Applied Biosystems

850 Lincoln Centre Drive
Foster City, CA 94404 U.S.A.
T 650.570.6667 F 650.572.2743
www.appliedbiosystems.com

March 2, 2010

John Abbott
State of West Virginia
Department of Administration
Purchasing Division
Building 15
2019 Washington Street, East
Charleston, WV 25305-0130

Re: State of West Virginia Request For Quotation No. DPS1025 – DNA Expert System Software; AB Quote No.20641127

Dear Mr. Abbott:

Thank you for the opportunity to respond to your request For Quotation No.DPS1025 for DNA Expert System Software. Please accept the attached Applied Biosystems' bid package, which includes AB Quote No. 20641127, completed bid forms and product literature for the GeneMapper ID Software v1.1. Please note that the prices set forth in AB Quote No. 20641127 are valid until April 30, 2010.

Should you have any questions regarding our products and/or pricing, please contact Dawn Waltman at 410-688-0723 or dawn.waltman@lifetech.com. For any contractual issues, please contact me as provided below.

Thank you in advance for your time and consideration.

Sincerely,

Ruba Ramahi

Ruba Ramahi
Applied Biosystems LLC.
Contracts Specialist
Ph.650.638.5647
Fax.650.638.5143
ruba.ramahi@lifetech.com

Enclosures

State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

Request for Quotation

RFQ NUMBER	PAGE
DPS1025	1

ADDRESS CORRESPONDENCE TO ATTENTION OF:
JOHN ABBOTT
304-558-2544

VENDOR
*501152144 650-638-5647
APPLIED BIOSYSTEMS
850 LINCOLN CENTRE DRIVE

FOSTER CITY CA 94404

SHIP TO
WEST VIRGINIA STATE POLICE

4124 KANAWHA TURNPIKE
SOUTH CHARLESTON, WV
25309 304-746-2141

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
02/14/2010				

BID OPENING DATE: 03/03/2010 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	LS		205-64 Gene Mapper ID-X V1.1 FULL DNA EXPERT SYSTEM SOFTWARE	$ 20,000.00	$ 20,000.00
0003				SW Genemapper ID-V1.1-Client	$ 70,000.00	$ 70,000.00

CONTRACT TO PROVIDE DNA EXPERT SYSTEM SOFTWARE FOR THE FORENSICS LAB AT THE WEST VIRGINIA STATE POLICE, PER THE ATTACHED SPECIFICATIONS.

NOTICE

A SIGNED BID MUST BE SUBMITTED TO:

DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
BUILDING 15
2019 WASHINGTON STREET, EAST
CHARLESTON, WV 25305-0130

THE BID SHOULD CONTAIN THIS INFORMATION ON THE FACE OF THE ENVELOPE OR THE BID MAY NOT BE CONSIDERED:

SEALED BID

BUYER: JOHN ABBOTT (32)

RFQ. NO.: DPS1025

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE Phillip G Bu TELEPHONE 650-638-5647 DATE 3/2/10

TITLE Sr. Contract Specialist FEIN 06-1534213 ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

GENERAL TERMS & CONDITIONS
REQUEST FOR QUOTATION (RFQ) AND REQUEST FOR PROPOSAL (RFP)

1. Awards will be made in the best interest of the State of West Virginia.

2. The State may accept or reject in part, or in whole, any bid.

3. Prior to any award, the apparent successful vendor must be properly registered with the Purchasing Division and have paid the required $125 fee

4. All services performed or goods delivered under State Purchase Order/Contracts are to be continued for the term of the Purchase Order/Contracts, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise available for these services or goods this Purchase Order/Contract becomes void and of no effect after June 30.

5. Payment may only be made after the delivery and acceptance of goods or services.

6. Interest may be paid for late payment in accordance with the ***West Virginia Code***

7. Vendor preference will be granted upon written request in accordance with the ***West Virginia Code***

8. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.

9. The Director of Purchasing may cancel any Purchase Order/Contract upon 30 days written notice to the seller.

10. The laws of the State of West Virginia and the ***Legislative Rules*** of the Purchasing Division shall govern the purchasing process.

11. Any reference to automatic renewal is hereby deleted. The Contract may be renewed only upon mutual written agreement of the parties.

12. **BANKRUPTCY:** In the event the vendor/contractor files for bankruptcy protection, the State may deem this contract null and void, and terminate such contract without further order.

13. **HIPAA BUSINESS ASSOCIATE ADDENDUM:** The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, is available online at **www.state.wv.us/admin/purchase/vrc/hipaa.htm** and is hereby made part of the agreement. Provided that the Agency meets the definition of a Cover Entity (45 CFR §160.103) and will be disclosing Protected Health Information (45 CFR §160.103) to the vendor.

14. **CONFIDENTIALITY:** The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in http://www.state.wv.us/admin/purchase/privacy/noticeConfidentiality.pdf.

15. **LICENSING:** Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, and the West Virginia Insurance Commission. The vendor must provide all necessary releases to obtain information to enable the director or spending unit to verify that the vendor is licensed and in good standing with the above entities.

16. **ANTITRUST:** In submitting a bid to any agency for the State of West Virginia, the bidder offers and agrees that if the bid is accepted the bidder will convey, sell, assign or transfer to the State of West Virginia all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to the bidder.

I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, or person or entity submitting a bid for the same material, supplies, equipment or services and is in all respects fair and without collusion or Fraud. I further certify that I am authorized to sign the certification on behalf of the bidder or this bid.

INSTRUCTIONS TO BIDDERS

1. Use the quotation forms provided by the Purchasing Division. Complete all sections of the quotation form.

2. Items offered must be in compliance with the specifications. Any deviation from the specifications must be clearly indicated by the bidder. Alternates offered by the bidder as **EQUAL** to the specifications must be clearly defined. A bidder offering an alternate should attach complete specifications and literature to the bid. The Purchasing Division may waive minor deviations to specifications.

3. Unit prices shall prevail in case of discrepancy. All quotations are considered F.O.B. destination unless alternate shipping terms are clearly identified in the quotation.

4. All quotations must be delivered by the bidder to the office listed below prior to the date and time of the bid opening. Failure of the bidder to deliver the quotations on time will result in bid disqualifications: Department of Administration, Purchasing Division, 2019 Washington Street East, P.O. Box 50130, Charleston, WV 25305-0130

5. Communication during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited (W.Va. C.S.R. §148-1-6.6)

State of West Virginia
Department of Administration
Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

Request for Quotation

RFQ NUMBER	PAGE
DPS1025	2

ADDRESS CORRESPONDENCE TO ATTENTION OF:
JOHN ABBOTT
304-558-2544

VENDOR
*501152144 650-638-5647
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4124 KANAWHA TURNPIKE
SOUTH CHARLESTON, WV
25309 304-746-2141

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
02/14/2010				

BID OPENING DATE: 03/03/2010 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO.	ITEM NUMBER	UNIT PRICE	AMOUNT

BID OPENING DATE: 3/3/2010

BID OPENING TIME: 1:30 PM

PLEASE PROVIDE A FAX NUMBER IN CASE IT IS NECESSARY TO CONTACT YOU REGARDING YOUR BID:

650-638-5143

CONTACT PERSON (PLEASE PRINT CLEARLY):

Ruba Ramahi

****** THIS IS THE END OF RFQ DPS1025 ****** TOTAL: $ 90,000.00

* TOTAL FOR BOTH The GeneMapper ID - V1.1 FULL Part# 4404049 and Genemapper V1.1 -Client

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE Phil Co. Bu TELEPHONE 650-638-5647 DATE 3/2/10

TITLE Sr. Contract Specialist FEIN 06-1534213 ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

The three major tasks that this software must be able to perform are the following:

1. Accurately and efficiently evaluate convicted offender profiles, identify the samples which do not meet the laboratory defined parameters and display the failed parameters, and allow for simple segregation of failed samples from passing samples and the export of passed samples in a CODIS acceptable format.

2. Perform quality control evaluations for every sample, offender, casework, and controls, generated or accepted by the laboratory and be able to display reports of the various quality checks.

3 Evaluate casework samples, both single source and mixtures, to assist the analyst in the interpretation of the sample DNA profile.

The vendor must prove that their software was approved by NDIS as an expert system prior 12/31/2009.

The software must be able to compare the run data generated from a specific run on a genetic analyzer to itself to identify possible cross contamination. The level of concordance (number of shared alleles) that is displayed must be a customizable parameter. The results of the comparison must be exportable in a report format

The software must be able to compare the run data generated on a genetic analyzer to a database of profiles that can be augmented as required meaning that all data of a similar type can be housed in a single database even if the analysis parameters which generated the DNA profiles are not identical. (ex. analyst database, consumable contamination database.) The level of concordance (number of shared alleles) that is displayed must be a customizable parameter. While not required, it is preferable that the software allow the databases to be populated by manual data entry as well as import from various genetic analyzer runs. The results of the comparison must be exportable in a report format

The software must include customizable security that allows the administrator to define security levels for access to parameter settings, sample data or select software fuctionalities. The security settings must be easily identified and the administrator should be able to review an individual's access rights from a single screen.

The software must be capable of tracking any changes to security definitions, analysis parameters and any overrides of system flags/rule firings as well as any edits to allele calls or artifact identification. The edit record should include identification by user name and event time, action taken, the original value and the changed value, if appropriate. The software must be password protected

The software must be able to compare samples identified as a positive control against a predefined profile(s) and flag that sample if the profile does not match or if other evaluation criteria are failed

The software must be able to evaluate ladders to determine if they are suitable for analysis purposes. This includes the correct identification of all manufacturer-defined alleles and the correct identification of all the software defined artifacts.

The software must be able to evaluate samples identified as reagent controls and negative controls and flag the samples if any peaks or artifacts above the defined thresholds are identified

The software must have the capacity to evaluate a single DNA profile generated by an Applied Biosystems Genetic Analyzer using manufacturer supplied collection software and, at a minimum, the criteria used in the Applied Biosystems Genemapper 3.2 software as well as evaluate and identify stutter, -A and noise.

The software must be able to segregate samples that have passed all evaluation criteria from those samples that did not pass in a manner that allows the analyst to bypass the problem free samples completely if desired.

The software must allow the analyst to easily upload only those samples that have been identified as passing review

The software must be able to present the analyst with all the rule firings/flags for each sample together on a single screen.

The software must allow all evaluation parameters to be customizable by the laboratory.

The software must allow for multiple sets of analysis parameters that are easily assessible for analysis purposes

The software must allow the analyst to view the raw data at any time within the system

The software must be able to deconvolute a mixture of two unknowns of a ratio of 2:1 or greater into two separate profiles and display some type of quality evaluation to the results. It is highly desirable for the software to be able to deconvolute mixtures containing one known profile and up to two unknown profiles.

The software must be server based and be able to handle at least ten client software connections simultaneously. The analyzed data should be available for viewing from any analyst's workstation and not just the workstation where the data was originally generated or viewed

The vendor must provide support for the validation of the software to meet NDIS approval within a mutually agreed upon timetable not to exceed 12 months

The vendor must provide the cost and components of available maintenance plans including upgrades, trouble shooting and correction of software defects. Price quotes for the first year, second year and third years must be included as well as any discounts for multiple year agreements. The vendor must also detail what, if anything would not be included in these maintenance plans. The vendor should also give details on wait times for service by phone or on site service calls including maximum time allowed before vendor response to initial contact and average time before a vendor response to initial contact.

The software must allow the export of profiles in multiple formats including CMF 1 0 and other CMF formats that are accepted by the CODIS software. The software must also be able to export multiple profiles with sample names under a header including the loci designations tested.

The vendor must list any known technical issues with any currently available Microsoft Operating Systems or Office software as well as known issues with any other commercially available software and delineate if these issues are with the full installs on the server only or with the software loaded on the individual workstations as well. The software must be compatible with Genemapper 3 2 or use the same peak detection and sizing algorithms as Genemapper3 2

The software version offered must have been accepted by NDIS as a validated expert system for convicted offender analysis. Otherwise the vendor must demonstrate that the new version performs as expected and that none of the changes would cause the system to NOT meet NDIS standards for expert systems. The vendor must provide the most recent version of the NDIS accepted software if more than one version has been approved.

The vendor must provide instructional manuals detailing all software functions and how to utilize each of the functions. Instructions should also detail how to export data and how to access and use the data files and reports generated by the software.

All training must occur at the West Virginia State Police Forensic Laboratory and the quote must include training for ten individuals. If the convicted offender and casework applications are separate then two individuals should be trained for the convicted offender component and up to ten individuals for the casework component.

The version of the software offered by the vendor must be available for installation no later than March 30, 2010.

RFQ No DPS1025[8]

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

West Virginia Code §5A-3-10a states: No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owed is an amount greater than one thousand dollars in the aggregate

DEFINITIONS:
"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Debtor" means any individual, corporation, partnership, association, limited liability company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. "Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount

EXCEPTION: The prohibition of this section does not apply where a vendor has contested any tax administered pursuant to chapter eleven of this code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

Under penalty of law for false swearing (***West Virginia Code*** §61-5-3), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

WITNESS THE FOLLOWING SIGNATURE

Vendor's Name: Applied Biosystems LLC.

Authorized Signature: [signature] Date: March 2, 2010

State of California

County of San Mateo, to-wit:

Taken, subscribed, and sworn to before me this 2 day of March, 2010

My Commission expires December 9, ~~20~~ 2011

AFFIX SEAL HERE

NOTARY PUBLIC [signature]

S JENNIFER KARDOS
COMM. # 1779706
NOTARY PUBLIC-CALIFORNIA
SAN MATEO COUNTY
MY COMM. EXP. DEC. 9, 2011

State of West Virginia

VENDOR PREFERENCE CERTIFICATE

Certification and application* is hereby made for Preference in accordance with *West Virginia Code*, §5A-3-37 (Does not apply to construction contracts). *West Virginia Code*, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the *West Virginia Code*. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Resident Vendor Preference, if applicable.

1. **Application is made for 2.5% resident vendor preference for the reason checked:**
____ Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; **or,**
____ Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or 80% of the ownership interest of Bidder is held by another individual, partnership, association or corporation resident vendor who has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; **or,**
____ Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; **or,**

2. **Application is made for 2.5% resident vendor preference for the reason checked:**
____ Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; **or,**

3. **Application is made for 2.5% resident vendor preference for the reason checked:**
____ Bidder is a nonresident vendor employing a minimum of one hundred state residents or is a nonresident vendor with an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia employing a minimum of one hundred state residents who certifies that, during the life of the contract, on average at least 75% of the employees or Bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; **or,**

4. **Application is made for 5% resident vendor preference for the reason checked:**
____ Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; **or,**

5. **Application is made for 3.5% resident vendor preference who is a veteran for the reason checked:**
____ Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; **or,**

6. **Application is made for 3.5% resident vendor preference who is a veteran for the reason checked:**
____ Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.

Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) reject the bid; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential.

Under penalty of law for false swearing (West Virginia Code, §61-5-3), Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.

Bidder: Applied Biosystems, LLC Signed: Phillip G. Rue

Date: 3/2/10 Title: Senior Contract Specialist

**Check any combination of preference consideration(s) indicated above, which you are entitled to receive.*

Bid Form DPS 1025

DPS 1025 **NOTE: The vendor must prove that their software was approved by the National DNA Index System (NDIS) as an expert system prior to 12/31/09** Please see attached document		**BID OPENING:**		
Item #	**Description**	***Estimated Annual Quantity**	**Unit Price**	**Extended Price**
1.	Software for DNA Expert System	1	$	$

Address: 850 Lincoln Centre
Foster City, Ca. 94404
Phone #: 650-638-5647
Email Address: www.bids@appliedbiosystems.com

Contact Coordinator Information:

Name: DAWN WALTMAN
Address: FIELD SALES Representative
Phone #: 410-688-0723
Email Address: DAWN.Waltman@lifetech.com

*Quantities are estimated annual usage for bidding purposes and bidder's information.

Applied Biosystems

850 Lincoln Centre Drive
Foster City, CA 94404 U.S.A.
T 650.570.6667 F 650.638.6677
www.appliedbiosystems.com

Additional GeneMapper® ID-X Software Configurations Approved by the National DNA Index System (NDIS) as an Expert System

Since GeneMapper® ID-X Software was launched in 2007, several major forensic laboratories in the United States have submitted the software to NDIS for approval as an expert system. To date, the following configurations have received formal acceptance as an expert system for use in generating data to be uploaded into NIDS:

- GeneMapper® ID-X Software v1.0.1, 3130xl Genetic Analyzer, and AmpFℓSTR® Identifiler® PCR Amplification Kit
- GeneMapper® ID-X Software v1.0.1, 3730 Genetic Analyzer, and AmpFℓSTR® Identifiler® PCR Amplification Kit
- GeneMapper® ID-X Software v1.0.1, 3100 Genetic Analyzer, and AmpFℓSTR® Profiler Plus® PCR Amplification Kit and AmpFℓSTR® COfiler® PCR Amplification Kit
- GeneMapper® ID-X Software v1.0, 3100 Genetic Analyzer, AmpFℓSTR® Profiler Plus® PCR Amplification Kit, and AmpFℓSTR® COfiler® PCR Amplification Kit

With the approval of NDIS as an expert system, forensic laboratories can confidently use the GeneMapper® ID-X Software for their routine DNA data analysis with significant time savings and dramatically improved efficiency and reliability.

Based on the feedback from the laboratories that received the NDIS approval, the training provided by Applied Biosystems has been very helpful in helping to complete the validation projects quickly for NDIS expert system submission. For GeneMapper® ID-X Software training and future updates to the NDIS expert system approval list, please contact your local sales representatives or visit **idx.appliedbiosystems.com**.

Applied Biosystems

Quotation

North American
Sales and Service
850 Lincoln Centre Drive
Foster City, CA 94404 U.S.A.
(800)874-9868; F(650)638-5875

To: Mr. Brent Myers
West Virginia State Police
725 Jefferson Rd
SOUTH CHARLESTON WV 25309

Quote No.: **20641127**
Quote Valid To: 04/30/2010
Quote Date: 03/01/2010
Pay Terms: Net 30 Days
Freight Terms: FOB DESTINATION - FRT QUOTED

Telephone No. (304) 746-2439
Fax No. (304) 746-2230

Please reference Quote No. when placing your orders.

Item	Part Number	Description	QTY	Unit List Price	Unit Net Price	Total Extended Price
0001	4404049	GENEMAPPER ID-X SW V1 1 FULL	1 00	20,000 00	20 000 00	20,000 00
0002	4361065	3130xl HID Installation Kit	1 00	2 280 00	0 00	0 00
0003	4404180	SW,GENEMAPPER ID-X v1 1,10-CLIENT	1 00	70 000.00	70,000 00	70,000 00
0004	4361065	3130xl HID Installation Kit	1 00	2,280 00	0 00	0 00

To place your Applied Biosystems order:

For INSTRUMENTS: Fax # 650-638-5875, Attn: Sales Administration

For CONSUMABLES: Fax #650-638-5998, Attn: Order Administration or phone 1-800-327-3002

-OR-

Visit us on the web at www.appliedbiosystems.com

Warranty Information. Applied Biosystems' product warranties are included with shipment of its products, or you may call Applied Biosystems for a copy of any product warranty. The warranty period for instruments begins on the earlier of the date of installation or ninety (90) days from the date of shipment for instruments installed by Applied Biosystems personnel. For instruments installed by the buyer or anyone other than Applied Biosystems, the warranty period begins on the date the instrument is delivered. Unless otherwise expressly indicated on Applied Biosystems' quotation, Applied Biosystems makes no warranty whatsoever in regard to products furnished by third parties. Such products are subject to the warranties, if any, of their respective manufacturers to the extent they are transferable or otherwise available to Applied Biosystems' customers.

Terms and Conditions. This quotation, including Applied Biosystems' General Terms and Conditions of Sale furnished with this quotation, and, if software is included, Applied Biosystems' applicable end user software license agreement, sets forth the terms on which Applied Biosystems is offering to sell the product(s) listed on this quotation. Applied Biosystems' end user license agreement for instrument operating software can be found on Applied Biosystems website, at: http://www.appliedbiosystems.com/legal. Licenses for stand alone software are in click wrap form.You may contact Applied Biosystems for a copy at any time.By issuing a purchase order or otherwise ordering the product(s), the customer expressly agrees to these General Terms and Conditions of Sale (and operating software end user software license agreement, if applicable) to the exclusion of all others not expressly agreed to in writing by an authorized representative of Applied Biosystems. If you have any questions, please call Applied Biosystems' Customer Account Services at 800-874-9868. Stenographical/clerical errors are subject to correction. Most recent quotation will supersede all prior quotations. All amounts are in USD.

Sales Representative: Dawn Waltman **Prepared by: Tracy McHugh**

ACCEPTANCE OF THIS QUOTATION IS LIMITED TO THE ATTACHED TERMS

Applied Biosystems

Quotation

North American
Sales and Service
850 Lincoln Centre Drive
Foster City CA 94404 U.S.A
(800)874-9868; F(650)638-5875

QUOTE NO.: 20641127
QUOTE VALID TO: 04/30/2010
QUOTE DATE: 03/01/2010

To: Mr. Brent Myers
West Virginia State Police

Please reference Quote No. when placing your orders.

Item	Part Number	Description	QTY	Unit List Price	Unit Net Price	Total Extended Price

AB Systems Financing (ABSF) can arrange competitive and flexible customer financing solutions for Applied Biosystems instruments, maintenance services and consumables.*

Please call us at 1-203-664-1537 to learn about how our ABSF program can meet your instrument financing needs.

* ABSF financing solutions are subject to credit approval and satisfactory documentation

APPLIED BIOSYSTEMS GENERAL TERMS AND CONDITIONS OF SALE

These General Terms and Conditions of Sale ("Terms") shall govern all orders for and purchases of products and services from Applied Biosystems ("AB"), including installation of equipment, unless other terms are specifically designated by AB to apply to a specific product or service, or AB and buyer have entered into a master purchase agreement or other written agreement that expressly provides that its terms supersede and replace these Terms with respect to the products or services covered by the master purchase or other agreement (See Section 12 SOLE TERMS INCONSISTENCIES ORDER OF PRECEDENCE)

1. PRICE. The price for any product or service (hereinafter collectively "Product") shall be the price stated in AB s quotation to buyer for the Product ("AB's Quotation") or, if AB has not issued a quotation, AB's list price of the Product at the time AB receives buyer's purchase order. AB's quotations are valid for 30 days from the quotation date unless otherwise stated in AB's Quotation. If AB's price is stated by reference to a price list then the price shall be AB s list price in the jurisdiction in which the Product is to be delivered or performed in effect at the time AB receives buyer's purchase order. Prices stated are exclusive of all taxes, fees, licenses, duties, levies or other governmental assessments ("Taxes") and, unless otherwise stated in AB's Quotation, shipping and handling charges, freight and insurance. All Taxes related to Product shall be paid by buyer (other than taxes assessed against AB's net income) or in lieu thereof, buyer shall provide AB with a tax exemption certificate acceptable to the relevant taxing authorities. Taxes and other charges payable by buyer may be billed as separate items on AB's invoice

2. PAYMENT TERMS; COLLECTION COSTS; SECURITY TERMS. Payment terms are net 30 days from date of AB's invoice. If AB deems buyer to be or to have become uncreditworthy, AB shall have the right to require alternative payment terms, including without limitation sight draft, letter of credit, or payment in advance. Payment for partial shipments shall be based on unit or prorated prices and payment for partial installation(s) shall be based on percentage of completion of installation,as reasonably determined by AB. If payment is not received by the due date, AB may assess and buyer agrees to pay a late payment charge at the rate of 1% per month (12% per year) or the maximum legal rate, whichever is less, of the amount due from the due date to the date of payment. If AB retains a collection agency or attorney to collect unpaid amounts, AB may invoice buyer for, and buyer will pay, all reasonable costs of collection,including without limitation reasonable attorneys fees Buyer hereby grants to AB and AB reserves a purchase money security interest in all tangible Product purchased from AB, and in any proceeds thereof, for all amounts owing to AB for or related to such Product. Upon request by AB, buyer shall sign any reasonable documents required for AB to perfect such security interest and to the fullest extent permitted by law, buyer hereby expressly grants AB authority and a limited power of attorney to file financing statements and amendments thereto for and on behalf of buyer for such Product and any proceeds thereof. Payment in full of all amounts owed for and related to such Product shall release such security interest in the Product and proceeds

3. CREDIT TERMS. AB may at any time and in its sole discretion, limit or cancel the credit of buyer as to time and amount, suspend shipments, demand payment in cash before delivery of Product, or demand other assurances of buyer's performance. If buyer fails to agree and comply with the different terms of payment demanded, or fails to give adequate assurances of performance, AB may, without prejudice to any other right or remedy AB may have: (i) by notice to buyer, treat such failure or refusal as a repudiation by buyer of that portion of buyer's order not then fully performed, whereupon AB may cancel all further deliveries, and any amounts unpaid for non-cancelled Product shall immediately become due and payable; or (ii) make shipments under reservation of a security interest and demand payment against tender of title documents.

4. ACCEPTANCE OF ORDERS, DELIVERY, TITLE AND RISK OF LOSS, INSTALLATION. AB may accept or reject any buyer purchase order for Product in whole or in part. If a purchase order is accepted, AB will use reasonable efforts to ship tangible Product or perform services, including equipment installation if agreed to by AB,subject to the purchase order within a reasonable time after ordered, or,if a shipment, service commencement or installation date is indicated in AB's Quotation or otherwise agreed upon in writing by an authorized representative of AB, on or before such date AB may make delivery in installments, and each installment shall be deemed to be a separate sale. AB may render a separate invoice for each installment, which invoice shall be paid without regard to prior or subsequent installments. Unless indicated otherwise in AB's Quotation, title and risk of loss with respect to all Products except Products that are software or services, and risk of loss with respect to software, shall pass from AB to buyer upon transfer of possession of the Product to a common or other third party carrier at AB's facility. If AB has undertaken to install a Product, it is buyer's responsibility, at buyer's cost, to have the installation site prepared and available for installation free of hazardous or unsafe conditions and unless AB otherwise agrees, to move the Product, uncrated, from the buyer s delivery dock or receiving location to the table top or other place of installation Buyer shall not assign AB personnel to work in biosafety level 3 or level 4 laboratories without prior written notice to AB and AB's consent.

5 CANCELLATION AND DEFERRAL BUYER MAY NOT CANCEL ANY PURCHASE ORDER. However, unless otherwise stated in AB's Quotation, buyer may defer the shipment date one time for up to 60 days for instruments and other hardware, and up to 30 days for reagents, consumables and other tangible Product, by giving written notice to AB at least 30 days before the scheduled shipment date for instruments and other hardware, and at least 10 days before the scheduled shipment date for other Product

6. REJECTION AND RETURN OF GOODS. Any claims for damaged, missing or defective Product must be reported in writing by buyer within 15 days from the date of buyer's receipt of the Product. In addition, buyer must promptly return a rejected Product to AB C.O.D , unused and in a condition no worse than that delivered to buyer and in the Product s original containers and packing material, accompanied by a valid return authorization number obtained from AB. AB may refuse any Product not timely rejected or sought to be returned without a valid return authorization number. For any valid claim timely made, AB, at its option, may repair the Product or replace the Product with an identical or substantially similar Product. Shipping charges will not be credited. **THESE ARE BUYER'S SOLE AND EXCLUSIVE REMEDIES FOR DAMAGED OR MISSING PRODUCT, AND, EXCEPT FOR EXPRESS WRITTEN WARRANTY RIGHTS, FOR DEFECTIVE PRODUCT.** AB may require that buyer sign and deliver a properly completed certificate of decontamination prior to returning any Product

7. LIMITED WARRANTY. AB makes only those warranties with respect to Product expressly identified as "warranties" and set forth in AB's current operating manual or catalog, or in a specific written warranty included with and covering Product, if any. Warranties are made only to the buyer purchasing the Product directly from AB, are not transferable and do not extend to the benefit of any other person or entity, unless otherwise expressly stated in writing by AB. **ANY PRODUCT NOT COVERED BY AN EXPRESS WRITTEN WARRANTY IS SOLD AND PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, STATUTORY, EXPRESS OR IMPLIED.** Any description of Product recited in AB's Quotation is for the sole purpose of identifying Product, and any such description is not part of any contract between AB and buyer and does not constitute a warranty that Product shall conform to that description. Any sample or model used in connection with AB's Quotation is for illustrative purposes only and is not part of any contract between AB and buyer and does not constitute a warranty that Product will conform to the sample or model. No affirmation of fact or promise made by AB, whether or not in AB's Quotation, shall constitute a warranty that Product will conform to the affirmation or promise Unless otherwise specified in

writing in documentation shipped with Product or otherwise agreed by AB in writing,AB does not provide service or support for custom products or other products made to buyer's specifications. **THE WARRANTIES IDENTIFIED IN THE FIRST SENTENCE OF THIS PARAGRAPH ARE AB'S SOLE AND EXCLUSIVE WARRANTIES WITH RESPECT TO PRODUCT AND ARE IN LIEU OF ALL OTHER WARRANTIES, STATUTORY, EXPRESS OR IMPLIED, ALL OF WHICH OTHER WARRANTIES ARE EXPRESSLY DISCLAIMED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT, OR REGARDING RESULTS OBTAINED THROUGH THE USE OF ANY PRODUCT (INCLUDING, WITHOUT LIMITATION, ANY CLAIM OF INACCURATE, INVALID OR INCOMPLETE RESULTS), WHETHER ARISING FROM A STATUTE OR OTHERWISE IN LAW OR FROM A COURSE OF PERFORMANCE, DEALING OR USAGE OF TRADE.**

8 INTELLECTUAL PROPERTY AND RELATED INDEMNITY.

8.1 BY AB. Subject to the restrictions set forth in this Section 8 and provided buyer complies with its obligations in this Section 8, AB agrees to defend buyer, and indemnify buyer from and against any infringement damages finally awarded, in any legal action or proceeding brought by a third party against buyer to the extent that such action is based on a claim that the manufacture and sale of a Product by AB infringes any United States or foreign patent, copyright, trademark or other intellectual property right of such third party if AB had actual knowledge of such intellectual property right and infringement at the time of delivery of the Product to buyer. Notwithstanding the foregoing, AB shall have no liability or obligation under this Section 8 with respect to any claim of infringement based upon: (i) modifications to any Product made by buyer or a third party; (ii) manufacture assembly, labeling or branding of Product by AB pursuant to specifications or designs or requests for specific labeling or branding furnished by buyer. Notwithstanding anything herein to the contrary, AB shall have no indemnification obligations with respect to Product originating from a third party and provided under these Terms. Buyer's sole right to indemnification with respect to such third party Product shall be pursuant to the original manufacturer's or licensor's indemnification obligations, if any to the extent provided by the original manufacturer or licensor

8.1.1 Buyer's Obligations. Buyer must notify AB in writing of any claim for which it may seek defense and indemnity from AB hereunder promptly after becoming aware of such claim, make no admission of liability with respect to the claim, and cooperate with and provide reasonable assistance to AB, at AB's expense with respect to reasonable out of pocket expenses paid by buyer to third parties for such assistance, in the defense or settlement of such claim AB shall have sole authority to defend and/or settle any claim under this Section 8. AB's obligations under this Section 8 are contingent upon buyer's compliance with all of the foregoing

8.1.2 Remedy for Infringement, Rights of AB, Exceptions. If any Product or portion thereof is subject to a suit or other legal proceeding claiming that the Product or such portion infringes a third party's intellectual property right, or in AB's opinion is (are) likely to become subject of such a claim. AB shall, at its option, have the right to either: (a) procure for buyer the right to continue using the Product; or (b) modify the Product so that it becomes non-infringing; or (c) require buyer to return the Product and upon return, refund to buyer the price actually paid by buyer for the Product, less a reasonable amount for use, damage and obsolescence; or(d) substitute for the alleged infringing Product other suitable non-infringing Products with comparable functionality

8.1.3 ENTIRE LIABILITY. THE FOREGOING STATES THE ENTIRE LIABILITY OF AB, AND THE EXCLUSIVE REMEDY OF BUYER, FOR ANY INFRINGEMENT OR CLAIMED INFRINGEMENT OF PATENT, COPYRIGHT, TRADE SECRET OR ANY OTHER INTELLECTUAL PROPERTY RIGHT BY OR IN CONNECTION WITH ANY PRODUCT.

8.2 BY BUYER FOR BUYER'S MODIFICATIONS OR SPECIFICATIONS. If buyer modifies any Product or furnishes AB with specifications or designs or requests for specific labeling or branding, buyer agrees to defend, indemnify and hold AB harmless against all liabilities, damages, costs, expenses and claims arising from or based upon buyer's modifications or AB's manufacture and sale of Product or other performance in compliance with such specifications or designs or requests for labeling or branding

9. COMPLIANCE WITH LAWS, USE OF PRODUCT, VALIDATION Without limiting the generality of the paragraph above entitled "LIMITED WARRANTY." unless otherwise expressly stated in writing by AB, no claim or representation is made or intended (i) as to any clinical use of any Product (whether diagnostic, prognostic, therapeutic, blood banking or any other clinical use), (ii) that any Product has been cleared, approved, registered or otherwise qualified (collectively, "Approval") by AB with any regulatory agency for use in any clinical procedure or for other use requiring compliance with any federal, state, provincial, European or any other governmental agency or regulatory body regulating diagnostic therapeutic blood or other clinical products, medical devices or similar products (collectively, "Regulatory Laws"), (iii) that any Product will satisfy the requirements of any governmental body or other organization, including, but not limited to, the United States Food and Drug Administration or the International Organization for Standardization, or (iv) that any Product or its performance is suitable or has been validated for any specific use or application. Product should not be used for any purpose that would require Approval unless proper Approval is obtained or, in the case of use in diagnostic laboratory systems and then only to the extent permitted by law, the laboratory has validated its complete system as required by the Clinical Laboratory Improvements Act of 1988, as amended, in the United States or equivalents in other countries. Buyer agrees that if it elects to use Product for a purpose that would subject buyer, its customers or any Product to the jurisdiction of Regulatory Laws or other applicable law, buyer shall be solely responsible for obtaining any required Approvals or other approvals and otherwise ensuring that its use of any Product complies with such laws. Unless otherwise expressly stated in writing, Products have not been tested by or for AB for any particular use or purpose, or for safety or efficacy. Buyer agrees that it is buyer's responsibility, and not AB's, to validate the performance of Products for any specific use or application and to ensure that Products meet applicable regulatory, certification validation or its other requirements, since the use and performance characteristics of Products have not been validated by AB for any specific use or application, except as may be otherwise expressly set forth by AB in writing. Product should be used in strict accordance with applicable instructions warnings and other information in user manuals and other Product documentation

10. FORCE MAJEURE. AB shall not be liable for any delay or failure of performance, including without limitation failure to deliver or failure to install, where such delay or failure arises or results from any cause beyond AB's reasonable control including, but not limited to, flood, fire, explosion natural catastrophe, military operations, blockade sabotage, revolution, riot, civil commotion war or civil war, plant breakdown, computer or other equipment failure, unusually severe weather,earthquake or other act of God, power loss or reduction, strike, lock-out, boycott or other labor disputes of any kind (whether relating to its own employees or others), embargo, governmental regulation or an inability or delay in obtaining materials. In the event of any such delay or failure of performance, AB shall have such additional time within which to perform its obligations hereunder as may be reasonably necessary under the circumstances; and AB shall also have the right, to the extent necessary in AB's reasonable judgment, to apportion Product then available for delivery fairly among its various customers in such manner as AB may consider equitable.

11. LIMITATION OF LIABILITY. TO THE FULLEST EXTENT ALLOWED BY LAW, IN NO EVENT SHALL AB BE LIABLE, WHETHER IN CONTRACT, TORT, STRICT LIABILITY, NEGLIGENCE, WARRANTY, OR UNDER ANY STATUTE OR ON ANY OTHER BASIS FOR ANY SPECIAL, INCIDENTAL, INDIRECT,EXEMPLARY, PUNITIVE, MULTIPLE OR CONSEQUENTIAL

DAMAGES SUSTAINED BY BUYER OR ANY OTHER PERSON OR ENTITY ARISING OUT OF OR CAUSED BY PRODUCT, AB'S PERFORMANCE OR FAILURE TO PERFORM ITS OBLIGATIONS RELATING TO THE PURCHASE OF PRODUCT OR PERFORMANCE OF SERVICES,AB'S BREACH OF THESE TERMS, THE POSSESSION OR USE OF ANY PRODUCT, OR THE PERFORMANCE BY AB OF ANY SERVICES, WHETHER OR NOT FORESEEABLE AND WHETHER OR NOT AB IS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, INCLUDING WITHOUT LIMITATION DAMAGES ARISING FROM OR RELATED TO LOSS OF USE, LOSS OF DATA, DOWNTIME, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES, OR FOR LOSS OF REVENUE, PROFITS, GOODWILL, OR BUSINESS OR OTHER FINANCIAL LOSS.

12. SOLE TERMS; INCONSISTENCIES; ORDER OF PRECEDENCE. These Terms, together with AB's Quotation, any applicable label license or patent statement or other written conditions of use, any other terms and conditions expressly agreed to in writing by an authorized representative of AB "(collectively, "AB's, Terms"), and buyer's statement on its purchase order (if accepted by AB) of the name or identity of the Product(s) purchased quantity, delivery date, bill to and ship to address and, if accurate, price (and only such information on buyer's purchase order). constitute the complete, exclusive and entire agreement between AB and buyer with respect to purchases of Product (unless other terms and conditions are expressly designated to be applicable by AB in writing), and AB's offer to sell Product is expressly limited to such terms. Such terms shall take precedence over and supersede and replace all prior or contemporaneous understandings or agreements, written or oral, and any of buyer's additional or different terms and conditions, which are hereby rejected and shall be void. Buyer's submission of a purchase order or other instrument for or regarding the purchase of Product, whether or not in response to an AB Quotation, shall be deemed acceptance of and agreement to AB's Terms to the exclusion of any other terms and conditions appearing in or referenced in such purchase order (except the name or identity of products purchased, quantity, delivery date, bill to and ship to address and, if accurate, price) or other instrument which are hereby deemed to be material alterations and notice of objection to which is hereby given , notwithstanding anything contained to the contrary in buyer's purchase order or other instrument or elsewhere. Any acceptance by AB of any offer of buyer is expressly conditioned on buyer's assent to and acceptance of AB's Terms to the extent they are additional or different terms from those of buyer's offer. Except as otherwise provided in these Terms, in the event of an inconsistency between these Terms and the terms appearing on AB's Quotation or other agreement signed by an authorized representative of AB, the terms appearing on AB's Quotation or such other agreement shall supersede and take precedence over the inconsistent provision(s) of these Terms and all other provisions of these Terms shall remain in full force and effect.

13. NO IMPLIED RIGHTS. Nothing in these Terms shall be deemed or construed (i) as a license or grant of any intellectual property rights, whether express, implied, by estoppel or otherwise; (ii) to limit AB's rights to enforce its patent or other intellectual property rights, including, without limitation, as to use of any Product beyond that granted under any patent or other intellectual property label license or statement applicable to the Product; (iii) as granting buyer any right to be supplied with any Product or component thereof beyond those ordered by buyer and supplied by AB in accordance with these Terms; or (iv) as a license or grant of any right to buyer to manufacture or to have manufactured any Product

14. CHOICE OF LAW. Any contract between AB and buyer relating to Product, including these Terms, and any disputes relating thereto shall be governed by and construed in accordance with the laws of the State of California, U.S.A., excluding both its choice of law provisions and the United Nations Convention on Contracts for the International Sale of Goods

15. EXPORT CONTROLS. Buyer agrees that it will not export or transfer Product for re-export in violation of any United States laws or the laws of any other jurisdiction or to any denied or prohibited person entity, or embargoed country in violation of such laws

16. MISCELLANEOUS. No amendment of AB's Quotation or these Terms or modification thereof shall be binding unless in writing and signed by a duly authorized representative of both AB and buyer. AB's failure to exercise any rights hereunder shall not constitute or be deemed a waiver or forfeiture of such rights or any other rights hereunder Headings are included herein for convenience of reference only and shall not constitute a part of these Terms for any other purpose. If any provision of these Terms shall be held to be invalid or unenforceable for any reason, such provisions shall, to the extent of such invalidity or enforceability, be severed without in any way affecting the remainder of such provision or any other provision thereof, all of which shall continue in full force and effect

17. ADDITIONAL TERMS AND CONDITIONS OF SALE FOR OLIGONUCLEOTIDE PRODUCTS, INCLUDING SPECIAL TERMS TO PROTECT CUSTOMER CONFIDENTIAL INFORMATION.THE FOLLOWING TERMS AND CONDITIONS OF SALE FOR PRODUCTS THAT ARE OLIGONUCLEOTIDE PRODUCTS IN ADDITION TO ALL OF THE TERMS AND CONDITIONS OF SALE SET FORTH ABOVE, APPLY TO THE PURCHASE AND SALE OF ALL APPLIED BIOSYSTEMS OLIGONUCLEOTIDE PRODUCTS,INCLUDING TAQMAN® ASSAYS TAQMAN® LOW DENSITY ARRAYS AND CUSTOM OLIGONUCLEOTIDE SYNTHESIS PRODUCTS

17.1 DEFINITIONS. The following definitions apply to these Additional Terms and Conditions of Sale for Oligonucleotide Products.

"Confidential Information of Buyer" means each Nucleic Acid Sequence specified by buyer in writing to AB that is intended to be detected by use of a Custom Product or to be included in primers and probes or other oligonucleotide Products manufactured by AB and sold to buyer, and the facts that buyer placed orders for Products containing or intended to detect such sequence and that buyer ordered oligonucleotide Products from AB containing or intending to detect such sequence

"Custom Product" means (i) an Oligonucleotide Kit that is intended to detect a Nucleic Acid Sequence specified by buyer or (ii) primers and probes or any other oligonucleotide Product that includes a Nucleic Acid Sequence or other non-off-the-shelf elements or features, specified by buyer

"Nucleic Acid Sequence" means the nucleic acid sequence of a genome intended to be detected by use of an Oligonucleotide Kit or that is specified as being included in other oligonucleotide Products.

"Oligonucleotide Kit" means a Product that consists of a combination of reagents and other products that includes at least one oligonucleotide based primer or probe, that is sold by AB as an assay kit, and the use of which is intended to detect at least one specific nucleic acid sequence in a sample

"Synthesis" means the design (where applicable) or manufacture by AB of Custom Kits or other oligonucleotide Products for delivery to buyer

17 2 AB'S EVALUATION OF CUSTOM KIT ORDERS. AB may decline the Synthesis, at any stage of the Synthesis process, of any Custom Product ordered by buyer that AB deems to be unsuitable or commercially impractical for Synthesis, whether on technological cost or other grounds AB will give written notice to buyer within a reasonable time following its determination to decline Synthesis of a Custom Product. Buyer shall have no obligation to pay any fees for time and materials, or for any other expenses incurred by AB, in connection with any declined Custom Product All Custom Product orders not declined by AB must be paid for by buyer, and orders may not be cancelled or changed by buyer without the written consent of AB. Buyer understands and agrees that buyer's obligation to pay for all Custom Products that AB proceeds to Synthesize and deliver is firm and irrevocable regardless of the number of Custom Products declined for

Synthesis in a given order. Each purchase order for Custom Products must be for the total amount payable for all Custom Products ordered The amount corresponding to the charges applicable to declined Synthesis will be reflected in AB's invoice for the order

17 3 BUYER'S REPRESENTATIONS. By submitting an order buyer represents warrants and agrees that

(i) buyer will provide AB with all information known to buyer regarding biological, radiological and chemical hazards associated with the handling, transport, exposure to or other use of any materials supplied to AB by buyer;
(ii) buyer has the right to cause the sequences that buyer has requested AB to manufacture to be manufactured by AB and sold to buyer, thatsuch sequences and the manufacture and sale thereof to buyer will not infringe or result from the misappropriation of the intellectual property rights, including without limitation patent, copyright, trademark and trade secrets, of any third party anywhere in the world (provided that the foregoing shall not be deemed a representation or warranty with respect to methods of manufacture employed by AB), and that the materials buyer furnishes to AB will not infringe or result from the misappropriation of any such intellectual property rights; and
(iii) the oligonucleotide Products and components thereof sold to buyer shall be for buyer s own internal research and development use only and shall not be resold or otherwise transferred or conveyed to any third party without the prior express written consent of AB.

17.4 CONFIDENTIAL INFORMATION OF BUYER. AB agrees that for seven (7) years after the disclosure by buyer to AB of Confidential Information of Buyer, AB shall not disclose such Confidential Information of Buyer to any third party and will use at least the same degree of care as it uses to protect its own confidential information of a like nature, but in no event less than a reasonable degree of care, to prevent the disclosure of such Confidential Information of Buyer to any third party This undertaking of confidentiality shall not apply to, and AB shall have no obligations under this paragraph with respect to, any Confidential Information of Buyer that (a) was in AB's possession before receipt from buyer, (b) is or becomes a matter of public knowledge or part of the public domain through no fault of AB, (c) is rightfully received by AB from a third party that was not obliged to keep such information confidential, (d) is developed by AB without reference to Confidential Information of Buyer or (e) is disclosed by AB with buyer's prior written approval. Notwithstanding the foregoing AB may disclose Confidential Information of Buyer to the extent required to comply with governmental regulations and other applicable laws or to respond to subpoena or other compulsory legal process, provided in all cases that AB takes reasonable and lawful actions to avoid or minimize the extent of such disclosure and notifies buyer in writing as far in advance of the date of disclosure as is reasonably feasible so that buyer to the extent feasible will have an opportunity to seek to prevent or limit disclosure

17.5 INTELLECTUAL PROPERTY RIGHTS. Any inventions (patentable or otherwise), discoveries, developments, improvements, information, data, compounds, formulae, know-how or other results that are conceived, developed, discovered, reduced to practice, or generated by or for AB or jointly by buyer and AB and that relate or apply to the processes and methods used in or related to the Synthesis of oligonucleotide Products or otherwise in connection with designing or manufacturing oligonucleotide Products, including without limitation primers and probes, shall be and remain the sole and exclusive intellectual property of AB, and buyer hereby transfers and assigns all of its right, title and interest in and to any such joint intellectual property to AB. Buyer will take reasonable steps, upon the request and at the expense of AB, to assist AB to secure evidence and record AB's rights in such intellectual property

18. AMERICAN RECOVERY & REINVESTMENT ACT. Applied Biosystems is eligible to receive orders funded by the American Recovery & Reinvestment Act (ARRA). If you are a U.S. Government customer, please call 866-934-5977 in order to place any order funded by ARRA or email ARRAN@appliedbiosystems com

Applied Biosystems

GeneMapper® *ID-X* Software v1.1

Expert System and Expert Assistant Software for Forensic DNA Analysis

- Powerful, easy-to-use data analysis tool designed to increase lab productivity
- Comprehensive Expert System capability for databasing laboratories delivered by automated data assessment functionality and efficient manual review tools
- Complete Expert Assistant solution for casework laboratories combining an efficient suite of manual review features with an integrated Mixture Analysis tool
- Quality control functionality allows rapid allele match comparisons and concordance searches within a data set
- Extensive security, auditing and e-signature capabilities help to protect data integrity and provide additional control of technical records
- Multi-User database configuration facilitates information exchange

Introduction

The need to handle ever increasing sample numbers with the same level of resources poses many challenges for forensic laboratories. Data analysis and review remains a very time consuming activity and drives forensic laboratories to seek automated solutions that enable them to reduce significantly the amount of analyst time required to interpret large volumes of data.

Expert systems can be an efficient means of minimizing the time needed for analysis of routine forensic databasing samples but are not always able to make the final analysis decisions for casework samples due to the interpretation complexities involved. Forensic laboratories require a complete software solution that can act as an Expert System for routine samples in their workflow and an Expert Assistant to aid in manual review of data and mixture interpretation. By automating as much of the analysis workflow as possible, for all types of forensic samples, the analyst is empowered to make key interpretation decisions more quickly and confidently

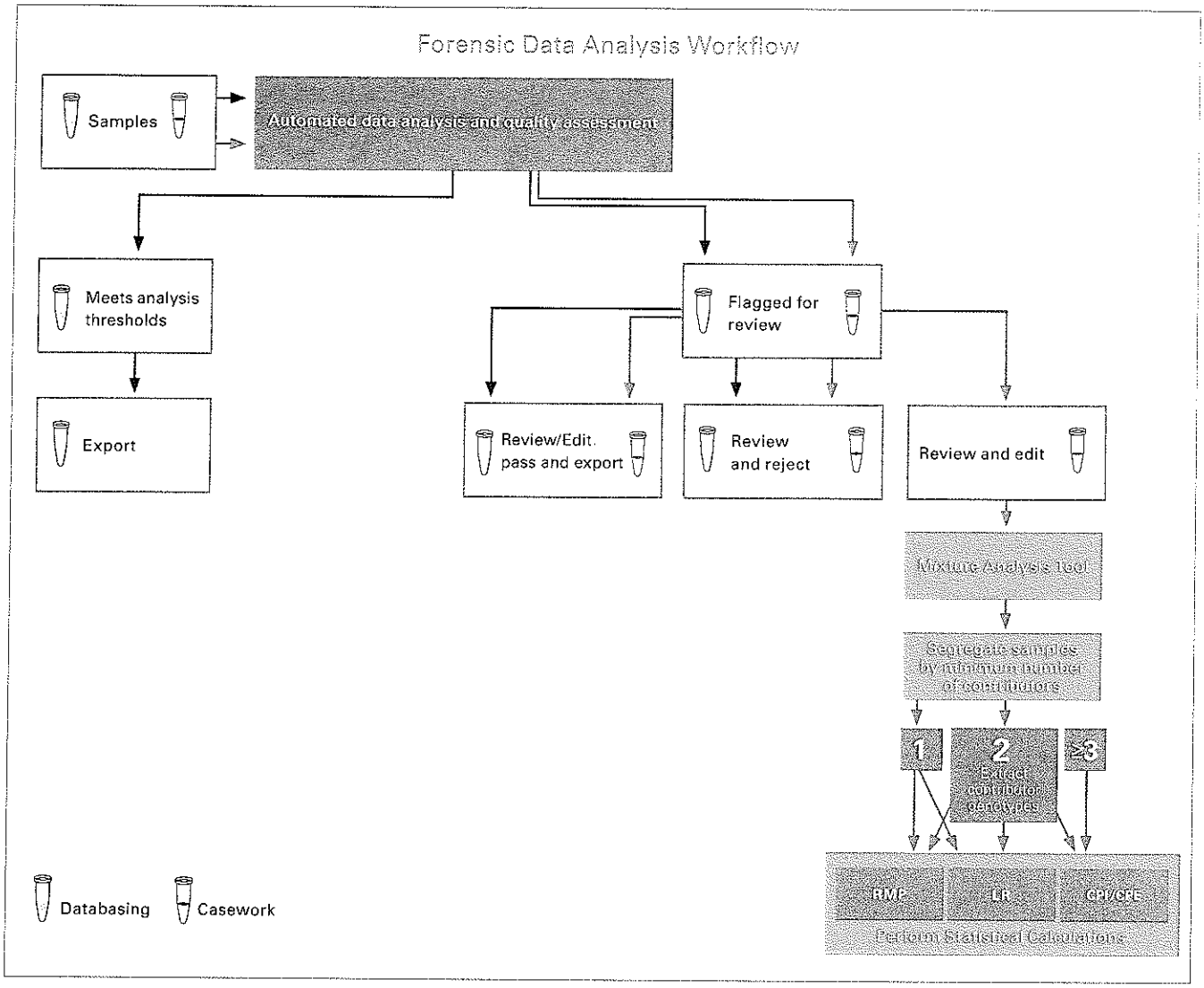

Figure 1 The workflow above represents how GeneMapper® *ID-X* Software v1 1 processes samples as either an Expert System or an Expert Assistant

GeneMapper® *ID-X* Software v1 1 is a powerful data analysis solution designed specifically to fulfill the requirements of Expert System and Expert Assistant software A combination of sophisticated automated data assessment processes and efficient manual review tools significantly reduces the amount of analysis time required for all types of forensic samples. Unparalled Expert System features quickly and easily identify samples which meet all analysis thresholds and highlight those that do not An efficient suite of manual review tools allows rapid processing of samples requiring review and editing For those samples containing DNA from more than one source, an integrated Mixture Analysis tool quickly determines the number of contributors and efficiently manages the resulting possible genotypes and associated statistical calculations Analyzing single source and casework samples has never been easier Now sizing, allele calling, mixture analysis and statistical calculations can all be performed within the easy-to-use GeneMapper® *ID-X* Software, allowing the forensic analyst to confidently and reproducibly analyze and interpret all types of forensic samples

Powerful Expert System Functionality

GeneMapper® *ID-X* Software v1.1 has the same powerful expert system functionality as GeneMapper® *ID-X* v1.0. In generic terms, expert systems are computer programs that contain subject-specific knowledge. Guided by user-defined rules, expert systems can analyze a given set of data with the same skill as a human expert. The most basic description of an expert system for forensic analysis is a program that can evaluate the quality of a sample based on a laboratory's established DNA interpretation guidelines. The GeneMapper® *ID-X* Software can be optimized and validated to quickly process and segregate those samples that clearly meet the defined interpretation guidelines of each laboratory from those that do not. The automated review performed by the software highlights those samples meeting all analysis criteria and provides detailed information on the remainder to facilitate the manual review performed by the analyst.

Comprehensive Expert Assistant Capability

Despite its ability to automate and streamline the analysis of single source samples, an expert system is often unable to make the final analysis decision for most forensic casework samples, especially those containing mixtures. It is possible, however, to harness the automated, rule-based, subject-specific knowledge on which an expert system is based to enable the software to act as an Expert Assistant to the forensic analyst, simplifying much of the analysis process and empowering the analyst to make key interpretation decisions consistently. Of all the stages involved in the analysis of casework evidence, interpretation of mixed samples is one of the most difficult and time-consuming. Despite this, many of the steps in this process can be automated based on a series of rules, which, once optimized and validated, can guide the analyst to make a more informed decision based on all of the available data. With the GeneMapper® *ID-X* Software v1.1, forensic analysts can manage their forensic casework data review more quickly and with more confidence. The Forensic Data Analysis Workflow shown in Figure 1 represents how GeneMapper® *ID-X* Software v1.1 processes samples as either an Expert System or an Expert Assistant.

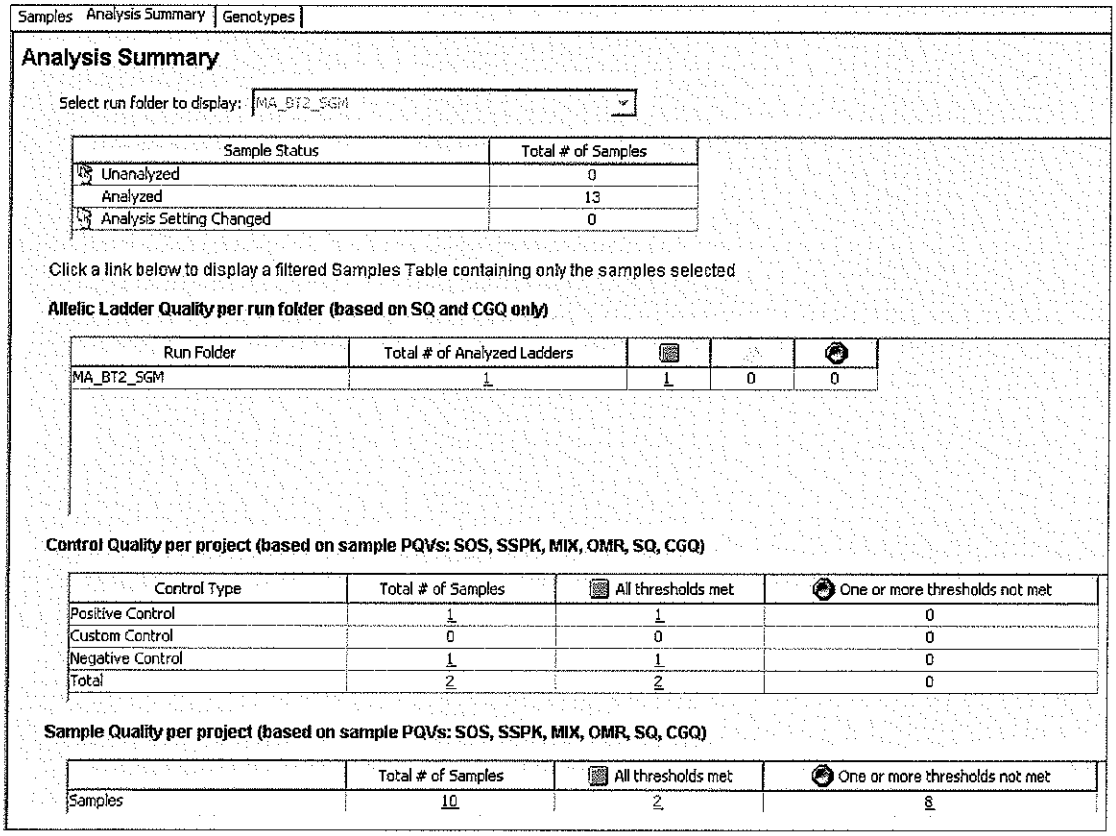

Figure 2 The analysis summary provides a quick snapshot of the results of data analysis. The summary is interactive and links results to a specific category of samples.

Automated Data Assessment
GeneMapper® *ID-X* Software has been developed with the human identification workflow in mind to ensure that the novel features introduced to improve the data analysis process link together to provide optimal interaction between the analyst and the data

Analysis Requirements Check
To ensure all analysis requirements are met before analysis starts, a series of analysis requirements checks are performed

Allelic Ladder Quality Assessment
GeneMapper® *ID-X* Software uses a rule-based system which quickly separates those ladders suitable for genotyping from those of poor quality which may adversely affect the allele designation process

Analysis Summary
This feature provides a quick snapshot of the results of data analysis Separate sections of the summary indicate the analysis outcome for allelic ladders, controls (positive, negative and custom controls) and unknown samples
The summary is interactive and links results to a specific category of samples (Figure 2)

Comprehensive Quality Value System
GeneMapper® *ID-X* Software uses a quality value system to assess data quality at different points in the workflow

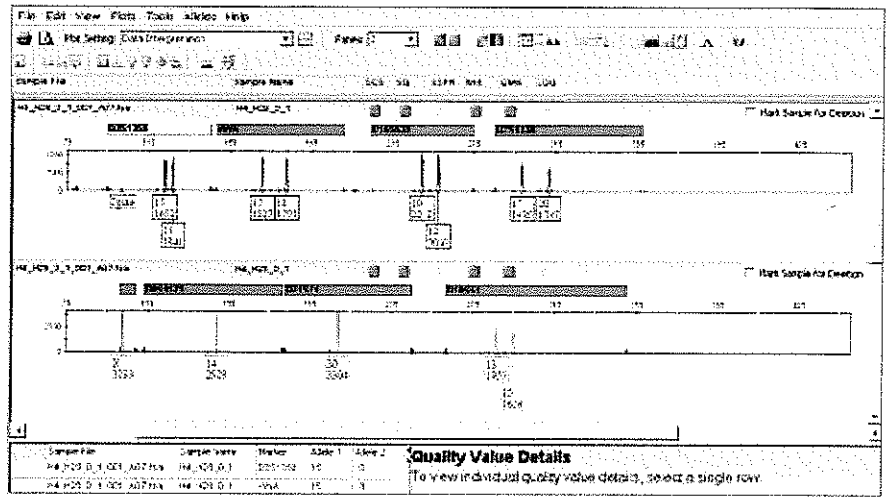

Figure 3. An example of an electropherogram in GeneMapper® *ID-X* Software showing some of the enhancements to the plot window Marker header bars color-coded to match the genotype quality flag for each marker identify where data may require review The Quality Value Details window indicates the observed and threshold values for each peak on the plot responsible for triggering a flag

at both the sample and marker level Different aspects of the data are evaluated at each level. the assessment being displayed as a colored quality flag.

Manual Review Tools
Data analysis efficiencies offered by the automated data review processes have been further enhanced through the introduction of a new suite of manual review tools These developments focus around the plot window providing quick and easy access to all aspects of the data. thus simplifying the data review process (Figure 3).

Peak Labeling and Editing
The software is capable of handling different types of labels In addition to traditional allele labels. artifact labels are applied automatically to data spikes (identified through an intelligent rule set) and can be defined and applied manually by the user to other data anomalies.

Quality Value Details Window
The plot window offers the option to display marker specific quality value details This includes thresholds for each of the marker-level quality flags defined in the analysis method along with the actual values obtained

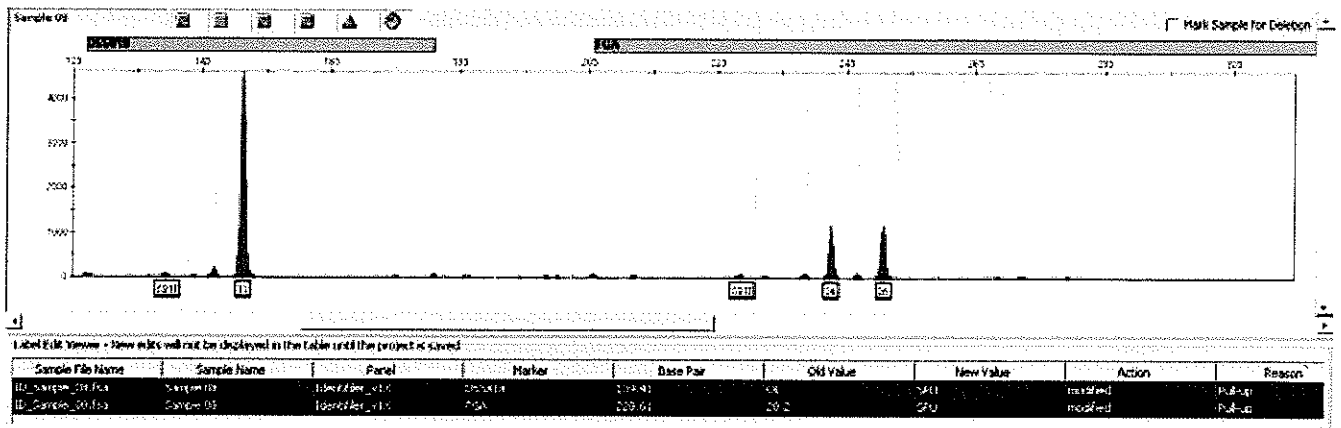

Figure 4. The Label Edit Viewer provides a table containing all edits made within a project Clicking on a row in the table highlights the edited peak in the plot and allows for simple and comprehensive secondary review of all data edits made by an analyst

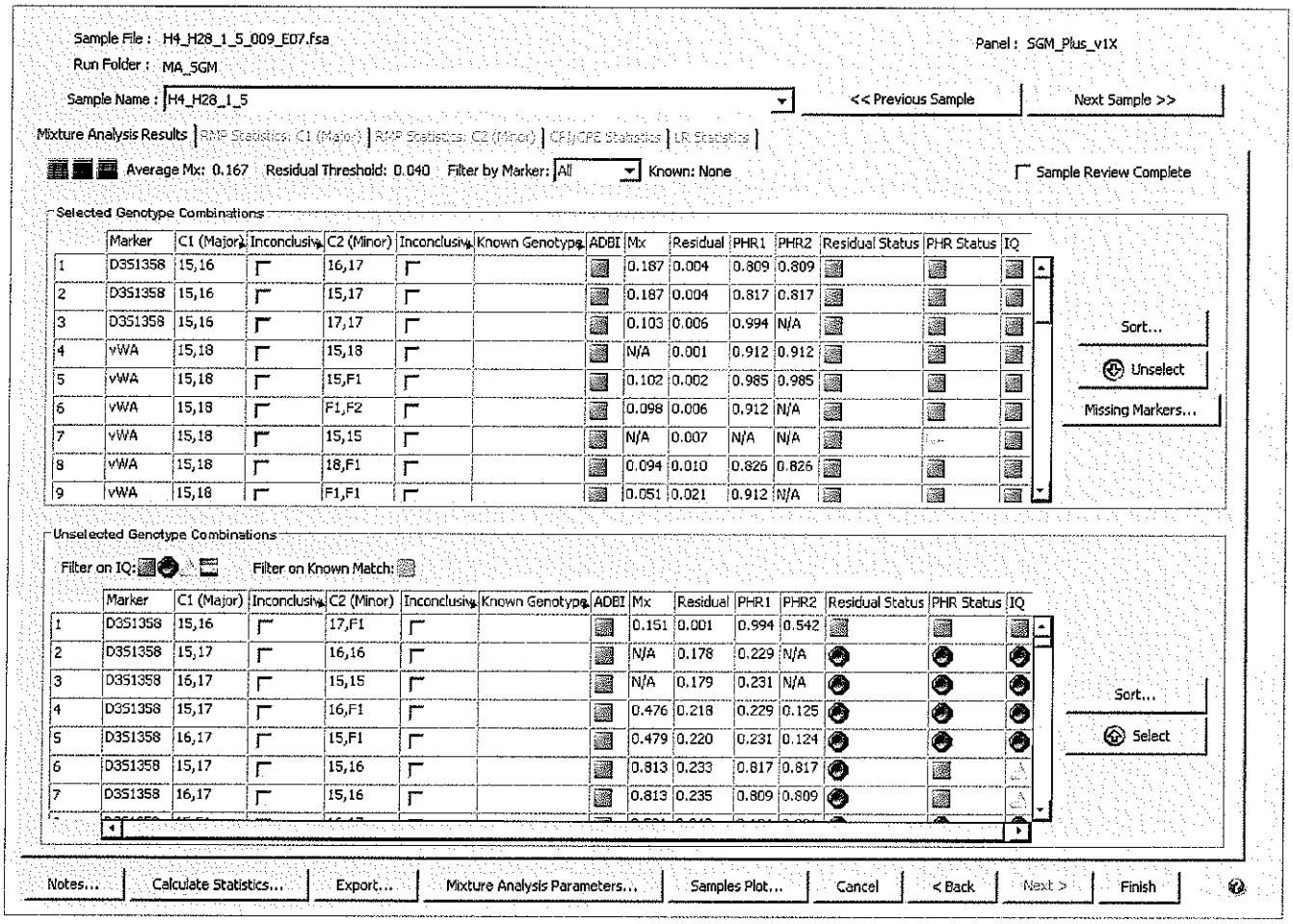

Figure 5. The Mixture Analysis Results Viewer segregates possible genotype combinations into the Selected Genotypes Combinations Table (top table) and an Unselected Genotypes Combinations Table (bottom table) based on the inclusion quality (IQ) status This allows users to review the mostly likely combinations based on their user defined thresholds confidently and efficiently thus speeding up mixture interpretation

Color-Coded Marker Header Bars

Marker header bars color-coded to match the genotype quality flag, allow the user to quickly identify the markers where anomalies are present and decide whether to edit, accept or reject the results (Figure 3)

Electronic Peer Review

Genotypes can be manually accepted at both the marker and sample level, providing evidence that the sample was manually inspected by the analyst and, together with a detailed label edit table display, providing an efficient mechanism for electronic/peer review of the data (Figure 4)

Quality Control & Data Comparison

GeneMapper® *ID-X* Software offers the ability to use multiple custom control samples in addition to the kit positive control contained in each AmpF*l*STR® kit The profile comparison tool allows the user to: (1) check the concordance of all designated controls; (2) determine if negative controls and reagent blanks affected by contamination contain similar profiles to samples amplified as part of the same batch or to laboratory personnel; and (3) perform comparisons between all samples contained within a project.

Mixture Analysis Tool

Once samples have been analyzed within a GeneMapper® *ID-X* project they can be imported directly into the Mixture Analysis tool where samples are rapidly separated based on the minimum number of contributors within the sample Individual contributors to 2-person mixtures can then be extracted based on rules assessing mixture proportion and peak height ratios for all possible genotype combinations. A ranked display of possible genotype combinations is then created which minimizes the number of combinations an analyst must evaluate The list of possible combinations can be further reduced if a known genotype is used during the extraction

process Based on the number of contributors identified within the sample, the software performs the appropriate set of statistical calculations including Random Match Probability (RMP) Combined Probability of Inclusion/ Exclusion (CPI/CPE) and Likelihood Ratio (LR) All calculations utilize allele frequencies contained in population databases contained in the software. Analysts can select from the population databases provided with the software or create and import their own Although much of the mixture analysis process is automated, analysts retain the flexibility to make manual adjustments based on their knowledge and experience. The GeneMapper® *ID-X* Software v1.1 Mixture Analysis tool reduces the time needed to perform mixture interpretation and provides a standardized framework which supports analysts to make more confident, consistent and accurate mixture interpretation decisions (Figure 5)

Flexible Data Output Formats

Flexibility of table output format is essential to help feed the data into downstream applications such as LIMS The Report Manager allows the user to create tables in horizontal or vertical format, control the exact column order and change the name of column headers if required

Chain of Custody for Electronic Data

To address evolving requirements for the management and auditing of electronic data, GeneMapper® *ID-X* Software offers comprehensive auditing, security and e-signature capability This functionality can assist labs to be compliant with ISO 17025 control of records requirements

Multi User Database

GeneMapper® *ID-X* is available in two installation configurations, Full Installation and Client Installations A Full Installation consists of the GeneMapper® *ID-X* Software and database. The Client Installation contains the GeneMapper® *ID-X* Software only, without the database Client users are able to access projects and settings stored in the centralized database associated with the Full Installation from a local workstation This reduces significantly the need for export and import of software objects and ensures that all users access a single source of analysis settings

Optimization and Validation

Automated data review processes such as those used by the GeneMapper® *ID-X* Software require optimization and validation in order to determine the appropriate settings for the thresholds governing how data is interpreted Thresholds may differ depending upon the instrument and chemistry being used or by the types of samples being processed Therefore, it is important that for each combination, the software is tested using a variety of single source and casework samples that challenge each of the different quality flags Default settings are suggested within the software but these should be adjusted based on the outcome of each laboratory's own internal evaluation of the GeneMapper® *ID-X* Software

Optimizing any software for use as an expert system will require an additional investment on the part of the laboratory To relieve some of the training and validation burden associated with implementation, the GeneMapper® *ID-X* software employs a similar user interface and identical peak detection and sizing algorithms to the GeneMapper® *ID* v3 2 1 Software An extensive system verification and simulated expert system optimization have been performed at Applied Biosystems and a summary of the verification studies performed will be available to users as a reference and to provide guidance to those looking to implement the software.

MINIMUM SYSTEM REQUIREMENTS: FULL INSTALLATION

Component	Recommended for Optimal Performance	Minimum Requirements
Computer	• Intel Pentium® IV processor, >2 8GHz	• Intel Pentium® processor 733 MHz
	• 1GB of RAM	• 512 MB of RAM
	• Two 120GB hard drives	
	• Free disk space	• Free disk space
	—200MB on the boot drive (the drive on which the operating system is installed)	—200MB on the boot drive (the drive on which the operating system is installed)
	—7GB on the drive on which the GeneMapper® *ID-X* Software is installed	—7GB on the drive on which the GeneMapper® *ID-X* Software is installed
	• 20/48X IDE CD-ROM	• 20/48X IDE CD-ROM
	• 10/100 NIC with RMU (internal)	• 10/100 NIC with RMU (internal)
Monitor	• 1024 x 768 pixel resolution	• 1024 x 768 pixel resolution
	• 19-inch color monitor	• 17-inch color monitor
Operating System	Either of the following:	
	• Microsoft® Windows® 2000 Professional Operating System Service Pack 4 Update	
	• Microsoft® Windows® XP Professional Operating System Service Pack 2 or later	
Ethernet Capability	• Network card for database installation	
	• TCP/IP must be installed before database installation	

MINIMUM SYSTEM REQUIREMENTS: CLIENT INSTALLATION

Component	Recommended for Optimal Performance	Minimum Requirements
Computer	• Intel Pentium® processor 733 MHz	• Intel Pentium® processor 733 MHz
	• 1GB of RAM	• 512MB of RAM
	• Free disk space	• Free disk space
	—200MB on the boot drive (the drive on which the operating system is installed)	—200MB on the boot drive (the drive on which the operating system is installed)
	—250MB on the drive on which the GeneMapper® *ID-X* Software is installed	—250MB on the drive on which the GeneMapper® *ID-X* Software is installed
	• 20/48X IDE CD-ROM	• 20/48X IDE CD-ROM
	• 10/100 NIC with RMU (internal)	• 10/100 NIC with RMU (internal)
Monitor	• 1024 x 768 pixel resolution	• 1024 x 768 pixel resolution
	• 19-inch color monitor	• 17-inch color monitor
Operating System	Either of the following:	
	• Microsoft® Windows® 2000 Professional Operating System Service Pack 4 Update	
	• Microsoft® Windows® XP Professional Operating System Service Pack 2 or later	

ORDERING INFORMATION

Description	P/N
GeneMapper® *ID-X* Software v1.1 Full Install Single License	4404049
GeneMapper® *ID-X* Software v1.1 Client Install Single License	4404047
GeneMapper® *ID-X* Software v1.1 Client Install 5 Pack License	4404179
GeneMapper® *ID-X* Software v1.1 Client Install 10 Pack License	4404180
GeneMapper® *ID-X* Software v1.0 x to v1.1 Upgrade	4412190

For Research Forensic or Paternity Use Only Not for use in diagnostic procedures

Notice to Purchaser: Purchase of this software product alone does not imply any license under any process, instrument or other apparatus, system, composition, reagent or kit rights under patent claims owned or otherwise controlled by Applera Corporation, either expressly, or by estoppel GeneMapper *ID* Software has undergone a verification process defined by Applied Biosystems However, human identification laboratories analyzing forensic paternity databasing and single-source samples that choose to use GeneMapper *ID* Software for data analysis should perform their own appropriate validation studies

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