****	0.939	1.496	1.795	*****	*****	*****	*****	*****	*****
G	*****	*****	*****	1.752	1.742	1.609	*****	*****	*****	*****	*****	*****
H	*****	*****	*****	1.685	1.627	0.841	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

C:\..\DriftCocOpiTHC120327.DAT   Printed on 3/30/2012 at 11:05:24 PM   Page 7 of 9
Plate ID: DriftCocOpiTHC120327   THC

TEST NO.	:		
TEST NAME	: THC		
PLATE	: DriftCocOpiTHC120327		
W/L MODE	: SINGLE	DATE	: 3/28/2012
TEST FILTER	: 450 nm	TIME	: 5:11:13 AM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data   : THC, TCF-0055B,
Plate Lot Data : CocOpiTHC, ,
Reagent Lot Data : Acid Stop, ,
               : EIA Buffer, ,
               : K-Blue, ,
               : THC CONJUGATE, ,
               : GROUP 2 CUTOFF, ,
               : GROUP 2 NEGATIVE, ,
               : THC CUTOFF, ,
               : THC NEGATIVE, ,
               : Distilled Water, ,
               : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO		1.480>1.349
+ equation	= CO	
	= 1.349	
- equation	= CO	
	= 1.349	

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[1]	G7	1.501	1.501	*****	*****	NEG
[2]	H7	1.593	1.593	*****	*****	NEG
[3]	A8	1.699	1.699	*****	*****	NEG
[4]	B8	1.599	1.599	*****	*****	NEG
[5]	C8	1.596	1.596	*****	*****	NEG
[6]	D8	1.510	1.510	*****	*****	NEG
[7]	E8	1.517	1.517	*****	*****	NEG
[8]	F8	1.499	1.499	*****	*****	NEG
[9]	G8	1.537	1.537	*****	*****	NEG
[10]	H8	1.497	1.497	*****	*****	NEG
[11]	A9	1.632	1.632	*****	*****	NEG

Panel 1 (top left)

C:\..\DriftCocOpiTHC120327.DAT   Printed on 3/30/2012 at 11:05:24 PM   Page 8 of 9
Plate ID: DriftCocOpiTHC120327   THC

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[12]	B9	1.620	1.620	*****	*****	NEG
[13]	C9	1.565	1.565	*****	*****	NEG
[14]	D9	1.561	1.561	*****	*****	NEG
[15]	E9	1.508	1.508	*****	*****	NEG
[16]	F9	1.558	1.558	*****	*****	NEG
[Group 2 NEG]	G9	1.415	1.415	*****	*****	NEG
[Group 2 Cutoff]	H9	1.269	1.269	*****	*****	POS

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A7	1.467	1.481	0.020	1.338%	NC1
	B7	1.495				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C7	1.353	1.349	0.005	0.378%	CO1
	D7	1.345				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E7	1.560	1.560	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F7	0.670	0.670	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

Panel 2 (top right)

C:\..\DriftCocOpiTHC120327.DAT   Printed on 3/30/2012 at 11:05:24 PM   Page 9 of 9
Plate ID: DriftCocOpiTHC120327   THC

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	*****	*****	1.467	1.699	1.632	*****	*****	*****
B	*****	*****	*****	*****	*****	*****	1.495	1.599	1.620	*****	*****	*****
C	*****	*****	*****	*****	*****	*****	1.353	1.596	1.565	*****	*****	*****
D	*****	*****	*****	*****	*****	*****	1.345	1.510	1.561	*****	*****	*****
E	*****	*****	*****	*****	*****	*****	1.560	1.517	1.508	*****	*****	*****
F	*****	*****	*****	*****	*****	*****	0.670	1.499	1.558	*****	*****	*****
G	*****	*****	*****	*****	*****	*****	1.501	1.537	1.415	*****	*****	*****
H	*****	*****	*****	*****	*****	*****	1.593	1.497	1.269	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

Panel 3 (bottom left)

C:\..\DriftCot120327.DAT   Printed on 3/30/2012 at 11:06:06 PM   Page 1 of 3
Plate ID: DriftCot120327   COTININE

REVELATION DSX 6.21

TEST NO.	:		
TEST NAME	: COTININE		
PLATE	: DriftCot120327		

W/L MODE	: SINGLE	DATE	: 3/28/2012
TEST FILTER	: 450 nm	TIME	: 4:03:20 AM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : COTININE, CTI-0034,
Plate Lot Data : Cot, ,
Reagent Lot Data : Acid Stop, ,
: COTININE CONJUGATE, ,
: EIA Buffer, ,
: K-Blue, ,
: COTININE CUTOFF, ,
: COTININE NEGATIVE, ,
: GROUP 1 CUTOFF, ,
: GROUP 1 NEGATIVE, ,
: Distilled Water, ,
: Neogen Wash Buffer, ,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   3.273>1.794

+ equation	= CO
	= 1.795
- equation	= CO
	= 1.795

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[1]	G1	3.289	3.289	*****	*****	NEG
[2]	H1	3.400	3.400	*****	*****	NEG
[3]	A2	3.410	3.410	*****	*****	NEG
[4]	B2	3.406	3.406	*****	*****	NEG
[5]	C2	3.393	3.393	*****	*****	NEG
[6]	D2	3.390	3.390	*****	*****	NEG
[7]	E2	3.356	3.356	*****	*****	NEG
[8]	F2	3.362	3.362	*****	*****	NEG

Panel 4 (bottom right)

C:\..\DriftCot120327.DAT   Printed on 3/30/2012 at 11:06:06 PM   Page 2 of 3
Plate ID: DriftCot120327   COTININE

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[9]	G2	3.364	3.364	*****	*****	NEG
[10]	H2	3.385	3.385	*****	*****	NEG
[11]	A3	3.287	3.287	*****	*****	NEG
[12]	B3	3.241	3.241	*****	*****	NEG
[13]	C3	3.245	3.245	*****	*****	NEG
[14]	D3	3.190	3.190	*****	*****	NEG
[15]	E3	3.140	3.140	*****	*****	NEG
[16]	F3	3.124	3.124	*****	*****	NEG
[Group 1 NEG]	G3	3.115	3.115	*****	*****	NEG
[Group 1 Cutoff]	H3	1.898	1.898	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	3.272	3.274	0.002	0.053%	NC1
	B1	3.275				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C1	1.829	1.795	0.049	2.713%	CO1
	D1	1.760				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E1	2.420	2.420	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F1	1.413	1.413	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

Panel 1 (top left)

C:\..\DriftCot120327.DAT
Plate ID: DriftCot120327

Printed on 3/30/2012 at 11:06:06 PM
COTININE

Page 3 of 3

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	3.272	3.410	3.287	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	3.275	3.406	3.241	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.829	3.393	3.245	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.760	3.390	3.190	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	2.420	3.356	3.140	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.413	3.362	3.124	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	3.289	3.364	3.115	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	3.400	3.385	1.898	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

Panel 2 (top right)

C:\..\DRIFT2_THC.DAT
Plate ID: DRIFT2_THC

Printed on 3/30/2012 at 11:03:10 PM
THC

Page 1 of 3

REVELATION DSX 6.21

TEST NO.	:		
TEST NAME	: THC		
PLATE	: DRIFT2_THC		

W/L MODE	: SINGLE	DATE	: 3/29/2012
TEST FILTER	: 450 nm	TIME	: 12:59:28 AM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data   : THC, TCF-0055B,
Plate Lot Data   : THC, ,
Reagent Lot Data : Acid Stop, ,
: EIA Buffer, ,
: K-Blue, ,
: THC CONJUGATE, ,
: GROUP 2 CUTOFF, ,
: GROUP 2 NEGATIVE, ,
: THC CUTOFF, ,
: THC NEGATIVE, ,
: Distilled Water, ,
: Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.473>1.068

+ equation   = CO
                 = 1.069
- equation   = CO
                 = 1.069

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[G2CO_OLD]	G1	1.055	1.055	*****	*****	POS
[1]	H1	1.534	1.534	*****	*****	NEG
[2]	A2	1.648	1.648	*****	*****	NEG
[3]	B2	1.534	1.534	*****	*****	NEG
[4]	C2	1.527	1.527	*****	*****	NEG
[5]	D2	1.559	1.559	*****	*****	NEG
[6]	E2	1.476	1.476	*****	*****	NEG
[7]	F2	1.507	1.507	*****	*****	NEG

Panel 3 (bottom left)

C:\..\DRIFT2_THC.DAT
Plate ID: DRIFT2_THC

Printed on 3/30/2012 at 11:03:10 PM
THC

Page 2 of 3

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[8]	G2	1.498	1.498	*****	*****	NEG
[9]	H2	1.484	1.484	*****	*****	NEG
[10]	A3	1.377	1.377	*****	*****	NEG
[11]	B3	1.596	1.596	*****	*****	NEG
[12]	C3	1.500	1.500	*****	*****	NEG
[13]	D3	1.531	1.531	*****	*****	NEG
[14]	E3	1.468	1.468	*****	*****	NEG
[15]	F3	1.489	1.489	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	1.475	1.473	0.002	0.140%	NC1
	B1	1.472				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C1	1.081	1.069	0.017	1.580%	CO1
	D1	1.057				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E1	1.495	1.495	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F1	0.544	0.544	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

Panel 4 (bottom right)

C:\..\DRIFT2_THC.DAT
Plate ID: DRIFT2_THC

Printed on 3/30/2012 at 11:03:10 PM
THC

Page 3 of 3

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.475	1.648	1.377	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.472	1.534	1.596	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.081	1.527	1.500	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.057	1.559	1.531	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.495	1.476	1.468	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	0.544	1.507	1.489	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.055	1.498	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.534	1.484	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

Panel 1

TEST NO. :
TEST NAME : BENZODIAZEPINE GROUP ACCURACY - ND
PLATE : BenzCocOpiDRIFT BenzACC 120405

W/L MODE : SINGLE DATE : 4/5/2012
TEST FILTER : 450 nm TIME : 4:27:38 PM
REF. FILTER : * OPERATOR : admin

Kit Lot Data : BENZODIAZEPINE GROUP ACCURACY - ND, ,
Plate Lot Data : BenzCocOpiDRIFT BenzACC 120405, ,
Reagent Lot Data : Acid Stop, ,
: BENZODIAZEPINE GROUP CONJUGATE, ,
: EIA Buffer, ,
: K-Blue, ,
: BENZODIAZEPINE GROUP CUTOFF, ,
: BENZODIAZEPINE GROUP NEGATIVE, ,
: GROUP 2 CUTOFF, ,
: GROUP 2 NEGATIVE, ,
: Distilled Water, ,
: Neogen Wash Buffer, ,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.032>1.096

+ equation = CO
= 1.097
- equation = CO
= 1.097

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Benzodiazepine -50%]	G10	1.152	1.280	0.084	6.564%	NEG
	H10	1.307				
	A11	1.368				
	B11	1.298				
	C11	1.208				
	D11	1.350				
[Benzodiazepine C/O]	E11	0.858	0.990	0.079	7.988%	POS
	F11	0.943				
	G11	0.995				
	H11	1.036				
	A12	1.077				
	B12	1.034				

Panel 2

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Benzodiazepine +50%]	C12	0.919	0.930	0.052	5.541%	POS
	D12	0.834				
	E12	0.941				
	F12	0.938				
	G12	0.965				
	H12	0.981				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A10	2.016	2.033	0.024	1.161%	NC1
	B10	2.049				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C10	1.042	1.097	0.077	7.024%	CO1
	D10	1.151				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E10	1.663	1.663	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F10	0.623	0.623	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

Panel 3

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	*****	*****	*****	*****	*****	2.016	1.368	1.077
B	*****	*****	*****	*****	*****	*****	*****	*****	*****	2.049	1.298	1.034
C	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.042	1.208	0.919
D	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.151	1.350	0.834
E	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.663	0.858	0.941
F	*****	*****	*****	*****	*****	*****	*****	*****	*****	0.623	0.943	0.938
G	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.152	0.995	0.965
H	*****	*****	*****	*****	*****	*****	*****	*****	*****	1.307	1.036	0.981

***** Indicates an unread well or value out of range

Dynex Technologies

Panel 4

REVELATION DSX 6.15

TEST NO. :
TEST NAME : BENZODIAZEPINE GROUP
PLATE : DRIFT2 BenzCocOpi 120406

W/L MODE : SINGLE DATE : 4/6/2012
TEST FILTER : 450 nm TIME : 4:52:22 PM
REF. FILTER : * OPERATOR : admin

Kit Lot Data : BENZODIAZEPINE GROUP, ,
Plate Lot Data : DRIFT2 BenzCocOpi 120406, ,
Reagent Lot Data : Acid Stop, ,
: BENZODIAZEPINE GROUP CONJUGATE, ,
: COCAINE/BZE CONJUGATE, ,
: EIA Buffer, ,
: K-Blue, ,
: OPIATE GROUP CONJUGATE, ,
: BENZODIAZEPINE GROUP CUTOFF, ,
: BENZODIAZEPINE GROUP NEGATIVE, ,
: GROUP 2 CUTOFF, ,
: GROUP 2 NEGATIVE, ,
: Distilled Water, ,
: Neogen Wash Buffer, ,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   0.050>0.046

+ equation = CO
= 0.046
- equation = CO
= 0.046

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Blank 1]	G1	0.052	0.052	*****	*****	NEG
[Blank 2]	H1	0.051	0.051	*****	*****	NEG
[Blank 3]	A2	0.047	0.047	*****	*****	NEG
[Blank 4]	B2	0.049	0.049	*****	*****	NEG
[Blank 5]	C2	0.045	0.045	*****	*****	POS
[Blank 6]	D2	0.046	0.046	*****	*****	POS
[Blank 7]	E2	0.049	0.049	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Blank 8]	F2	0.050	0.050	*****	*****	NEG
[Blank 9]	G2	0.068	0.068	*****	*****	NEG
[Blank 10]	H2	0.065	0.065	*****	*****	NEG
[Blank 11]	A3	0.057	0.057	*****	*****	NEG
[Blank 12]	B3	0.048	0.048	*****	*****	NEG
[Blank 13]	C3	0.049	0.049	*****	*****	NEG
[Blank 14]	D3	0.047	0.047	*****	*****	NEG
[Blank 15]	E3	0.048	0.048	*****	*****	NEG
[Blank 16]	F3	0.053	0.053	*****	*****	NEG
[Group 2 NEG]	G3	0.049	0.049	*****	*****	NEG
[Group 2 C/O]	H3	0.048	0.048	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	0.055	0.051	0.006	11.785%	NC1
	B1	0.047				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C1	0.046	0.046	0.000	0.152%	CO1
	D1	0.046				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E1	0.045	0.045	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F1	0.050	0.050	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	0.055	0.047	0.057	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	0.047	0.049	0.048	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	0.046	0.045	0.049	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	0.046	0.046	0.047	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	0.045	0.049	0.048	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	0.050	0.050	0.053	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	0.052	0.068	0.049	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	0.051	0.065	0.048	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

TEST NO.   :
TEST NAME   : COCAINE-BZE
PLATE   : DRIFT2 BenzCocOpi 120406

W/L MODE   : SINGLE   DATE   : 4/6/2012
TEST FILTER : 450 nm   TIME   : 4:52:22 PM
REF. FILTER : *   OPERATOR   : admin

Kit Lot Data   : COCAINE-BZE, ,
Plate Lot Data   : DRIFT2 BenzCocOpi 120406, ,
Reagent Lot Data : Acid Stop, ,
                  : COCAINE/BZE CONJUGATE, ,
                  : EIA Buffer, ,
                  : K-Blue, ,
                  : COCAINE/BZE CUTOFF, ,
                  : COCAINE/BZE NEGATIVE, ,
                  : GROUP 2 CUTOFF, ,
                  : GROUP 2 NEGATIVE, ,
                  : Distilled Water, ,
                  : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.714>1.003

+ equation   = CO
              = 1.004
- equation   = CO
              = 1.004

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Blank 1]	G4	2.446	2.446	*****	*****	NEG
[Blank 2]	H4	2.649	2.649	*****	*****	NEG
[Blank 3]	A5	2.326	2.326	*****	*****	NEG
[Blank 4]	B5	2.377	2.377	*****	*****	NEG
[Blank 5]	C5	2.359	2.359	*****	*****	NEG
[Blank 6]	D5	2.391	2.391	*****	*****	NEG
[Blank 7]	E5	2.380	2.380	*****	*****	NEG
[Blank 8]	F5	2.439	2.439	*****	*****	NEG
[Blank 9]	G5	2.430	2.430	*****	*****	NEG
[Blank 10]	H5	2.500	2.500	*****	*****	NEG
[Blank 11]	A6	2.368	2.368	*****	*****	NEG
[Blank 12]	B6	2.385	2.385	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Blank 13]	C6	2.376	2.376	*****	*****	NEG
[Blank 14]	D6	2.354	2.354	*****	*****	NEG
[Blank 15]	E6	2.398	2.398	*****	*****	NEG
[Blank 16]	F6	2.407	2.407	*****	*****	NEG
[Group 2 NEG]	G6	1.775	1.775	*****	*****	NEG
[Group 2 C/O]	H6	1.127	1.127	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A4	1.655	1.714	0.084	4.873%	NC1
	B4	1.773				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C4	1.052	1.004	0.069	6.840%	CO1
	D4	0.955				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E4	1.270	1.270	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F4	0.728	0.728	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	1.655	2.326	2.368	*****	*****	*****	*****	*****	*****
B	*****	*****	*****	1.773	2.377	2.385	*****	*****	*****	*****	*****	*****
C	*****	*****	*****	1.052	2.359	2.376	*****	*****	*****	*****	*****	*****
D	*****	*****	*****	0.955	2.391	2.354	*****	*****	*****	*****	*****	*****
E	*****	*****	*****	1.270	2.380	2.398	*****	*****	*****	*****	*****	*****
F	*****	*****	*****	0.728	2.439	2.407	*****	*****	*****	*****	*****	*****
G	*****	*****	*****	2.446	2.430	1.775	*****	*****	*****	*****	*****	*****
H	*****	*****	*****	2.649	2.500	1.127	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

```
TEST NO.            :
TEST NAME           : OPIATE GROUP
PLATE               : DRIFT2 BenzCocOpi 120406

W/L MODE            : SINGLE           DATE        : 4/6/2012
TEST FILTER         : 450 nm           TIME        : 4:52:22 PM
REF. FILTER         : *                OPERATOR    : admin

Kit Lot Data        : OPIATE GROUP, ,
Plate Lot Data      : DRIFT2 BenzCocOpi 120406, ,
Reagent Lot Data    : Acid Stop, ,
                    : EIA Buffer, ,
                    : K-Blue, ,
                    : OPIATE GROUP CONJUGATE, ,
                    : GROUP 2 CUTOFF, ,
                    : GROUP 2 NEGATIVE, ,
                    : OPIATE GROUP CUTOFF, ,
                    : OPIATE GROUP NEGATIVE, ,
                    : Distilled Water, ,
                    : Neogen Wash Buffer, ,

OVER limit          : 3.500
Calculation mode    : Endpoint
```

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.357>0.931

+ equation   = CO
                     = 0.932
- equation   = CO
                     = 0.932

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Blank 1]	G7	1.672	1.672	*****	*****	NEG
[Blank 2]	H7	1.905	1.905	*****	*****	NEG
[Blank 3]	A8	1.481	1.481	*****	*****	NEG
[Blank 4]	B8	1.453	1.453	*****	*****	NEG
[Blank 5]	C8	1.430	1.430	*****	*****	NEG
[Blank 6]	D8	1.486	1.486	*****	*****	NEG
[Blank 7]	E8	1.495	1.495	*****	*****	NEG
[Blank 8]	F8	1.508	1.508	*****	*****	NEG
[Blank 9]	G8	1.586	1.586	*****	*****	NEG
[Blank 10]	H8	1.858	1.858	*****	*****	NEG
[Blank 11]	A9	1.570	1.570	*****	*****	NEG
[Blank 12]	B9	1.545	1.545	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[Blank 13]	C9	1.520	1.520	*****	*****	NEG
[Blank 14]	D9	1.532	1.532	*****	*****	NEG
[Blank 15]	E9	1.575	1.575	*****	*****	NEG
[Blank 16]	F9	1.551	1.551	*****	*****	NEG
[Group 2 NEG]	G9	1.427	1.427	*****	*****	NEG
[Group 2 C/O]	H9	1.166	1.166	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A7	1.385	1.358	0.039	2.865%	NC1
	B7	1.330				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C7	0.939	0.932	0.010	1.092%	CO1
	D7	0.924				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E7	1.585	1.585	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F7	0.864	0.864	*****	*****	NCO1

[...] Indicates manual entry if Sample ID is bracketed
***** Indicates an unread well or value out of range
  0 Indicates an equivocal response
  * Indicates an unread well or value out of range
  # Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	*****	*****	1.385	1.481	1.570	*****	*****	*****
B	*****	*****	*****	*****	*****	*****	1.330	1.453	1.515	*****	*****	*****
C	*****	*****	*****	*****	*****	*****	0.939	1.430	1.520	*****	*****	*****
D	*****	*****	*****	*****	*****	*****	0.924	1.486	1.532	*****	*****	*****
E	*****	*****	*****	*****	*****	*****	1.585	1.495	1.575	*****	*****	*****
F	*****	*****	*****	*****	*****	*****	0.864	1.508	1.551	*****	*****	*****
G	*****	*****	*****	*****	*****	*****	1.672	1.586	1.427	*****	*****	*****
H	*****	*****	*****	*****	*****	*****	1.905	1.858	1.166	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

Panel 1 (Page 1 of 9)

C:\..\Percession AmpOxyBez032812.DAT   Printed on 3/30/2012 at 11:12:20 PM   Page 1 of 9
Plate ID: Percession AmpOxyBez032812   AMPHETAMINE ULTRA

REVELATION DSX 6.21

TEST NO.   :
TEST NAME   : AMPHETAMINE ULTRA
PLATE   : Percession AmpOxyBez032812

W/L MODE	: SINGLE	DATE	: 3/29/2012
TEST FILTER	: 450 nm	TIME	: 1:20:27 AM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data   : AMPHETAMINE ULTRA, AUF-0047B,
Plate Lot Data : AmpOxyBen, ,
Reagent Lot Data : Acid Stop, ,
                : AMPHETAMINE ULTRA CONJUGATE, ,
                : BENZODIAZEPINE GROUP CONJUGATE, ,
                : EIA Buffer, ,
                : K-Blue, ,
                : OXYCODONE/OXYMORPHONE CONJUGATE, ,
                : AMPHETAMINE ULTRA CUTOFF, ,
                : AMPHETAMINE ULTRA NEGATIVE, ,
                : GROUP 1 CUTOFF, ,
                : GROUP 1 NEGATIVE, ,
                : Distilled Water, ,
                : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.453>1.088

+ equation   = CO
                  = 1.088
- equation   = CO
                  = 1.088

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[G1NEG#1]	G1	1.401	1.401	*****	*****	NEG
[G1CO#1]	H1	1.068	1.068	*****	*****	POS
[G1NEG#2]	A2	1.423	1.423	*****	*****	NEG
[G1CO#2]	B2	0.995	0.995	*****	*****	POS
[G1NEG#3]	C2	1.415	1.415	*****	*****	NEG
[G1CO#3]	D2	1.037	1.037	*****	*****	POS

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Panel 2 (Page 2 of 9)

C:\..\Percession AmpOxyBez032812.DAT   Printed on 3/30/2012 at 11:12:20 PM   Page 2 of 9
Plate ID: Percession AmpOxyBez032812   AMPHETAMINE ULTRA

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[G1NEG#4]	E2	1.382	1.382	*****	*****	NEG
[G1CO#4]	F2	1.034	1.034	*****	*****	POS
[G1NEG#5]	G2	1.339	1.339	*****	*****	NEG
[G1CO#5]	H2	1.130	1.130	*****	*****	NEG
[G1NEG#6]	A3	1.364	1.364	*****	*****	NEG
[G1CO#6]	B3	1.071	1.071	*****	*****	POS
[G1NEG#7]	C3	1.372	1.372	*****	*****	NEG
[G1CO#7]	D3	1.009	1.009	*****	*****	POS
[G1NEG#8]	E3	1.381	1.381	*****	*****	NEG
[G1CO#8]	F3	1.007	1.007	*****	*****	POS
[G1NEG#9]	G3	1.330	1.330	*****	*****	NEG
[G1CO#9]	H3	1.063	1.063	*****	*****	POS

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	1.479	1.453	0.036	2.480%	NC1
	B1	1.428				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C1	1.066	1.088	0.031	2.805%	CO1
	D1	1.110				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E1	1.509	1.509	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F1	0.965	0.965	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

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Panel 3 (Page 3 of 9)

C:\..\Percession AmpOxyBez032812.DAT   Printed on 3/30/2012 at 11:12:20 PM   Page 3 of 9
Plate ID: Percession AmpOxyBez032812   AMPHETAMINE ULTRA

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.479	1.423	1.364	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.428	0.995	1.071	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.066	1.415	1.372	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.110	1.037	1.009	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.509	1.382	1.381	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	0.965	1.034	1.007	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.401	1.339	1.330	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.068	1.130	1.063	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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Panel 4 (Page 4 of 9)

C:\..\Percession AmpOxyBez032812.DAT   Printed on 3/30/2012 at 11:12:20 PM   Page 4 of 9
Plate ID: Percession AmpOxyBez032812   OXYCODONE/OXYMORPHONE

TEST NO.   :
TEST NAME   : OXYCODONE-OXYMORPHONE
PLATE   : Percession AmpOxyBez032812

W/L MODE	: SINGLE	DATE	: 3/29/2012
TEST FILTER	: 450 nm	TIME	: 1:20:27 AM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data   : OXYCODONE-OXYMORPHONE, OXF-0037B,
Plate Lot Data : AmpOxyBen, ,
Reagent Lot Data : Acid Stop, ,
                : EIA Buffer, ,
                : K-Blue, ,
                : OXYCODONE/OXYMORPHONE CONJUGATE, ,
                : GROUP 1 CUTOFF, ,
                : GROUP 1 NEGATIVE, ,
                : OXYCODONE/OXYMORPHONE CUTOFF, ,
                : OXYCODONE/OXYMORPHONE NEGATIVE, ,
                : Distilled Water, ,
                : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.032>1.198

+ equation   = CO
                  = 1.199
- equation   = CO
                  = 1.199

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[G1NEG#1]	G4	2.018	2.018	*****	*****	NEG
[G1CO#1]	H4	1.337	1.337	*****	*****	NEG
[G1NEG#2]	A5	2.096	2.096	*****	*****	NEG
[G1CO#2]	B5	1.239	1.239	*****	*****	NEG
[G1NEG#3]	C5	2.035	2.035	*****	*****	NEG
[G1CO#3]	D5	1.313	1.313	*****	*****	NEG
[G1NEG#4]	E5	2.034	2.034	*****	*****	NEG
[G1CO#4]	F5	1.316	1.316	*****	*****	NEG
[G1NEG#5]	G5	1.976	1.976	*****	*****	NEG
[G1CO#5]	H5	1.315	1.315	*****	*****	NEG
[G1NEG#6]	A6	2.019	2.019	*****	*****	NEG

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C:\..\Percession AmpOxyBez032812.DAT   Printed on 3/30/2012 at 11:12:20 PM   Page 5 of 9
Plate ID: Percession AmpOxyBez032812   OXYCODONE/OXYMORPHONE

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[G1CO#6]	B6	1.272	1.272	*****	*****	NEG
[G1NEG#7]	C6	2.050	2.050	*****	*****	NEG
[G1CO#7]	D6	1.304	1.304	*****	*****	NEG
[G1NEG#8]	E6	2.036	2.036	*****	*****	NEG
[G1CO#8]	F6	1.273	1.273	*****	*****	NEG
[G1NEG#9]	G6	1.846	1.846	*****	*****	NEG
[G1CO#9]	H6	1.291	1.291	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A4	2.048	2.033	0.022	1.071%	NC1
	B4	2.018				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C4	1.263	1.199	0.091	7.584%	CO1
	D4	1.135				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E4	2.134	2.134	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F4	1.148	1.148	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

C:\..\Percession AmpOxyBez032812.DAT   Printed on 3/30/2012 at 11:12:20 PM   Page 6 of 9
Plate ID: Percession AmpOxyBez032812   OXYCODONE/OXYMORPHONE

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	2.048	2.096	2.019	*****	*****	*****	*****	*****	*****
B	*****	*****	*****	2.018	1.239	1.272	*****	*****	*****	*****	*****	*****
C	*****	*****	*****	1.263	2.035	2.050	*****	*****	*****	*****	*****	*****
D	*****	*****	*****	1.135	1.313	1.304	*****	*****	*****	*****	*****	*****
E	*****	*****	*****	2.134	2.034	2.036	*****	*****	*****	*****	*****	*****
F	*****	*****	*****	1.148	1.316	1.273	*****	*****	*****	*****	*****	*****
G	*****	*****	*****	2.018	1.976	1.846	*****	*****	*****	*****	*****	*****
H	*****	*****	*****	1.337	1.315	1.291	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

C:\..\Percession AmpOxyBez032812.DAT   Printed on 3/30/2012 at 11:12:20 PM   Page 7 of 9
Plate ID: Percession AmpOxyBez032812   BENZODIAZEPINE GROUP

TEST NO.	:
TEST NAME	: BENZODIAZEPINE GROUP
PLATE	: Percession AmpOxyBez032812

W/L MODE	: SINGLE	DATE	: 3/29/2012
TEST FILTER	: 450 nm	TIME	: 1:20:27 AM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data   : BENZODIAZEPINE GROUP, BGF-0061B, ,
Plate Lot Data   : AmpOxyBen, ,
Reagent Lot Data   : Acid Stop, ,
       : BENZODIAZEPINE GROUP CONJUGATE, ,
       : EIA Buffer, ,
       : K-Blue, ,
       : BENZODIAZEPINE GROUP CUTOFF, ,
       : BENZODIAZEPINE GROUP NEGATIVE, ,
       : GROUP 2 CUTOFF, , ,
       : GROUP 2 NEGATIVE, ,
       : Distilled Water, ,
       : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.675>0.745

+ equation   = CO
           = 0.746
- equation   = CO
           = 0.746

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[G2NEG#1]	G7	1.720	1.720	*****	*****	NEG
[G2CO#1]	H7	0.740	0.740	*****	*****	POS
[G2NEG#2]	A8	1.691	1.691	*****	*****	NEG
[G2CO#2]	B8	0.771	0.771	*****	*****	NEG
[G2NEG#3]	C8	1.740	1.740	*****	*****	NEG
[G2CO#3]	D8	0.814	0.814	*****	*****	NEG
[G2NEG#4]	E8	1.744	1.744	*****	*****	NEG
[G2CO#4]	F8	0.784	0.784	*****	*****	NEG
[G2NEG#5]	G8	1.701	1.701	*****	*****	NEG
[G2CO#5]	H8	0.796	0.796	*****	*****	NEG
[G2NEG#6]	A9	1.762	1.762	*****	*****	NEG

C:\..\Percession AmpOxyBez032812.DAT   Printed on 3/30/2012 at 11:12:20 PM   Page 8 of 9
Plate ID: Percession AmpOxyBez032812   BENZODIAZEPINE GROUP

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[G2CO#6]	B9	0.865	0.865	*****	*****	NEG
[G2NEG#7]	C9	1.746	1.746	*****	*****	NEG
[G2CO#7]	D9	0.776	0.776	*****	*****	NEG
[G2NEG#8]	E9	1.726	1.726	*****	*****	NEG
[G2CO#8]	F9	0.787	0.787	*****	*****	NEG
[G2NEC#9]	G9	1.741	1.741	*****	*****	NEG
[G2CO#9]	H9	0.877	0.877	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A7	1.665	1.675	0.014	0.864%	NC1
	B7	1.686				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C7	0.728	0.746	0.025	3.291%	CO1
	D7	0.763				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E7	1.372	1.372	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F7	0.526	0.526	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

Top-left panel

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	*****	*****	1.665	1.691	1.762	*****	*****	*****
B	*****	*****	*****	*****	*****	*****	1.686	0.771	0.865	*****	*****	*****
C	*****	*****	*****	*****	*****	*****	0.728	1.740	1.746	*****	*****	*****
D	*****	*****	*****	*****	*****	*****	0.763	0.814	0.776	*****	*****	*****
E	*****	*****	*****	*****	*****	*****	1.372	1.744	1.726	*****	*****	*****
F	*****	*****	*****	*****	*****	*****	0.526	0.784	0.787	*****	*****	*****
G	*****	*****	*****	*****	*****	*****	1.720	1.701	1.741	*****	*****	*****
H	*****	*****	*****	*****	*****	*****	0.740	0.796	0.877	*****	*****	*****

***** Indicates an unread well or value out of range

Dynex Technologies

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Top-right panel

REVELATION DSX 6.21

TEST NO.   :
TEST NAME   : COCAINE-BZE
PLATE   : PER CocOpiTHC032812

W/L MODE   : SINGLE   DATE   : 3/29/2012
TEST FILTER   : 450 nm   TIME   : 1:39:01 AM
REF. FILTER   : *   OPERATOR : admin

Kit Lot Data   : COCAINE-BZE, BZF-0079B,
Plate Lot Data   : CocOpiTHC, ,
Reagent Lot Data : Acid Stop, ,
                       : COCAINE/BZE CONJUGATE, ,
                       : EIA Buffer, ,
                       : K-Blue, ,
                       : OPIATE GROUP CONJUGATE, ,
                       : THC CONJUGATE, ,
                       : COCAINE/BZE CUTOFF, ,
                       : COCAINE/BZE NEGATIVE, ,
                       : GROUP 2 CUTOFF, ,
                       : GROUP 2 NEGATIVE, ,
                       : Distilled Water, ,
                       : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.188>0.497

+ equation   = CO
                       = 0.498
- equation   = CO
                       = 0.498

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[G2NEG#1]	G1	1.316	1.316	*****	*****	NEG
[G2CO#1]	H1	0.550	0.550	*****	*****	NEG
[G2NEG#2]	A2	1.334	1.334	*****	*****	NEG
[G2CO#2]	B2	0.496	0.496	*****	*****	POS
[G2NEG#3]	C2	1.179	1.179	*****	*****	NEG
[G2CO#3]	D2	0.476	0.476	*****	*****	POS

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Bottom-left panel

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[G2NEG#4]	E2	1.296	1.296	*****	*****	NEG
[G2CO#4]	F2	0.500	0.500	*****	*****	NEG
[G2NEG#5]	G2	1.310	1.310	*****	*****	NEG
[G2CO#5]	H2	0.524	0.524	*****	*****	NEG
[G2NEG#6]	A3	1.236	1.236	*****	*****	NEG
[G2CO#6]	B3	0.538	0.538	*****	*****	NEG
[G2NEG#7]	C3	1.284	1.284	*****	*****	NEG
[G2CO#7]	D3	0.485	0.485	*****	*****	POS
[G2NEG#8]	E3	1.247	1.247	*****	*****	NEG
[G2CO#8]	F3	0.550	0.550	*****	*****	NEG
[G2NEC#9]	G3	1.256	1.256	*****	*****	NEG
[G2CO#9]	H3	0.503	0.503	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	1.289	1.189	0.141	11.903%	NC1
	B1	1.089				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C1	0.543	0.498	0.064	12.900%	CO1
	D1	0.452				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E1	0.953	0.953	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F1	0.466	0.466	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

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Bottom-right panel

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.289	1.334	1.236	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.089	0.496	0.538	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	0.543	1.179	1.284	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	0.452	0.476	0.485	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	0.953	1.296	1.247	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	0.466	0.500	0.550	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.316	1.310	1.256	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	0.550	0.524	0.503	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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C:\..\PER CocOpiTHC032812.DAT   Printed on 3/30/2012 at 11:07:46 PM   Page 4 of 9
Plate ID: PER CocOpiTHC032812   OPIATE GROUP

TEST NO.	:
TEST NAME	: OPIATE GROUP
PLATE	: PER CocOpiTHC032812

W/L MODE	: SINGLE	DATE	: 3/29/2012
TEST FILTER	: 450 nm	TIME	: 1:39:01 AM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : OPIATE GROUP, MOF-0056B,
Plate Lot Data : CocOpiTHC, ,
Reagent Lot Data : Acid Stop, ,
: EIA Buffer, ,
: K-Blue, ,
: OPIATE GROUP CONJUGATE, ,
: GROUP 2 CUTOFF, ,
: GROUP 2 NEGATIVE, ,
: OPIATE GROUP CUTOFF, ,
: OPIATE GROUP NEGATIVE, ,
: Distilled Water, ,
: Neogen Wash Buffer, ,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.425>0.858

+ equation   = CO
          = 0.858
- equation   = CO
          = 0.858

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[G2NEG#1]	G4	1.440	1.440	*****	*****	NEG
[G2CO#1]	H4	0.941	0.941	*****	*****	NEG
[G2NEG#2]	A5	1.381	1.381	*****	*****	NEG
[G2CO#2]	B5	0.874	0.874	*****	*****	NEG
[G2NEG#3]	C5	1.384	1.384	*****	*****	NEG
[G2CO#3]	D5	0.908	0.908	*****	*****	NEG
[G2NEG#4]	E5	1.373	1.373	*****	*****	NEG
[G2CO#4]	F5	0.817	0.817	*****	*****	POS
[G2NEG#5]	G5	1.450	1.450	*****	*****	NEG
[G2CO#5]	H5	0.816	0.816	*****	*****	POS
[G2NEG#6]	A6	1.520	1.520	*****	*****	NEG

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C:\..\PER CocOpiTHC032812.DAT   Printed on 3/30/2012 at 11:07:46 PM   Page 5 of 9
Plate ID: PER CocOpiTHC032812   OPIATE GROUP

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[G2CO#6]	B6	0.907	0.907	*****	*****	NEG
[G2NEG#7]	C6	1.499	1.499	*****	*****	NEG
[G2CO#7]	D6	0.833	0.833	*****	*****	POS
[G2NEG#8]	E6	1.420	1.420	*****	*****	NEG
[G2CO#8]	F6	0.861	0.861	*****	*****	NEG
[G2NEC#9]	G6	1.602	1.602	*****	*****	NEG
[G2CO#9]	H6	0.822	0.822	*****	*****	POS

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A4	1.450	1.425	0.035	2.427%	NC1
	B4	1.401				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C4	0.828	0.858	0.042	4.935%	CO1
	D4	0.888				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E4	1.746	1.746	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F4	0.977	0.977	*****	*****	NCO1

[...]   Indicates manual SID entry or manual pipetting
*****   Indicates an unread well or value out of range
0   Indicates an equivocal response
*   Indicates an unread well or value out of range
#   Indicates combined data

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C:\..\PER CocOpiTHC032812.DAT   Printed on 3/30/2012 at 11:07:46 PM   Page 6 of 9
Plate ID: PER CocOpiTHC032812   OPIATE GROUP

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	1.450	1.381	1.520	*****	*****	*****	*****	*****	*****
B	*****	*****	*****	1.401	0.874	0.907	*****	*****	*****	*****	*****	*****
C	*****	*****	*****	0.828	1.384	1.499	*****	*****	*****	*****	*****	*****
D	*****	*****	*****	0.888	0.908	0.833	*****	*****	*****	*****	*****	*****
E	*****	*****	*****	1.746	1.373	1.420	*****	*****	*****	*****	*****	*****
F	*****	*****	*****	0.977	0.817	0.861	*****	*****	*****	*****	*****	*****
G	*****	*****	*****	1.440	1.450	1.602	*****	*****	*****	*****	*****	*****
H	*****	*****	*****	0.941	0.816	0.822	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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C:\..\PER CocOpiTHC032812.DAT   Printed on 3/30/2012 at 11:07:46 PM   Page 7 of 9
Plate ID: PER CocOpiTHC032812   THC

TEST NO.	:
TEST NAME	: THC
PLATE	: PER CocOpiTHC032812

W/L MODE	: SINGLE	DATE	: 3/29/2012
TEST FILTER	: 450 nm	TIME	: 1:39:01 AM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : THC, TCF-0055B,
Plate Lot Data : CocOpiTHC, ,
Reagent Lot Data : Acid Stop, ,
: EIA Buffer, ,
: K-Blue, ,
: THC CONJUGATE, ,
: GROUP 2 CUTOFF, ,
: GROUP 2 NEGATIVE, ,
: THC CUTOFF, ,
: THC NEGATIVE, ,
: Distilled Water, ,
: Neogen Wash Buffer, ,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.559>1.113

+ equation   = CO
          = 1.114
- equation   = CO
          = 1.114

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[G2NEG#1]	G7	1.378	1.378	*****	*****	NEG
[G2CO#1]	H7	1.088	1.088	*****	*****	POS
[G2NEG#2]	A8	1.607	1.607	*****	*****	NEG
[G2CO#2]	B8	1.148	1.148	*****	*****	NEG
[G2NEG#3]	C8	1.455	1.455	*****	*****	NEG
[G2CO#3]	D8	1.132	1.132	*****	*****	NEG
[G2NEG#4]	E8	1.454	1.454	*****	*****	NEG
[G2CO#4]	F8	1.110	1.110	*****	*****	POS
[G2NEG#5]	G8	1.369	1.369	*****	*****	NEG
[G2CO#5]	H8	1.143	1.143	*****	*****	NEG
[G2NEG#6]	A9	1.515	1.515	*****	*****	NEG

C:\..\PER CocOpiTHC032812.DAT   Printed on 3/30/2012 at 11:07:46 PM   Page 8 of 9
Plate ID: PER CocOpiTHC032812   THC

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[G2CO#6]	B9	1.197	1.197	*****	*****	NEG
[G2NEG#7]	C9	1.483	1.483	*****	*****	NEG
[G2CO#7]	D9	1.130	1.130	*****	*****	NEG
[G2NEG#8]	E9	1.434	1.434	*****	*****	NEG
[G2CO#8]	F9	1.126	1.126	*****	*****	NEG
[G2NEC#9]	G9	1.424	1.424	*****	*****	NEG
[G2CO#9]	H9	1.107	1.107	*****	*****	POS

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A7	1.559	1.559	0.001	0.044%	NC1
	B7	1.560				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C7	1.162	1.114	0.069	6.175%	CO1
	D7	1.065				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E7	1.508	1.508	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F7	0.594	0.594	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

C:\..\PER CocOpiTHC032812.DAT   Printed on 3/30/2012 at 11:07:46 PM   Page 9 of 9
Plate ID: PER CocOpiTHC032812   THC

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	*****	*****	1.559	1.607	1.515	*****	*****	*****
B	*****	*****	*****	*****	*****	*****	1.560	1.148	1.197	*****	*****	*****
C	*****	*****	*****	*****	*****	*****	1.162	1.455	1.483	*****	*****	*****
D	*****	*****	*****	*****	*****	*****	1.065	1.132	1.130	*****	*****	*****
E	*****	*****	*****	*****	*****	*****	1.508	1.454	1.434	*****	*****	*****
F	*****	*****	*****	*****	*****	*****	0.594	1.110	1.126	*****	*****	*****
G	*****	*****	*****	*****	*****	*****	1.378	1.369	1.424	*****	*****	*****
H	*****	*****	*****	*****	*****	*****	1.088	1.143	1.107	*****	*****	*****

***** Indicates an unread well or value out of range

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C:\..\PER Cot032812.DAT   Printed on 3/30/2012 at 11:11:18 PM   Page 1 of 3
Plate ID: PER Cot032812   COTININE

REVELATION DSX 6.21

TEST NO.	:		
TEST NAME	: COTININE		
PLATE	: PER Cot032812		
W/L MODE	: SINGLE	DATE	: 3/29/2012
TEST FILTER	: 450 nm	TIME	: 12:31:03 AM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data   : COTININE, CTI-0034,
Plate Lot Data   : Cot, ,
Reagent Lot Data   : Acid Stop, ,
     : COTININE CONJUGATE, ,
     : EIA Buffer, ,
     : K-Blue, ,
     : COTININE CUTOFF, ,
     : COTININE NEGATIVE, ,
     : GROUP 1 CUTOFF, ,
     : GROUP 1 NEGATIVE, ,
     : Distilled Water, ,
     : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   3.228>1.750

+ equation   = CO
         = 1.751
- equation   = CO
         = 1.751

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[G1NEG#1]	G1	3.231	3.231	*****	*****	NEG
[G1CO#1]	H1	1.900	1.900	*****	*****	NEG
[G1NEG#2]	A2	3.312	3.312	*****	*****	NEG
[G1CO#2]	B2	1.815	1.815	*****	*****	NEG
[G1NEG#3]	C2	3.264	3.264	*****	*****	NEG
[G1CO#3]	D2	1.756	1.756	*****	*****	NEG
[G1NEG#4]	E2	3.226	3.226	*****	*****	NEG
[G1CO#4]	F2	1.735	1.735	*****	*****	POS

C:\..\PER Cot032812.DAT   Printed on 3/30/2012 at 11:11:18 PM   Page 2 of 3
Plate ID: PER Cot032812   COTININE

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[G1NEG#5]	G2	3.263	3.263	*****	*****	NEG
[G1CO#5]	H2	1.864	1.864	*****	*****	NEG
[G1NEG#6]	A3	3.154	3.154	*****	*****	NEG
[G1CO#6]	B3	1.773	1.773	*****	*****	NEG
[G1NEG#7]	C3	3.091	3.091	*****	*****	NEG
[G1CO#7]	D3	1.736	1.736	*****	*****	POS
[G1NEG#8]	E3	3.078	3.078	*****	*****	NEG
[G1CO#8]	F3	1.768	1.768	*****	*****	NEG
[G1NEG#9]	G3	3.085	3.085	*****	*****	NEG
[G1CO#9]	H3	1.812	1.812	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	3.281	3.229	0.073	2.266%	NC1
	B1	3.177				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C1	1.789	1.751	0.054	3.104%	CO1
	D1	1.712				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E1	2.390	2.390	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F1	1.276	1.276	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

Panel 1 (top-left)

C:\..\PER Cot032812.DAT   Printed on 3/30/2012 at 11:11:18 PM   Page 3 of 3
Plate ID: PER Cot032812   COTININE

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	3.281	3.312	3.154	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	3.177	1.815	1.773	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.789	3.264	3.091	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.712	1.756	1.736	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	2.390	3.226	3.078	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.276	1.735	1.768	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	3.231	3.263	3.085	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.900	1.864	1.812	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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Panel 2 (top-right)

C:\..\PREC2AMPOXYBENZ032812.DAT   Printed on 3/30/2012 at 11:13:11 PM   Page 1 of 9
Plate ID: PREC2AMPOXYBENZ032812   AMPHETAMINE ULTRA

REVELATION DSX 6.21

TEST NO.   :
TEST NAME   : AMPHETAMINE ULTRA
PLATE   : PREC2AMPOXYBENZ032812

W/L MODE	: SINGLE	DATE	: 3/29/2012
TEST FILTER	: 450 nm	TIME	: 4:53:03 AM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data   : AMPHETAMINE ULTRA, AUF-0047B,
Plate Lot Data   : AMPOXYBENZ, ,
Reagent Lot Data   : Acid Stop, ,
                    : AMPHETAMINE ULTRA CONJUGATE, ,
                    : BENZODIAZEPINE GROUP CONJUGATE, ,
                    : EIA Buffer, ,
                    : K-Blue, ,
                    : OXYCODONE/OXYMORPHONE CONJUGATE, ,
                    : AMPHETAMINE ULTRA CUTOFF, ,
                    : AMPHETAMINE ULTRA NEGATIVE, ,
                    : GROUP 1 CUTOFF, ,
                    : GROUP 1 NEGATIVE, ,
                    : Distilled Water, ,
                    : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.562>1.145

+ equation   = CO
                    = 1.145
- equation   = CO
                    = 1.145

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[G1NEG1]	G1	1.396	1.396	*****	*****	NEG
[G1CO1]	H1	1.150	1.150	*****	*****	NEG
[G1NEG2]	A2	1.538	1.538	*****	*****	NEG
[G1CO2]	B2	1.143	1.143	*****	*****	POS
[G1NEG3]	C2	1.528	1.528	*****	*****	NEG
[G1CO3]	D2	1.160	1.160	*****	*****	NEG

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Panel 3 (bottom-left)

C:\..\PREC2AMPOXYBENZ032812.DAT   Printed on 3/30/2012 at 11:13:11 PM   Page 2 of 9
Plate ID: PREC2AMPOXYBENZ032812   AMPHETAMINE ULTRA

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[G1NEG4]	E2	1.503	1.503	*****	*****	NEG
[G1CO4]	F2	1.076	1.076	*****	*****	POS
[G1NEG5]	G2	1.444	1.444	*****	*****	NEG
[G1CO5]	H2	1.137	1.137	*****	*****	POS
[G1NEG6]	A3	1.581	1.581	*****	*****	NEG
[G1CO6]	B3	1.091	1.091	*****	*****	POS
[G1NEG7]	C3	1.494	1.494	*****	*****	NEG
[G1CO7]	D3	1.105	1.105	*****	*****	POS
[G1NEG8]	E3	1.454	1.454	*****	*****	NEG
[G1CO8]	F3	1.095	1.095	*****	*****	POS
[G1NEG9]	G3	1.483	1.483	*****	*****	NEG
[G1CO9]	H3	1.059	1.059	*****	*****	POS

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	1.528	1.562	0.048	3.068%	NC1
	B1	1.596				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C1	1.173	1.145	0.039	3.417%	CO1
	D1	1.118				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E1	1.589	1.589	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F1	1.074	1.074	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

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Panel 4 (bottom-right)

C:\..\PREC2AMPOXYBENZ032812.DAT   Printed on 3/30/2012 at 11:13:11 PM   Page 3 of 9
Plate ID: PREC2AMPOXYBENZ032812   AMPHETAMINE ULTRA

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.528	1.538	1.581	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.596	1.143	1.091	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.173	1.528	1.494	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.118	1.160	1.105	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.589	1.503	1.454	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.074	1.076	1.095	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.396	1.444	1.483	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.150	1.137	1.059	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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C:\..\PREC2AMPOXYBENZ032812.DAT   Printed on 3/30/2012 at 11:13:11 PM   Page 4 of 9
Plate ID: PREC2AMPOXYBENZ032812   OXYCODONE/OXYMORPHONE

TEST NO.   :
TEST NAME   : OXYCODONE-OXYMORPHONE
PLATE   : PREC2AMPOXYBENZ032812

W/L MODE   : SINGLE   DATE   : 3/29/2012
TEST FILTER   : 450 nm   TIME   : 4:53:03 AM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : OXYCODONE-OXYMORPHONE, OXF-0037B,
Plate Lot Data   : AMPOXYBENZ, ,
Reagent Lot Data   : Acid Stop, ,
                   : EIA Buffer, ,
                   : K-Blue, ,
                   : OXYCODONE/OXYMORPHONE CONJUGATE, ,
                   : GROUP 1 CUTOFF, ,
                   : GROUP 1 NEGATIVE, ,
                   : OXYCODONE/OXYMORPHONE CUTOFF, ,
                   : OXYCODONE/OXYMORPHONE NEGATIVE, ,
                   : Distilled Water, ,
                   : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.127>1.267

+ equation   = CO
                   = 1.267
- equation   = CO
                   = 1.267

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[G1NEG1]	G4	2.092	2.092	*****	*****	NEG
[G1CO1]	H4	1.353	1.353	*****	*****	NEG
[G1NEG2]	A5	2.088	2.088	*****	*****	NEG
[G1CO2]	B5	1.319	1.319	*****	*****	NEG
[G1NEG3]	C5	2.110	2.110	*****	*****	NEG
[G1CO3]	D5	1.409	1.409	*****	*****	NEG
[G1NEG4]	E5	2.139	2.139	*****	*****	NEG
[G1CO4]	F5	1.369	1.369	*****	*****	NEG
[G1NEG5]	G5	2.095	2.095	*****	*****	NEG
[G1CO5]	H5	1.325	1.325	*****	*****	NEG
[G1NEG6]	A6	2.110	2.110	*****	*****	NEG

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C:\..\PREC2AMPOXYBENZ032812.DAT   Printed on 3/30/2012 at 11:13:11 PM   Page 5 of 9
Plate ID: PREC2AMPOXYBENZ032812   OXYCODONE/OXYMORPHONE

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[G1CO6]	B6	1.301	1.301	*****	*****	NEG
[G1NEG7]	C6	2.153	2.153	*****	*****	NEG
[G1CO7]	D6	1.353	1.353	*****	*****	NEG
[G1NEG8]	E6	2.148	2.148	*****	*****	NEG
[G1CO8]	F6	1.359	1.359	*****	*****	NEG
[G1NEG9]	G6	2.111	2.111	*****	*****	NEG
[G1CO9]	H6	1.347	1.347	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A4	2.146	2.127	0.027	1.254%	NC1
	B4	2.108				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C4	1.325	1.267	0.082	6.463%	CO1
	D4	1.209				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E4	2.289	2.289	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F4	1.365	1.365	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

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C:\..\PREC2AMPOXYBENZ032812.DAT   Printed on 3/30/2012 at 11:13:11 PM   Page 6 of 9
Plate ID: PREC2AMPOXYBENZ032812   OXYCODONE/OXYMORPHONE

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	2.146	2.088	2.110	*****	*****	*****	*****	*****	*****
B	*****	*****	*****	2.108	1.319	1.301	*****	*****	*****	*****	*****	*****
C	*****	*****	*****	1.325	2.110	2.153	*****	*****	*****	*****	*****	*****
D	*****	*****	*****	1.209	1.409	1.353	*****	*****	*****	*****	*****	*****
E	*****	*****	*****	2.289	2.139	2.148	*****	*****	*****	*****	*****	*****
F	*****	*****	*****	1.365	1.369	1.359	*****	*****	*****	*****	*****	*****
G	*****	*****	*****	2.092	2.095	2.111	*****	*****	*****	*****	*****	*****
H	*****	*****	*****	1.353	1.325	1.347	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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C:\..\PREC2AMPOXYBENZ032812.DAT   Printed on 3/30/2012 at 11:13:11 PM   Page 7 of 9
Plate ID: PREC2AMPOXYBENZ032812   BENZODIAZEPINE GROUP

TEST NO.   :
TEST NAME   : BENZODIAZEPINE GROUP
PLATE   : PREC2AMPOXYBENZ032812

W/L MODE   : SINGLE   DATE   : 3/29/2012
TEST FILTER   : 450 nm   TIME   : 4:53:03 AM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : BENZODIAZEPINE GROUP, BGF-0061B,
Plate Lot Data   : AMPOXYBENZ, ,
Reagent Lot Data   : Acid Stop, ,
                   : BENZODIAZEPINE GROUP CONJUGATE, ,
                   : EIA Buffer, ,
                   : K-Blue, ,
                   : BENZODIAZEPINE GROUP CUTOFF, ,
                   : BENZODIAZEPINE GROUP NEGATIVE, ,
                   : GROUP 2 CUTOFF, ,
                   : GROUP 2 NEGATIVE, ,
                   : Distilled Water, ,
                   : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.873>0.919

+ equation   = CO
                   = 0.920
- equation   = CO
                   = 0.920

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[G2NEG1]	G7	1.812	1.812	*****	*****	NEG
[G2CO1]	H7	0.833	0.833	*****	*****	POS
[G2NEG2]	A8	1.694	1.694	*****	*****	NEG
[G2CO2]	B8	0.827	0.827	*****	*****	POS
[G2NEG3]	C8	1.744	1.744	*****	*****	NEG
[G2CO3]	D8	0.852	0.852	*****	*****	POS
[G2NEG4]	E8	1.798	1.798	*****	*****	NEG
[G2CO4]	F8	0.813	0.813	*****	*****	POS
[G2NEG5]	G8	1.860	1.860	*****	*****	NEG
[G2CO5]	H8	0.867	0.867	*****	*****	POS
[G2NEG6]	A9	1.764	1.764	*****	*****	NEG

Panel 1 (top-left)

C:\..\PREC2AMPOXYBENZ032812.DAT   Printed on 3/30/2012 at 11:13:11 PM   Page 8 of 9
Plate ID: PREC2AMPOXYBENZ032812   BENZODIAZEPINE GROUP

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[G2CO6]	B9	0.779	0.779	*****	*****	POS
[G2NEG7]	C9	1.795	1.795	*****	*****	NEG
[G2CO7]	D9	0.804	0.804	*****	*****	POS
[G2NEG8]	E9	1.736	1.736	*****	*****	NEG
[G2CO8]	F9	0.801	0.801	*****	*****	POS
[G2NEG9]	G9	1.760	1.760	*****	*****	NEG
[G2CO9]	H9	0.770	0.770	*****	*****	POS

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A7	1.869	1.873	0.006	0.302%	NC1
	B7	1.877				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C7	0.889	0.920	0.043	4.729%	CO1
	D7	0.950				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E7	1.427	1.427	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F7	0.605	0.605	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

Panel 2 (top-right)

C:\..\PREC2AMPOXYBENZ032812.DAT   Printed on 3/30/2012 at 11:13:11 PM   Page 9 of 9
Plate ID: PREC2AMPOXYBENZ032812   BENZODIAZEPINE GROUP

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	*****	*****	1.869	1.694	1.764	*****	*****	*****
B	*****	*****	*****	*****	*****	*****	1.877	0.827	0.779	*****	*****	*****
C	*****	*****	*****	*****	*****	*****	0.889	1.744	1.795	*****	*****	*****
D	*****	*****	*****	*****	*****	*****	0.950	0.852	0.804	*****	*****	*****
E	*****	*****	*****	*****	*****	*****	1.427	1.798	1.736	*****	*****	*****
F	*****	*****	*****	*****	*****	*****	0.605	0.813	0.801	*****	*****	*****
G	*****	*****	*****	*****	*****	*****	1.812	1.860	1.760	*****	*****	*****
H	*****	*****	*****	*****	*****	*****	0.833	0.867	0.770	*****	*****	*****

***** Indicates an unread well or value out of range

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Panel 3 (bottom-left)

C:\..\PREC2COCOPITHC032812.DAT   Printed on 3/30/2012 at 11:14:05 PM   Page 1 of 9
Plate ID: PREC2COCOPITHC032812   COCAINE/BZE

REVELATION DSX 6.21

TEST NO.	:
TEST NAME	: COCAINE-BZE
PLATE	: PREC2COCOPITHC032812

W/L MODE	: SINGLE	DATE	: 3/29/2012
TEST FILTER	: 450 nm	TIME	: 5:11:20 AM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data   : COCAINE-BZE, BZF-0079B,
Plate Lot Data : COCOPITHC, ,
Reagent Lot Data : Acid Stop, ,
                : COCAINE/BZE CONJUGATE, ,
                : EIA Buffer, ,
                : K-Blue, ,
                : OPIATE GROUP CONJUGATE, ,
                : THC CONJUGATE, ,
                : COCAINE/BZE CUTOFF, ,
                : COCAINE/BZE NEGATIVE, ,
                : GROUP 2 CUTOFF, ,
                : GROUP 2 NEGATIVE, ,
                : Distilled Water, ,
                : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO		1.210>0.417
+ equation	= CO	
	= 0.418	
- equation	= CO	
	= 0.418	

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[G2NEG1]	G1	1.295	1.295	*****	*****	NEG
[G2CO1]	H1	0.515	0.515	*****	*****	NEG
[G2NEG2]	A2	1.155	1.155	*****	*****	NEG
[G2CO2]	B2	0.438	0.438	*****	*****	NEG
[G2NEG3]	C2	1.120	1.120	*****	*****	NEG
[G2CO3]	D2	0.492	0.492	*****	*****	NEG

Panel 4 (bottom-right)

C:\..\PREC2COCOPITHC032812.DAT   Printed on 3/30/2012 at 11:14:05 PM   Page 2 of 9
Plate ID: PREC2COCOPITHC032812   COCAINE/BZE

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[G2NEG4]	E2	1.298	1.298	*****	*****	NEG
[G2CO4]	F2	0.482	0.482	*****	*****	NEG
[G2NEG5]	G2	1.265	1.265	*****	*****	NEG
[G2CO5]	H2	0.508	0.508	*****	*****	NEG
[G2NEG6]	A3	1.320	1.320	*****	*****	NEG
[G2CO6]	B3	0.485	0.485	*****	*****	NEG
[G2NEG7]	C3	1.192	1.192	*****	*****	NEG
[G2CO7]	D3	0.481	0.481	*****	*****	NEG
[G2NEG8]	E3	1.303	1.303	*****	*****	NEG
[G2CO8]	F3	0.523	0.523	*****	*****	NEG
[G2NEG9]	G3	1.233	1.233	*****	*****	NEG
[G2CO9]	H3	0.447	0.447	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	1.231	1.210	0.029	2.399%	NC1
	B1	1.190				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C1	0.471	0.418	0.075	17.892%	CO1
	D1	0.365				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E1	0.937	0.937	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F1	0.481	0.481	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

Panel 1 (Page 3 of 9)

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.231	1.155	1.320	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.190	0.438	0.485	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	0.471	1.120	1.192	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	0.365	0.492	0.481	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	0.937	1.298	1.303	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	0.481	0.482	0.523	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.295	1.265	1.233	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	0.515	0.508	0.447	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Panel 2 (Page 4 of 9)

TEST NO.	:		
TEST NAME	: OPIATE GROUP		
PLATE	: PREC2COCOPITHC032812		
W/L MODE	: SINGLE	DATE	: 3/29/2012
TEST FILTER	: 450 nm	TIME	: 5:11:20 AM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : OPIATE GROUP, MOF-0056B,
Plate Lot Data : COCOPITHC,
Reagent Lot Data : Acid Stop, ,
: EIA Buffer, ,
: K-Blue, ,
: OPIATE GROUP CONJUGATE, ,
: GROUP 2 CUTOFF, ,
: GROUP 2 NEGATIVE, ,
: OPIATE GROUP CUTOFF, ,
: OPIATE GROUP NEGATIVE, ,
: Distilled Water, ,
: Neogen Wash Buffer, ,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.450>0.814

+ equation   = CO
               = 0.814
- equation   = CO
               = 0.814

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[G2NEG1]	G4	1.642	1.642	*****	*****	NEG
[G2CO1]	H4	0.985	0.985	*****	*****	NEG
[G2NEG2]	A5	1.597	1.597	*****	*****	NEG
[G2CO2]	B5	0.850	0.850	*****	*****	NEG
[G2NEG3]	C5	1.640	1.640	*****	*****	NEG
[G2CO3]	D5	0.898	0.898	*****	*****	NEG
[G2NEG4]	E5	1.327	1.327	*****	*****	NEG
[G2CO4]	F5	0.874	0.874	*****	*****	NEG
[G2NEG5]	G5	1.622	1.622	*****	*****	NEG
[G2CO5]	H5	0.862	0.862	*****	*****	NEG
[G2NEG6]	A6	1.618	1.618			

Panel 3 (Page 5 of 9)

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[G2CO6]	B6	0.938	0.938	*****	*****	NEG
[G2NEG7]	C6	1.606	1.606	*****	*****	NEG
[G2CO7]	D6	0.758	0.758	*****	*****	POS
[G2NEG8]	E6	1.447	1.447	*****	*****	NEG
[G2CO8]	F6	0.908	0.908	*****	*****	NEG
[G2NEG9]	G6	1.532	1.532	*****	*****	NEG
[G2CO9]	H6	0.810	0.810	*****	*****	POS

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A4	1.410	1.451	0.057	3.922%	NC1
	B4	1.491				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C4	0.886	0.814	0.102	12.486%	CO1
	D4	0.742				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E4	1.439	1.439	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F4	0.918	0.918	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

Panel 4 (Page 6 of 9)

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	1.410	1.597	1.618	*****	*****	*****	*****	*****	*****
B	*****	*****	*****	1.491	0.850	0.938	*****	*****	*****	*****	*****	*****
C	*****	*****	*****	0.886	1.640	1.606	*****	*****	*****	*****	*****	*****
D	*****	*****	*****	0.742	0.898	0.758	*****	*****	*****	*****	*****	*****
E	*****	*****	*****	1.439	1.327	1.447	*****	*****	*****	*****	*****	*****
F	*****	*****	*****	0.918	0.874	0.908	*****	*****	*****	*****	*****	*****
G	*****	*****	*****	1.642	1.622	1.532	*****	*****	*****	*****	*****	*****
H	*****	*****	*****	0.985	0.862	0.810	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Panel 1 (Page 7 of 9)

TEST NO.	:
TEST NAME	: THC
PLATE	: PREC2COCOPITHC032812

W/L MODE	: SINGLE	DATE	: 3/29/2012
TEST FILTER	: 450 nm	TIME	: 5:11:20 AM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : THC, TCF-0055B,
Plate Lot Data : COCOPITHC, ,
Reagent Lot Data : Acid Stop, ,
: EIA Buffer, ,
: K-Blue, ,
: THC CONJUGATE, ,
: GROUP 2 CUTOFF, ,
: GROUP 2 NEGATIVE, ,
: THC CUTOFF, ,
: THC NEGATIVE, ,
: Distilled Water, ,
: Neogen Wash Buffer, ,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.624>1.230

+ equation   = CO
           = 1.231
- equation   = CO
           = 1.231

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[G2NEG1]	G7	1.443	1.443	*****	*****	NEG
[G2CO1]	H7	1.198	1.198	*****	*****	POS
[G2NEG2]	A8	1.698	1.698	*****	*****	NEG
[G2CO2]	B8	1.295	1.295	*****	*****	NEG
[G2NEG3]	C8	1.630	1.630	*****	*****	NEG
[G2CO3]	D8	1.191	1.191	*****	*****	POS
[G2NEG4]	E8	1.520	1.520	*****	*****	NEG
[G2CO4]	F8	1.238	1.238	*****	*****	NEG
[G2NEG5]	G8	1.521	1.521	*****	*****	NEG
[G2CO5]	H8	1.247	1.247	*****	*****	NEG
[G2NEG6]	A9	1.647	1.647	*****	*****	NEG

Panel 2 (Page 8 of 9)

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[G2CO6]	B9	1.321	1.321	*****	*****	NEG
[G2NEG7]	C9	1.638	1.638	*****	*****	NEG
[G2CO7]	D9	1.244	1.244	*****	*****	NEG
[G2NEG8]	E9	1.597	1.597	*****	*****	NEG
[G2CO8]	F9	1.165	1.165	*****	*****	POS
[G2NEG9]	G9	1.481	1.481	*****	*****	NEG
[G2CO9]	H9	1.193	1.193	*****	*****	POS

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A7	1.613	1.624	0.016	0.966%	NC1
	B7	1.636				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C7	1.270	1.231	0.056	4.567%	CO1
	D7	1.191				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E7	1.623	1.623	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F7	0.733	0.733	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

Panel 3 (Page 9 of 9)

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	*****	*****	1.613	1.698	1.647	*****	*****	*****
B	*****	*****	*****	*****	*****	*****	1.636	1.295	1.321	*****	*****	*****
C	*****	*****	*****	*****	*****	*****	1.270	1.630	1.638	*****	*****	*****
D	*****	*****	*****	*****	*****	*****	1.191	1.191	1.244	*****	*****	*****
E	*****	*****	*****	*****	*****	*****	1.623	1.520	1.597	*****	*****	*****
F	*****	*****	*****	*****	*****	*****	0.733	1.238	1.165	*****	*****	*****
G	*****	*****	*****	*****	*****	*****	1.443	1.521	1.481	*****	*****	*****
H	*****	*****	*****	*****	*****	*****	1.198	1.247	1.193	*****	*****	*****

***** Indicates an unread well or value out of range

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Panel 4 (Page 1 of 3)

REVELATION DSX 6.21

TEST NO.	:
TEST NAME	: COTININE
PLATE	: PREC2COT032812

W/L MODE	: SINGLE	DATE	: 3/29/2012
TEST FILTER	: 450 nm	TIME	: 4:03:18 AM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : COTININE, CTI-0034,
Plate Lot Data : COT, ,
Reagent Lot Data : Acid Stop, ,
: COTININE CONJUGATE, ,
: EIA Buffer, ,
: K-Blue, ,
: COTININE CUTOFF, ,
: COTININE NEGATIVE, ,
: GROUP 1 CUTOFF, ,
: GROUP 1 NEGATIVE, ,
: Distilled Water, ,
: Neogen Wash Buffer, ,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   3.441>1.853

+ equation   = CO
           = 1.853
- equation   = CO
           = 1.853

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[G1NEG1]	G1	3.337	3.337	*****	*****	NEG
[G1CO1]	H1	1.978	1.978	*****	*****	NEG
[G1NEG2]	A2	OVER	OVER	*****	*****	*
[G1CO2]	B2	1.850	1.850	*****	*****	POS
[G1NEG3]	C2	3.398	3.398	*****	*****	NEG
[G1CO3]	D2	1.836	1.836	*****	*****	POS
[G1NEG4]	E2	3.337	3.337	*****	*****	NEG
[G1CO4]	F2	1.860	1.860	*****	*****	NEG

Panel 1 (top-left)

C:\..\PREC2COT032812.DAT Printed on 3/30/2012 at 11:14:47 PM Page 2 of 3
Plate ID: PREC2COT032812 COTININE

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[G1NEG5]	G2	3.300	3.300	*****	*****	NEG
[G1CO5]	H2	1.941	1.941	*****	*****	NEG
[G1NEG6]	A3	3.449	3.449	*****	*****	NEG
[G1CO6]	B3	1.882	1.882	*****	*****	NEG
[G1NEG7]	C3	3.321	3.321	*****	*****	NEG
[G1CO7]	D3	1.741	1.741	*****	*****	POS
[G1NEG8]	E3	3.161	3.161	*****	*****	NEG
[G1CO8]	F3	1.681	1.681	*****	*****	POS
[G1NEG9]	G3	3.102	3.102	*****	*****	NEG
[G1CO9]	H3	1.930	1.930	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	3.480	3.441	0.055	1.600%	NC1
	B1	3.402				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C1	1.879	1.853	0.036	1.961%	CO1
	D1	1.827				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E1	2.441	2.441	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F1	1.335	1.335	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

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Panel 2 (top-right)

C:\..\PREC2COT032812.DAT Printed on 3/30/2012 at 11:14:47 PM Page 3 of 3
Plate ID: PREC2COT032812 COTININE

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	3.480	OVER	3.449	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	3.402	1.850	1.882	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.879	3.398	3.321	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.827	1.836	1.741	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	2.441	3.337	3.161	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.335	1.860	1.681	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	3.337	3.300	3.102	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.978	1.941	1.930	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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Panel 3 (bottom-left)

C:\..\ACURACYAMPOXYBENZ032912.DAT Printed on 3/30/2012 at 11:01:12 PM Page 1 of 9
Plate ID: ACURACYAMPOXYBENZ032912 AMPHETAMINE ULTRA

REVELATION DSX 6.21

TEST NO. :
TEST NAME : AMPHETAMINE ULTRA ACCURACY
PLATE : ACURACYAMPOXYBENZ032912

W/L MODE : SINGLE DATE : 3/30/2012
TEST FILTER : 450 nm TIME : 12:18:38 AM
REF. FILTER : * OPERATOR : admin

Kit Lot Data : AMPHETAMINE ULTRA ACCURACY, AUF-0047B,
Plate Lot Data : AMPOXYBENZ, ,
Reagent Lot Data : Acid Stop, ,
: AMPHETAMINE ULTRA CONJUGATE, ,
: BENZODIAZEPINE GROUP CONJUGATE, ,
: EIA Buffer, ,
: K-Blue, ,
: OXYCODONE/OXYMORPHONE CONJUGATE, ,
: AMPHETAMINE ULTRA CUTOFF, ,
: AMPHETAMINE ULTRA NEGATIVE, ,
: GROUP 1 CUTOFF, ,
: GROUP 1 NEGATIVE, ,
: Distilled Water, ,
: Neogen Wash Buffer, ,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO 1.641>1.154

+ equation = CO
= 1.154
- equation = CO
= 1.154

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[AMP-50]	G1	1.290	1.259	0.038	3.000%	NEG
	H1	1.206				
	A2	1.288				
	B2	1.219				
	C2	1.264				
	D2	1.288				

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Panel 4 (bottom-right)

C:\..\ACURACYAMPOXYBENZ032912.DAT Printed on 3/30/2012 at 11:01:12 PM Page 2 of 9
Plate ID: ACURACYAMPOXYBENZ032912 AMPHETAMINE ULTRA

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[AMP CO]	E2	1.064	1.068	0.022	2.093%	POS
	F2	1.105				
	G2	1.068				
	H2	1.070				
	A3	1.066				
	B3	1.035				
[AMP+50]	C3	0.975	0.961	0.041	4.284%	POS
	D3	0.991				
	E3	0.992				
	F3	0.936				
	G3	0.984				
	H3	0.888				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	1.669	1.641	0.039	2.399%	NC1
	B1	1.613				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C1	1.149	1.154	0.007	0.622%	CO1
	D1	1.159				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E1	1.623	1.623	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F1	1.100	1.100	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

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Panel 1 (Page 3 of 9)

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.669	1.288	1.066	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.613	1.219	1.035	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.149	1.264	0.975	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.159	1.288	0.991	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.623	1.064	0.992	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.100	1.105	0.936	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.290	1.068	0.984	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.206	1.070	0.888	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Panel 2 (Page 4 of 9)

TEST NO.   :
TEST NAME   : OXYCODONE-OXYMORPHONE ACCURACY
PLATE   : ACURACYAMPOXYBENZ032912

W/L MODE   : SINGLE   DATE   : 3/30/2012
TEST FILTER   : 450 nm   TIME   : 12:18:38 AM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : OXYCODONE-OXYMORPHONE ACCURACY, OXF-0037B,
Plate Lot Data   : AMPOXYBENZ, ,
Reagent Lot Data   : Acid Stop, ,
                    : EIA Buffer, ,
                    : K-Blue, ,
                    : OXYCODONE/OXYMORPHONE CONJUGATE, ,
                    : GROUP 1 CUTOFF, ,
                    : GROUP 1 NEGATIVE, ,
                    : OXYCODONE/OXYMORPHONE CUTOFF, ,
                    : OXYCODONE/OXYMORPHONE NEGATIVE, ,
                    : Distilled Water, ,
                    : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.006>1.230

+ equation	= CO
	= 1.231
- equation	= CO
	= 1.231

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[OXY-50]	G4	1.700	1.657	0.030	1.790%	NEG
	H4	1.666				
	A5	1.645				
	B5	1.631				
	C5	1.623				
	D5	1.679				
[OXYCO]	E5	1.370	1.280	0.049	3.853%	NEG
	F5	1.266				
	G5	1.288				
	H5	1.232				
	A6	1.283				

Panel 3 (Page 5 of 9)

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
	B6	1.242				
[OXY+50]	C6	1.052	0.948	0.057	5.983%	POS
	D6	0.941				
	E6	0.918				
	F6	0.928				
	G6	0.887				
	H6	0.962				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A4	2.018	2.007	0.016	0.806%	NC1
	B4	1.995				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C4	1.304	1.231	0.104	8.459%	CO1
	D4	1.157				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E4	2.129	2.129	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F4	1.439	1.439	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

Panel 4 (Page 6 of 9)

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	2.018	1.645	1.283	*****	*****	*****	*****	*****	*****
B	*****	*****	*****	1.995	1.631	1.242	*****	*****	*****	*****	*****	*****
C	*****	*****	*****	1.304	1.623	1.052	*****	*****	*****	*****	*****	*****
D	*****	*****	*****	1.157	1.679	0.941	*****	*****	*****	*****	*****	*****
E	*****	*****	*****	2.129	1.370	0.918	*****	*****	*****	*****	*****	*****
F	*****	*****	*****	1.439	1.266	0.928	*****	*****	*****	*****	*****	*****
G	*****	*****	*****	1.700	1.288	0.887	*****	*****	*****	*****	*****	*****
H	*****	*****	*****	1.666	1.232	0.962	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

Panel 1 (Page 7 of 9)

C:\..\ACURACYAMPOXYBENZ032912.DAT Printed on 3/30/2012 at 11:01:12 PM Page 7 of 9
Plate ID: ACURACYAMPOXYBENZ032912 BENZODIAZEPINE GROUP

TEST NO.	:
TEST NAME	: BENZODIAZEPINE GROUP ACCURACY
PLATE	: ACURACYAMPOXYBENZ032912

W/L MODE	: SINGLE	DATE	: 3/30/2012
TEST FILTER	: 450 nm	TIME	: 12:18:38 AM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data	: BENZODIAZEPINE GROUP ACCURACY, BGF-0061B,
Plate Lot Data	: AMPOXYBENZ, ,
Reagent Lot Data	: Acid Stop, ,
	: BENZODIAZEPINE GROUP CONJUGATE, ,
	: EIA Buffer, ,
	: K-Blue, ,
	: BENZODIAZEPINE GROUP CUTOFF, ,
	: BENZODIAZEPINE GROUP NEGATIVE, ,
	: GROUP 2 CUTOFF, ,
	: GROUP 2 NEGATIVE, ,
	: Distilled Water, ,
	: Neogen Wash Buffer, ,

OVER limit	: 3.500
Calculation mode	: Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.714>0.809

+ equation   = CO
                = 0.809
- equation   = CO
                = 0.809

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[BENZ-50]	G7	0.985	1.005	0.024	2.398%	NEG
	H7	0.971				
	A8	1.026				
	B8	1.021				
	C8	1.001				
	D8	1.029				
[BENZCO]	E8	0.787	0.805	0.029	3.639%	POS
	F8	0.807				
	G8	0.790				
	H8	0.863				
	A9	0.791				

Panel 2 (Page 8 of 9)

C:\..\ACURACYAMPOXYBENZ032912.DAT Printed on 3/30/2012 at 11:01:12 PM Page 8 of 9
Plate ID: ACURACYAMPOXYBENZ032912 BENZODIAZEPINE GROUP

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
	B9	0.793				
[BENZ+50]	C9	0.741	0.784	0.056	7.184%	POS
	D9	0.729				
	E9	0.754				
	F9	0.803				
	G9	0.793				
	H9	0.882				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A7	1.682	1.714	0.045	2.631%	NC1
	B7	1.746				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C7	0.770	0.809	0.056	6.972%	CO1
	D7	0.849				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E7	1.314	1.314	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F7	0.539	0.539	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

Panel 3 (Page 9 of 9)

C:\..\ACURACYAMPOXYBENZ032912.DAT Printed on 3/30/2012 at 11:01:12 PM Page 9 of 9
Plate ID: ACURACYAMPOXYBENZ032912 BENZODIAZEPINE GROUP

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	*****	*****	1.682	1.026	0.791	*****	*****	*****
B	*****	*****	*****	*****	*****	*****	1.746	1.021	0.793	*****	*****	*****
C	*****	*****	*****	*****	*****	*****	0.770	1.001	0.741	*****	*****	*****
D	*****	*****	*****	*****	*****	*****	0.849	1.029	0.729	*****	*****	*****
E	*****	*****	*****	*****	*****	*****	1.314	0.787	0.754	*****	*****	*****
F	*****	*****	*****	*****	*****	*****	0.539	0.807	0.803	*****	*****	*****
G	*****	*****	*****	*****	*****	*****	0.985	0.790	0.793	*****	*****	*****
H	*****	*****	*****	*****	*****	*****	0.971	0.863	0.882	*****	*****	*****

***** Indicates an unread well or value out of range

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Panel 4 (Page 1 of 9)

C:\..\ACCURACYCOCOPITHC032912.DAT Printed on 3/30/2012 at 10:58:49 PM Page 1 of 9
Plate ID: ACCURACYCOCOPITHC032912 COCAINE/BZE

REVELATION DSX 6.21

TEST NO.	:
TEST NAME	: COCAINE-BZE ACCURACY
PLATE	: ACCURACYCOCOPITHC032912

W/L MODE	: SINGLE	DATE	: 3/30/2012
TEST FILTER	: 450 nm	TIME	: 12:31:03 AM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data	: COCAINE-BZE ACCURACY, BZF-0079B,
Plate Lot Data	: COCOPITHC, ,
Reagent Lot Data	: Acid Stop, ,
	: COCAINE/BZE CONJUGATE, ,
	: EIA Buffer, ,
	: K-Blue, ,
	: OPIATE GROUP CONJUGATE, ,
	: THC CONJUGATE, ,
	: COCAINE/BZE CUTOFF, ,
	: COCAINE/BZE NEGATIVE, ,
	: GROUP 2 CUTOFF, ,
	: GROUP 2 NEGATIVE, ,
	: Distilled Water, ,
	: Neogen Wash Buffer, ,

OVER limit	: 3.500
Calculation mode	: Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.315>0.497

+ equation   = CO
                = 0.498
- equation   = CO
                = 0.498

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[COC-50]	G1	0.906	0.807	0.081	9.994%	NEG
	H1	0.840				
	A2	0.706				
	B2	0.712				
	C2	0.852				
	D2	0.828				

C:\...\ACCURACYCOCOPITHC032912.DAT   Printed on 3/30/2012 at 10:58:49 PM   Page 2 of 9
Plate ID: ACCURACYCOCOPITHC032912   COCAINE/BZE

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[COCCO]	E2	0.560	0.500	0.045	9.029%	NEG
	F2	0.478				
	G2	0.473				
	H2	0.493				
	A3	0.549				
	B3	0.446				
[COC+50]	C3	0.366	0.327	0.025	7.735%	POS
	D3	0.302				
	E3	0.311				
	F3	0.341				
	G3	0.304				
	H3	0.336				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	1.383	1.316	0.096	7.286%	NC1
	B1	1.248				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C1	0.543	0.498	0.064	12.946%	CO1
	D1	0.452				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E1	0.991	0.991	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F1	0.476	0.476	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

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C:\...\ACCURACYCOCOPITHC032912.DAT   Printed on 3/30/2012 at 10:58:49 PM   Page 3 of 9
Plate ID: ACCURACYCOCOPITHC032912   COCAINE/BZE

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.383	0.706	0.549	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	1.248	0.712	0.446	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	0.543	0.852	0.366	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	0.452	0.828	0.302	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	0.991	0.560	0.311	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	0.476	0.478	0.341	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	0.906	0.473	0.304	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	0.840	0.493	0.336	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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C:\...\ACCURACYCOCOPITHC032912.DAT   Printed on 3/30/2012 at 10:58:49 PM   Page 4 of 9
Plate ID: ACCURACYCOCOPITHC032912   OPIATE GROUP

TEST NO.   :
TEST NAME   : OPIATE GROUP ACCURACY
PLATE   : ACCURACYCOCOPITHC032912

W/L MODE   : SINGLE   DATE   : 3/30/2012
TEST FILTER : 450 nm   TIME   : 12:31:03 AM
REF. FILTER : *   OPERATOR : admin

Kit Lot Data   : OPIATE GROUP ACCURACY, MOF-0056B,
Plate Lot Data : COCOPITHC, ,
Reagent Lot Data : Acid Stop, ,
                : EIA Buffer, ,
                : K-Blue, ,
                : OPIATE GROUP CONJUGATE, ,
                : GROUP 2 CUTOFF, ,
                : GROUP 2 NEGATIVE, ,
                : OPIATE GROUP CUTOFF, ,
                : OPIATE GROUP NEGATIVE, ,
                : Distilled Water, ,
                : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.585>0.888

+ equation   = CO
              = 0.888
- equation   = CO
              = 0.888

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[OPI-50]	G4	1.079	1.002	0.072	7.203%	NEG
	H4	0.934				
	A5	0.930				
	B5	0.997				
	C5	0.974				
	D5	1.100				
[OPICO]	E5	0.911	0.857	0.066	7.663%	POS
	F5	0.853				
	G5	0.891				
	H5	0.733				
	A6	0.851				

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C:\...\ACCURACYCOCOPITHC032912.DAT   Printed on 3/30/2012 at 10:58:49 PM   Page 5 of 9
Plate ID: ACCURACYCOCOPITHC032912   OPIATE GROUP

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
	B6	0.903				
[OPI+50]	C6	0.812	0.721	0.077	10.674%	POS
	D6	0.680				
	E6	0.636				
	F6	0.715				
	G6	0.666				
	H6	0.818				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A4	1.678	1.586	0.130	8.199%	NC1
	B4	1.494				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C4	0.948	0.888	0.085	9.550%	CO1
	D4	0.828				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E4	1.684	1.684	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F4	0.942	0.942	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

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C:\..\ACCURACYCOCOPITHC032912.DAT   Printed on 3/30/2012 at 10:58:49 PM
Plate ID: ACCURACYCOCOPITHC032912   OPIATE GROUP

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	1.678	0.930	0.851	*****	*****	*****	*****	*****	*****
B	*****	*****	*****	1.494	0.997	0.903	*****	*****	*****	*****	*****	*****
C	*****	*****	*****	0.948	0.974	0.812	*****	*****	*****	*****	*****	*****
D	*****	*****	*****	0.828	1.100	0.680	*****	*****	*****	*****	*****	*****
E	*****	*****	*****	1.684	0.911	0.636	*****	*****	*****	*****	*****	*****
F	*****	*****	*****	0.942	0.853	0.715	*****	*****	*****	*****	*****	*****
G	*****	*****	*****	1.079	0.891	0.666	*****	*****	*****	*****	*****	*****
H	*****	*****	*****	0.934	0.733	0.818	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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C:\..\ACCURACYCOCOPITHC032912.DAT   Printed on 3/30/2012 at 10:58:49 PM
Plate ID: ACCURACYCOCOPITHC032912   THC

TEST NO.	:		
TEST NAME	: THC ACCURACY		
PLATE	: ACCURACYCOCOPITHC032912		
W/L MODE	: SINGLE	DATE	: 3/30/2012
TEST FILTER	: 450 nm	TIME	: 12:31:03 AM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data   : THC ACCURACY, TCF-0055B,
Plate Lot Data   : COCOPITHC, ,
Reagent Lot Data   : Acid Stop, ,
                   : EIA Buffer, ,
                   : K-Blue, ,
                   : THC CONJUGATE, ,
                   : GROUP 2 CUTOFF, ,
                   : GROUP 2 NEGATIVE, ,
                   : THC CUTOFF, ,
                   : THC NEGATIVE, ,
                   : Distilled Water, ,
                   : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.374>1.060

+ equation   = CO
                   = 1.061
- equation   = CO
                   = 1.061

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[THC-50]	G7	1.131	1.229	0.065	5.253%	NEG
	H7	1.285				
	A8	1.312				
	B8	1.227				
	C8	1.228				
	D8	1.193				
[THCCO]	E8	1.014	1.054	0.043	4.058%	POS
	F8	1.072				
	G8	0.998				
	H8	1.106				
	A9	1.089				

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C:\..\ACCURACYCOCOPITHC032912.DAT   Printed on 3/30/2012 at 10:58:49 PM
Plate ID: ACCURACYCOCOPITHC032912   THC

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
	B9	1.042				
[THC+50]	C9	0.972	0.933	0.048	5.172%	POS
	D9	0.898				
	E9	0.914				
	F9	0.869				
	G9	0.945				
	H9	0.998				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A7	1.403	1.375	0.041	2.957%	NC1
	B7	1.346				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C7	1.055	1.061	0.009	0.832%	CO1
	D7	1.067				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E7	1.399	1.399	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F7	0.597	0.597	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
   0 Indicates an equivocal response
   * Indicates an unread well or value out of range
   # Indicates combined data

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C:\..\ACCURACYCOCOPITHC032912.DAT   Printed on 3/30/2012 at 10:58:49 PM
Plate ID: ACCURACYCOCOPITHC032912   THC

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	*****	*****	1.403	1.312	1.089	*****	*****	*****
B	*****	*****	*****	*****	*****	*****	1.346	1.227	1.042	*****	*****	*****
C	*****	*****	*****	*****	*****	*****	1.055	1.228	0.972	*****	*****	*****
D	*****	*****	*****	*****	*****	*****	1.067	1.193	0.898	*****	*****	*****
E	*****	*****	*****	*****	*****	*****	1.399	1.014	0.914	*****	*****	*****
F	*****	*****	*****	*****	*****	*****	0.597	1.072	0.869	*****	*****	*****
G	*****	*****	*****	*****	*****	*****	1.131	0.998	0.945	*****	*****	*****
H	*****	*****	*****	*****	*****	*****	1.285	1.106	0.998	*****	*****	*****

***** Indicates an unread well or value out of range

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REVELATION DSX 6.21

TEST NO.	:			
TEST NAME	: COTININE ACCURACY			
PLATE	: ACCURACYCOT032912			

W/L MODE	: SINGLE	DATE	: 3/29/2012	
TEST FILTER	: 450 nm	TIME	: 11:34:21 PM	
REF. FILTER	: *	OPERATOR	: admin	

Kit Lot Data   : COTININE ACCURACY, CTI-0034,
Plate Lot Data   : COT, ,
Reagent Lot Data : Acid Stop, ,
                 : COTININE CONJUGATE, ,
                 : EIA Buffer, ,
                 : K-Blue, ,
                 : COTININE CUTOFF, ,
                 : COTININE NEGATIVE, ,
                 : GROUP 1 CUTOFF, ,
                 : GROUP 1 NEGATIVE, ,
                 : Distilled Water, ,
                 : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   3.257>1.753

+ equation   = CO
                  = 1.753
- equation   = CO
                  = 1.753

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[COT-50]	G1	2.014	1.918	0.056	2.907%	NEG
	H1	1.920				
	A2	1.915				
	B2	1.928				
	C2	1.884				
	D2	1.847				
[COTCO]	E2	1.672	1.581	0.058	3.660%	POS
	F2	1.534				

Page 2 of 3

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
	G2	1.558				
	H2	1.633				
	A3	1.557				
	B3	1.532				
[COT+50]	C3	1.556	1.473	0.063	4.269%	POS
	D3	1.423				
	E3	1.394				
	F3	1.482				
	G3	1.451				
	H3	1.533				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	3.268	3.258	0.014	0.427%	NC1
	B1	3.248				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C1	1.774	1.753	0.030	1.686%	CO1
	D1	1.732				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E1	2.411	2.411	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F1	1.305	1.305	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
    0 Indicates an equivocal response
    * Indicates an unread well or value out of range
    # Indicates combined data

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DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	3.268	1.915	1.557	*****	*****	*****	*****	*****	*****	*****	*****	*****
B	3.248	1.928	1.532	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.774	1.884	1.556	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.732	1.847	1.423	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	2.411	1.672	1.394	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.305	1.534	1.482	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	2.014	1.558	1.451	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.920	1.633	1.533	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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Appendix H

ELISA Results for Sample Analysis

Kit, Plate, and Reagent Lot Data

Date: 03/30/2012

ASSAY	Amphetamine Ultra	Benzodiazepine Group	Cocaine/BZE	Cotinine	Opiate Group	Oxycodone/ Oxymorphone	THC
Kit #	AUF-0047B	BGF-0061B	BZF-0078B	CTI-0034	MOF-0056B	OXF-0037B	TCF-0055B
Kit Exp. Date	1/30/2013	1/23/2013	2/22/2013	7/10/2012	2/22/2013	1/16/2013	2/9/2013
Plate #	120119	120119	120116FAM	1102211	120213F	111103F	120208
Plate Exp. Date	1/19/2014	1/19/2014	1/16/2014	2/21/2013	2/13/2014	11/3/2013	2/8/2014
C/O & NEG lot #	111212-WB	110811-WB	111110-WB	026	110715-WB	120117-WB	110826-WB
C/O & NEG Exp. Date	1/8/2013	12/28/2012	11/9/2012	-	1/10/2013	1/16/2013	12/26/2012
CONJ lot #	036	050	055	034	044	028	044
CONJ Exp.	1/30/2013	1/23/2013	2/22/2013	-	2/22/2013	1/16/2013	2/9/2013

Acid Stop, EIA Buffer, K-Blue, Distilled Water, and Neogen Wash Buffer were prepared on 03/30/2012
Negative and Cutoff Calibrators were prepared 03/30/2012

Page 1 (top left)

REVELATION DSX 6.21

TEST NO.	:
TEST NAME	: AMPHETAMINE ULTRA
PLATE	: AmpOxyBen033012

W/L MODE	: SINGLE	DATE	: 3/30/2012
TEST FILTER	: 450 nm	TIME	: 11:58:49 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : AMPHETAMINE ULTRA, AUF-0047B,
Plate Lot Data : AmpOxyBen, ,
Reagent Lot Data : Acid Stop, ,
: AMPHETAMINE ULTRA CONJUGATE, ,
: BENZODIAZEPINE GROUP CONJUGATE, ,
: EIA Buffer, ,
: K-Blue, ,
: OXYCODONE/OXYMORPHONE CONJUGATE, ,
: AMPHETAMINE ULTRA CUTOFF, ,
: AMPHETAMINE ULTRA NEGATIVE, ,
: GROUP 1 CUTOFF, ,
: GROUP 1 NEGATIVE, ,
: Distilled Water, ,
: Neogen Wash Buffer, ,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.625>1.259

+ equation   = CO
           = 1.260
- equation   = CO
           = 1.260

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[47753]	G1	1.641	1.641	*****	*****	NEG
[47603]	H1	1.925	1.925	*****	*****	NEG
[47551]	A2	1.762	1.762	*****	*****	NEG
[47726]	B2	1.719	1.719	*****	*****	NEG
[47691]	C2	1.721	1.721	*****	*****	NEG
[47703]	D2	1.631	1.631	*****	*****	NEG

Page 2 (top right)

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[47714]	E2	1.751	1.751	*****	*****	NEG
[47613]	F2	1.913	1.913	*****	*****	NEG
[47670]	G2	1.785	1.785	*****	*****	NEG
[47716]	H2	1.707	1.707	*****	*****	NEG
[47729]	A3	1.679	1.679	*****	*****	NEG
[47692]	B3	1.666	1.666	*****	*****	NEG
[47619]	C3	1.729	1.729	*****	*****	NEG
[47702]	D3	1.736	1.736	*****	*****	NEG
[47690]	E3	1.867	1.867	*****	*****	NEG
[47682]	F3	1.753	1.753	*****	*****	NEG
[47725]	G3	1.930	1.930	*****	*****	NEG
[47571]	H3	1.905	1.905	*****	*****	NEG
[47728]	A4	1.771	1.771	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	1.607	1.626	0.027	1.640%	NC1
	B1	1.645				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C1	1.292	1.260	0.045	3.563%	CO1
	D1	1.228				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E1	1.846	1.846	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F1	1.169	1.169	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range

Page 3 (bottom left)

\# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.607	1.762	1.679	1.771	*****	*****	*****	*****	*****	*****	*****	*****
B	1.645	1.719	1.666	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.292	1.721	1.729	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.228	1.631	1.736	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.846	1.751	1.867	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.169	1.913	1.753	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.641	1.785	1.930	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.925	1.707	1.905	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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TEST NO.	:
TEST NAME	: OXYCODONE-OXYMORPHONE
PLATE	: AmpOxyBen033012

W/L MODE	: SINGLE	DATE	: 3/30/2012
TEST FILTER	: 450 nm	TIME	: 11:58:49 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : OXYCODONE-OXYMORPHONE, OXF-0037B,
Plate Lot Data : AmpOxyBen, ,
Reagent Lot Data : Acid Stop, ,
: EIA Buffer, ,
: K-Blue, ,
: OXYCODONE/OXYMORPHONE CONJUGATE, ,
: GROUP 1 CUTOFF, ,
: GROUP 1 NEGATIVE, ,
: OXYCODONE/OXYMORPHONE CUTOFF, ,
: OXYCODONE/OXYMORPHONE NEGATIVE, ,
: Distilled Water, ,
: Neogen Wash Buffer, ,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   2.137>1.386

+ equation   = CO
           = 1.386
- equation   = CO
           = 1.386

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[47753]	G5	2.036	2.036	*****	*****	NEG
[47603]	H5	2.152	2.152	*****	*****	NEG
[47551]	A6	2.140	2.140	*****	*****	NEG
[47726]	B6	2.137	2.137	*****	*****	NEG
[47691]	C6	2.126	2.126	*****	*****	NEG
[47703]	D6	2.152	2.152	*****	*****	NEG
[47714]	E6	2.140	2.140	*****	*****	NEG
[47613]	F6	2.111	2.111	*****	*****	NEG
[47670]	G6	2.120	2.120	*****	*****	NEG
[47716]	H6	2.133	2.133	*****	*****	NEG
[47729]	A7	2.116	2.116	*****	*****	NEG

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Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[47692]	B7	2.127	2.127	*****	*****	NEG
[47619]	C7	2.129	2.129	*****	*****	NEG
[47702]	D7	2.096	2.096	*****	*****	NEG
[47690]	E7	2.124	2.124	*****	*****	NEG
[47682]	F7	2.082	2.082	*****	*****	NEG
[47725]	G7	2.094	2.094	*****	*****	NEG
[47571]	H7	2.079	2.079	*****	*****	NEG
[47728]	A8	2.214	2.214	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A5	2.134	2.137	0.004	0.183%	NC1
	B5	2.140				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C5	1.451	1.386	0.092	6.622%	CO1
	D5	1.321				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E5	2.230	2.230	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F5	1.213	1.213	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

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DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	2.134	2.140	2.116	2.214	*****	*****	*****	*****
B	*****	*****	*****	*****	2.140	2.137	2.127	*****	*****	*****	*****	*****
C	*****	*****	*****	*****	1.451	2.126	2.129	*****	*****	*****	*****	*****
D	*****	*****	*****	*****	1.321	2.152	2.096	*****	*****	*****	*****	*****
E	*****	*****	*****	*****	2.230	2.140	2.124	*****	*****	*****	*****	*****
F	*****	*****	*****	*****	1.213	2.111	2.082	*****	*****	*****	*****	*****
G	*****	*****	*****	*****	2.036	2.120	2.094	*****	*****	*****	*****	*****
H	*****	*****	*****	*****	2.152	2.133	2.079	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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TEST NO. :
TEST NAME : BENZODIAZEPINE GROUP
PLATE : AmpOxyBen033012

W/L MODE : SINGLE DATE : 3/30/2012
TEST FILTER : 450 nm TIME : 11:58:49 PM
REF. FILTER : * OPERATOR : admin

Kit Lot Data : BENZODIAZEPINE GROUP, BGF-0061B,
Plate Lot Data : AmpOxyBen, ,
Reagent Lot Data : Acid Stop, ,
 : BENZODIAZEPINE GROUP CONJUGATE, ,
 : EIA Buffer, ,
 : K-Blue, ,
 : BENZODIAZEPINE GROUP CUTOFF, ,
 : BENZODIAZEPINE GROUP NEGATIVE, ,
 : GROUP 2 CUTOFF, ,
 : GROUP 2 NEGATIVE, ,
 : Distilled Water, ,
 : Neogen Wash Buffer, ,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO 1.826>1.071

+ equation = CO
 = 1.072
- equation = CO
 = 1.072

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[47753]	G9	1.563	1.563	*****	*****	NEG
[47603]	H9	1.831	1.831	*****	*****	NEG
[47551]	A10	1.796	1.796	*****	*****	NEG
[47726]	B10	1.826	1.826	*****	*****	NEG
[47691]	C10	1.775	1.775	*****	*****	NEG
[47703]	D10	1.844	1.844	*****	*****	NEG
[47714]	E10	1.818	1.818	*****	*****	NEG
[47613]	F10	1.793	1.793	*****	*****	NEG
[47670]	G10	1.638	1.638	*****	*****	NEG
[47716]	H10	1.664	1.664	*****	*****	NEG
[47729]	A11	1.695	1.695	*****	*****	NEG

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Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[47692]	B11	1.732	1.732	*****	*****	NEG
[47619]	C11	1.861	1.861	*****	*****	NEG
[47702]	D11	1.748	1.748	*****	*****	NEG
[47690]	E11	1.826	1.826	*****	*****	NEG
[47682]	F11	1.743	1.743	*****	*****	NEG
[47725]	G11	1.782	1.782	*****	*****	NEG
[47571]	H11	1.740	1.740	*****	*****	NEG
[47728]	A12	1.855	1.855	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A9	1.832	1.827	0.007	0.402%	NC1
	B9	1.821				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C9	1.041	1.072	0.043	4.056%	CO1
	D9	1.102				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E9	1.298	1.298	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F9	0.522	0.522	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

Panel 1 (top-left)

C:\..\AmpOxyBen033012.DAT   Printed on 3/31/2012 at 12:44:35 AM   Page 9 of 9
Plate ID: AmpOxyBen033012   BENZODIAZEPINE GROUP

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	*****	*****	*****	*****	1.832	1.796	1.695	1.855
B	*****	*****	*****	*****	*****	*****	*****	*****	1.821	1.826	1.732	*****
C	*****	*****	*****	*****	*****	*****	*****	*****	1.041	1.775	1.861	*****
D	*****	*****	*****	*****	*****	*****	*****	*****	1.102	1.844	1.748	*****
E	*****	*****	*****	*****	*****	*****	*****	*****	1.298	1.818	1.826	*****
F	*****	*****	*****	*****	*****	*****	*****	*****	0.522	1.793	1.743	*****
G	*****	*****	*****	*****	*****	*****	*****	*****	1.563	1.638	1.782	*****
H	*****	*****	*****	*****	*****	*****	*****	*****	1.831	1.664	1.740	*****

***** Indicates an unread well or value out of range

Dynex Technologies

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Panel 2 (top-right)

C:\..\CocOpiTHC033012.DAT   Printed on 3/31/2012 at 12:45:05 AM   Page 1 of 9
Plate ID: CocOpiTHC033012   COCAINE/BZE

REVELATION DSX 6.21

TEST NO.	:			
TEST NAME	: COCAINE-BZE			
PLATE	: CocOpiTHC033012			
W/L MODE	: SINGLE	DATE	: 3/31/2012	
TEST FILTER	: 450 nm	TIME	: 12:16:51 AM	
REF. FILTER	: *	OPERATOR	: admin	

Kit Lot Data : COCAINE-BZE, BZF-0079B,
Plate Lot Data : CocOPiTHC, ,
Reagent Lot Data : Acid Stop, ,
: COCAINE/BZE CONJUGATE, ,
: EIA Buffer, ,
: K-Blue, ,
: OPIATE GROUP CONJUGATE, ,
: THC CONJUGATE, ,
: COCAINE/BZE CUTOFF, ,
: COCAINE/BZE NEGATIVE, ,
: GROUP 2 CUTOFF, ,
: GROUP 2 NEGATIVE, ,
: Distilled Water, ,
: Neogen Wash Buffer, ,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.398>0.835

+ equation   = CO
         = 0.835
- equation   = CO
         = 0.835

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[47753]	G1	1.522	1.522	*****	*****	NEG
[47603]	H1	1.734	1.734	*****	*****	NEG
[47551]	A2	1.713	1.713	*****	*****	NEG
[47726]	B2	1.581	1.581	*****	*****	NEG
[47691]	C2	1.608	1.608	*****	*****	NEG
[47703]	D2	1.453	1.453	*****	*****	NEG

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Panel 3 (bottom-left)

C:\..\CocOpiTHC033012.DAT   Printed on 3/31/2012 at 12:45:05 AM   Page 2 of 9
Plate ID: CocOpiTHC033012   COCAINE/BZE

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[47714]	E2	1.558	1.558	*****	*****	NEG
[47613]	F2	1.679	1.679	*****	*****	NEG
[47670]	G2	1.686	1.686	*****	*****	NEG
[47716]	H2	1.755	1.755	*****	*****	NEG
[47729]	A3	1.681	1.681	*****	*****	NEG
[47692]	B3	1.656	1.656	*****	*****	NEG
[47619]	C3	1.665	1.665	*****	*****	NEG
[47702]	D3	1.370	1.370	*****	*****	NEG
[47690]	E3	1.842	1.842	*****	*****	NEG
[47682]	F3	1.684	1.684	*****	*****	NEG
[47725]	G3	1.574	1.574	*****	*****	NEG
[47571]	H3	1.638	1.638	*****	*****	NEG
[47728]	A4	1.593	1.593	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	1.382	1.399	0.024	1.704%	NC1
	B1	1.416				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C1	0.904	0.835	0.097	11.648%	CO1
	D1	0.766				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E1	1.067	1.067	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F1	0.560	0.560	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range

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Panel 4 (bottom-right)

C:\..\CocOpiTHC033012.DAT   Printed on 3/31/2012 at 12:45:05 AM   Page 3 of 9
Plate ID: CocOpiTHC033012   COCAINE/BZE

# Indicates combined data

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	1.382	1.713	1.681	1.593	*****	*****	*****	*****	*****	*****	*****	*****
B	1.416	1.581	1.656	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	0.904	1.608	1.665	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	0.766	1.453	1.370	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	1.067	1.558	1.842	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	0.560	1.679	1.684	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	1.522	1.686	1.574	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	1.734	1.755	1.638	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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C:\..\CocOpiTHC033012.DAT        Printed on 3/31/2012 at 12:45:05 AM        Page 4 of 9
Plate ID: CocOpiTHC033012              OPIATE GROUP
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TEST NO.   :
TEST NAME   : OPIATE GROUP
PLATE   : CocOpiTHC033012

W/L MODE   : SINGLE   DATE   : 3/31/2012
TEST FILTER   : 450 nm   TIME   : 12:16:51 AM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : OPIATE GROUP, MOF-0056B,
Plate Lot Data   : CocOPiTHC, ,
Reagent Lot Data   : Acid Stop, ,
                     : EIA Buffer, ,
                     : K-Blue, ,
                     : OPIATE GROUP CONJUGATE, ,
                     : GROUP 2 CUTOFF, ,
                     : GROUP 2 NEGATIVE, ,
                     : OPIATE GROUP CUTOFF, ,
                     : OPIATE GROUP NEGATIVE, ,
                     : Distilled Water, ,
                     : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.477>1.005

+ equation   = CO
                 = 1.006
- equation   = CO
                 = 1.006

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[47753]	G5	1.546	1.546	*****	*****	NEG
[47603]	H5	1.601	1.601	*****	*****	NEG
[47551]	A6	1.608	1.608	*****	*****	NEG
[47726]	B6	1.637	1.637	*****	*****	NEG
[47691]	C6	1.612	1.612	*****	*****	NEG
[47703]	D6	1.473	1.473	*****	*****	NEG
[47714]	E6	1.666	1.666	*****	*****	NEG
[47613]	F6	1.686	1.686	*****	*****	NEG
[47670]	G6	1.631	1.631	*****	*****	NEG
[47716]	H6	1.579	1.579	*****	*****	NEG
[47729]	A7	1.536	1.536	*****	*****	NEG

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C:\..\CocOpiTHC033012.DAT        Printed on 3/31/2012 at 12:45:05 AM        Page 5 of 9
Plate ID: CocOpiTHC033012              OPIATE GROUP
```

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[47692]	B7	1.517	1.517	*****	*****	NEG
[47619]	C7	1.726	1.726	*****	*****	NEG
[47702]	D7	1.605	1.605	*****	*****	NEG
[47690]	E7	1.777	1.777	*****	*****	NEG
[47682]	F7	1.752	1.752	*****	*****	NEG
[47725]	G7	1.514	1.514	*****	*****	NEG
[47571]	H7	1.630	1.630	*****	*****	NEG
[47728]	A8	1.374	1.374	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A5	1.580	1.478	0.144	9.758%	NC1
	B5	1.376				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C5	1.044	1.006	0.055	5.472%	CO1
	D5	0.967				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E5	1.691	1.691	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F5	0.900	0.900	*****	*****	NCO1

```
[...]  Indicates manual SID entry or manual pipetting
*****  Indicates an unread well or value out of range
    0  Indicates an equivocal response
    *  Indicates an unread well or value out of range
    #  Indicates combined data
```

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C:\..\CocOpiTHC033012.DAT        Printed on 3/31/2012 at 12:45:05 AM        Page 6 of 9
Plate ID: CocOpiTHC033012              OPIATE GROUP
```

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	1.580	1.608	1.536	1.374	*****	*****	*****	*****
B	*****	*****	*****	*****	1.376	1.637	1.517	*****	*****	*****	*****	*****
C	*****	*****	*****	*****	1.044	1.612	1.726	*****	*****	*****	*****	*****
D	*****	*****	*****	*****	0.967	1.473	1.605	*****	*****	*****	*****	*****
E	*****	*****	*****	*****	1.691	1.666	1.777	*****	*****	*****	*****	*****
F	*****	*****	*****	*****	0.900	1.686	1.752	*****	*****	*****	*****	*****
G	*****	*****	*****	*****	1.546	1.631	1.514	*****	*****	*****	*****	*****
H	*****	*****	*****	*****	1.601	1.579	1.630	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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C:\..\CocOpiTHC033012.DAT        Printed on 3/31/2012 at 12:45:05 AM        Page 7 of 9
Plate ID: CocOpiTHC033012              THC
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TEST NO.   :
TEST NAME   : THC
PLATE   : CocOpiTHC033012

W/L MODE   : SINGLE   DATE   : 3/31/2012
TEST FILTER   : 450 nm   TIME   : 12:16:51 AM
REF. FILTER   : *   OPERATOR   : admin

Kit Lot Data   : THC, TCF-0055B,
Plate Lot Data   : CocOPiTHC, ,
Reagent Lot Data   : Acid Stop, ,
                     : EIA Buffer, ,
                     : K-Blue, ,
                     : THC CONJUGATE, ,
                     : GROUP 2 CUTOFF, ,
                     : GROUP 2 NEGATIVE, ,
                     : THC CUTOFF, ,
                     : THC NEGATIVE, ,
                     : Distilled Water, ,
                     : Neogen Wash Buffer, ,

OVER limit   : 3.500
Calculation mode   : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   1.526>1.331

+ equation   = CO
                 = 1.332
- equation   = CO
                 = 1.332

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[47753]	G9	1.618	1.618	*****	*****	NEG
[47603]	H9	1.639	1.639	*****	*****	NEG
[47551]	A10	1.601	1.601	*****	*****	NEG
[47726]	B10	1.551	1.551	*****	*****	NEG
[47691]	C10	1.588	1.588	*****	*****	NEG
[47703]	D10	1.584	1.584	*****	*****	NEG
[47714]	E10	1.539	1.539	*****	*****	NEG
[47613]	F10	1.625	1.625	*****	*****	NEG
[47670]	G10	1.548	1.548	*****	*****	NEG
[47716]	H10	1.576	1.576	*****	*****	NEG
[47729]	A11	1.489	1.489	*****	*****	NEG

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Top-left panel

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Plate ID: CocOpiTHC033012   THC

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[47692]	B11	1.556	1.556	*****	*****	NEG
[47619]	C11	1.575	1.575	*****	*****	NEG
[47702]	D11	1.557	1.557	*****	*****	NEG
[47690]	E11	1.649	1.649	*****	*****	NEG
[47682]	F11	1.569	1.569	*****	*****	NEG
[47725]	G11	1.588	1.588	*****	*****	NEG
[47571]	H11	1.536	1.536	*****	*****	NEG
[47728]	A12	1.436	1.436	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A9	1.508	1.527	0.027	1.764%	NC1
	B9	1.546				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C9	1.322	1.332	0.014	1.042%	CO1
	D9	1.341				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E9	1.510	1.510	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F9	0.676	0.676	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

Top-right panel

C:\..\CocOpiTHC033012.DAT   Printed on 3/31/2012 at 12:45:05 AM   Page 9 of 9
Plate ID: CocOpiTHC033012   THC

DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	*****	*****	*****	*****	*****	*****	*****	*****	1.508	1.601	1.489	1.436
B	*****	*****	*****	*****	*****	*****	*****	*****	1.546	1.551	1.556	*****
C	*****	*****	*****	*****	*****	*****	*****	*****	1.322	1.588	1.575	*****
D	*****	*****	*****	*****	*****	*****	*****	*****	1.341	1.584	1.557	*****
E	*****	*****	*****	*****	*****	*****	*****	*****	1.510	1.539	1.649	*****
F	*****	*****	*****	*****	*****	*****	*****	*****	0.676	1.625	1.569	*****
G	*****	*****	*****	*****	*****	*****	*****	*****	1.618	1.548	1.588	*****
H	*****	*****	*****	*****	*****	*****	*****	*****	1.639	1.576	1.536	*****

***** Indicates an unread well or value out of range

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Bottom-left panel

C:\..\Cot033012.DAT   Printed on 3/30/2012 at 11:09:40 PM   Page 1 of 3
Plate ID: Cot033012   COTININE

REVELATION DSX 6.21

TEST NO.	:
TEST NAME	: COTININE
PLATE	: Cot033012

W/L MODE	: SINGLE	DATE	: 3/30/2012
TEST FILTER	: 450 nm	TIME	: 11:08:29 PM
REF. FILTER	: *	OPERATOR	: admin

Kit Lot Data : COTININE, CTI-0034,
Plate Lot Data : Cot,,
Reagent Lot Data : Acid Stop, ,
: COTININE CONJUGATE, ,
: EIA Buffer, ,
: K-Blue, ,
: COTININE CUTOFF, ,
: COTININE NEGATIVE, ,
: GROUP 1 CUTOFF, ,
: GROUP 1 NEGATIVE, ,
: Distilled Water, ,
: Neogen Wash Buffer, ,

OVER limit : 3.500
Calculation mode : Endpoint

THRESHOLD RESULTS

Q.C. equations

NC>CO   3.160>1.575

+ equation   = CO
              = 1.576
- equation   = CO
              = 1.576

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[47753]	G1	3.092	3.092	*****	*****	NEG
[47603]	H1	3.220	3.220	*****	*****	NEG
[47551]	A2	3.226	3.226	*****	*****	NEG
[47726]	B2	3.113	3.113	*****	*****	NEG
[47691]	C2	2.900	2.900	*****	*****	NEG
[47703]	D2	3.183	3.183	*****	*****	NEG
[47714]	E2	3.192	3.192	*****	*****	NEG
[47613]	F2	3.139	3.139	*****	*****	NEG

Bottom-right panel

C:\..\Cot033012.DAT   Printed on 3/30/2012 at 11:09:40 PM   Page 2 of 3
Plate ID: Cot033012   COTININE

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
[47670]	G2	3.195	3.195	*****	*****	NEG
[47716]	H2	3.300	3.300	*****	*****	NEG
[47729]	A3	3.179	3.179	*****	*****	NEG
[47692]	B3	3.131	3.131	*****	*****	NEG
[47619]	C3	3.121	3.121	*****	*****	NEG
[47702]	D3	3.043	3.043	*****	*****	NEG
[47690]	E3	3.103	3.103	*****	*****	NEG
[47682]	F3	3.022	3.022	*****	*****	NEG
[47725]	G3	3.095	3.095	*****	*****	NEG
[47571]	H3	3.089	3.089	*****	*****	NEG
[47728]	A4	3.246	3.246	*****	*****	NEG

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NC1	A1	3.194	3.161	0.048	1.517%	NC1
	B1	3.127				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
CO1	C1	1.667	1.576	0.130	8.221%	CO1
	D1	1.484				

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NNC1	E1	2.199	2.199	*****	*****	NNC1

Sample ID	Location	Data	Mean	S.D.	C.V.	Result
NCO1	F1	1.075	1.075	*****	*****	NCO1

[...] Indicates manual SID entry or manual pipetting
***** Indicates an unread well or value out of range
0 Indicates an equivocal response
* Indicates an unread well or value out of range
# Indicates combined data

C:\..\Cot033012.DAT
Plate ID: Cot033012

Printed on 3/30/2012 at 11:09:40 PM
COTININE

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DATA MATRIX/TABLE : OD

	1	2	3	4	5	6	7	8	9	10	11	12
A	3.194	3.226	3.179	3.246	*****	*****	*****	*****	*****	*****	*****	*****
B	3.127	3.113	3.131	*****	*****	*****	*****	*****	*****	*****	*****	*****
C	1.667	2.900	3.121	*****	*****	*****	*****	*****	*****	*****	*****	*****
D	1.484	3.183	3.043	*****	*****	*****	*****	*****	*****	*****	*****	*****
E	2.199	3.192	3.103	*****	*****	*****	*****	*****	*****	*****	*****	*****
F	1.075	3.139	3.022	*****	*****	*****	*****	*****	*****	*****	*****	*****
G	3.092	3.195	3.095	*****	*****	*****	*****	*****	*****	*****	*****	*****
H	3.220	3.300	3.089	*****	*****	*****	*****	*****	*****	*****	*****	*****

***** Indicates an unread well or value out of range

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