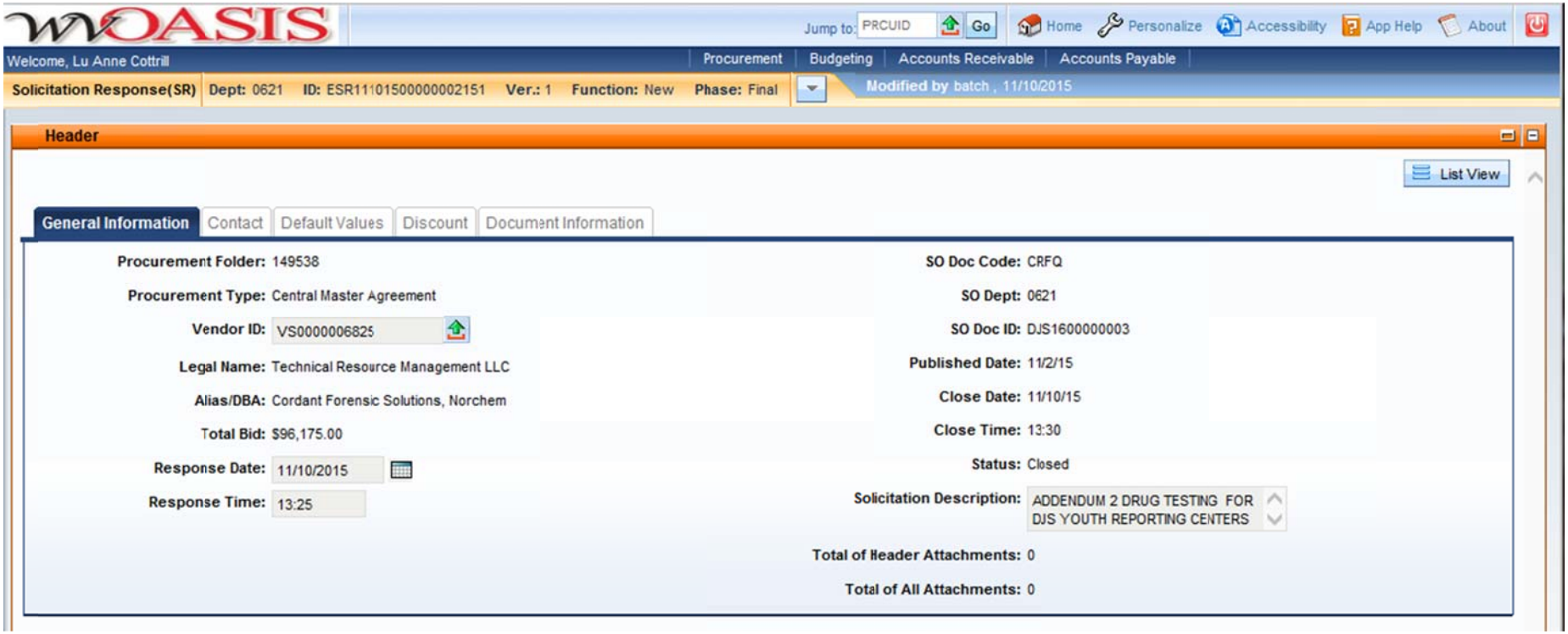
The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at ***wvOASIS.gov***. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at ***WVPurchasing.gov*** with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.


WVOASIS
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About
Welcome, Lu Anne Cottrill
Procurement
Budgeting
Accounts Receivable
Accounts Payable
Solicitation Response(SR) Dept: 0621 ID: ESR11101500000002151 Ver.: 1 Function: New Phase: Final
Modified by batch , 11/10/2015
Header
List View
General Information
Contact
Default Values
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Document Information
Procurement Folder: 149538
Procurement Type: Central Master Agreement
Vendor ID: VS0000006825
Legal Name: Technical Resource Management LLC
Alias/DBA: Cordant Forensic Solutions, Norchem
Total Bid: $96,175.00
Response Date: 11/10/2015
Response Time: 13:25
SO Doc Code: CRFQ
SO Dept: 0621
SO Doc ID: DJS1600000003
Published Date: 11/2/15
Close Date: 11/10/15
Close Time: 13:30
Status: Closed
Solicitation Description: ADDENDUM 2 DRUG TESTING FOR DJS YOUTH REPORTING CENTERS
Total of Header Attachments: 0
Total of All Attachments: 0

Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Solicitation Response

Proc Folder : 149538

Solicitation Description : ADDENDUM 2 DRUG TESTING FOR DJS YOUTH REPORTING CENTERS

Proc Type : Central Master Agreement

Date issued	Solicitation Closes	Solicitation No	Version
	2015-11-10 13:30:00	SR 0621 ESR11101500000002151	1

VENDOR

VS0000006825

Technical Resource Management LLC

Cordant Forensic Solutions, Norchem

FOR INFORMATION CONTACT THE BUYER

Crystal Rink

(304) 558-2402
crystal.g.rink@wv.gov

Signature X **FEIN #** **DATE**

All offers subject to all terms and conditions contained in this solicitation

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	11 panel (C) Urine	5000.00000	EA	$11.500000	$57,500.00

Comm Code	Manufacturer	Specification	Model #
85121800			

Extended Description : Price per test of 11 panel (C) Urine
estimated annual Qty. 5000 for bid purposes only to include confirmation.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
2	Confirmation for synthetic drugs	1500.00000	EA	$24.950000	$37,425.00

Comm Code	Manufacturer	Specification	Model #
85121800			

Extended Description : Price per confirmation of synthetic drugs.
estimated annual Qty 1500 for bid purposes only.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
3	MRO or Lab Rep as Expert Witness	5.00000	HOUR	$250.000000	$1,250.00

Comm Code	Manufacturer	Specification	Model #
85121800			

Extended Description : per hourly rate to include travel.
estimated annual Qty. 5-hours for bid purposes only.

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: DJS1600000003

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:
(Check the box next to each addendum received)

[X]	Addendum No. 1	[ ]	Addendum No. 6
[X]	Addendum No. 2	[ ]	Addendum No. 7
[ ]	Addendum No. 3	[ ]	Addendum No. 8
[ ]	Addendum No. 4	[ ]	Addendum No. 9
[ ]	Addendum No. 5	[ ]	Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Technical Resource Managementm, LLC dba Norchem, Cordant Forensic Solutions
Company

Amanda Gibbs
Authorized Signature

11/10/2015
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.
Revised 6/8/2012

Full accreditation for forensic drug testing (CAP-FDT)

Advancing Excellence

Accredited Laboratory

The College of American Pathologists

certifies that the laboratory named below

Norchem Drug Testing
Laboratory
Flagstaff, Arizona
Bert Toivola, PhD

CAP Number: 6913001
AU-ID: 1334964

has met all applicable standards for accreditation and is hereby accredited by the College of American Pathologists' Forensic Drug Testing Accreditation Program. Reinspection should occur prior to May 22, 2017 to maintain accreditation.

Accreditation does not automatically survive a change in director, ownership, or location and assumes that all interim requirements are met.

Chair, Commission on Laboratory Accreditation

President, College of American Pathologists

Department of Health and Human Services, Centers for Medicare & Medicaid Services Clinical Laboratory Improvement Amendments (CLIA) CLIA Laboratory Certificate of Compliance

CENTERS FOR MEDICARE & MEDICAID SERVICES
CLINICAL LABORATORY IMPROVEMENT AMENDMENTS

CERTIFICATE OF COMPLIANCE

LABORATORY NAME AND ADDRESS
TECHNICAL RESOURCE MGMT LLC / NORCHEM
1760 E ROUTE 66, SUITE 1
FLAGSTAFF, AZ 86004

CLIA ID NUMBER
03D0936918

EFFECTIVE DATE
06/18/2014

LABORATORY DIRECTOR
BERT T K TOIVOLA, PHD

EXPIRATION DATE
06/17/2016

Pursuant to Section 353 of the Public Health Services Act (42 U.S.C. 263a) as revised by the Clinical Laboratory Improvement Amendments (CLIA), the above named laboratory located at the address shown hereon (and other approved locations) may accept human specimens for the purposes of performing laboratory examinations or procedures.

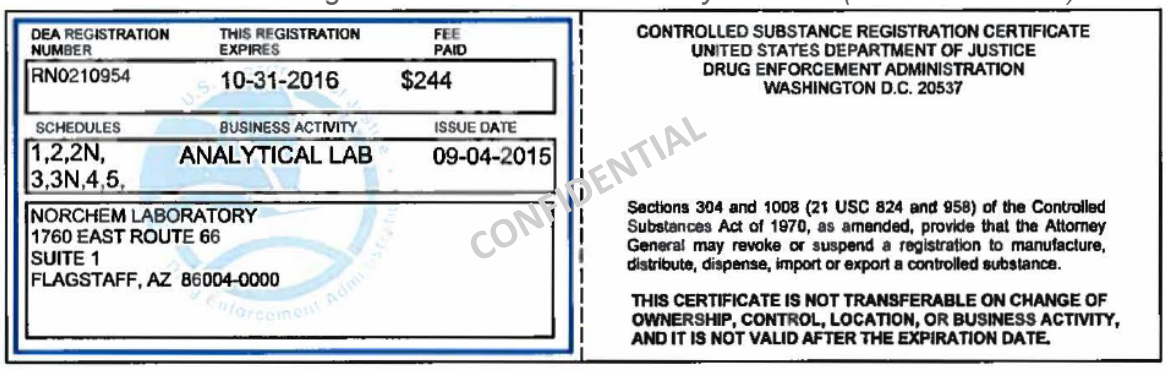
This certificate shall be valid until the expiration date above, but is subject to revocation, suspension, limitation, or other sanctions for violation of the Act or the regulations promulgated thereunder.

CMS
CENTERS FOR MEDICARE & MEDICAID SERVICES

Karen W. Dyer, Acting Director
Division of Laboratory Services
Survey and Certification Group
Center for Clinical Standards and Quality

313 Certs2_050515

Controlled Substance Registration Certificate issued by the DEA (CONFIDENTIAL)



DEA REGISTRATION NUMBER	THIS REGISTRATION EXPIRES	FEE PAID
RN0210954	10-31-2016	$244

SCHEDULES	BUSINESS ACTIVITY	ISSUE DATE
1,2,2N, 3,3N,4,5,	ANALYTICAL LAB	09-04-2015

NORCHEM LABORATORY
1760 EAST ROUTE 66
SUITE 1
FLAGSTAFF, AZ 86004-0000

CONTROLLED SUBSTANCE REGISTRATION CERTIFICATE
UNITED STATES DEPARTMENT OF JUSTICE
DRUG ENFORCEMENT ADMINISTRATION
WASHINGTON D.C. 20537

CONFIDENTIAL

Sections 304 and 1008 (21 USC 824 and 958) of the Controlled Substances Act of 1970, as amended, provide that the Attorney General may revoke or suspend a registration to manufacture, distribute, dispense, import or export a controlled substance.

THIS CERTIFICATE IS NOT TRANSFERABLE ON CHANGE OF OWNERSHIP, CONTROL, LOCATION, OR BUSINESS ACTIVITY, AND IT IS NOT VALID AFTER THE EXPIRATION DATE.

November 10, 2015

Crystal Rink
Department of Administration
Purchasing Division
2019 Washington St E
Charleston, WV 25305

RE: Centralized Request for Quote (CRFQ) DJS1600000003 – Drug Testing for DJS Youth Reporting Centers

Dear Ms. Rink,

Cordant Forensic Solutions, formerly and herein referred to as "Norchem" is pleased to submit the enclosed response the State of West Virginia's ("the State") Request for Quotes for Drug Testing for DJS Youth Reporting Centers. Norchem is committed to working closely with you to meet and exceed your expectations.

Norchem has 20 years of experience providing forensic drug testing, with a particular focus on serving criminal justice, treatment, and social services agencies. Our specific expertise is in providing legally defensible results in industry-leading turn-around time, coupled with dedicated client service, which result in improved outcomes and client satisfaction. Our test result turn-around time is among the best in the industry.

Philosophically, we consider testing for drugs of abuse a vital and objective tool for officers and caseworkers to use in the monitoring, evaluation, treatment and ultimately, the rehabilitation of offenders and abusers/addicts. We take the stance that not just the test itself, but the entire process must be completely reliable and legally defensible with the best science behind it. Norchem has earned an exceptional reputation as a world-class drug abuse, clinical, and toxicological analysis laboratory. Our reputation for integrity, honesty, quality, and service is evidenced by our hard-earned credentials and surrounds every single test.

Our highly reputable forensic certified laboratory, our philosophy of leveraging outcomes-based reporting to improve compliance and rehabilitation, and our extensive experience providing these services government agencies across the country make selecting Norchem a most compelling decision. Please do not hesitate to contact us if you have any questions or require any clarification. Thank you for your consideration.

Kind regards,

Amanda Gibbs

Amanda Gibbs
Vice President and General Manager, Criminal Justice Business Unit
Phone: 800-348-4422 Ext. 241
AGibbs@CordantHS.com

BACKGROUND AND QUALIFICATIONS

Technical Resource Management, LLC dba Norchem and Cordant Forensic Solutions (herein referred to as Norchem) has been providing legally defensible forensic laboratory drug testing since 1995. We provide urine and oral fluid testing for all common drugs of abuse, as well as designer substances like synthetic cannabinoids (Spice, K2) and synthetic stimulants (Bath Salts). We have also developed a proprietary evidence based substance abuse management, compliance monitoring, and reporting web platform (Norchem Sentry™). Sentry was developed specifically to assist in improving outcomes and saving costs. Sentry is currently used by many drug courts, probation departments, social services agencies, and other government clients throughout the country.

Annually, we perform over 20,000,000 individual tests on approximately 2,000,000 specimens at our laboratory. We currently have the facility and management team to add capacity that would allow for an additional 10,000,000 tests on an additional 1,000,000 specimens per year (up to 12,000 specimens per day). Our laboratory processes specimens from 40 states. Listed below are some of our current clients:

- New York (6+ years):
  - New York State Parole;
  - Rochester County DA Diversion Program; and
  - NYC Department of Corrections – employment testing.
- California (10+ years):
  - San Diego County Probation; and
  - Santa Clara Department of Family and Children Services.
- Arizona (18+ years):
  - Arizona Juvenile and Adult Probation; and
  - Arizona Child Protective Services.
- New Mexico (5+ years):
  - New Mexico Children Youth & Families; and
  - New Mexico Probation and Parole.
- Colorado (9+ years):
  - Colorado County—22 districts;
  - Denver County Court Probation; and
  - Over 100 private treatment providers supporting the probation departments statewide.

Norchem holds accreditation from the College of American Pathologists for Forensic Drug Testing (CAP-FDT) and licensure from Clinical Laboratory Improvement Amendments (CLIA) in Toxicology, as well as licenses and permits from states where additional licensing is mandated, including Florida, Pennsylvania, New York, Maryland, and Texas (copies of all of our certifications and accreditations can be viewed on our website at: http://www.norchemlab.com/about-us/certifications/.)

Norchem participates in four rigorous external quality control programs with the College of American Pathology (CAP) for Drugs of Abuse Confirmations, Pain Management, Ethanol Biomarkers (EtG / EtS), and Adulteration, as well as proficiency testing with the American Association of Bioanalysts (AAB).

Copies of our CAP-FDT, CLIA, and DEA certificates/registrations have been provided as separate attachments.

SERVICES

Norchem will furnish all of the necessary equipment, hardware, software, materials, shipping materials, testing supplies, insurance, and permits/licenses needed in order to provide these services to the State.

Norchem Sentry™

Our web based application management system, Sentry, creates efficiencies at every step in the substance abuse monitoring value stream: donor enrollment and photo capture, randomization, notification for testing by IVR (Interactive Voice Response) phone system, no call and no show reporting, electronic chain of custody (no handwriting or typing to eliminate data transfer errors), collection supplies and shipping to our laboratory, and results reporting in real time. The State will receive better outcomes at a lower cost with Sentry.

Abnormal results, no-call, and no-show notices can be sent via an alert system by email in “real time”. Statistical reports that show trends and correlations are available on demand, providing information to every level of the agency. With Sentry, users can access different tests/panels (standard & customized) that fit your requirements. Sentry reduces work steps, eliminates paper forms and reports, and provides instant communication to all the stakeholders.

Sentry is designed to fortify supervision of your clients. Supervision levels impact outcomes. The goal is to hold the client to the court’s or your testing requirements, depending on their risk level. A daily reporting system provides the officer or case worker an additional point of contact, which adds structure and accountability to the client’s routine.

Sentry is designed to save you money. In addition to eliminating unscheduled testing and other abuses of the system by clients, Sentry allows for easy

monitoring of case managers and insight into the appropriateness of testing frequencies. Customizable reporting tools ensure accountability on a finite budget.

Sentry is designed to save you time. The collection process utilizes an electronic chain of custody that allows specimen collections without cumbersome paperwork. Results go directly to each of the stakeholders and are always available with a few mouse clicks. Results may be simultaneously and automatically distributed to probation departments, third party vendors, treatment centers, and other authorized parties. The result distribution process can be customized for each individual client.

Clients are imported into Sentry and assigned randomization schedules individually or in groups (high risk-high supervision, medium risk, and low risk). Testing dates are randomly and evenly distributed throughout weekly, monthly, quarterly, or annual periods. Sentry also allows for a chance for an additional surprise test within a period to further limit predictability. Sentry provides mathematical randomization so as not to establish a pattern for frequency or timing of the testing.

Sentry's features include:

- Phone/Web Test Notification;
- Randomization;
- Identity Verification & Printable COC Form;
- Email and Web Alerts;
- Tools to Support Evidenced Based Practices;
- Integration with Other Third-Party Monitoring Tools;
- Cross-Agency Information Sharing and ability to transfer clients and caseloads;
- Ability to Interface with County/State and Third-Party Systems;
- Robust reporting capabilities

Email and Web Alerts

Sentry not only offers real-time alerts on the user's dashboard (homepage) in the web interface of Sentry, but also allows officers and case workers to receive email alerts on missed calls, missed tests, and abnormal/normal drug test results. With the ability to receive alerts of non-compliant clients, it allows the officer to intervene quickly at the start of their day through the web alerts function, or intervene quickly by receiving email alerts on their smart phones while working out in the field.

Reporting

Norchem and Sentry offer abundant reporting features readily available to all levels of users. Sentry is integrated with our Laboratory Information Management System (LIMS) to report drug test results in real-time to the State users. With Sentry, officers, case managers, and administrators do not have to wait until the end of the day to receive drug test results on clients. Sentry enables the State to leverage evidence-based practices, ensure accountability, and customize treatment approaches with a solution that has a track record of helping to revolutionize drug testing and sobriety monitoring programs.

Sentry provides organizational level reporting in multiple formats to include:

- Result reporting 24/7;
- Random selection reports:
  - Who is testing;
  - How many males;
  - How many females;
  - Who missed tests;
  - Who missed call-in requirements;
- Full history of laboratory testing;
- Highlighted abnormal and issue test results; and
- Download complete results in multiple formats: XML, PDF, XLSX.

Norchem and Sentry provide robust reporting capabilities from the Administration level, to the Agency user level, to the Client level.

- Administrative level:
  - Statistical, correlation, and trend reports for decision making for program evaluation and budgetary decisions. A sample statistical report is pictured on the following page;
- Agency User level:
  - Caseload reports on entire caseloads or group reporting at the group level;
- Client level:
  - Detailed client reports for monitoring sobriety and compliance and court/hearing appearances;
  - Complete client compliance reports to include compliance scores;
  - Audit logs showing all activity on the client's case;
  - UA test reports; and
  - Client accountability reports.

Materials and Supplies

Norchem will provide all collection and shipping supplies. Supplies will include:

- Chain of Custody (COC) Forms with pre-printed unique bar codes on the form and specimen security seal.
- Specimen Bags: Self-sealing specimen bags contain separate "pockets" for the specimen vial and Chain of Custody form. The specimen pocket contains an absorbent sheet that will absorb any potential spillage.
- Urine Specimen Vials: Individually packaged, tamper proof, heat-sealed vials which include a latch lock for specimen transport and stronger, improved protection against leakage. Norchem will provide both male and female style urine collection kits.
- Shipping Supplies: Norchem will provide all supplies necessary for next-day delivery to our lab.
- Female Wands: These devices provide for a more user-friendly female urine collection and can be purchased for $5.00 each.

Supplies will be set up for automatic, regular shipment to each collection site. Quantities shipped to each location are based on the volume of specimens we receive. If we receive a larger number of specimens, we will send out an equal amount of supply kits. Collection sites may also contact our Client Services department to place orders.

Urine Specimen Vials

The specimen containers utilized for collection of urine are designed to be very resistant to leaks. These new, improved specimen containers are durable with specially designed lids to provide better protection against leakage, resulting in even fewer samples arriving to our laboratory unable be tested. Specimen cups are sealed in the manufacturing process, which ensures a clinically clean container, free of any contamination. Specimens are opened by automated instrumentation, further mitigating the chance of human error and ensuring a clean and accurate process.

Administrative

Our client services team is available Monday through Friday from 8:30 A.M. to 7:00 P.M. Eastern Time at 800-348-4422. Specifically trained to interpret results produced by our laboratory, they are capable of handling a wide variety of result interpretation questions.

Our scientists are also available and ready to assist with our customers' needs if required. Our Laboratory and Technical Laboratory Directors, Forensic Pathologists, Toxicologists, and other scientists are available Monday through Friday from 8 A.M. to 5 P.M. Mountain Standard Time (Arizona time) to assist with any questions. *In addition, an on-call Toxicologist, available 24/7/365, is available for urgent questions. There are never any additional fees for these support services.*

As your partner, your designated Account Manager will continue to review your account regularly, recommending new policies, procedures, and protocols for drug testing.

Expert Testimony and Legal Services

We have scientists, directors, and technical staff members available to provide expert testimony as needed. Our expert witnesses will defend the veracity of our procedures and the accuracy and reliability of our test results. We are well versed in meeting the needs of customers who require legally defensible drug testing. Our procedures (analytical and chain of custody) comply with CAP-FDT requirements as evidenced by our current certification.

Our Scientific Director, Dr. Bert Toivola, has qualified as an expert witness in Superior, Municipal, and District courts in Arizona, California, New Mexico, Washington, Oregon, Idaho, Texas, Georgia, Hawaii, Alaska, Colorado, and before a Federal Grand Jury in Colorado. He has testified in over 200 cases in addition to testifying in Frye Motion hearings regarding EtG testing.

We can arrange for an expert witness to provide deposition, documentation, testimony and/or any other administrative and court action support. Testimony can be provided telephonically, via video conferencing or through sworn affidavit.

Under normal circumstances, testimony requires a subpoena, and litigation packages, affidavits, letters, etc. require either a subpoena or a written request on official letterhead, with two (2) weeks prior notice whenever possible. In exceptional situations, and in accordance with the applicable HIPAA provision requiring it, exemptions to these requirements may be accommodated. We follow all HIPAA requirements for the release of documents or experts for testimony.

Litigation packets can be provided for $75.00 each. Affidavits can be provided for $25.00 each.

Testing and Testing Methodologies

Testing for drugs consists of an initial screening test employing immunoassay techniques to identify negative samples from presumptive positive specimens, and a secondary confirmatory test to positively identify and provide quantitative results.

At Norchem, all testing is performed according to CAP-FDT (College of American Pathologists-Forensic Drug Testing) guidelines and under CAP-FDT regulated

conditions, all confirmed test results are approved by certifying scientists, and results are legally defensible in a court of law. A forensic certification, such as CAP-FDT or SAMHSA, is of value because it demonstrates the laboratory has to meet and maintain certain performance standards in order to be certified. It is critical that the laboratory also be able to state honestly that all testing is performed under those regulated conditions for all the requested tests.

Initial Lab Screens

Once a specimen is delivered to our lab, it is processed by Immunoassay screening. Norchem utilizes EMIT (Enzyme-Multiplied Immunoassay Technique), EIA (Enzyme Immunoassay), CEDIA (Cloned Enzyme Donor Immunoassay), and ELISA (Enzyme-Linked Immunosorbent Assay) methods. EMIT, EIA, and CEDIA employ different enzymes and different drug-specific antibodies. The labeled enzyme used for EMIT produces NADH, which is detected with ultraviolet light (340 nm). The labeled enzyme used for CEDIA produces CPR, which is detected with yellow light (570 nm).

Specimen Validity

Deliberate efforts to mask drug use are not uncommon, so we employ a variety of analytical and subjective tools to determine specimen integrity. Every specimen received undergoes a basic adulteration check to determine specimen tampering. Unusual color, physical characteristics, and instrument responses are assessed. Any specimen abnormalities or unusual instrument response are reported on the test result. If specimen abnormalities are identified, an *Extended Adulteration Panel* that tests for nitrates, pH, and specific gravity can then be performed for an additional fee (see table below):

Test	Normal	Adulterant	Possible Product
Creatinine	>20 mg/dL	Flushing	Golden Seal
PH	4.5 – 8.9	Strong Base or Acid	Oven Cleaner
Specific Gravity	1.0030 – 1.0300	Most Additives	Salt, Sugar
Oxidants	<500 ug/mL	Potassium Nitrite, Pyridiniumchlorochromate, Bleach	Klear, Urine Luck

In addition, every urine specimen is tested for creatinine. The creatinine level provides critical information on specimen dilution and provides a warning against possible false negative drug test results. Specimen dilution is caused by an individual consuming an inordinate amount of fluid (primarily water) prior to testing in an effort to dilute the concentration of any drug that is present. Specimen dilution is the primary way an individual attempts to beat a drug test. This is why the reporting of a creatinine level on every specimen is so important. A creatinine level less than 20 mg/dL indicates a dilute specimen.

Specimen Criteria:

- Dilute: A specimen with a creatinine level <20 mg/dL will have a comment on the result report “Specimen too dilute to assure valid NEGATIVE result”;
- Invalid/Unable to test: A specimen with a high particulate matter such as excessive blood or mucus;
- Substituted: A specimen with a creatinine level <5 mg/dL AND a specific gravity level between <1.001 or >1.02; and
- Adulterated: A specimen which has an abnormal pH, or contains Nitrite, Gluteraldehyde, Oxidizing Substances, and/or Chromate.

Confirmation Testing

The confirmatory test *must use a physical chemical method distinctly different from the screening method* that is more sensitive and specific compared to screening methods. That is, if enzyme immunoassay (EIA) is used as a screening method, tests using other forms of immunoassay, radioimmunoassay (RIA), fluorescent polarization immunoassay (FPIA), enzyme linked immunoabsorbent assays (ELISA), etc., are excluded as acceptable confirmatory methods. Norchem uses Liquid Chromatographic/Tandem Mass Spectrometric (LC/MS/MS) methods to perform confirmation tests (GCFID is used for alcohol confirmations).

The dual “mass-spec” of the LC/MS/MS provides for more specific and more sensitive analyses. The “more specific” feature means that it is better at distinguishing the analyte in question from interfering substances such as adulterants or a similar drug. The “more sensitive” feature means it can measure the drug at much lower concentrations, making LC/MS/MS analyses less susceptible to dilution efforts by the donor. LC/MS/MS will detect compounds at one-hundredth the concentration than can be achieved with GC/MS (picograms/mL vs nanograms/mL).

Our LC/MS/MS methodologies meet or exceed Kelly-Frye standards for test results entered into evidence. Nationally recognized toxicology laboratories have embraced and successfully implemented LC/MS/MS analyses for forensic, general and clinical toxicology, as well as the highly specialized and demanding analyses of drugs in alternative matrices like hair, saliva, and sweat (alternative matrices require greater sensitivity than GC/MS can provide).

Creatinine and THC

Marijuana (THC) can persist in the urine long after use; from two days for the occasional user to six weeks for the chronic user. There is often a need to determine if a current positive THC result indicates new marijuana use or a previous use. In principle, the THC level should decrease over time following the last use. However, the THC level also depends upon the urine concentration. In

order to handle this complication the THC level is divided by the creatinine level (CR). The THC/CR ratio should decrease over time when there is no new use. The rule-of-thumb is that when comparing two results, the THC/CR ratio should decrease by 50% every 2-10 days depending on the individual. A light-infrequent user will decrease faster than a heavy-frequent user.

EtG Alcohol Testing

Norchem has made a considerable investment in EtG testing science. EtG testing offers a longer window of detection, making it ideal for criminal justice agencies. We offer both EIA screening and LC/MS/MS confirmatory tests for EtG and EtS.

Designer Drugs

Norchem is a leader in testing for designer drugs such as synthetic cannabinoids (Spice, K2) and designer stimulants (Bath Salts, Flakka). As soon as we become aware of new drugs, and as calibrators become commercially available, we add the new compounds to our test menu. We audit results and quickly to respond to changes in the designer drug landscape. All drugs are screened using either EIA or LC/MS/MS and are confirmed using LC/MS/MS.

Synthetic cannabinoids have become one of the most popular designer drugs since their introduction into the United States in 2009 and 2010. We were among the few early adopters of synthetic cannabinoid testing in late 2010, and in 2013 we expanded our capabilities to include metabolites from 14 synthetic cannabinoids. In 2014, we expanded our menu again, and we can now detect 20 different synthetic cannabinoids metabolites (see table below).

Current Synthetic Cannabinoid Metabolite Test Menu

JWH018	JWH019	JWH073	JWH250
JWH 203	JWH072	JWH081	JWH210
JWH 398	JWH122	RCS4	UR144
UR144 PYRO	AKB48	5F-PB22	PB22
AM694	AM2201	MAM2201	XLR11

We are also constantly working to expand our designer stimulant testing capabilities, with plans to add butylone, methylone, methedrone, naphyrone, ethylone, flephedrone, DMAA, and alpha-PBV to the list of compounds we currently test for (see below). We are also researching the addition of the new “2-C” class of hallucinogens which include the substance known on the street as “N-bomb”.

Current Designer Stimulant Compound Test Menu

MDPV	Mephedrone
Cathinone	Methcathinone
Alpha PVP (“Flakka”)	

We can also offer tests for Salvia (Salvinorin A, Salvinorin B) and Phenethylamines (2C-B, 2C-E, 2C-I) through our affiliated laboratories (additional

time required for results). Prices for these tests vary and can be quoted separately upon request.

Turnaround Time

We provide results within a 24-48 hour turnaround time to drug courts, departments of corrections, social services agencies, probation and parole agencies, and treatment centers. We pride ourselves on providing quality test results within some of the quickest turn-around times in the industry.

Confirmed positive test results for common substances are provided within forty-eight (48) hours after receipt of specimens to the laboratory. Negative screen results are reported the within 24 hours of receipt to the laboratory. On average, Norchem delivers over 40% of confirmed positive results on common substances on the same day as receipt of specimen, with the balance reported the following day. Results are noted individually as positive or negative.

KEY PRICING ASSUMPTIONS

Please refer to the fees submitted online. Additional fees and key assumptions are detailed below.

Additional Services

Court Representation and Testimony

DESCRIPTION	Fee
In-person (1st day of testimony)	**$250/hr. (8 hour minimum)**
In-person (2nd day of testimony)	**$150/hr.**
Telephonic	**No Charge**
Skype or video-conferencing	**No Charge**
Litigation Packet	**$75.00**
Affidavit	**$25.00**

Lab Supplies and Courier Shipping

DESCRIPTION	Price
Chain of Custody Forms	**Included**
Urine specimen collection kits with attached temperature strips	**Included**
FedEx Overnight Shipping	**Included**

Lab supply orders will be shipped to you at no charge via ground service delivery.

Key Pricing Assumptions

- Estimated Monthly Specimen Volume: 400-420;
- Estimated Positive Rate: approximately 50%. If the overall positivity rate exceeds 50%, fees may need to be recalculated and renegotiated;
- Two to three (2-3) FedEx pickups per week from twelve (12) locations;
- Urine specimens must be collected with or poured into a Norchem specimen vial before shipping to our lab;
- Quoted fees include one (1) in-person training (per specification 3.1.1.6). Additional virtual/web-based training for department staff can also be provided at no cost. Additional in-person training may be available for additional fees;
- Overnight shipping for specimens is provided at no charge; however, it is requested that seven (7) or more specimens are enclosed in each FedEx overnight shipment. Shipments containing fewer than seven (7) specimens may incur a $10 surcharge; and
- Pricing includes the use of Norchem Sentry™.